**CURRICULUM VITAE**

University of Idaho

**NAME:** Wilhelm, Frank M. **DATE:** May 2024

**RANK OR TITLE:** Associate Professor, Department of Fish and Wildlife Sciences (Limnology)

**DEPARTMENT:** Fish and Wildlife Resources

**OFFICE LOCATION AND CAMPUS ZIP:** 104E, 1136 **OFFICE PHONE:** (208) 885-7218

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**DATE OF FIRST EMPLOYMENT AT UI:** July 2007

**DATE OF TENURE:** 2010

**DATE OF PRESENT RANK OR TITLE:** August 2017

**EDUCATION BEYOND HIGH SCHOOL:**

 **Degrees:**

 Ph.D., 1999 University of Alberta, Edmonton, Alberta, Canada, Environmental Science and Ecology

 M. S., 1994 Trent University, Peterborough, Ontario, Canada, Watershed Ecosystems

 B. Sc., 1991 Trent University, Peterborough, Ontario, Biology & Environmental Resource Science

 **Certificates and Licenses:**

 Professional Lake Manager, certified October 2011 by North American Lakes Management Society

 Marine VHF operator, certified September 14, 2000 by New Zealand Coast Guard

 Boatmaster, certified June 23, 2000 by New Zealand Coast Guard

 Level 2 integrated 4-Wheel drive, certified May 4, 2000 by RidgeWise

 Day Skipper, certified February 25, 2000 by New Zealand Coast Guard

**EXPERIENCE:**

 **Teaching, Extension and Research Appointments:**

 2017- Professor (Limnology), Department of Fish and Wildlife Sciences, University of Idaho, Moscow, ID, USA

 2010-2017 Associate Professor (Limnology), Department of Fish and Wildlife Sciences, University of Idaho, Moscow, ID, USA

 2007-2010 Assistant Professor (Limnology), Department of Fish and Wildlife Resources, University of Idaho, Moscow, ID, USA

 Adjunct faculty member, Department of Environmental Resources and Policy, Southern Illinois University, Carbondale, IL, USA

 2001-2007 Assistant Professor (Zoology), Department of Zoology, Southern Illinois University, Carbondale, IL, USA

 1999-2001 Research Scientist (Natural Sciences and Engineering Research Council of Canada, Post-Doctoral Fellow), Department of Zoology, University of Otago, Dunedin, New Zealand

 1994-1999 Graduate Research Assistant, Department of Biological Sciences, University of Alberta Edmonton, Alberta, Canada

 1993-1994 Demonstrator/Technician, Biology Department, Trent University, Peterborough, Ontario, Canada

 1992 Electron Microscopy Technician, Biology Department, Trent University, Peterborough, Ontario, Canada

 1990-1993 Teaching Assistant, Biology Department, Trent University, Peterborough, Ontario, Canada

 **Academic Administrative Appointments:**

 None

 **Non-Academic Employment including Armed Forces:**

 1991 Research Aide, Biology Department, Trent University, Peterborough, Ontario, Canada

 1990 Research Aide, Biology Department, Trent University, Peterborough, Ontario, Canada

 1989 Research Assistant, College of Biological Sciences, University of Guelph, and Department of Fisheries and Oceans Biological Station, St. Andrews, NB, Canada

 **Consulting:** (List company/institute name, title, brief description, date)

 1992 Beak Consultants Limited, subcontractor/field technician, collected analyzed and reported results of a winter oxygen monitoring program on a suite of lakes. Peterborough, Ontario, Canada

**TEACHING ACCOMPLISHMENTS:**

 **Areas of Specialization:**

 Limnology

 Ecology

 Environmental Science

 General Biology

 General Zoology

 **Courses Taught:**

  *At University of Idaho*

 Limnology FISH 535, Fall semesters since 2022 (online every other year since 2022)

 Limnology, FISH 415, Fall semesters since 2007 (online every other year since 2020)

 Management and Communication Scientific Data, WLF 370, Spring semesters since 2020

 Introduction to the Fish and Wildlife Professions, FISH/WLF 102 Spring semesters since 2008

 Advanced Limnology, FISH 503, Spring 2009, 2010, 2012, 2014

 Fish and Wildlife Applications II, FISH 202, Spring 2016, 2017

 Water in Society, ISEM 301, Spring 2015, and 2016

 Current Issues in Aquatic Sciences, FISH 404, Spring 2011

 Exploring Natural Resources, NR 101, Fall semesters (2008-2018)

 Special topics courses, FISH 398, Summer 2011; FISH 483, Fall 2011 to 2014, Spring 2012, and 2013, Summer 2012-2014; Fish 499, Spring 2013, and 2014; Fish 504, Spring 2013; ENVS 502, Fall 2008, ENVS 499, Fall/Spring 2015, 2016

Thesis/Dissertation credits, FISH 500, every semester since fall 2008; FISH 600, every semester since Fall 2011; WR 500, every semester Summer 2012 to Spring 2014, ENVS 500, every semester Fall 2008 to Spring 2012, ENVS 599, every semester Summer 2014 to Spring 15.

Guest presentation in Conservation Biology WLF 440, 1/yr since Spring 2008

 *At Southern Illinois University at Carbondale (SIUC)*

 Issues in Aquatic Ecology, ZOOL 458, Spring semesters (2003-2007)

 Principles of Animal Biology, ZOOL 118, Spring Semesters (2003-2007)

 Limnology, ZOOL 415, Fall semesters (2001-2006)

 Honors Research, ZOOL 493, Spring and fall semesters (2003-2006, 1-2 per year)

 Numerous guest presentations and lectures in variety of other courses

 **Students Advised:**

 Undergraduate Students:

 ~ 110 to completion (at UI), advise approximately 12/yr

 Graduate Students:

 Burnet, Sarah, Ph.D. (Nat. Res. - Fisheries), in progress

 Madison Schumacher (Env Sci, Non-thesis), 2024

 Jacob Youngblood (Env Sci. Non-thesis), 2024

 Jacob Morgan, M.S., (Env Sci, Non-thesis), 2023

 Mariana Sandifer, M.S., (Env Sci), 2022

 Chui-Ting Chen, MS (Env. Sci. Non-thesis), 2020

 Alexa Maine, PhD, (Env Sci) 2020

 Stephanie Estell, M.S., (Nat. Res. - Fisheries) 2019

 Randi Notte, M.S., (Env. Sci.) 2019

 Jamie Carmon, M.S., (Env. Sci. Non-thesis) 2018

 Joseph Dantin, M.S., (Env. Sci. Non-thesis) 2017

 Rolen, Justin, M.S., (Env. Sci. Non-thesis) 2017

 Coyle, Mary, K., Ph.D., (Nat. Res. - Fisheries) 2016

 Burnet, Sarah, M.S., (Nat. Res. - Fisheries) 2016

 LaCroix, Trea, M.S., (Nat. Res. - Fisheries) 2015

 Cobb, Marie, M.S., (Env. Sci. Non-thesis) 2015

 Hill, Matthew, M.S., (Nat. Res. - Fisheries) 2015

 Rajkovich, Hallie, M.S., (Wat. Res.) 2014

 Harris, Theodore, M.S., (Nat Res. - Fisheries) 2012

 Adams, Cindy, M.S., (Env. Sci.) 2012

 Nelson, Daniel, M.S., (Nat. Res. - Fisheries) 2010

 Caldwell, Timothy, M.S. (Nat. Res. - Fisheries) 2010

 Martin, Darrin, M.S., 2007 (Zool. at SIUC)

 Venarsky, Michael, M.S., 2005 (Zool. at SIUC)

 Served on graduate committee

 Michael Vogler (MS, Water Resources), 2023

 Douglas Park (PhD, computer Science), in progress

 Gaige Swanson (MS, Water Resources), 2022

 Josh Hightower (PhD Water Resources), in progress

 Ryan Dunbeck (MS, Biology – U. South Dakota), in progress

 Brent Deyo (MS, Water Resources), 2021

 Alex Chessman (MS Env. Sci.), 2020

 Torso, Kathleen, Ph.D., (Wat. Res.) 2020

 Parker, Cody, M.S.(Geology) 2016

 Klein, Zachary, M.S. (Nat. Res. - Fisheries) 2015

 Yu, Yuanyand, M.S. (Statistics) 2014

 Helsley, Jess, M.S., (Env. Sci.) 2014

 Whitlock, Steven, M.S. (Nat. Res. - Fisheries) 2013

 Walrath, Jonathan, M.S. (Nat. Res. - Fisheries) 2013

 Dunnette, Paul, M.S., (Nat. Res. - Forestry) 2013

 McCormick, Joshua, M.S. (Nat. Res. - Fisheries) 2012

 Carter, Meghan, M.S., (Law/Wat. Res.) 2012

 Sanchez-Murillo, Ricardo, M.S., (Wat. Res.) 2010

 Schmoeger, Adam, M.S., (Env. Sci.) 2010

 Holecek, Dean, M.S., (Env. Sci.) 2010

 Mansary, Abu. M.S., (Env. Sci.) 2010

 Tosh, McClure, M.S. (Env. Sci.) 2009

 Wahl, Nick, M.S., 2008 (Zool. at SIUC)

 Colon-Gaud, Checo, Ph.D., 2008 (Zool. at SIUC)

 Krug, Kristen M.S., (Geology), 2008 (Zool. at SIUC)

 Pope, Lewis, M.S. 2007 (Zool. at SIUC)

 Shasteen, Diane, M.S., 2007 (Zool. at SIUC)

 Severson, John, M.S. 2007 (Zool. at SIUC)

 Knuth, David, M.S., 2006 (Zool. at SIUC)

 Schuler, Lance, Ph.D. 2006 (Zool. at SIUC)

 Csoboth, Laura, M.S., 2006 (Zool. at SIUC)

 Lane, Ryan, Ph.D. 2005 (Zool. at SIUC)

 Williamson, Chris, M.S., 2004 (Zool. at SIUC)

 **Materials Developed:** (non-scholarship activity)

 Winter Limnology for McCall Outdoor Science School.

 Aquatic ecology workshop for high school students as part of the Illinois Junior Science and Humanities Symposium.

 **Courses Developed:**

 Limnology FISH 535

 Limnology, FISH 415

 Management and Communication of Scientific Data WLF 370

 Fish and Wildlife Applications II, FISH 202

 Water in Society, ISEM 301

 Current Issues in Aquatic Sciences, FISH 404

 Advanced Limnology, FISH 503

 Exploring Natural Resources, NR 101 (co-taught with other instructors)

 Introduction to the Fish and Wildlife Professions, FISH/WLF 102 (co-taught with Janet Rachlow)

 Issues in Aquatic Ecology, ZOOL 458 (at SIUC)

 Limnology, ZOOL 415 (at SIUC)

 Principles of Animal Biology, ZOOL 118 (at SIUC)

 **Non-credit Classes, Workshops, Seminars, Invited Lectures, etc.:**

 (\* and \*\* indicate with supervised under - and/or graduate student(s), respectively)

**Wilhelm, F. M**. and Schumacher, M.\*\* 2024.Nutrients and metals in the Coeur d’Alene Lake nearshore: 2023 data. Kootenai Co. Natural Resources Committee Meeting, Coeur d’Alene, ID. Virtual, Apr 18.

**Wilhelm, F. M.**, and Schumacher, M.\*\* 2024. 2023 Bay Watcher data update for Coeur d’Alene Lake. Coeur d’Alene, ID. Virtual, Apr 4.

**Wilhelm, F. M.** and Schumacher, M.\*\* 2023. Nutrient and metal resuspension in the nearshore of Lake Coeur d’Alene/ Four Counties natural Resources Committee. Coeur d’Alene, ID. Sep 6.

**Wilhelm F. M.**, and Schumacher, M.\*\* 2023. Nutrient and metal resuspension in the nearshore of Lake Coeur d’Alene progress update. Kootenai Co. Natural resources Committee. Virtual, Aug. 17.

**Wilhelm, F. M.**, 2023. Fernan Lake background and phosphorus dynamics. Public meeting to discuss Fernan Lake restoration and reduction of phosphorus contribution to Coeur d’Alene Lake. Coeur d’Alene, ID, Mar 20.

**Wilhelm, F. M.**, 2023. Cyanobacteria: The players, conditions that promote them, and what you can do about them. Western AIS Short Course. Missoula, MT. Mar 7-8.

**Wilhelm, F. M.**, 2023. LGRTs fuel the world. Part of Confluence Lab lunchtime discussion series. University of Idaho, Moscow, ID. Jan 25.

**Wilhelm, F. M**., 2022. Little drops in big lakes: Do individual actions matter? Presentation to Sandpoint Rotary Lunch. Sandpoint, ID. May 11.

**Wilhelm, F. M.** 2022. Waves and Wakes in the nearshore of lakes: resuspension of sediment, nutrients, and metals in CDA Lake. Meeting with DEQ and Kootenai County Natural Resources Committee. Mar 18. Remote/Virtual.

**Wilhelm, F. M.**, Saunoa, K.\*, Hale, A.\*, and King, D.\* 2021. The sloshing in our lakes and why what you do matters to everyone else. Coeur D’Alene Chamber of Commerce Upbeat Breakfast. Coeur D’Alene, ID Aug 10.

Eisenbrandt, D.\*, Schmidt, M., and **Wilhelm, F. M.** 2021. Accuracy of the Secchi depth derived trophic state index in Coeur d’Alene Lake.Idea Network for Biomedical Research Experience Annual Conference, Moscow, ID. Jul 26-28.

**Saunoa, K.\***, VanMiddlesworth, J., and Wilhelm, F. M. 2021. Quantifying the link between boat wakes and sediment-released nutrients that may stimulate harmful algal blooms in the nearshore of Coeur d’Alene Lake, Idaho. Idea Network for Biomedical Research Experience Annual Conference, Moscow, ID. Jul 26-28.

**Wilhelm, F. M.**, 2021. Welcome to the UI Limnology Lab. Lab tour for UI/NIC and LCSC INBRE students. Moscow, ID Jun 4.

**Wilhelm, F. M.**, 2021. Limnology 101. Presentation on basic limnology given to Lake Coeur D’Alene Bay Watchers. Coeur D’Alene, ID, May 26.

Iñiguez-Armijos, C., Zúñiga-Sarango, W., **Wilhelm, F.M.**, and Breuer, L. 2021. Nitrogen processing by primary consumers along an urbanization gradient in Andean streams. Ecological Society of America Annual meeting. Virtual, Aug 2-6.

Saunoa, K.\*, VanMiddlesworth, J., and **Wilhelm, F. M.** 2021. Quantifying the link between boat wakes and sediment-released nutrients that may stimulate harmful algal blooms in the nearshore of the Spokane River in North Idaho. University of Idaho Center for Health in the Human Ecosystem Annual conference, Moscow, ID. Apr 20.

**Wilhelm, F. M.**, Saunoa, K.\*, Crawford, H. L.\*\*, Hale, A.\*, and Cousin, B.\*\* 2021. Nearshore limnology and Erosion. North Fork of Payette Watershed Summit, Virtual, Feb 08.

**Wilhelm, F. M.**, Saunoa, K.\*, Crawford, H. L.\*\*, and Hale, A.\* 2020. Nearshore limnology. Coeur d’Alene Rotary lunch. Coeur d’Alene, ID Sep 18.

**Wilhelm, F. M.** 2020. Limnology basics. Our Gem seminar speaker series. Virtual, Sep 15.

**Wilhelm, F. M.,** Crawford, H. L.\*\*2020. Sediment and nutrient resuspension in the nearshore of Payette Lake in response to waves and wakes. Presented to Valley Co. Board of Commissioners, Cascade, ID, Jul 27.

**Wilhelm, F. M.**, 2020. Management options for Twin Lakes. Idaho Department of Environmental Quality public meeting with Twin Lakes homeowners. Virtual, Jun 22.

**Wilhelm, F. M.** 2020. A Limnology Primer. Presentation to the joint House and Senate Natural Resources Committees of the Idaho Legislature. Boise, ID, Feb 3.

**Wilhelm, F.M.** 2019. Limnology 101. Presentation on basic limnology given to Lake Coeur D’Alene Bay Watchers. Coeur D’Alene, ID, Jun 25.

**Wilhelm, F. M**. 2019. The importance of N:P Ratios. Presented at IDEQ request to Northern Idaho Volunteer Lake Monitoring Program. Coeur D’Alene, ID, Apr 23.

**Wilhelm, F**. M. 2019. Cyanotoxins: What they are and why they matter. Presentation given to Idaho Environmental Health Association at request of IDEQ. Boise, ID, Mar 13.

**Wilhelm, F**. M. 2019. Cyanotoxins: What they are and why they matter. Presentation given to Idaho Rural Water Association at request of IDEQ. Boise, ID, Mar 13.

**Wilhelm, F. M**. 2019. Update on Fernan Lake Research and important of east end wetland. Presentation given to IDEQ and IDFG personnel at request of IDEQ. Coeur D’Alene, ID, Jan 11.

**Wilhelm, F. M**. 2018. Cyanotoxins: What they are, and why they matter. Presented as part of Idaho Source Water Protection Workshop on ‘Cyanotoxins in Drinking water: Protection & response’, hosted by the Idaho Department of Environmental Quality, Boise and Hayden, ID, USA, Nov 28, 29.

Hinds, J, and **Wilhelm, F. M.** 2018. Monitoring lake water flow with dye and drones. University of Idaho Drone Summit, Moscow, ID, USA, Nov 1.

**Wilhelm, F. M.,** Hale, A.\*, Johnson, E\*., King, D.\*, Piscitelli, C.\*, Beard, R.\*, LaCroix, T\*\*., and Balbiani, J.\* 2018. Research in northern Idaho lakes: Blue-green algae in Fernan Lake and the effects of boat wakes in Lake CDA. Rotary Lunch presentation, Coeur d’Alene, ID, USA, Oct 12.

**Wilhelm, F.M.** 2018. Combining active and service-learning for student success in the sciences. Active Leraning Symposium. University of Idaho, Moscow, ID, USA, April 30.

**Wilhelm, F.M.**, King, D.\*, Piscitelli, C.\*, Beard, R.\*, LaCroix, T.\*\*, Balbiani, J.\*, and Howard, S.\* 2018. Measuring wind-generated water currents using drogues, drones, and dye tracing to determine the contribution of wetland-derived nutrients to harmful algal blooms at Fernan Lake: starting small to go big. Review of Idaho Water Resources Research Institute research. Moscow, ID, USA, March 7.

**Wilhelm, F. M.** 2017. The conservation of freshwater ecosystems. Guest Lecture in WLF 440. University of Idaho, Moscow, ID, USA, Nov 28.

**Wilhelm, F. M.** 2017. Why we should care about green lakes. Guest Lecture in ENVS 400. University of Idaho, Moscow, ID, USA, Oct 17.

**Wilhelm, F.M.**, and LaCroix, T.\*\*, King, D.\* 2017. Understanding the seasonal trajectory of algae and related health advisories in Fernan Lake. Coeur D’Alene Chamber of Commerce Upbeat Breakfast, Coeur D’Alene, ID, USA Aug 8.

**Wilhelm, F. M.** 2016. When the ‘greenness’ in lakes is not good for you. Science After Hours hosted by Palouse Clearwater Environmental Institute, Moscow, ID, USA, Feb 4.

**Wilhelm, F. M.** 2016. The Fernan Lake ‘green’ water issue. Presentation to Idaho EPSCoR-MILES Vice Presidents of Research. Moscow, ID, USA, Jan 22.

**Wilhelm, F. M.**, and LaCroix, T. \*\* 2015. A nutrient mass balance of Fernan Lake, ID, and future directions. Idaho Department of Environmental Quality Coeur D’Alene Lake Tributaries Watershed Advisory Group quarterly meeting. Coeur D’Alene, ID, USA, Nov 30.

LaCroix\*\*, T., and **Wilhelm, F. M.** 2015. The state of Fernan Lake. Kootenai Environmental Alliance monthly lunch meeting. Coeur d’Alene, ID, USA, Sep 3.

LaCroix\*\*, T., and **Wilhelm, F. M.** 2015. UI research at Fernan Lake: 2015 update. Fernan Lake Recreation and Conservation Association monthly meeting. Coeur d’Alene, ID, USA, Jul 14.

Coyle\*\*, M. K., and **Wilhelm, F. M.** 2015*. Didymosphenia geminata* in the intermountain northwest and long-term management strategies for nuisance mats. Trout Unlimited Libby Chapter. Libby, MT, USA, Apr 15.

Coyle\*\*, M. K., and **Wilhelm, F. M.**2015. *Didymosphenia geminata* in the intermountain northwest and long-term management strategies for nuisance mats. USACE Ranger Training, Libby, MT, USA, Mar 12.

**Wilhelm, F. M.**, and LaCroix\*\*, T. 2014. Idaho EPSCoR MILES Limnology Research at Fernan Lake to date. Fernan Lake Stakeholder Meeting. Coeur d’Alene, ID, USA, Nov 17.

**Wilhelm, F. M.** 2014. Conservation of aquatic ecosystems. Conservation Biology WLF440 guest lecture. University of Idaho, Moscow, ID, USA, Nov 06.

**Wilhelm, F. M.**, LaCroix\*\*, T., Burnet\*\*, S., Rajkovich\*\*, H. E., Harris\*\*, T., Adams\*\*, C. J. 2014. UI limnology research: science for lake management. 50th Anniversary Celebration of the Idaho Water Resources Research Institute. Coeur d’Alene, ID, USA, Oct 17.

**Wilhelm, F. M.**, LaCroix\*\*, T. 2014. UI research at Fernan Lake to date. Monthly meeting of the Fernan Lake Conservation and Recreation Association, Coeur d’Alene, ID, USA, Oct 14.

**Wilhelm, F. M.** 2014. Overview of other CNR programs / research interests and opportunities for collaboration. Meeting with representatives of Catholic University of Temuco, Chile. Moscow, ID, USA, Aug. 8.

**Wilhelm, F. M.**, and LaCroix\*\*, T. 2014. Idaho EPSCoR Adventure Learning Workshop at Fernan Lake. A 1-day workshop given to 10 Idaho middle and high school teachers. Coeur d’Alene, ID, USA, Jun 16.

Coyle\*\*, M. K., and **Wilhelm, F. M.** 2014. *Didymosphenia geminata* nuisance mats throughout Idaho and Montana. Idaho Dept. of Fish and Game crew training. Lewiston, ID, Jun 5.

**Wilhelm, F. M.**, Rajkovich\*\*, H. E., Harris\*\*, T. D., and Adams\*\*, C. J. 2014. Cyanobacteria blooms and research at Willow Creek. US Army Corps of Engineers Harmful Algal Bloom Technical Session. Portland, OR., USA, May 28-29.

Coyle\*\*, M. K., **Wilhelm, F. M.**, and Shafii, B. 2014. Phosphorus enrichment as a management strategy for *Didymosphenia geminata* nuisance mats in the Kootenai River, Libby MT. USACE Personnel Libby Dam. Libby, MT, USA, May 25.

Balbiani\*, J., and **Wilhelm, F. M.** 2014. Fernan Lake Wetlands: Nutrient sink or source? Annual Idaho EPSCoR meeting. Coeur d’Alene, ID, USA, Apr. 23.

Coyle\*\*, M. K., and **Wilhelm, F. M.** 2014. *Didymosphenia geminata* in the Kootenai River Libby, MT: Finding management strategies for long-term suppression. Northern Idaho Flyfishing Expo, Lewiston, Idaho – Kelly Creek Flycasters. Lewiston, ID, USA, Mar 21.

**Wilhelm, F. M.** 2014. Lakes in winter. Three-day workshop with approximately 65 6th graders at McCall Outdoor Science School. McCall, ID, Mar 18-21.

**Wilhelm, F. M.**, and Harris\*\*, T.D. 2014. The ‘green’ in lakes and why you should care. Science on Tap, Salomn River Brewery, McCall, ID, USA, Mar 20.

Coyle\*\*, M. K., and **Wilhelm, F. M.** 2014. *Didymosphenia geminata* in the Kootenai River Libby, MT Finding management strategies for long-term suppression. Trout Unlimited, Bozeman Chapter, Bozeman, MT, USA, Mar 18.

**Wilhelm, F. M**, Lacroix\*\*, T., Balbiani\*, J., Howard\*, S., Pengilly, M. 2014. Limnology activities at Fernan Lake. Idaho EPSCoR stakeholder meeting, Coeur d’Alene, ID, USA, Mar. 5.

**Wilhelm, F. M.** 2014. Cyanobacteria response to manipulations of TN:TP. ENVS400 University of Idaho, Moscow, ID, USA, Feb 25.

Rajkovich\*\*, H. E. and **Wilhelm F. M.** 2014. Use of high-resolution sampling to identify candidate sub-catchments for potential remediation to improve water quality in receiving water bodies. Palouse Clearwater Environmental Institute’s Science Uncorked Presentation Series. Moscow, ID, USA, Mar 14.

**Wilhelm, F. M.** 2014. UI MILES pilot Fernan Lake data. FOR/GEOG 501 University of Idaho, Moscow, ID, USA, Feb 20.

Rajkovich\*\*, H. E., **Wilhelm, F. M.**, Harris\*\*, T. D., and Adams\*\*, C. J. 2014. Summary of research at Willow Creek Reservoir to understand the occurrence of blue-green algae blooms. Morrow County Soil and Water Conservation District Annual Meeting, Heppner, OR, USA, Jan 17.

**Wilhelm, F. M.**, and Anderson, J. W. 2013. UI Miles pilot Fernan Lake data integration. Idaho EPSCoR quarterly meeting. Moscow, ID, USA, Dec. 17.

**Wilhelm, F. M.** 2013. Potential of internal loads of P to Fernan Lake and contribution to blooms of cyanobacteria. Fernan Lake Conservation and Recreation Association. Coeur D’Alene, ID, USA, Sep 11.

**Wilhelm, F. M.**, Harris\*\*, T. D., Adams\*\*, C. J., and Rajkovich\*\*, H. E. 2013. The ecology of blue-green algae blooms and implications to management concerning water quality. Coeur d’Alene Lake Tributaries Watershed Advisory Group. Coeur D’Alene, ID, USA, May 16.

**Wilhelm, F. M.** 2012**.** Opportunties in the Aquatic Sciences. Department of Natural Sciences Seminar, Univesidad, Tecnic Particular de Loja. Loja, Ecuador, May 28.

**Wilhelm, F. M.** 2012. Theory and practice of Limnology. Three-day workshop presented to 20 students at Universidad Tecnica Particular de Loja. Loja, Ecuador, May 19-21.

**Wilhelm, F. M.** 2012. World water issues overview. Presentation to SEED students. Moscow, ID, USA, Mar 28.

**Wilhelm, F. M.** 2011. The science of buffer strips and overview of building code setbacks for Lake Pend Oreille. City of Sandpoint Planning Commission, Sandpoint City Hall, Sandpoint, ID, USA, Jun 21.

**Wilhelm, F. M.** 2011. Cyanobacteria and large enclosure research. Public meeting of nutrient enhancement project in Dworshak Reservoir. Best Western Inn, Orofino, ID, USA, May 23.

**Wilhelm, F. M.** 2011. Overview of Caldwell MS thesis, University of Idaho. Idaho Department of Fish and Game, Coeur D’Alene, ID, USA, Mar 22.

**Wilhelm, F. M.**, and Caldwell\*\*, T. J. 2011. An overview of mysids in the Lake Pend Oreille food web. Departmental Seminar, Eastern Washington University, Cheney, WA, USA, Mar 11.

**Wilhelm, F. M.** 2010. World water issues and conservation. Guest lecture to WLF470 Conservation Biology. University of Idaho, Moscow, ID, USA, Nov 9.

Caldwell\*\*, T. J., and **Wilhelm, F. M.** 2010. The role of *Mysis diluviana* in the nutrient dynamics of Lake Pend Oreille. Lake Pend Oreille Task Force meeting, Sandpoint, ID, USA, Nov 4.

**Wilhelm, F. M.** 2010. Understanding dissolved oxygen: A ½ day workshop for professional lake managers. Presented at annual meeting of the North American Lakes Management Society. Oklahoma City, OK, USA, Nov 2.

**Wilhelm, F. M.** 2010. Limnology: A 1-day workshop. Given to Idaho Department of Fish and Game. Boise, ID, USA, Feb 18.

**Wilhelm, F. M.** 2009. World water issues and conservation. Guest lecture to WLF470 Conservation Biology. University of Idaho, Moscow, ID, USA, Nov 05.

Advanced Limnology, FISH 503, modules offered to lake managers and professionals certified by North American Lakes Management Society for continuing education credits. Spring 2009.

**Wilhelm, F. M.** 2008. The science of buffers: management of water quality. Bonner County Ad Hoc committee on building code revisions. Bonner County Federal Building, Sandpoint, ID, USA, May 29.

**Wilhelm, F. M.** 2008. Pitfalls of using aerators to control nutrients in lakes. Idaho Water Resources Research Institute, Water Resources, Hydrology Seminar Series. University of Idaho, Moscow, ID, USA, Apr 2.

**Wilhelm, F. M.** 2008. Review of the Illinois EPA clean lakes program. Presented to IEPA Bureau of Water, Surface Water Section, Springfield, IL, USA, Feb 27.

**Wilhelm, F. M.** 2008. Using aerators to restore lakes: avoiding nutrient pumps. Inland Northwest Aquatic, Riparian, and Wetland Symposium. Eastern Washington University, Spokane, WA, USA, Feb 22.

**Wilhelm, F. M.** 2006. Limnological aspects of Campus Lake. Guest speaker for Rotary Club of Carbondale-Breakfast meeting, Southern Illinois University, Carbondale, IL, USA, May 16.

**Wilhelm, F. M.** 2005. The respiration of cave amphipods and the restoration of Campus Lake. Center for Ecology Seminar Series, Southern Illinois University, Carbondale, IL, USA, Oct 5.

**Wilhelm, F. M.** 2005. Insights into the life history strategy of invertebrates at the extreme edge of life” Watershed Ecosystems Graduate Program Seminar Series, Trent University, Peterborough, ON, Canada, May 19.

**Wilhelm, F. M.** 2005. Aquatic Ecology workshop for 27th Illinois Junior Science and Humanities Symposium, Carbondale, IL, USA, Apr 4.

**Wilhelm, F. M.** 2004 Aquatic Ecology workshop for 26th Illinois Junior Science and Humanities Symposium, Carbondale, IL, USA, Apr 3.

**Wilhelm, F. M.** 2003. Aquatic Ecology workshop for 25th Illinois Junior Science and Humanities Symposium, Carbondale, IL, USA, Mar 20.

**Wilhelm, F. M.** 2001. Implications of climate change for populations of benthic invertebrates. Department of Zoology, Guelph University, Guelph, ON, Canada, Sep 24.

**Wilhelm, F. M.** 2001. Surprises from the deep: The ecology and role of amphipods in lakes. Department of Zoology, Southern Illinois University, Carbondale, IL, USA., Mar 5.

**Wilhelm, F. M.** 2000. Life at the top: The ecology of *Gammarus lacustris* in lakes of the Canadian Rocky Mountains. Entomological Society of New Zealand, Otago Branch, Dunedin, New Zealand, Aug 24.

**Wilhelm, F. M.** 2000. Life at the edge: The ecology of *Gammarus lacustris* in lakes of the Canadian Rocky Mountains. Zoology Seminar Series, Department of Zoology, University of Otago, Dunedin, New Zealand, Mar 17.

**Wilhelm, F. M.** 1999. Life at the edge: The ecology of *Gammarus lacustris* from alpine lakes in the Canadian Rocky Mountains. Biology Seminar Series, Biology Department, Trent University, Peterborough, ON, Canada, Nov 24.

**Wilhelm, F. M.** 1999. The ecology of *Gammarus lacustris* in mountain lakes: From life history to plankton community structure. Ecology Seminar Series, Department of Biological Sciences, University of Calgary, Calgary, AB, Canada, Feb 24.

**Wilhelm, F. M.** 1997. An overview of amphipod and bull trout research in Banff National Park. Grade 12 Biology, Margaret Barbour Collegiate Institute, The Pas, MB, Canada, Nov 10.

**Wilhelm, F. M.** 1997. An evaluation of the bull charr (*Salvelinus confluentus*) population and its diet seasonality in Harrison Lake, Banff National Park, Alberta, Canada. The Friends of Banff National Park, Banff, AB, Canada, May 26.

 **Honors and Awards:**

2023 Alumni Award of Excellence, University of Idaho

2022 Jim LaBounty Best Paper Award in Lake and Reservoir Management – professional peer-reviewed

 journal of North American Lake Management society

2019 Alumni Award of Excellence, University of Idaho

2018 Secchi Award (Washington State Lakes Protection Association)

2018 Outstanding Faculty 2017/2018 Environmental Sciences Program

2018 University of Idaho Teaching Excellence Award

2016 Alumni Award of Excellence

2015 Alumni Award of Excellence

2015 Nominated for UI Annual Award in Teaching Excellence

2015 National Advising Association Faculty Advising Award

2015 Region 8 National Academic Advising Association Faculty Advisor Award of Merit

2014 Nominated for Donald Crawford Outstanding Graduate advisor

2014 UI Faculty Advising Excellence

2012 Nominated for Donald Crawford Outstanding Graduate advisor

2012 Nominated for UI Advising Excellence Award

2011 Alumni Award of Excellence

2010 Alumni Award of Excellence

2010 College of Natural Resources, Outstanding Advisor Award,

**SCHOLARSHIP ACCOMPLISHMENTS:**

 **Publications:**

 **Refereed: (\* and \*\* indicate publication with under - and graduate student(s), respectively)**

Maine, A.N., Moser, M. L., Jackson, A. D., and **Wilhelm, F. M.** 2023. Probiotics improve survival and growth of larval Pacific Lamprey in laboratory culture. North American Journal of Fisheries Management. DOI: 10.1002/nafm.10923

Swanson, G., Langman, J. B., Child, A. W., **Wilhelm, F. M**., and Moberly, J. G. 2023. Iron and manganese oxidation states, bonding environment and mobility in the mining-impacted sediments of Coeur d’Alene Lake, Idaho: Core experiments*.* Hydrology**2023***,*10*(*1), 23; <https://doi.org/10.3390/hydrology10010023>

Dreher, T. W., Davis, E. W., **Wilhelm, F. M.**, Burnet, S. H., and Mueller, R. S. 2022. Genome sequence of freshwater nontoxigenic *Limnoraphsis* associated with microcystin-producing blooms. Harmful Algae 118: doi.org/10.1016/j.hal.2022.102309

Iniguez-Armijos, C., Tapia-Armijos, M., **Wilhelm, F.**, Breuer, L. 2021. Urbanisation process generates more independently acting stressors and ecosystem functioning impairment in tropical Andean streams. Journal of Environmental Management https://doi.org/10.1016/j.jenvman.2021.114211

Burnet, S. H.\*\*, and **Wilhelm, F. M.** 2021. Estimates of internal loading of phosphorus in a western US reservoir using 3 methods.  *Lake and Reservoir Management* **37**: 262-274. DOI https://doi.org/10.1080/10402381.2021.1923590

Awarded Jim LaBounty Best Paper Award in Lake and Reservoir Management in 2022.

Langman, J.B., Ali, J.D., Child, A. W., **Wilhelm, F. M.**, and Moberly, J. G. 2020. Sulfur species, bonding environment, and metal mobilization in mining-impacted lake sediments: Column experiments replicating seasonal anoxia and deposition of algal detritus. *Minerals* **10**: 849; doi:10.3390/min10100849

Michael J. Vanni, McIntyre, P.B., Arnott, D.L. Benstead, J.P., Berg, D.J., Brabrand, A.,Brosse, S., Bukaveckas, P.A., Caliman, A., Capps, K.A., Carneiro, L.S., Chadwick, N.E., Christian, A.D., Clarke, A., Conroy, J.D., Cross, W.F., Culver, D.A., Dalton, C. M., Devine, J. A., Domine, L.A., Evans-White, M.A., Faafeng, B., Flecker, A.S., Gido, K.B., Godinot, C., Guariento, R., Haertel-Borer, S., Hall, R.O., Henry, R., Herwig, B.R., Hicks, B.J., Higgins, K.A., Hood, J.M., Hopton, M.E., Ikeda, T., James, W. F., Jansen, H.M., Johnson, C.R., Koch, B.J., Lamberti, G. A., Lessard-Pilon, S., Maerz, J.C., Mather, M.E., McManamay, R.A., Milanovich, J.R., Morgan, D.K.J., Moslemi, J.M., Naddafi, R., Petter Nilssen J., Pagano, M., Pilati, A., Post, D.M., Roopin, M., Rugenski, A.T., Schaus, M.H., Shostell, J., Small, GE., Solomon, G. T., Sterrett, S. C., Strand, O., Tarvainen, M., Taylor, J.M., Torres-Gerald, L.E., Turner, C.B., Urabe, J., Uye, S.-I.. Ventelä,A.-M., Villéger, S., Whiles, M.R., **Wilhelm, F. M.**, Wilson, H.F., Xenopoulos, M.A., Zimmer, K.D. 2017. A global database of nitrogen and phosphorus excretion rates of aquatic animals. *Ecology 98: 1475*

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**Wilhelm, F. M.**, Parker, B. R., Schindler, D. W. and Donald, D. B. 1999. Seasonal food habits of bull trout from a small alpine lake in the Canadian Rocky Mountains. *Transactions of the American Fisheries Society* 128: 1176-1192.

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**Wilhelm, F. M.** 2017. From the President column. LakeLine 37(3): 9.

**Wilhelm, F. M.** 2017. President’s Message. NALMS Notes September/October: 3-4.

**Wilhelm, F. M.** 2017. From the President column. LakeLine 37(2): 9.

**Wilhelm, F. M.** 2017. President’s Message. NALMS Notes July/August: 3-4.

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**Wilhelm, F. M.** 2017. From the President column. LakeLine 37(1): 6-7.

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LaCroix T.\*\*, and **Wilhelm, F.M.** 2016. Total phosphorus load calculations for two inflow locations and the outflow location at Fernan Lake, Idaho (April 2014-April 2015). Northwest Knowledge Network. Dataset. http://dx.doi.org/10.7923/G46Q1V53

LaCroix, T.\*\*, and **Wilhelm, F. M.** 2016. Total residue (suspended and dissolved solids) load calculations for two inflow locations and the outflow location at Fernan Lake, Idaho (April 2014-April 2015). Northwest Knowledge Network. Dataset. http://dx.doi.org/10.7923/G42Z13FR

**Wilhelm, F. M.**, and LaCroix, T.\*\* 2015. Fernan Lake Bathymetry, Idaho (2014-2015). Northwest Knowledge network. Dataset. https://www.northwestknowledge.net/doi?doi=10.7923/G4BG2KWD

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**Wilhelm, F. M.** 2021. Quarter 1 report for Cooperative Agreement W912HZ2020027 (UI#V200812) option yr1 Willow Creek Water Quality Research and Evaluation Studies between University of Idaho and U.S. Army Corps of Engineers, Portland Office, 9p.

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Keim, R., King, S. L., Scott, D., and **Wilhelm, F. M.** 2019. Klamath Basin trip report. Submitted to UFWS Office Klamath Falls, Oregon. 5p.

**Wilhelm F.M.**, Burnet, S.H.\*\* 2019. First quarterly report for Cooperative Agreement W912HZ-15-2-0011 Modification P00006 (UI#15509) – “Willow Creek Water Quality Research and Evaluation Studies” between University of Idaho and U.S. Army Corps of Engineering. Completed for U.S. Army Corps of Engineers, Portland District Office. 6p.

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**Wilhelm F. M**., Vivian, K., M.\*\*, and Schaffi, B. *Didymosphenia geminata* in the Kootenai River, Libby, MT: Nuisance mat characteristics and management strategies for long-term suppression. Final Report project report to MT Fish, Wildlife, and Parks. xiii+102pp.

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Burnet, S. H.\*\*, **Wilhelm, F. M.** 2017. Q2 Quarterly report for Cooperative Agreement W912HZ-15-2-0011 Modification P00003 (UI#15509) Willow Creek Water Quality Research and Evaluation Studies between University of Idaho and U.S. Army Corps of Engineers. 7p.

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Burnet, S. H.\*\*, **Wilhelm, F. M.** 2016. Q2 report for Cooperative Agreement W912HZ-15-2-0011 E00002 (UI#15509) Willow Creek Water Quality Research and Evaluation Studies between University of Idaho and U.S. Army Corps of Engineers. Submitted to US Army Corps of Engineers, Engineer Research and Development Center, Vicksburg, MS. 8p.

Burnet, S. H.\*\*, **Wilhelm, F. M.** 2016. Q1 report for Cooperative Agreement W912HZ-15-2-0011 E00002 (UI#15509) Willow Creek Water Quality Research and Evaluation Studies between University of Idaho and U.S. Army Corps of Engineers. Submitted to US Army Corps of Engineers, Engineer Research and Development Center, Vicksburg, MS. 7p.

Coyle, M. K.\*\*, **Wilhelm, F. M.**, and Shaffi, B. 2016. *Didymosphenia geminata* in the Kootenai River, Libby, MT: Nuisance mat characteristics and management strategies for long-term suppression. Final project report to MT Fish, Wildlife, and Parks. xii+81p.

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Burnet, S. H.\*\*, and **Wilhelm, F. M.** 2015. Willow Creek Water Quality Research and Evaluation Studies Q1 Progress report for period April 01, 2015, to July 31, 2015. Submitted to US Army Corps of Engineers, Engineer Research and Development Center, Vicksburg, MS. 7p.

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Coyle, M. K.\*\*, **Wilhelm, F. M.**, and Shaffii, B. 2015. Response of Nuisance Mats of *Didymosphenia geminata* to Manipulated Concentrations of Nitrogen and Phosphorus Year 3 Progress Report submitted to MT Fish, Wildlife, and Parks, 39p.

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Taylor, S. J., **F. M. Wilhelm**, Adams, G. L.\*\* 2002. Establishing baseline data on seasonal physiological requirements for *Gammarus acherondytes* and *Gammarus troglophilus* in relation to microbial oxygen demand. 3 p. Revised Objectives and Deliverables. Submitted to Division of Natural Heritage Illinois Department of Natural Resources.

Taylor, S. J., Adams, G. L.\*\*, and **Wilhelm, F. M.** 2001. Establishing baseline data on seasonal physiological requirements for *Gammarus acherondytes* and *Gammarus troglophilus* in relation to microbial oxygen demand. 9 p. Progress Report #4 submitted to Division of Natural Heritage, Illinois Department of Natural Resources.

**Wilhelm, F. M.** 1998. Seasonal diet and population assessment of bull charr (*Salvelinus confluentus*) in Harrison Lake, Banff National Park. 37 p. Report prepared for The Friends of Banff National Park.

**Wilhelm, F. M.** 1998. A preliminary *Gammarus* and rainbow trout diet analysis investigation in the Livingstone Trout Farm Main Pond. 24 p. Report prepared for Livingstone Trout Farm.

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**Refereed/Adjudicated (currently scheduled or submitted):**

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Maine, A. N., Moser, M. L., Jackson, A, and Wilhelm, F. M. Polyculture increases growth in larval Pacific Lamprey *Entosphenus tridentatus.* Submitted to: Aquaculture Research.

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 None

**Presentations and Other Creative Activities:**

2019. Photograph of Paradise Room in Crevice Cave, MO, USA published in NSS directory

2018. Photograph of *Gammarus acherondytes* published in Belleville New Democrat Dec 10.

2011. Photograph of *Hyalella azteca* for use on web page of Aquatic Biosystems.

2008. Photograph of Illinois Cave amphipod published on public education poster displayed at Illinois Caverns State Natural Area.

2007.Photograph published on Illinois Department of Natural Resources “Illinois Threatened and Endangered Species” poster.

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2006. Cover photograph of Freshwater Biology 51(6) June issue.

**Professional Meeting Papers, Workshops, Showings, Recitals:**

Morgan, J.\*\*, and **Wilhelm, F. M.** 2024. The historical influence of paper mill discharges on the surface water quality and stream ecology of the Pigeon River, North Carolina. 73rd Annual Meeting of the southeastern section of the Geological Society of America, Ashville, NC., Apr 15-16.

Homer, G.\*\*, and **Wilhelm F. M.** 2024. Anthropogenic wakes as a contributor to cultural eutrophication in the nearshore of Payette Lake. Idaho Water Quality Workshop, IDEQ, Boise, ID. Feb. 6-7.

Schumacher, M.\*\*, and **Wilhelm F. M.** 2024. Quantifying the wave and wake resuspension of sediment, nutrients and metals in Lake Coeur d’Alene aided by community science. Idaho Water Quality Workshop, IDEQ, Boise, ID. Feb. 6-7.

Homer, G.\*\*, and **Wilhelm, F. M.** 2023. Anthropogenic wakes as a contributor to cultural eutrophication in the nearshore of Payette Lake, ID. Washington Lakes Protection Association Annual Conference. Tacoma, WA. Oct 4-6.

**Wilhelm, F. M.**, 2023. Cyanobacteria: The players, conditions that promote them, and what you can do about them. Western AIS Short Course. Missoula, MT. Mar 7-8.

Burnet, S. H.\*\*, and **Wilhelm, F. M.** 2023. Wind + internal P + metalimnetic entrainment = cyanoHABS: working towards predicting the occurrence of harmful algal blooms. ERDC Water Quality meeting, Vicksburg, MS. Feb 14-17.

Pierce, E.\*, Saunoa, K.\*, and **Wilhelm, F.M.** 2022. A refined method of quantifying macrophyte dissolved oxygen contribution in Coeur d’Alene Lake.Idea Network for Biomedical Research Experience Annual Conference, Moscow, ID. Aug 01-03.

Frazee, B. F.\*\*, and **Wilhelm, F. M.** 2022. A novel ‘slinky’ design for an in-lake hypolimnetic aerator to accommodate an annual 11m (35ft) draw down. Annual Hydrophiles Conference, Corvallis, OR. Apr 13-14.

**Wilhelm, F. M.**, Burnet, S. H.\*\*, and Frazee, B. E.\*\* 2021. Factors contributing to high interannual variation in the onset of anoxia and concomitant internal loading of phosphorus that influence harmful algae blooms. 41th Annual International Symposium of the North American Lake Management Society, online. Nov 15-19.

Eisenbrandt, D.\*, Schmidt, M., and **Wilhelm, F. M.** 2021. Accuracy of the Secchi depth derived trophic state index in Coeur d’Alene Lake.Idea Network for Biomedical Research Experience Annual Conference, Moscow, ID. Jul 26-28.

Saunoa, K.\*, VanMiddlesworth, J., and **Wilhelm, F. M.** 2021. Quantifying the link between boat wakes and sediment-released nutrients that may stimulate harmful algal blooms in the nearshore of Coeur d’Alene Lake, Idaho. Idea Network for Biomedical Research Experience Annual Conference, Moscow, ID. Jul 26-28.

Iñiguez-Armijos, C., Zúñiga-Sarango, W., **Wilhelm, F.M.**, and Breuer, L. 2021. Nitrogen processing by primary consumers along an urbanization gradient in Andean streams. Ecological Society of America Annual meeting. Virtual, Aug 2-6.

Saunoa, K.\*, VanMiddlesworth, J., and **Wilhelm, F. M.** 2021. Quantifying the link between boat wakes and sediment-released nutrients that may stimulate harmful algal blooms in the nearshore of the Spokane River in North Idaho. University of Idaho Center for Health in the Human Ecosystem Annual conference, Moscow, ID. Apr 20.

Burnet, S. H.\*\*, and **Wilhelm, F. M.** 2020. Sediment particle size predicts phosphorus release: empirical data from Willow Creek Reservoir, OR, USA. 40th Annual International Symposium of the North American Lake Management Society, online. Nov 16-20.

Cousin, B.\*\*, Crawford, H.\*\*, and **Wilhelm, F. M.** 2020. Literature Review of Sediment and Nutrient Resuspension in Response to Waves and Wakes: Current State, and Missing Pieces – Directions for Future Research. 40th Annual International Symposium of the North American Lake Management Society, online. Nov 16-20.

Crawford, H.L.\*\*, Eitel, J.U.H., Cousin, B.\*\*, and **Wilhelm, F. M.** 2020. Use of ground-based LiDAR 3D scanning to measure shoreline erosion in response to waves and wakes. 40th Annual International Symposium of the North American Lake Management Society, online. Nov 16-20.

Hoots, E.\*, Scofield, B., and **Wilhelm, F. M.** 2020. Life History of a Benthic Caddisfly in Coeur d'Alene Lake. 40th Annual International Symposium of the North American Lake Management Society, online. Nov 16-20.

**Wilhelm, F. M.**, Crawford, H.\*\*, Cousin, B.\*\*, Saunoa, K.\*, and Hale, A.\* 2020. Researching the influence of anthropogenic-created disturbances in the nearshore of lakes: navigating a high visibility public arena as scientists. 40th Annual International Symposium of the North American Lake Management Society, online. Nov 16-20.

Crawford, H. L.\*\*, Eitel, J., Cousin, B.\*\*, and **Wilhelm, F. M.** 2020. Using Ground-Based Lidar 3D Scanning to Measure Shoreline Accretion and Erosion in Response to Waves and Wakes. 33rd Annual conference of the Washington State Lake Protection Association, Virtual, Oct. 14-15.

Cousin, B.\*\*, Crawford, H.L.\*\*, Saunoa, K.\*, and **Wilhelm, F. M.** 2020. Literature Review of Sediment and Nutrient Resuspension in Response to Surface Hydrodynamic Disturbance: Current State and Directions for Future Research. 33rd Annual conference of the Washington State Lake Protection Association, Virtual, Oct. 14-15.

Haakenstad, H.\*, and **Wilhelm, F. M.** 2020. Seasonal spatial distribution of zooplankton in Willow Creek Reservoir in relation to hypolimnetic anoxia. 33rd Annual conference of the Washington State Lake Protection Association, Virtual, Oct. 14-15.

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Saunoa, K.\*, **Wilhelm, F. M.**, and Van Middlesworth, J. 2020. Effects of boat wakes on the nearshore of the Spokane River in North Idaho. 33rd Annual conference of the Washington State Lake Protection Association, Virtual, Oct. 14-15.

Saunoa, K.\*, **Wilhelm, F. M.**, and Van Middlesworth, J. 2020. Effects of boat wakes on the nearshore of the Spokane River in North Idaho. INBRE annual conference Coeur D’Alene, ID, Virtual August 13.

Burnet, S. H.\*\*, and **Wilhelm, F.M.** 2019. Wind + internal P + metalimnetic entrainment = CyanoHABs: Towards predicting the occurrence of harmful algal blooms. 39th International Symposium of the North American Lake Management Society (NALMS). Burlington, VT. Nov. 11-15.

Burnet, S. H.\*\*, and **Wilhelm, F.M.** 2019. Wind + internal P + metalimnetic entrainment = CyanoHABs: Towards predicting the occurrence of harmful algal blooms. 21st All Hands’ Meeting of the Global Lake Ecological Observation Network (GLEON). Muskoka, ON, Canada. Nov. 4-8.

Burnet, S. H.\*\*, and **Wilhelm, F.M.** 2019. Predicting the occurrence of harmful algal blooms resulting from wind-related metalimnetic entrainment of high phosphorus hypolimnetic water

Washington State Lake Protection Association (WALPA) Conference. Lake Chelan, WA. Oct. 30- Nov. 1.

Child, A., Langman, J. B., **Wilhelm F. M.**, and Moberly, J. G. 2019. Effects of algae-induced eutrophication on metal mobility in contaminated sediments collected from the mining-impacted Coeur d’Alene Lake, Idaho. 15th International Conference on the Biochemistry of trace elements. Nanjing, China, May 5-9,

Burnet, S. H.\*\*, and **Wilhelm, F.M.** 2019. How low does it go? Vertical distribution of cyanobacteria toxin in Willow Creek Reservoir, Heppner, OR. Association for the Sciences of Limnology and Oceanography Aquatic Sciences Meeting. San Juan, Puerto Rico. Feb. 23rd – Mar. 2nd.

Moberly, J. G., Child, A. W., Langman, J.B., and **Wilhelm, F.M.** 2018. Eutrophication-induced metal mobility in Coeur d’Alene Lake. 18th Annual Northern ID/ Eastern WA Regional Lake Conference, Spokane, WA, USA, Feb 2.

**Wilhelm, F. M.**, Johnson, E., King, D.\*, Piscitelli, C.\*, Beard, R.\*, LaCroix, T.\*\*, Balbiani, J.\*, and Howard, S.\* 2018. Fernan Lake Water Exchange: Dye tracing with drones.18th Annual Northern ID/ Eastern WA Regional Lake Conference, Spokane, WA, USA, Feb 02.

**Wilhelm, F. M.**, and Burnet, S. H.\*\* 2018. Safety and decontamination protocols when sampling blooms of cyanobacteria: What’s being done in the real world, and what some institutions are requesting to approve research. 38th International Symposium of the North America Lake Management Society, Cincinnati, OH, USA, Oct 29-Nov 02.

Notte, R.\*\*, **Wilhelm, F. M.**, and Cooper, C. 2018. Periphyton in Coeur d’Alene Lake, ID: Indicators of nutrient loading. 38th International Symposium of the North America Lake Management Society, Cincinnati, OH, USA, Oct 29-Nov 02.

Estell, S.\*\*, Scofield, B., **Wilhelm, F. M.** 2018. The life history of *Nectopsyche albida* and its dietary habits in Lake Coeur d’Alene, ID, with a focus on predation on the invasive Eurasian milfoil (*Myriophyllum spicatum*). 38th International Symposium of the North America Lake Management Society, Cincinnati, OH, USA, Oct 29-Nov 02.

Burnet, S. H.\*\*, and **Wilhelm, F.M.** 2018. Vertical distribution of cyanobacteria toxins in Willow Creek Reservoir, OR. 38th International Symposium of the North America Lake Management Society, Cincinnati, OH, USA, Oct 29-Nov 02.

**Wilhelm, F.M.** 2018. Dye tracing surveys with consumer-grade drones to estimate water & nutrient exchange between a littoral wetland &adjacent lake. Joint annual meeting of the Oregon Lakes Association and Washington State Lakes Protection Association. Portland, OR, USA Oct 26-28.

Hoots, B.\*, Scott, C.\*, **Wilhelm, F. M.**, Iñiguez Armijos, C. 2018. Biodiversity in ponds of the southern Andes of Ecuador across an urban-rural gradient. Joint annual meeting of the Oregon Lakes Association and Washington State Lakes Protection Association. Portland, OR, USA Oct 26-28.

Hale, A.\*, and **Wilhelm, F.M.** 2018. Waves of phosphorus: resuspension & release by recreational boating. Joint annual meeting of the Oregon Lakes Association and Washington State Lakes Protection Association. Portland, OR, USA Oct 26-28.

Notte, R.\*\*, **Wilhelm, F.M.**, and Cooper, C. 2018. Development & limitations of artificial substrate periphyton monitoring in Coeur d'Alene Lake, Idaho. Joint annual meeting of the Oregon Lakes Association and Washington State Lakes Protection Association. Portland, OR, USA Oct 26-28.

Estell, S.\*\*, Scofield, B., and **Wilhelm, F. M.** 2018. The life history & dietary habits of the caddisfly *Nectopsyche albida* in Coeur d’Alene Lake, ID, with a focus on predation on invasive Eurasian milfoil. Joint annual meeting of the Oregon Lakes Association and Washington State Lakes Protection Association. Portland, OR, USA Oct 26-28.

Burnet, S.H.\*\*, and **Wilhelm, F.M.** 2018. Vertical distribution of cyanobacteria toxins in Willow Creek Reservoir, OR. Joint annual meeting of the Oregon Lakes Association and Washington State Lakes Protection Association. Portland, OR, USA Oct 26-28.

Hale, A.\*, and **Wilhelm, F.M.** 2019. Waves of phosphorus: resuspension and release by recreational boating. INBRE annual conference, Moscow, ID, USA Jul 30-Aug 01.

Johnson, E.\*, and **Wilhelm, F. M.** 2018. Effects of valley winds on Fernan Lake water currents. INBRE annual conference, Moscow, ID, USA Jul 30-Aug 01.

Cornacchia, B.\*, and **Wilhelm, F.M.** 2018. Caddisfly control of Eurasian water milfoil in Lake Coeur d’Alene. INBRE annual conference, Moscow, ID, USA Jul 30-Aug 01.

Hale, A.\*, and **Wilhelm, F.M.** 2019. Waves of phosphorus: resuspension and release by recreational boating. ICUR conference, Noise, ID, USA. Jul 26-27.

**Wilhelm, F.M.** 2018. Combining active and service-learning for student success in the sciences. Active Learning Symposium. University of Idaho, Moscow, ID, USA, April 30.

**Wilhelm, F.M.**, King, D., Piscitelli, C., Beard, R., LaCroix, T., Balbiani, J., and Howard, S.2018. Measuring wind-generated water currents using drogues, drones, and dye tracing to determine the contribution of wetland-derived nutrients to harmful algal blooms at Fernan Lake: starting small to go big. Review of Idaho Water Resources Research Institute research. Moscow, ID, USA, March 7.

Notte, R\*\*., **Wilhelm, F. M.**, Cooper, C. 2018. Is algal growth on substrates in bays of Lake Coeur d’Alene related to nutrient inputs from the watershed? Method development & 1st summer results. Eastern Washington Regional Lakes Day, Spokane, WA, Feb 3.

Burnet, S. H.\*\*, and **Wilhelm, F. M.** 2017. Nutrient availability as a function of sediment particle size and location in Willow Creek Reservoir, Heppner, OR, GLEON 19 All-hands meeting, Lake Mohonk, NY, USA, Nov 27- Dec 1.

**Wilhelm, F. M.** 2017. Understanding conditions for harmful algal blooms and future expectations. Spokane River Forum, Coeur D’Alene, ID, USA, Nov. 16.

Burnet, S. H.\*\*, and **Wilhelm, F. M.** 2017. Spatial relationship between nutrient availability and sediment particle size in Willow Creek Reservoir, Heppner, Oregon, 37th International Symposium of the North American Lakes Management Society, Denver, CO, USA, Nov 6-9.

Gabrielli, A\*\*., Demaray, A.\*, **Wilhelm, F. M.**, Iñiguez Armijos, C. 2017. People and periphyton: How land-use affects primary producers in the streams of southern Ecuador. 30th Annual Meeting of Washington Lakes Protection Association. Spokane, WA. Oct 11-13.

King, D.\*, and **Wilhelm, F.M.** 2017. Dirunal wind effects on surface watrer movement in Fernan Lake, Idaho. INBRE conference, Moscow, ID, Aug 8.

Boyd, A.\*, **Wilhelm, F. M.**, Nelson, C., Steed, R., and Larson, K. 2017. Effects of wastewater on aquatic health of Kootenai Bay, Lake Pend Oreille, Idaho. INBRE conference, Moscow, ID, Aug 8.

Burnet, S. H.\*\*, and **Wilhelm, F. M.** 2017. Quantifying the contribution of internal loading to the occurrence of epilimnetic algal blooms in Willow Creek Reservoir, Heppner, OR. Hydrophiles Annual Conference, Corvallis, OR, USA, Mar 6.

**Wilhelm, F. M.**, and Burnet, S. H.\*\* 2016. Assessing the role of phosphorus and local weather in the blooms of cyanobacteria at Willow Creek Reservoir, OR. North American Lake Management Society International Symposium, Banff, AB, Canada, Nov 1-4.

Larson, K., Steed, R., Wilhelm, F. M., Downing, J. And Ekins, J. 2016. Understanding the efficacy of floating treatment wetlands on Hayden Lake. North American Lake Management Society International Symposium, Banff, AB, Canada, Nov 1-4.

Burnet, S. H.\*\*, and **Wilhelm, F. M.** 2016. Comparison of two methods to estimate within-lake regenerated nutrients and determine their role in harmful algal blooms. North American Lake Management Society International Symposium, Banff, AB, Canada, Nov 1-4.

**Wilhelm, F. M.**, Burnet, S. H.\*\*, Rajkovich, H. E.\*\*, Harris, T. D.\*\*, and Adams, C. J.\*\* 2016. Research overview of the cyanobHAB plague at Willow Creek Reservoir. Oregon Lakes Association annual meeting, The Dalles, OR, USA, Oct 14-16.

Burnet, S. H.\*\*, and **Wilhelm, F. M.** 2016. Estimation of within-lake regenerated nutrients using two methods. Oregon Lakes Association annual meeting, The Dalles, OR, USA, Oct 14-16.

Burnet, S. H.\*\*, and **Wilhelm, F. M.** 2016. Comparison of two methods to estimate within-lake regenerated phosphorus in a reservoir. Washington Lakes Protection Association annual meeting, Bellingham, WA, USA, Oct 5-7.

Ekins, J., **Wilhelm, F. M**., Larson, K., Steed, R., and Downing, J. 2016. Understanding the Efficacy of Floating Treatment Wetlands on Hayden Lake, ID. 22nd National Nonpoint Source Monitoring Workshop, Salt Lake City, UT, USA, Aug 23-25.

Beard, R.\*, and **Wilhelm, F. M.** 2016. Evolution of phosphorus in the Fernan Lake wetland in summer. Idaho INBRE Statewide Conference, Moscow, ID, USA, Aug 1-3.

Van Horn, S.\*, **Wilhelm, F. M.**, and Chess. D., Solomon, M. 2016. Large-bodied caldoceran density and body size as indicators of trophic changes in lake ecosystems. Idaho Conference on Undergraduate Research, Boise, ID, USA, Jul 27-28.

**Wilhelm, F.M.**, Moffitt, C. M., Braker\*\*, E., Kibler, B., Noonan\*, J., and Woolf, T. 2015. Efforts to use elevated pH and benthic barriers to eradicate Asian clams (*Corbicula*) from Idaho’s great lake, Lake Pend Oreille. 35th Annual conference of the North American Lakes Management Society. Saratoga Springs, NY, USA, Nov 17-20.

LaCroix, T.\*\*, and **Wilhelm, F. M.** 2015. Engaging Landowners in Limnology: The Fernan Lake Experience. 35th Annual conference of the North American Lakes Management Society. Saratoga Springs, NY, USA, Nov 17-20.

LaCroix, T.\*\*, and **Wilhelm, F. M.** 2015. High resolution spatial and temporal data to understand nutrient concentrations and loads that influence algal blooms in a small lake: how much data do we need? 35th Annual conference of the North American Lakes Management Society. Saratoga Springs, NY, USA, Nov 17-20.

Burnet, S. H.\*\*, and **Wilhelm, F. M.** 2015. Selection of sites is crucial to obtain meaningful measures of internal loading: a case study from Willow Creek Reservoir, OR. 35th Annual conference of the North American Lakes Management Society. Saratoga Springs, NY, USA, Nov 17-20.

Liao, F. H., and **Wilhelm, F. M.** 2015. The effects of ambient water quality and Eurasian milfoil on lakefront property values in the Coeur d’Alene area of Northern Idaho. Idaho EPSCoR Annual conference. Boise, ID, USA, Oct 28-30.

LaCroix, T.\*\*, and **Wilhelm, F. M.** 2015. How Landowners can be involved in Limnology: The Fernan Lake Experience. Idaho EPSCoR Annual conference. Boise, ID, USA, Oct 28-30.

**Wilhelm, F. M**., V.-A., Suchar, LaCroix, T.\*\* 2015. How meaningful are those lake sampling sites you chose? Washington Lakes Protection Association Annual Meeting. Walla Walla, WA, USA, Oct 26-28.

LaCroix, T.\*\*, and **Wilhelm, F. M.** 2015. A mass balance approach using high resolution data to understand nutrient concentrations and loads that influence algal blooms in a small lake. Washington Lakes Protection Association Annual Meeting. Walla Walla, WA, USA, Oct 26-28.

Burnet, S. H.\*\*, and **Wilhelm, F. M.** 2015. The need for multiple within-lake sites to determine rates of internal loading from sediment cores. Washington Lakes Protection Association Annual Meeting. Walla Walla, WA, USA, Oct 26-28.

Burnet, S. H.\*\*, and **Wilhelm, F. M.** 2015. Large variance in internal loading rates from spatially separated sediment cores in Willow Creek Reservoir, OR. Oregon Lakes Association 2015 Annual Conference. Klamath Falls, OR, USA, Oct 2-4.

Guzman, B.\*, Rankin, E.\*, Braker, E.\*\*, Moffitt, C. M., and **Wilhelm, F.M.** 2015. Benthic survey of Ellisport Bay, Lake Pend Oreille, Idaho, for Asian clams. Annual meeting of the Ecological Society of America, Baltimore, MD, USA, Aug 9-14.

Moffitt, C. M., **Wilhelm, F. M.**, Braker, E.\*\*, Kibler, B., Noonan, J.\*, and Woolf, T. 2015. Asian clams can pose a significant threat to aquatic resources: updates on the Lake Pend Oreille infestation and management. Annual meeting of the Idaho Chapter of the American Fisheries Society, Boise, ID, USA, Mar. 3-5.

**Wilhelm, F. M.**, and LaCroix, T.\*\* 2015. What landowners can do for aquatic scientists: the Fernan Lake experience. 14th Annual Regional Lakes Day, Spokane, WA, USA, Feb. 7.

**Wilhelm, F. M.**, and LaCroix, T.\*\* 2014. Idaho EPSCoR MILES Limnology Research at Fernan Lake to date. Spokane River Forum, Coeur d’Alene, ID, USA, Nov 18-20.

Coyle, M. K.\*\*, Nissley, M.\*, **Wilhelm, F. M.**, and Shaffi, B. 2014. *Didymosphenia geminata* in the Intermountain Northwest and Long-term Management Strategies for Nuisance Mats. Washington Lakes Protection Association Annual Meeting, Chelan, WA, USA, Oct 2.

**Wilhelm, F. M.** 2014. Dealing with dishonest students: what faculty need to know to survive all 12 rounds. 11th Annual UIACADA Advising Symposium. Moscow, ID, USA, Sep 12.

Coyle, M. K.\*\*, and **Wilhelm, F. M.** 2014. Phosphorus enrichment as a management strategy for *Didymosphenia geminata* mats in the Kootenai River Libby, MT. Idaho Chapter of the American Fisheries Society annual meeting. Idaho Falls, ID, USA, Feb 10-13.

Rajkovich, H. E.\*\*, and **Wilhelm, F. M.** 2014. Daily measures of phosphorus and sediment to identify contributions of sub-watershed loads that fuel reservoir cyanobacteria growth. 26th Annual Idaho Department of Environmental Quality Water Quality Conference, Boise, ID, USA, Feb 4-6.

Reams, E.\*\*, and **Wilhelm, F. M.** 2013. Zooplankton size structure as an indicator of productive stocking sites. 33rd annual meeting of the North American Lakes Management Society. San Diego, CA, USA, Oct 28 - Nov 1.

Rajkovich, H. E.\*\*, and **Wilhelm, F. M.** 2013. Use of high-resolution sampling to identify candidate sub-catchments for potential remediation to improve water quality in receiving water bodies. 33rd annual meeting of the North American Lakes Management Society. San Diego, CA, USA, Oct 28 - Nov 1.

Olson, B. L.\*, Bourret, S.\*\*, Bustamante, M.\*, Eguiguren, J. S.\*, **Wilhelm, F. M**., and Iñiguez, C. 2013. Cascading trophic interactions in fish and fishless high-altitude lakes in the Andes of southern Ecuador. 33rd annual meeting of the North American Lakes Management Society. San Diego, CA, USA, Oct 28 - Nov 1.

Rajkovich, H. E.\*\*, and **Wilhelm, F. M**. 2013. Use of high-resolution sampling to identify candidate sub-catchments for potential remediation to improve water quality in receiving water bodies. Joint meeting of Washington Lakes Protection Association and Oregon Lakes Association. Vancouver, WA, USA, Oct 16-18.

Roon, D., Waits, L., Rachlow, J., **Wilhelm, F. M.**, Tank, D., Pinel, S., Cisneros, R., Lopez, F., Iniguez-Gallardo, V., Espinoza, C., Iñiguez Armijos, C. 2013. A student-driven research partnership for building neotropical conservation capacity, centered on the Podocarpus region of Southern Ecuador, 98th Annual Meeting of the Ecological Society of America. Minneapolis, MN, USA, Aug 4-9.

Coyle, M. K.\*\*, and **Wilhelm, F. M.** 2013. Overview of *Didymosphenia gemintata* mesocosm project below Libby Dam. International Kootenai Ecosystem Restoration Team Meeting. Kaslo, B.C., Canada, May 9-10.

Reams, E.\*\*, **Wilhelm, F. M.**, and Dux, A. 2013. Changes in the thermal stratification of Lake Pend Oreille. Lake Pend Oreille Basin Commission Meeting. Dover, ID, USA, Apr 22.

Coyle, M. K.\*\*, and **Wilhelm, F. M.** 2013. *Didymosphenia geminata* in the Kootenai River. Invasive Aquatic Species Treatment, Prevention and Education in the Northern Interior Columbia Basin. Dover, ID, USA, Mar 28.

**Wilhelm, F. M**., Harris, T. D.\*\*, Graham, J. L., and Loftin, K. A. 2013. The ecology of blue-green blooms and implications to management decisions concerning water quality. 23rd Annual Idaho Department of Environmental Water Quality Conference. Boise, ID, USA, Feb 12-14.

Reams, E.\*\*, and **Wilhelm, F. M**. 2013. Changes in the thermal stratification of Lake Pend Oreille. 12th Annual Regional Lakes Day. Spokane, WA, USA, Feb 9.

Harris, T.D.\*\*, **Wilhelm, F. M.**, Graham, J. L., and Loftin, K. A. 2013. Manipulating the nitrogen to phosphorus ratio in lakes and reservoirs: a management strategy to reduce toxic cyanobacterial blooms. 2013 Kansas Natural Resources Conference. Wichita, KS, USA, Jan 24-25.

Thorp, A.\*, Campbell, M.\*, Davidson, D.\*, Suescum, J. A.\*, **Wilhelm, F. M**., and Iñiguez C. 2012. Limnological investigations of limiting nutrients and stream and lake invertebrate communities in the high Andean Páramo of southern Ecuador. 32nd annual meeting of the North American Lakes Management Society. Madison, WI, USA, Nov 7-9.

Reams, E.\*\*, and **Wilhelm, F. M.** 2012. Influences of climate change on the annual thermal stratification of a large oligotrophic lake. 32nd annual meeting of the North American Lakes Management Society. Madison, WI, USA, Nov 7-9.

Harris, T. D.\*\*, **Wilhelm, F. M.**, Graham, J. L., and Loftin, K. A. 2012. Experimental additions of alum and nitrogen to large-scale in situ mesocosms to reduce algal biovolume and microcystin concentration. 32nd Annual meeting of the North American Lake Management Society. Madison, WI, USA, Nov 7-9.

Harris, T.D.\*\*, **Wilhelm, F. M.**, Graham, J. L., and Loftin, K. A. 2012. Potential short-term management strategy to reduce toxic cyanobacterial blooms by manipulation of the nitrogen to phosphorus ratio. 2012 Governor’s Conference on the Future of Water in Kansas. Manhattan, KS, USA., Oct 30-31.

**Wilhelm, F. M.**, and Makus, L. 2012. Mentoring students to graduation and beyond: a faculty perspective. 9th Annual UI/WSU Advising Symposium. Moscow, ID, USA, Sep 9.

Anderson, C. L.\*, Shimada, E.\*, Lopez, F., Tiwi, C.\*, Cisneros, R., Leiva, A. Iñiguez, C. Roon, D., Fremier, A., and **Wilhelm, F. M.** 2011. Relations between benthic macroinvertebrates and vegetative communities along an elevation gradient in the southern Andes of Ecuador: baseline data for indigenous communities and long-term resource management. 31st Annual meeting of the North American Lakes Management Society. Spokane, WA, USA, Oct 25-28.

Harris, T.D.\*\*, **Wilhelm, F. M.** Graham, J. L., and Loftin, K. A. 2011. Alteration of nutrient regimes in large-scale *in situ* enclosure experiments to reduce cyanobacterial biovolume and toxicity. 31st Annual meeting of the North American Lakes Management Society. Spokane, WA, USA, Oct 25-28.

Adams, C. J.\*\*, and **Wilhelm, F. M.** 2011. Perceptions by the general public of cyanobacterial blooms and remediation strategies in lakes: what can scientist learn? 31st Annual meeting of the North American Lakes Management Society. Spokane, WA, USA, Oct 25-28.

Caldwell, T. J.\*\*, and **Wilhelm, F.M.** 2011. The role of the opossum shrimp (*Mysis diluviana)* in the food web of Lake Pend Oreille, a large (380 km2) and deep (>350 m) oligotrophic lake in Northern Idaho, USA. 31st Annual meeting of the North American Lakes Management Society. Spokane, WA, USA, Oct 25-28.

Harris, T. D.\*\*, and **Wilhelm, F. M.** 2011. An overview of large in situ enclosure experiments in Willow Creek Reservoir to reduce cyanobacteria density and toxicity under altered nutrient regimes. Annual meeting of the Oregon Lakes Association. Portland, OR, USA, Oct 21-22.

**Wilhelm, F. M.**, Strittmater, K, and Turner, S. 2011. Advising 303: Degree Audit, What-If and GPA calculator - Oh My! 8th Annual UI/WSU Advising Symposium. Moscow, ID, USA, Sep 9.

Amante, J.\*, **Wilhelm, F. M.**, and Harris, T. D.\*\* 2011. The response of cyanobacteria and zooplankton to experimental addition of nitrogen to large lake enclosures. University of New Hampshire Undergraduate Research Conference. Durham, NH, USA, Apr 27.

Gonzalez, R.\*, Caldwell, T. J.\*\*, and **Wilhelm, F. M.** 2011. The vertical and spatial distribution of zooplankton in Lake Pend Oreille, northern Idaho, in the presence of *Mysis diluviana*. Aquatic Sciences Meeting of the American Society of Limnology and Oceanography. San Juan, Puerto Rico, USA, Feb 13-18.

**Wilhelm, F. M.**, and Caldwell, T. J.\*\* 2011. Mysids in the Lake Pend Oreille food web: history and current research. 10th Annual Regional Lakes Conference. Spokane, WA, USA, Feb 5.

**Wilhelm, F. M**. 2010. Use of large mesocsoms in lake management research. 30th Annual meeting of the North American Lakes Management Society. Oklahoma City, OK, USA, Nov 3-5.

Adams, C. J.\*\*, and **Wilhelm, F. M**. 2010. Amazing differences: the disparity between mass of total solids and phosphorus entering a reservoir based on daily and biweekly samples. 30th Annual meeting of the North American Lakes Management Society. Oklahoma City, OK, USA, Nov 3-5.

**Wilhelm, F. M.** 2010. Incorporating service-learning into an introductory limnology course. Annual joint meeting of the American Society of Limnology and Oceanography and North American Benthological Society. Albuquerque, NM, USA, Jun 6-11.

Caldwell, T. J.\*\*, and **Wilhelm, F. M.** 2010. The role of *Mysis diluviana* in the nutrient and zooplankton community dynamics of a large and deep oligotrophic lake in northern Idaho, USA. Annual joint meeting of the American Society of Limnology and Oceanography and North American Benthological Society. Santa Fe, NM, USA, Jun 6-11.

Nelson, D.\*\*, and **Wilhelm, F. M.** 2010. Food web structure in cave streams of southwestern Illinois: a stable isotope approach. Annual joint meeting of the American Society of Limnology and Oceanography and North American Benthological Society. Santa Fe, NM, USA, Jun 6-11.

Adams, C. J.\*\*, and **Wilhelm, F. M.** 2010. Implications of solar powered circulation of an epilimnion for cyanobacteria control of the zooplankton populations within Willow Creek Reservoir, Oregon. Annual joint meeting of the American Society of Limnology and Oceanography and North American Benthological Society. Santa Fe, NM, USA, Jun 6-11.

Caldwell, T. J.\*\*, and **Wilhelm, F. M.** 2010. The role of the opossum shrimp (*Mysis relicta)* in the nutrient and zooplankton community dynamics of a large and deep (>350 m) oligotrophic lake in Northern Idaho, USA. Annual meeting of the International Association of Great Lakes Research. Toronto, ON, Canada, May 17-21.

Adams, C. J.\*\*, and **Wilhelm, F. M.** 2009. The vertical and horizontal distribution of zooplankton populations in response to a mechanical whole-lake management strategy. 29th Annual meeting of the North American Lakes Management Society. Hartford, CT, USA, Oct 27-31.

**Wilhelm, F. M.**, and Banks, L. 2009. Advising 102: Taking the plunge. University of Idaho Academic Advising Association 6th Annual Advising Symposium. Moscow, ID, USA, Sep 11.

**Wilhelm, F. M**. 2008. An advanced limnology course at the University of Idaho of interest to NALMS CLM/CLPs and other aquatic professionals. 28th Annual Meeting of the North American Lakes Management Society. Chateau Lake Louise, Lake Louise, AB, Canada, Nov 11-14.

Gillespie, K. and **Wilhelm, F. M.** 2008. Advising 101: Getting your feet wet. University of Idaho Academic Advising Association 5th Annual Advising Symposium. Moscow, ID, USA, Sep 5.

**Wilhelm, F. M.** 2008. Using aerators to restore lakes: avoiding nutrient pumps. 23rd Annual Meeting of the Illinois Lake Management Association. Springfield, IL, USA, Feb 28-Mar 1.

**Wilhelm, F. M.** 2007. A touch of realism: service-learning in a natural sciences course - FISH 415 Limnology. Service-Learning Faculty Fellows Workshop. University of Idaho Career and Professional Planning, Moscow, ID, USA, Dec 18-20.

**Wilhelm, F. M.** and Martin, D. L.\*\* 2007. How effective are restorations focused on reducing phosphorus in Illinois lakes? 27th Annual Meeting of the North American Lakes Management Society. Orlando, FL, USA, Oct 30 - Nov 2.

Wahl, N. C.\*\*, Zeigler, J. M.\*\*, Whitledge, G. W., Jacobs, A. M.\*\*, and **Wilhelm, F. M.** 2007. Relationship between bluegill diet and cladoceran size in Campus Lake. 136th Annual meeting of the American Fisheries Society, San Francisco, CA, USA, Sep 2-6.

**Wilhelm, F. M.**, Flood, S.\*, and Seifert, K.\* 2007. The use of whole-lake aeration to restore a small pond impacted by a brine spill from oil and gas development. 22nd Annual Illinois Lake Management Association Conference, Q Center, St. Charles, IL, USA, Feb 22-24.

Martin, D. L.\*\*, and **Wilhelm, F. M.** 2007. The phosphorus reductions of draining and dredging a pond and a cost-benefit analysis of the project. 22nd Annual Illinois Lake Management Association Conference, Q Center, St. Charles, IL, USA, Feb 22-24.

**Wilhelm, F. M.**, Jacobs, A. M.\*\*, and Musgrove, C. S.\* 2006. Aeration of Campus Lake: Controlling internal phosphorus loading and environmental visualization of the whole-lake aeration. 26th Annual Meeting of the North American Lake Management Society. Indianapolis, IN, USA, Nov 8-10.

Martin, D. L.\*\*, and **Wilhelm, F. M.** 2006. Draining and dredging of a pond as a watershed management strategy to improve the water quality of a downstream lake. 26th Annual Meeting of the North American Lake Management Society. Indianapolis, IN, USA, Nov 8-10.

Jacobs, A. M.\*\*, and **Wilhelm, F. M.** 2006. The impact of a reservoir management strategy on the zooplankton community in the Illinois EPA Clean Lakes Phase II Restoration of Campus Lake. 26th Annual Meeting of the North American Lake Management Society. Indianapolis, IN, USA, Nov 8-10.

Jacobs, A. M.\*\*, and **Wilhelm, F. M.** 2006. The impact of artificial lake destratification on the zooplankton community in the Phase II restoration of Campus Lake. 26th Annual Midwest Ecology and Evolution Conference, Washington University, St. Louis, MO, USA, Mar 17-19.

**Wilhelm, F. M**., Jacobs, A. M.\*\*, and Musgrove, C. S.\* 2006. Estimating and visualizing the whole-lake effect of year 1 aerator operation on physical and chemical parameters in the Phase II restoration of Campus Lake. 21st Annual Illinois Lake Management Association Conference, Eagle Creek Resort & Conference Center, Lake Shelbyville, IL, USA, Mar 9-11.

Jacobs, A. M.\*\*, **Wilhelm, F. M.,** and Musgrove, C. S.\* 2006. The impact of lake destratification on the zooplankton community in the Phase II restoration of Campus Lake. 21st Annual Illinois Lake Management Association Conference, Eagle Creek Resort & Conference Center, Lake Shelbyville, IL, USA, Mar 9-11.

Martin, D. L.\*\*, and **Wilhelm, F. M.** 2006. The efficacy of pond draining and dredging as a watershed management strategy to improve the water quality of Campus Lake. 21st Annual Illinois Lake Management Association Conference, Eagle Creek Resort & Conference Center, Lake Shelbyville, IL, USA, Mar 9-11.

**Wilhelm, F. M.**, Wongsopawiro, D.\*\*, and Arts, M. T. 2005. Seasonal lipid dynamics and inter-annual differences in life history characteristics of the grass shrimp, *Palaemonetes kadiakensis*, in a Midwestern US lake. 6th International Crustacean Congress, University of Glasgow, Glasgow, Scotland, Jul 18-22.

Venarsky, M. P.\*\*, Anderson, F. E., Abbasi, W.\*, and **Wilhelm, F. M.** 2005. Population genetics and phylogenetic position of the endangered Illinois cave amphipod *Gammarus acherondytes.* Annual Meeting of the Society of Systematic Biologists. University of Alaska, Fairbanks, AK, USA, Jun 11-14.

Venarsky, M. P.\*\*, **Wilhelm, F. M.**, Anderson, F. E., and Taylor, S. J. 2005. Life history and reproductive timing of the endangered Illinois cave amphipod. 53rd Annual Meeting of the North American Benthological Society, New Orleans, LA, USA, May 22-27.

Venarsky, M. P.\*\*, Anderson, F. E., **Wilhelm, F. M.**, and Taylor, S. J. 2005. Population genetics of the endangered Illinois cave amphipod, *Gammarus acherondytes* (Gammaridae). 25th Annual Midwest Ecology and Evolution Conference, Carbondale, IL, USA, Mar 11-13.

Taylor, S. J., **Wilhelm, F. M.**, Venarsky, M. P.\*, and Adams, G. L.\*\* 2003. Oxygen consumption / body mass relationships of *Gammarus acherondytes* and *G. troglophilus* (Amphipoda) in an Illinois cave. National Speleological Society Annual meeting, CA, USA, Aug 1-5.

**Wilhelm, F. M.**, Taylor, S. J., Venarsky, M. P.\*, and Adams, G. L.\*\* 2003. Oxygen consumption of *Gammarus acherondytes* and *G. troglophilus,* two cave amphipods from Illinois Caverns. The Crustacean Society Annual Conference, Williamsburg, VA, USA, Jun 1-5.

**Wilhelm, F. M.**, Burns, C. W., and Schindler, D. W. 2002. The response of aquatic invertebrates to climate change: Predictions from temperature-mediated reproductive strategies. American Society of Limnology and Oceanography Annual Conference, Victoria Conference Centre, Victoria, B. C. Canada, Jun 10-14.

**Wilhelm, F. M.** 2001. Climate warming and the fate of aquatic invertebrates: Using seasonal reproductive strategies to predict long-term trends in populations. DIALOG IV (Dissertations Initiative for the Advancement of Limnology and Oceanography), Bermuda Biological Station for Research, Bermuda, Oct 13-20.

**Wilhelm, F. M.** 2001. Amphipods on top of the world. DIALOG IV (Dissertations Initiative for the Advancement of Limnology and Oceanography), Bermuda Biological Station for Research, Bermuda, Oct 13-20.

Blais, J. M., **Wilhelm, F. M.**, Kidd, K. A., Muir, D .C. G., Donald, D. B. and Schindler, D. W. 2001. Organochlorine pesticide and PCB concentrations in amphipods (*Gammarus lacustris*) along an elevation gradient in mountain lakes of Banff National Park, Canada. Aquatic Toxicity Workshop, Winnipeg, MB, Canada, Sep 30-Oct 4.

**Wilhelm, F. M.** and Burns, C. W. 2001. Predation by mysids on amphipods: An overlooked interaction in aquatic ecosystems. XXVIII Societas Internationalis Limnologiae Congress, Melbourne, Australia, Feb 4-10.

**Wilhelm, F. M.** and Burns, C. W. 2000. The life history of *Paracalliope fluviatilis* (Crustacea: Amphipoda) in a South Island, New Zealand lake: Implications of warmer temperatures. Annual Conference of the New Zealand Limnological Society, Christchurch, New Zealand, Nov 20-24.

**Wilhelm, F. M.** and Schindler, D. W. 1999. The life history strategy of *Gammarus lacustris* (Crustacea: Amphipoda) in lakes at different elevations in the Canadian Rocky Mountains: Predictions for climate change. Annual Conference of the New Zealand Limnological Society, Wairakei, New Zealand, Nov 29-Dec 3.

Parker, B.R. and **Wilhelm, F. M.** 1999. Harrison Lake Bull Trout. Ecology and Management of Northwest Salmonids: Bull trout II Conference. Canmore, AB, Canada, Nov 17-20.

**Wilhelm, F. M.**, Hudson, J. J. and Schindler, D. W. 1999. Benthic to pelagic phosphorus transport by the amphipod *Gammarus lacustris* in an alpine lake. 18th Annual Conference of the Society of Canadian Limnologists. Edmonton, AB, Jan 7-10.

**Wilhelm, F. M.**, Parker, B. R. Schindler, D. W. and Donald, D. B. 1998. Bull charr (*Salvelinus confluentus*): A desirable species in small mountain lakes. 18th International Symposium of the North American Lake Management Society, Banff, AB, Canada, Nov 10-13.

**Wilhelm, F. M.** and Schindler, D. W. 1998. *Gammarus lacustris* (Crustacea: Amphipoda) zooplankton predation in a Canadian Rocky Mountain alpine lake. XXVII Societas Internationalis Limnologiae Congress, Dublin, Ireland, Aug 9-14.

**Wilhelm, F. M.** 1997. *Gammarus* survival under bull trout predation in a sub-alpine Rocky Mountain lake. Graduate Student Research Symposium, University of Alberta, Edmonton, AB, Canada, Oct 24-25.

**Wilhelm, F. M.** 1997. *Gammarus lacustris* life history trade-offs between prairie and alpine lakes in southwestern Alberta. Prairies University Biological Seminar, University of Alberta, Edmonton, AB, Canada, Feb 20-22.

**Wilhelm, F. M.** 1996. *Gammarus lacustris* - nocturnal marauders. Sharing Ideas: Graduate Student Research Symposium, Department of Biological Sciences, University of Alberta, Edmonton, AB, Canada, Nov 8-9.

**Wilhelm, F. M.** 1996. *Gammarus lacustris* - pelagic predators from the benthos. 44th Annual Meeting of the North American Benthological Society, Kalispell, MT, USA, Jun 3-7.

**Wilhelm, F. M.** 1996. High altitude amphipod research. The Future of Our Environment: research at the University of Alberta, Edmonton, AB, Canada, Apr 29-30.

**Wilhelm, F. M.** and Schindler, D. W. 1995. The life history of *Gammarus lacustris* (Crustacea: Amphipoda) from two southwestern Alberta alpine lakes. American Society of Limnology and Oceanography Annual Conference, University of Nevada, Reno, NV, USA, Jun 11-15.

**Wilhelm, F. M.** and Hiebert, J. A.\*\* 1995. A cheap and easy method to separate benthos from sediments (just add water!). 43rd Annual Meeting of the North American Benthological Society, Keystone, CO, USA, May 30 - Jun 3.

**Wilhelm, F. M.** and Lasenby, D. C. 1995. Activity and respiration rates of *Diporeia hoyi* (Crustacea: Amphipoda) from two south central Ontario lakes. Prairies Universities Biological Seminar, University of Winnipeg, Winnipeg, MB, Canada, Feb 16-18.

**Wilhelm, F. M.** and Lasenby, D. C. 1995. How useful are one-time head capsule length - body size/weight relationships? 14th Annual Conference of the Society of Canadian Limnologists, Ottawa, ON, Canada, Jan 5-7.

**Wilhelm, F. M.** and Lasenby, D. C. 1993. Sediment processing by *Diporeia hoyi* from two south central Ontario lakes. American Society of Limnology and Oceanography Annual Conference, University of Alberta, Edmonton, AB, Canada, May 30-Jun 4.

**Wilhelm, F. M.**, Wilhelm, R. M., Plante, R. and Lasenby, D. C. 1993. A new activity recorder for continuous monitoring of small invertebrates, even in substrates. 41st Annual Meeting of the North American Benthological Society, University of Calgary, Calgary, AB, Canada, May 25-30.

**Wilhelm, F. M.** and Lasenby, D. C. 1993. Vertical distribution of *Diporeia hoyi* in Twelve Mile Lake sediments. 12th Annual Conference of the Society of Canadian Limnologists, Trent University, Peterborough, ON, Canada, Jan 2-4.

**Wilhelm, F. M.** and Lasenby, D. C. 1993. Life history of *Diporeia hoyi* (Crustacea: Amphipoda) from two south central Ontario lakes. 12th Annual Conference of the Society of Canadian Limnologists, Trent University, Peterborough, ON, Canada, Jan 2-4.

**Wilhelm, F. M.** and Lasenby, D. C. 1991. The effect of low dissolved lake oxygen concentration on gill surface area in *Pontoporeia hoyi* (Crustacea: Amphipoda). Ontario Ethology and Ecology Colloquium, University of Guelph, Guelph, ON, Canada, May 12-14.

**Wilhelm, F. M.** 1991. The effect of low dissolved lake oxygen concentrations on gill surface area in the amphipod *Pontoporeia hoyi* (Crustacea: Amphipoda). Ontario Biology Day, McMaster University, Hamilton, ON, Canada, Mar 16.

 **Patents:** (provide title/description, patent number and date)

None

 **Grants and Contracts Awarded:**

**Funded:**

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| 2022-2024 | **Kootenai County** Analysis of metals in water and sediment resuspended from natural and anthropogenic disturbances in the nearshore of Lake Coeur D’Alene.**Wilhelm, F. M.** | $58,000 |
| 2022-2024 | **Idaho Department of Environmental Quality** A sampling program to examine the resuspension of sediment and nutrients from disturbances in the nearshore zone of Lake Coeur D’Alene., **Wilhelm, F. M.** | $ 145,142 |
| 2020-2022 | **Big Payette Lake Water Quality Council.** The release of nutrients and sediment from wave- and wake-induced nearshore disturbances in Big Payette Lake, ID. **Wilhelm F. M.** | $ 90,000 |
| 2020-2025 | **US Army Corps of Engineers.** Willow Creek Reservoir water quality research and evaluation studies **Wilhelm, F. M.** | $ 500,000 |
| 2019-2020 | **US Army Corps of Engineers.** Willow Creek Reservoir water quality research and evaluation studies (Yr5) **Wilhelm, F. M.** | $ 80,000 |
| 2018-2019 | **US Army Corps of Engineers.** Willow Creek Reservoir water quality research and evaluation studies (Yr4) **Wilhelm, F. M.** | $ 80,000 |
| 2017-2022 | **Idaho Department of Environmental Quality.** Water quality and periphyton studies in Lake Coeur D’Alene to support the lake management plan. **Wilhelm, F. M.** | $ 35, 000 |
| 2017-2018 | **US Geological Survey / Idaho Water Resources Research Institute.** 104bEstimating the bulk exchange of water and solutes between fringing wetlands and lakes to estimate the role of wetlands in water quality.**Wilhelm, F. M.** | $44,474 |
| 2017 | **ORED 2017** Equipment Support Request: CNR Core Laboratory equipment replacement. Hudiburg, T., and **Wilhelm, F. M.** | $13,023 |
| 2017-2018 | **US Army Corps of Engineers.** Willow Creek Reservoir water quality research and evaluation studies (Yr3)**Wilhelm, F. M.** | $ 80,000 |
| 2017-2019 | **US Army Corps of Engineers.** Water quality and periphyton studies in Lake Coeur D’Alene to support the lake management plan.**Wilhelm, F. M.** | $35,000 |
| 2016-2017 | **US Army Corps of Engineers.** Willow Creek Reservoir water quality research and evaluation studies (Yr2)**Wilhelm, F. M.** | $ 80,000 |
| 2016-2017 | **Idaho State Department of Agriculture.** Survey of Asian clam distribution at Hope in Lake Pend Oreille, Idaho.**Wilhelm, F. M.**, and Moffitt, C. M. | $7, 582 |
| 2015-2018 | **National Science Foundation. A**n International, interdisciplinary student research program in a biological hotspot of southern Ecuador. Waits, L., Roon, D., Bosque-Perez, N., and **Wilhelm, F. M.** | $ 245,000 |
| 2015-2016 | **US Army Corps of Engineers.** Willow Creek Reservoir water quality research and evaluation studies (Yr1)**Wilhelm, F. M.** | $ 80,000 |
| 2014-2015 | **University of Idaho Service-Learning office** Service-learning mini grant **Wilhelm, F. M.** | $ 400 |
| 2014-2015 | **Idaho EPSCoR.** Proposal to obtain data sondes to obtain water quality data from the Chain Lakes on the Coeur d’Alene River as part of expansion of MILES beyond the Fernan Lake pilot program.**Wilhelm, F. M**., LaCroix, T., and Chess, D. | $ 51,370 |
| 2014-2015 | **Idaho EPSCoR**. Proposal to obtain University of Idaho site license for CTech Development Corporation visualization software.**Wilhelm, F. M**., LaCroix, T., and Anderson, J. W. | $ 5,040 |
| 2014-2015 | **US Army Corps of Engineers** Experimental determination of the role of phosphorus on the growth of *Didymosphenia geminata* in the Kootenai River, Montana, downstream from Libby Dam.**Wilhelm, F. M.**  | $ 5, 800 |
| 2014-2016 | **USFWS Region 1 FY2014 Science Support Partnership**. Risks and effectiveness of benthic barriers as tools to eradicate infestation of Asian clams in the Ellisport Bay treatment area of Lake Pend Oreille, Idaho. Kiebler, R., Moffitt, C. M., and **Wilhelm, F. M.** | $ 46,018 |
| 2014-2015 | **US Army Corps of Engineers** Willow Creek Reservoir Water Sampling in 2014 and determination of Internal Loading.**Wilhelm, F. M.** | $ 65,000 |
| 2013-2015 | **iSEED UI EPSCoR**. Visualizing limnological data: support to develop a data interoperability standard.**Wilhelm, F. M.**, and Anderson, J. W. | $ 65,345 |
| 2013-2015 | **Office of Species Conservation / Pacific Coast Salmon Recovery Fund**.The juvenile steelhead food web in an effluent dominated stream, Troy, ID, determined using stable isotopes.**Wilhelm, F. M**., Sanchez-Murillo, R., Treasure, J., Brooks, E., Boll, J.  | $ 77,846 |
| 2013-2014 | **US Army Corps of Engineers**. Willow Creek Reservoir water sampling in 2013.**Wilhelm, F. M.** | $ 53,729 |
| 2013-2017 | **NSF - IGERT**. Adaptation to change in water resources: science to inform decision-making across disciplines, cultures and scales. Boll, J., and others (Wilhelm listed as participating fac. and contributed lake research idea)  | $ 3,499 161 |
| 2012-2016 | **Montana Fish Wildlife and Parks**, Invasion/outbreak of *Didymosphenia* *geminata* in the Kootenai River at Libby Dam Montana: research for underlying causes and potential remediation strategies.**Wilhelm, F. M.** | $ 277,982 |
| 2012-2015 | **US Army Corps of Engineers**. Experimental determination of the role of phosphorus on the growth of *Didymosphenia geminata* in the Kootenai River, Montana, downstream from Libby Dam. **Wilhelm, F. M.** | $ 96,654 |
| 2012–2013 | **US Army Corps of Engineers**. Willow Creek Reservoir water sampling in 2012.**Wilhelm, F. M.** | $ 50,171 |
| 2011-2013 | **Idaho Department of Fish and Game**. An examination of the spatial and temporal distribution and density of *Mysis* and zooplankton and implications for the survival of kokanee fry in Lake Pend Oreille.**Wilhelm, F. M.** | $ 105,701 |
| 2011-2012 | **US Army Corps of Engineers**. Monitoring water quality in conjunction with circulation patterns from long distance circulation in Willow Creek Lake in 2011.**Wilhelm, F. M.** | $ 54,382 |
| 2011-2012 | **Idaho Department of Fish and Game**. Interpretation of algal data collected below Dworshak Reservoir in association with whole-reservoir nutrient enhancement.**Wilhelm, F. M.** | $ 2,000 |
| 2010-2011 | **US Army Corps of Engineers**. Monitoring water quality and long-distance circulation currents in Willow Creek Lake in 2010. **Wilhelm, F. M.** | $ 84,586 |
| 2010-2011 | **University of Idaho Service-Learning Center**. Service-Learning mini grant for FISH 415 Limnology.**Wilhelm, F. M.** | $ 600 |
| 2009-2010 | **US Army Corps of Engineers.** Literature review of potential impacts of overwater structures on bull trout in Lake Pend Oreille.**Wilhelm, F. M.** | $ 11, 825 |
| 2009-2014 | **Illinois Department of Natural Resources / US Department of the Interior/US Fish and Wildlife Service.** A rearing protocol for the Illinois cave amphipod, *Gammarus acherondytes*, to support its recovery. **Wilhelm, F. M.** | $ 54, 514 |
| 2009-2010 | **US Army Corps of Engineers.** Monitoring water quality in Willow Creek Reservoir in 2009 and obtaining in- and outflow samples to determine the nutrient mass balance.**Wilhelm, F. M.** | $ 13, 230 |
| 2009-2011 | **Idaho Department of Fish and Game.** Determination of the role of *Mysis* in the nutrient budget of surface waters in Lake Pend Oreille and its relation to kokanee survival.**Wilhelm, F. M.** | $ 100,000 |
| 2009-2010 | **IDFG / Kootenay Tribe / Dr. K. Cain** subcontract to monitor water quality and zooplankton populations in natural ponds used to extensively culture burbot.**Wilhelm, F. M.** | $ 5,000 |
| 2008-2009 | **University of Idaho Seed Grant Program.** Investigating mechanisms by which long distance circulation (LDC) enhances surface water quality. **Wilhelm, F. M.** | $ 8,000 |
| 2008-2009 | **Idaho Department of Fish and Game.** Examination of the water chemistry and zooplankton in a small rural pond. **Wilhelm, F. M.** | $ 350 |
| 2008-2010 | **US Geologic Service.** Investigating mechanisms by which long distance circulation (LDC) enhances surface water quality**.****Wilhelm, F. M.** | $ 20,032 |
| 2007-2012 | **US Department of the Interior/US Fish and Wildlife Service.** A rearing protocol for the Illinois cave amphipod, *Gammarus acherondytes*, to support its recovery. **Wilhelm, F. M.** | $ 37,000 |
| 2007-2008 | **Candlewick Lake Association.** Bathymetric Mapping and Sediment Analysis of Candlewick Lake, Illinois.**Wilhelm, F. M.** | $ 11,707 |
| 2006-2008 | **US Department of the Interior/US Fish and Wildlife Service.** A rearing protocol for the Illinois cave amphipod, *Gammarus acherondytes*, to support its recovery.**Wilhelm, F. M.**  | $ 20,000 |
| 2006-2007 | **Lumpkin Family Foundation.** Summary and cost benefit analysis of projects to improve the water quality in Illinois Lakes. **Wilhelm, F. M.** | $ 15,761 |
| 2006-2007 | **Illinois Environmental Protection Agency**. Monitoring the mixing of chloride in Living Light Ministry (Maru) Pond as part of its recovery. **Wilhelm, F. M.** | $ 10,000 |
| 2005-2006 | **Southern Illinois University.** (Undergraduate Student Technology Grant). A proposal to obtain 3-dimensional visualization and interpolation software at Southern Illinois University. **Wilhelm, F. M.**, Esling, S., Sun, W., Williard, K., Harpalani, S. and DeVantier, B. | $ 5,425 |
| 2005 | **Travel Grant - Office of Research and Development.** Southern Illinois University Supplemental grant to attend 6th International Crustacean Congress - Scotland, UK. **Wilhelm, F. M.** | $ 500 |
| 2005-2006 | **US Department of Agriculture/US Forest Service**. A bathymetric inventory of Lakes and Ponds on the Shawnee National Forest. **Wilhelm, F. M.** | $ 23,083 |
| 2005 | **Southern Illinois University.** (Graduate Student Technology Enhancement Grant) Technology to enhance groundwater related research in Zoology and Geology.**Wilhelm, F. M.**, and Esling, S. | $ 9,000 |
| 2004-2007 | **Illinois Environmental Protection Agency.** Phase II long-term restoration and protection of Campus Lake. **Wilhelm, F. M.**, Neuman, R. and Ruffing, A. | $ 476,549 |
| 2004-2005 | **US Department of Agriculture/US Forest Service.** An inventory of biotic communities and water quality in homestead wells of the Shawnee National Forest: A first step to establish a groundwater monitoring network.**Wilhelm, F. M.** | $ 21,397 |
| 2004-2005 | **US Department of the Interior / US Fish and Wildlife Service.** The population genetics and ecology of the Illinois cave amphipod.**Wilhelm, F. M.** | $ 1,591 |
| 2003-2004 | **Illinois Department of Natural Resources.** Differences in water quality between the upper and lower reaches of Illinois Caverns: Potential effects on population s of *Gammarus acherondytes*. Panno, S. V., Hackley, K. C., Kelly, W. R., Hwang, H. H., **Wilhelm, F. M.**, Taylor, S. J. | $ 17,000 |
| 2003-2004 | **USDA Forest Service Shawnee National Forest.** Illinois Spring Cave Fish. Burr, B. M. Adams, G.L. **Wilhelm, F. M.**, Adams, R. | $ 15,000 |
| 2003 | **Division of Natural Heritage, Illinois Department of Natural Resources.** Supplemental funds for: Establishing baseline data on seasonal physiological requirements for *Gammarus acherondytes* and *Gammarus troglophilus* in relation to microbial oxygen demand. January - June 30, 2003 (Total award beginning in 2000: $20,912). Taylor, S. J. (INHS), and **Wilhelm, F. M.** (SIUC) | $ 5,000 |
| 2002-2003 | **Faculty Research and Creative Grants.** - Office of Research and Development,Southern Illinois University. The ecology and lipid dynamics of amphipods in lakes of Southern Illinois.**Wilhelm, F. M.**  | $ 18,768 |
| 2002 | **Travel Grant** - Office of Research and Development, Southern Illinois University Supplemental grant to attend annual meeting of ASLO - Victoria, Canada.**Wilhelm, F. M.** | $ 300 |
| 2001-2002 | **Division of Natural Heritage, Illinois Department of Natural Resources / USFWS.** Establishing baseline data on seasonal physiological requirements for *Gammarus acherondytes* and *Gammarus troglophilus* in relation to microbial oxygen demand. Taylor, S. J., **Wilhelm, F. M.**, Adams, G. L. | $ 15,912 |
| 2000-2001 | **Otago Research Grant (University of Otago).** Effects of climate change on coastal freshwater and brackish ecosystems.Burns, C. W., Schallenberg, M., **Wilhelm, F. M.**, Zehrer, R., Floeder, S., Fitzharris, B., Koons, P., and Schulmeister, J.  | $ 42,344 |
| 1999-2000 | **Minor Equipment Grant.** Department of Zoology, University of Otago**Wilhelm, F. M.**  | $ 1,500 |
| 1997-1999 | **Canadian Circumpolar Institute/Alberta Boreal Research Grant**. The importance of *Gammarus lacustris* in the regeneration of nutrients in small alpine and arctic lakes. **Wilhelm, F. M.**  | $ 5,000 |
| 1997-1998 | **Friends of Banff National Park Research Grant.** An evaluation of the bull charr *Salvelinus confluentus*) population and its diet seasonality in Harrison Lake, Banff National Park, Alberta, Canada. **Wilhelm, F. M.** | $ 3,260 |
| 1996-1998 | **Izaak Walton Killam Memorial Scholarship Research Grant** **Wilhelm, F. M.** | $ 1,500 |
| 1995-1997 | **Challenge Grants in Biodiversity (Alberta Environmental Protection).** An investigation of *Gammarus lacustris lacustris* (Crustacea: Amphipoda) life history from mountain lakes along an altitude gradient in southwestern Alberta. **Wilhelm, F. M.** | $ 12,000 |
| 1995-1997 | **Canadian Circumpolar Institute/Alberta Boreal Research Grant**. The life history and feeding habits of *Gammarus lacustris lacustris*, a crustacean amphipod in alpine and arctic lakes. **Wilhelm, F. M.** | $ 1,000 |

**Honors and Awards:**

 1999-2001 NSERC Post-Doctoral Fellowship University of Otago, NZ

 1998-1999 University of Alberta Dissertation Fellowship University of Alberta, Canada

 1999 18th Int. Symp. N. Am. Lake Management Soc. Hon. Mention for Student Presentation

 1998-1999 Andrew Stewart Memorial Prize University of Alberta, Canada

 1998 Marie Louise Imrie FGSR Travel Award University of Alberta

 1998 Department of Biological Sciences Travel Award University of Alberta

 1996-1998 Izaak Walton Killam Memorial Scholarship University of Alberta, Canada

 1994-1996 NSERC Post-graduate Scholarship University of Alberta, Canada

 1995 Clemens-Rigler Travel Award (SCL/DFO) University of Alberta

 1995 43rd Meeting of N. Am. Benthol. Soc. Best Student Poster

 1994 Ontario Graduate Scholarship Declined

 1992-1993 Ontario Graduate Scholarship Trent University, Canada

 1991-1992 Ontario Graduate Scholarship Trent University, Canada

 1991-1992 Trent University Graduate Entrance Scholarship Trent University, Canada

 1991 NSERC Summer Undergraduate Award Trent University, Canada

 1990-1991 Roy L. Edwards Scholarship Trent University, Canada

 1990 NSERC Summer Undergraduate Award Trent University, Canada

 1989 Summer Research Scholarship University of Guelph, Canada

 1988-1989 Department of Biology Book Prize Trent University, Canada

 1987-1988 Trent University Entrance Scholarship Trent University, Canada

**SERVICE:**

 **Major Committee Assignments:**

 2024 Fish and Wildlife Sciences Scholarship Committee

 2023 Faculty member on FWS Administrative II search Committee

 2023- UI Representative on Lake Coeur d’Alene Science Coordination Team

 2023 Fish and Wildlife Sciences Scholarship Committee

 2023 Promotion review committee for Dr. J. Aycrigg

 2022 3rd Year Review Committee Chair for David Ausband and Jocelyn Aycrigg (Jan)

 2021 3rd Year Review Committee Chair for David Ausband and Jocelyn Aycrigg (Dec)

 2020 3rd Year Review Committee for Jan Eitel

 2019- University of Idaho Honors Program Internal Advisory Council

 2018- Fish and Wildlife Sciences rep on CNR Graduate Council

 2017- Fish and Wildlife Sciences rep on CNR MNR core program committee

 2016-2018 CNR faculty secretary

 2015 New Faculty Orientation Panel participant

 2015 CNR Advisory Council Natural Resources tour presenter to UI Provost and President

 2014 Faculty member of Department of Fish and Wildlife Sciences Department Chair search committee

 2014 Faculty member of Department of Fish and Wildlife Sciences Assistant II search committee

 2014 Faculty member of UI Sr. Associate Registrar search committee

 2014 Faculty member on College of Natural Resources Social Ecological Sciences Department reorganization task force

 2012-2016 Faculty representative on College of Natural Resources Leadership Team (bi-weekly meetings, except summer)

 2012-2016 College of Natural Resources alternate for Faculty Senate

 2014-2016 Co-Chair of Department of Fish and Wildlife Sciences Students Programs Committee

 2013 CNR representative on UI student retention symposium

 2012 University of Idaho Academic Advising Association planning committee for 9th annual advising symposium

 2012 Faculty member of Dr Quist’s T&P committee in Department of Fish and Wildlife Sciences

 2011 Faculty member of Forest Rangeland Extension faculty search committee

 2011 University of Idaho Academic Advising Association planning committee for 8th annual advising symposium

 2011-2012 Faculty member of College of Natural Resources Curriculum Reform committee

 2011 Faculty member of 3rd year review of Dr. Fremier in Department of Fish and Wildlife Sciences

 2010 Faculty member of UI Director of Advising Services search committee

 2010 University of Idaho Academic Advising Association planning committee for 7th annual advising symposium

 2010-2013 CNR representative on Summer Curriculum committee

 2010-2012 Department of Fish and Wildlife Sciences Alternate for CNR graduate committee

 2010 Faculty member of Dr. Kennedy T&P committee in Department of Fish and Wildlife Sciences

 2009-2010 University of Idaho Academic Advising Association Chair of Executive

 2009 University of Idaho Academic Advising Association planning committee for 6th annual advising symposium

 2008-2015 Faculty member of Department of Fish and Wildlife Sciences Scholarship selection committee

 2008 Faculty member of College of Natural Resource hiring committee for Research Scientist for Dr. Coleman

 2008- College of Natural Resources representative of UI Digital Measures Task Force

 2008 Faculty member of College of Natural Resource hiring committee for Research Scientist for Dr. Moffitt

 2008 University of Idaho Academic Advising Association planning committee for 5th annual advising symposium

 2008 Faculty member of 3rd year review committee for Dr. Kennedy in Department of Fish and Wildlife Resources

 2007 Teaching Focus Team for College of Natural Sciences strategic planning

 2006-2007 Committee on Undergraduate Studies, Department of Zoology, Southern Illinois University

 2002-2007 Judge at Illinois Junior Academy of Science Regional Science Fair, Southern Illinois University, Carbondale.

 2006-2010 Science advisory committee for Cave Research Foundation

 2005-2007 Secretary to the Faculty, Department of Zoology, Southern Illinois University

 Advisory Committee, Department of Zoology, Southern Illinois University

 2005 Zoology Dept Search Committee for Fisheries and Illinois Aquaculture Center

 2003-2005 Secretary to the Faculty, Department of Zoology, Southern Illinois University

 2001-2003 Secretary to the Faculty, Department of Zoology, Southern Illinois University

 Committee on Undergraduate Studies, Department of Zoology, Southern Illinois University

 1995-1998 Graduate Student Representative, Department of Biological Sciences Council, University of Alberta

 1992-1993 Student representative on Tenure Track Review Committee, Environmental Resource Studies Department, Trent University

 **Professional and Scholarly Organizations**

 *Current Member in the following professional / scholarly organizations:*

 American Society of Limnology and Oceanography

 North American Lake Management Society

 Sigma Xi

 Washington Lakes Protection Association

 *Past member in the following professional / scholarly organizations*

 Society of International Limnologists

 The Crustacean Society

 International Association of Great Lakes Research

 National Speleological Society

 Illinois Speleological Survey

 Illinois Lake Management Association

 American Institute of Biological Sciences

 *Offices/positions held:*

 2018-2020 Secchi Dip-in and Lakes Appreciation Month Committee, North American Lake Management Society

 2018-2020 Development and fundraising committee, North American Lake Management Society

 2018- Ethics committee, North American Lake Management Society

 2017-2018 Past-president, North American Lake Management Society

 2016-2017 President, North American Lake Management Society

 2015-2016 President-elect, North American Lake Management Society

 2012-2018 North American Lakes Management Society Governmental Affairs and Policy sub-committee

 2012-2018 North American Lakes Management Society Grant, Marketing and Fundraising sub-committee

 2012- North American Lakes Management Society Publications Sub-committee

 2012-2015 Region X Director on Board of Directors for North American Lakes Management Society

 2013- Regional Examination Proctor for Society of Freshwater Scientists certifications

 2010- Associate Editor, Lake and Reservoir Management

 2009/2010 Chair of Executive Committee of University of Idaho Academic Advising Association

 2009-2010 Planning committee for North American Lakes Management Society Annual Meeting in Spokane in 2011

 2008-2015 Washington Lakes Protection Association Board member

 2008-2015 Washington Lakes Protection Association scholarships committee chair

 2008-2020 Data custodian, Illinois Speleological Survey

 2006-2012 Chair Data Request Committee, Illinois Speleological Survey

 2005-2006 Director, Illinois Speleological Survey

 2005-2006 Co-coordinator, Shawnee National Forest Project, Illinois Speleological Society

  *Manuscripts reviewed for the following journals:*

 Advances in Limnology; Aquatic Ecology; Aquatic Sciences; Archiv für Hydrobiologie; Canadian Journal of Zoology; Canadian Journal of Fisheries and Aquatic Sciences; Ecohydrology; Environmental Pollution; Environmental Earth Sciences; Estuarine and Coastal Shelf Science; Freshwater Biology; Fundamental and Applied Limnology; Functional Ecology; Hydrobiologia; Hydrology and Earth Systems Sciences; Inland Waters; Invertebrate Biology; Journal of Crustacean Biology; Journal of Experimental Marine Biology and Ecology; Journal of Fish and Wildlife Management; Journal of Great Lakes Research; Journal of Insect Physiology; Journal of the North American Benthological Society; Lake and Reservoir Management; Limnologica; Limnology and Oceanography; Marine and Freshwater Research; Microbial Ecology; Northwest Science; Northeastern Naturalist; Oecologia; Proceedings of the International Association for Theoretical and Applied Limnology; River Research and Application; Transactions of the American Fisheries Society.

 Grant proposals reviewed for the following funding agencies:

 2016 Reviewer for National Academic Advising Association Faculty Advising Awards

 2014 Reviewer of UI Seed grants

 2010 Reviewer for International Association of Great Lakes Research Baldwin Scholarship

 2009 Illinois Sea Grant reviewer

 2008 UI Seed proposal review

 2007 Cave Research Foundation

 2005 Cannon National Parks Scholarships

 Review of personnel/external theses/dissertations:

 2023 External Reviewer for Promotion and Tenure of Dr. A. Strecker, Western Washington U.

 2014 External Reviewer for Promotion and Tenure of Dr. Haberland at Rutgers University

 2013 External Reviewer for Promotion and Tenure of Dr. Gahdouani at University of Western Australia

 2013 External Grade Reviewer for Dr. Moffitt at USGS

 2012 External Examiner for C. Miners PhD dissertation at University of Western Australia

 2005 External Examiner for K. Wolgemuth, MS thesis at Trent University

 **Outreach Service:** (Including popular press, interview articles, newspaper articles, workshops-seminars-tours organized, Extension impact statements)

 2021 Responded to Krem2 News request for circulation patterns in Lake Pend Oreille

 2021 Gave Interview to KREM2 News on cyanobacteria Aug 09.

 2021 Gave interview to KREM2 News on cyanobacteria, Jul 29.

 2021 Limnology “Teach-me” takeover of UI Instagram site Mar 09.

 2020 Homeowner’s meeting at Fernan Lake to discuss next steps.

 2017 Breakfast meeting with Fernan Lake residents to discuss management options, Fernan Village, ID, USA Aug 8.

 2015 Gave interviews to Spokesman Review and CDA Press reporters about MILES research at Fernan Lake.

 2015 Gave presentation about water resources and professions to a session at the Youth Water Summit held at UI, Moscow, ID, USA, Apr 10.

 Participated in 5 student recruiting events for Dept Fish and Wildlife Sciences

 2014 Aug 15, 2014. Gave interview to Becky Kramer of Spokesman Review regarding work on HABs on Fernan Lake and general research related to MILE/UI EPSCoR - published in Spokesman Review Aug 20th, 2014.http://www.spokesman.com/stories/2014/aug/20/ui-researchers-tracking-sources-of-fernan-lake/

 2014 Presented Idaho EPSCoR Adventure Learning Workshop at Fernan Lake to 10 Idaho middle and high school teachers to provide ideas of how to incorporate lake science into their curriculum. Coeur d’Alene, ID, USA, Jun 16.

 2014 Provided IDFG snorkel crew training about *Didymosphenia geminata* nuisance mats in Idaho and Montana. Lewiston, ID, Jun 5.

 2014 Provided a technical session on cyanobacteria blooms and research at Willow Creek to US Army Corps of Engineers personnel in Portland, OR., USA, May 28-29.

 2014 Gave a three-day workshop on lakes in winter to 65 6th graders at McCall Outdoor Science School. McCall, ID, Mar 18-21.

 2013 Presented seminar: “Dealing with dishonest students: what faculty need to know to survive all 12 rounds” at 11thaAnnual UIACADA Advising Symposium. Moscow, ID, USA, Sep 12.

 2013 Responded to request by NPR reporter Paul Banse with information on cyanobacteria.

 2013 Presented 1/2-day workshop on cyanobacteria and toxins to Idaho Department of Environmental Quality personnel. Boise, ID, USA, Feb 14.

 2012 Gave interview to David Austin of Observer Review about 15,000-gal brine spill in Seneca Lake, NY. Sep 21.

 2012 Presented “Mentoring students to graduation and beyond: a faculty perspective” at 9th annual UI/WSU Advising Symposium. Moscow, ID, USA, Sep 9.

 2012 Gave 3-day workshop on theory and practice of limnology to 20 students at Universidad Tecnica Particular de Loja. Loja, Ecuador, May 19-21.

 2012 Participated on faculty panel at New Student Orientation session. UI, Moscow, ID, USA, Jan 9.

 2011 Presented “Advising 303: Degree Audit, What-If and GPA calculator - Oh My!” at 8th annual UI/WSU Advising Symposium. Moscow, ID, USA, Sep 9.

 2011 Presented seminar on the science of buffer strips and overview of building code setbacks for Lake Pend Oreille to City of Sandpoint Planning Commission. Sandpoint City Hall, Sandpoint, ID, USA, Jun 21.

 2010 Provided ½-day workshop entitled “Understanding dissolved oxygen” to lake professionals before annual meeting of the North American Lakes Management Society. Oklahoma City, OK, USA, Nov 2.

 2010 Gave interview to Erin Hart of UI Argonaut (student newspaper) on Service-learning. Article appeared in Argonaut on May 7th, 2010.

 2010 Gave a 1-day workshop on limnology at annual IDFG fisheries personnel training. Boise, ID, USA, Feb 18.

 2009 Presented “Advising 102: Taking the plunge” at University of Idaho Academic Advising Association 6th Annual Advising Symposium. Moscow, ID, USA, Sep 11.

 2009 Gave interview to Kate Wilson regarding the benefits of buffer strips along lakeshores, especially with regards to Bonner Co. and Lake Pend Oreille on April 9th. Article published in The River Journal 18:12-13.

 2008 Presentation on the science of lake aquatic buffer strips presented to the Bonner Co. ad hoc committee and public reviewing Title 12 of the Bonner County building code. May 29th.

 2006 Gave interview regarding Cave Hill Cave and aquatic biota in it to Brian DeNeal, staff writer for Daily Register on July 14th. News article appeared in printed and online version of The Daily Register on Monday July 17th.

 2005 Gave interview on Campus Lake to reporter of Daily Egyptian Newspaper.

 2003 Organized and presented information on planned restoration activities at Campus Lake to general public in Carbondale.

 2003 Gave a TV interview to CBS-KFVS 12 for Lake lab as part of Illinois Junior Science and Humanities Symposium, Carbondale IL on March 24th. Show appeared on the 18:00 nightly news.

 2003 Presented educational and occupational workshop on aquatic positions to SIUC student chapter of the Wildlife Society

 2002 Gave a TV interview to Kirstin Millgate on lake ice formation and safety for ABC-WSIL 3, Carbondale IL on January 5th. Show appeared on the 22:00 nightly news.

 **Community Service**:(non-academic unrelated to employment)

 2013 Mock interview Panel for INTR 201class

 2012 Mock interview Panel for INTR 201class

 2008-2014 Hosted fly-tying nights in spring semester for Palouse Unit of the American Fisheries Society student chapter at my house.

 2007 Participant, Secchi-Dip In, Coordinated by Kent State University/ US EPA.

 Volunteer Lake Monitoring Program, IL EPA, Campus Lakes (biweekly sampling May to October)

 2006 Participant, Secchi-Dip In, Coordinated by Kent State University/ US EPA.

 Volunteer Lake Monitoring Program, IL EPA, Little Grassy and Campus Lakes (biweekly sampling May to October)

 2005 -2006 Vice President, Little Egypt Grotto (Caving Club in Carbondale

 2005 Participant, Secchi-Dip In, Coordinated by Kent State University/ US EPA.

 Volunteer Lake Monitoring Program, IL EPA, Little Grassy and Campus Lakes (biweekly sampling May to October)

 2004 Wilhelm, F. M., Welker, M., and Kleinschmidt, K. 2004. The Shawnee homestead well and cistern project. Shawnee National Forest Volunteer Appreciation Day. Lake Glendale, IL, USA. Oct 16, 2004.

 Participant, Secchi-Dip In, Coordinated by Kent State University/ US EPA.

 Volunteer Lake Monitoring Program, IL EPA, Little Grassy and Campus Lakes (biweekly sampling May to October)

 2003 Participant, Secchi-Dip In, Coordinated by Kent State University/ US EPA.

 Volunteer Lake Monitoring Program, IL EPA, Little Grassy and Campus Lakes (biweekly sampling May to October)

 2002 Participant, Project WET, Illinois Department of Natural Resources, Giant City State Park.

 Participant, Cedar Lake Workshop, Great Egypt Planning Association, IL EPA

 Volunteer Lake Monitoring Program, IL EPA, Little Grassy and Campus Lakes (biweekly sampling May to October)

 Participant, Secchi-Dip In, Coordinated by Kent State University/ US EPA.

 **Honors and Awards:**

None

**PROFESSIONAL DEVELOPMENT:** (workshops and seminars attended)

 **Teaching / Advising:**

 2023 Attended USEPA 4-day Virtual CyanoSymposium. Oct 16, 18, 23, 25, 4 h per day.

 2023 Attended Per- and polyfluoroalkyl substances workshop hosted by Pediatric Environmental Specialty Units (PEHSU) in ECHO: Extension for Community Healthcare Outcomes Seminar series. Virtual, Oct 5.

 2023 Attended CETL Wired Wednesday workshops.

 2022 Attended CETL Wired Wednesday workshops.

 2021 Attended CETL workshops for new teaching technologies and switch to Canvas.

 2020 What is driving the oxygen depletion in lakes? Process-based modeling of long-term

 oxygen dynamics. R. Ladwig, University of Wisconsin, Madison, WI. Nov 4.

 2020 Attended all CETL online/COVID workshops for teaching in online environment.

 2019 Met with CETL staff on regular basis in fall to develop online limnology course.

 2019 Attended 1-day conference on “Teaching and Learning with Technology”, University of Idaho, Moscow, ID, USA.

 2019 Attended and presented at Active Learning Symposium, University of Idaho, Moscow, ID, USA.

 2018 Attended 1-day conference on “Teaching and Learning with Technology”, University of Idaho, Moscow, ID, USA, Nov 14.

 2018 Attended 1-day Student Success Conference, University of Idaho, Moscow, ID, USA, May 1.

 2018 Attended and presented at Active Learning Symposium, University of Idaho, Moscow, ID, USA, April 30.

 2018 Attended 1-day Drone Summit. University of Idaho, Moscow, ID, USA Apr 24.

 2018 Attended online seminars in Transforming the Teaching and Learning Environment” Virtual Conference, University of Idaho, Moscow, ID, USA, Feb 12-23.

 2017 Attended 1-day active Learning Symposium, University of Idaho, Moscow, ID, USA, Apr 12.

 2016 12th Annual Advising Symposium. University of Idaho, Moscow, ID, USA, Sep 16.

 2016 Attended 1-day Active Learning Symposium, University of Idaho, Moscow, ID, USA, Apr 25.

 2016 Teaching for Engagement - a workshop with Paul Loeb. University of Idaho, Moscow, ID, USA, Mar 16.

 2015-2016 Attended monthly meetings of Active Learning Circle at Doceo Center to learn about active learning classrooms and modifying lecture style.

 2014 11th Annual Advising Symposium. University of Idaho, Moscow, Idaho, Sep 12.

 2013 10th Annual Advising Symposium. University of Idaho, Moscow, Idaho, Sep 12.

 2012 9th Annual Advising Symposium. University of Idaho, Moscow, Idaho, Sep 5.

 2011 8th Annual Advising Symposium. University of Idaho, Moscow, Idaho, Sep 9.

 2011 Service-Learning Community Partnership Celebration Breakfast. Discussion of successful service-learning at UI. Moscow, ID, USA, May 5.

 2011 President’s Engagement Day - a 1-day conference on engaged learning. Moscow, ID, USA, May 6

 2011 “Advising student athletes” Vandal Academic Support Services. Moscow, ID, USA, Jan 27.

 2010 7th Annual Advising Symposium. University of Idaho, Moscow, Idaho, Sep 11.

 2009 “Accommodations for Students with Disabilities - the Essentials” Gloria Jensen, Disability Support Services. December 3.

 2009 6th Annual Advising Symposium. University of Idaho, Moscow, Idaho, Sep 11.

 2009 “The Core Curriculum” Jean Henscheid, UI Core Curriculum. Oct 14.

 2009 “Best advising practices for probation/disqualification students” Dr. B. Pittman, M. Lyngholm and A. Brewick. April 15.

 2009 “Rethinking advising” by Dr. J. Christiansen, UI ACADA seminar. Feb 25.

 2009 “The advantages of summer school for students” Dan Davenport and Cynthia Leonhart. UI ACADA seminar. Feb 10.

 2009 Advanced service-learning faculty development workshop with Dr. Kathleen Rice. University of Idaho Career and Professional Planning, Moscow, ID, USA. Jan 8.

 2008 “Benefits of study abroad and international programs” by Bob Neuenschwander. UI ACADA seminar Dec 03.

 2008- Participant in Learning Circle run by Dr. M. Kyte. University of Idaho.

 2008 Degree Works by N. Krogh. UI ACADA Seminar. Sep 17.

 2008 Attended 5th Annual Advising Symposium. University of Idaho, Moscow, Idaho, Sep 5.

 2007 Service-learning faculty fellows workshop. University of Idaho Career and Professional Planning, Moscow, ID, USA. December 18-20.

 2007 “National survey on student engagement” by Jane Baillargeon. UI ACADA seminar. December 06.

 2007 “Advising off the check sheet”. UI ACADA seminar. November 09.

 2007 4th Annual Advising Symposium. University of Idaho, Moscow, Idaho, September 7.

 2003 “New approaches and techniques for teaching science: Addressing environmental problems to stimulate undergraduate learning”. National Science Foundation sponsored workshop. Bemidji State University, Bemidji, Minnesota, June 15-19, 2003.

 2003 “A critical thinking and writing workshop” with J. C. Bean. Communication across the curriculum and student development, SIUC September 08.

 2003 “Writing across the curriculum workshops” by Toby Fulweiler. Communication across the curriculum and student development, SIUC, April.

 2002 “A forum on writing and service-learning workshop”. Communication across the curriculum and student development, SIUC, September 05.

 2002 “Using the grading process to enhance student learning, teaching and assessment,” and “Scholarly action research in the writing intensive classroom: more tips and rubrics” with Dr. Virginia Anderson. Communication across the curriculum and student development, SIUC, February 14.

 **Scholarship:**

 2023 Attended 1st annual Western AIS short course, Missoula, MT. Mar 7-8

 2021 Presented at 41th Annual International Symposium of the North American Lake

Management Society, online. Nov 15-19.

 2021 Presented at Idea Network for Biomedical Research Experience Annual Conference,

 Moscow, ID. Jul 26-28.

 2021 Was guest speaker at Coeur D’Alene Chamber of Commerce Upbeat Breakfast. Coeur

 d’Alene, ID Aug 10.

 2021 Presented to Lake Coeur D’Alene Bay Watchers. Coeur D’Alene, ID, May 26.

 2021 Presented at Ecological Society of America Annual meeting. Virtual, Aug 2-6.

 2021 Presented at North Fork of Payette Watershed Summit, Virtual, Feb 08.

 2020 Presented at the 40th Annual International Symposium of the North American Lake

Management Society, online. Nov 16-20.

 2020 Presented at 33rd Annual conference of the Washington State Lake Protection

Association, Virtual, Oct. 14-15.

 2020 Guest speaker at Coeur d’Alene Rotary lunch. Coeur d’Alene, ID Sep 18.

 2020 Gave seminar in “Our Gem seminar speaker series”. Virtual, Sep 15.

 2020 Attended and presented at INBRE annual conference Coeur D’Alene, ID, Virtual

August 13.

 2020 Gave Wave& wake presentation to Valley Co. Board of Commissioners, Cascade, ID,

 Jul 27.

 2020 Met with Twin Lakes homeowners’ association and IDEQ to discuss management

 options.

 Virtual, Jun 22.

 2020 Presented basics about limnology to joint House and Senate Natural Resources

 Committees of the Idaho Legislature. Boise, ID, Feb 3.

2019 Met with 2 board members of Selkirk Conservation Alliance to discuss data analysis. Oct 18, 2019

2019 Presented a limnology 101 to Lake Coeur D’Alene Bay Watchers (Approx. 15 people) Jun 25.

2019 Presented importance of N:P ratios to North Idaho Volunteer Lakes Monitoring Program at request of IDEQ. (approx. 10 people) Apr 23.

2019 Gave Influence of Wetland Presentation to IDEQ/IDFG (Approx. 12 people), Jan 1, 2019

2019 Gave presentation on importance of cyanobacteria to Idaho Environmental Health Association at request of IDEQ (Approx. 75 people). Mar 13.

2019 Gave presentation on importance of cyanobacteria to Idaho Rural Water Association at request of IDEQ (Approx. 45 people). Mar 13.

 2018 Idaho Source Water Protection Workshop on ‘Cyanotoxins in Drinking water: Protection & response’, hosted by the Idaho Department of Environmental Quality, Boise and Hayden, ID, USA, Nov 28, 29.

 2018 North American Lake Management Society 2018 International Symposium, Cincinnati, OH, USA, Oct 29-Nov 2

 2018 Oregon Lake Association and Washington Lakes Protection Association Joint Annual Meeting, Portland, OR, Oct 26-28.

 2018 Eastern Washington Regional Lakes Day conference. Spokane, WA, USA, Feb 3.

 2017 North American Lake Management Society 2017 International Symposium, Denver, CO, USA, Nov 6-10.

 2017 The Role of Aeration/Oxygenation in Lake and Reservoir Management, pre-conference workshop given by Dr. C. Holdren, J., Ruane, and R., Kortmann, Denver, CO, USA, Nov 3

 2016 North American Lake Management Society 2016 International Symposium, Banff, AB, Canada, Nov 1-4.

 2016 Internal Loading in Lake, pre-conference workshop given by Dr. G. Nurnberg, AB, Canada, Oct 31.

 2016 Oregon Lakes Association 2016 Annual Conference, The Dalles, OR, USA, Oct 14-16.

 2016 Washington Lakes Protection Association Annual Meeting, Bellingham, WA, USA, Oct 5-7.

 2016 22nd National Nonpoint Source Monitoring Workshop, Salt Lake City, UT, USA, Aug 23-25.

 2015 35thAannual meeting of the North American Lakes Management Society. Saratoga Springs NY, USA, Nov 17-20.

 2015 GIS applications for water resources professionals. 1-day pre-conference workshop given by Marie Esten and Holly Waterfield, Saratoga Spring, NY, USA, Nov 17.

 2015 Washington Lakes Protection Association annual meeting. Walla Walla, WA, USA, Oct 27-28.

 2015 Oregon Lakes Association annual conference, Klamath Falls, OR, USA, Oct 3-4.

 2014 34th annual meeting of the North American Lakes Management Society. Tampa, Florida, CA, USA, Nov 12-14.

 2014 Washington Lakes Protection Association annual meeting. Chelan, WA. USA, Oct 2-3.

 2014 Leading and Sustaining Your Research Program, a professional development course. IBest Institute, University of Idaho, Moscow, ID, USA, Jun 2-6

2013 33rd annual meeting of the North American Lakes Management Society. San Diego, California, USA, Oct 28 - Nov 1.

 2013 Washington Lakes Protection Association/Oregon Lakes Association joint annual meeting. Vancouver, WA, USA, Oct 16-18.

 2013 Idaho Department of Environmental Water Quality Conference. Boise, ID, USA, Feb 12-14.

 2013 12th Annual Regional Lakes Day. Spokane, WA, USA, Feb 9

 2012 North American Lakes Management Society annual meeting, Madison, WI, USA, Nov 7-9, 2012

 2012 Collection, identification, ecology and control of freshwater algae - advanced course. Pre-conference workshop given by Dr. Anne St. Amand, Madison, WI, USA, Nov 6.

 2012 Eastern Washington/Northern Idaho Annual Lakes Day, Spokane Community College, Spokane, WA, USA, Feb 4.

 2012 Regional Sustainability Symposium, Spokane, WA, USA, Feb 9.

 2012 Washington Lakes Protection Association, annual meeting. Wenatchee, WA, USA, Oct 24-26.

 2011 Simple tools for lake and watershed assessment. 1-day workshop given by Dr. David Soballe, Spokane, WA, USA, Oct 25.

 2011 North American Lakes Management Society annual meeting, Spokane, WA, USA, Oct 26-28.

 2011 Washington Lakes Protection Association, annual meeting. Spokane, WA, USA, Oct 27.

 2011 Oregon Lakes Association, annual meeting, Portland, OR, USA, Oct 22.

 2011 Opportunities and challenges for scientists in a changing world: A communication workshop. Presented by Nancy Baron University of Idaho, Moscow, ID, USA, Sep 16.

 2011 Communities and Ecosystems in Transition: a resilience perspective. IUCN workshop, McCall Outdoor Science School, ID, USA, Sep 10.

 2011 UI President’s Sustainability Symposium, Moscow ID, USA, Mar 31.

 2011 Eastern Washington, Northern Idaho Annual Lakes Day, Spokane Community College, Spokane, WA, USA, Feb 5.

 2010 North American Lakes Management Society 30th annual meeting. Oklahoma City, OK, USA, Nov 2-5.

 2010 Washington State Lakes Protection Association Annual Meeting. Tacoma, WA, USA, Sep 9-10.

 2009 29th Annual meeting of the North American Lakes Management Society. Hartford, CT, USA, Oct 27-31.

 2009 Washington State Lakes Protection Association Annual Meeting. Spokane, WA, USA, Sep 22-23.

 2009 30th International Kokanee Workshop, Idaho Department of Fish and Game, Coeur D’Alene Regional Office sponsored workshop. Post Falls, ID, USA, Mar 25.

 2008 28th Annual meeting of the North American Lakes Management Society. Lake Louise, AB, Canada, Nov 11-14.

 2008 Annual meeting of the Washington Lake Protection Association. Arlington, WA, USA, Sep 30 - Oct 1.

 2008 Annual meeting of Illinois Lake Management Society Annual Meeting. Springfield, IL, USA, Feb 28 - Mar 1.

 2008 Inland Northwest Aquatic, Riparian and Wetland Symposium. Spokane, WA, USA, Feb 22.

 2007 27th Annual meeting of the North American Lakes Management Society. Orlando, FL, USA, Oct 30 - Nov 2.

 2007 Annual meeting of the Washington Lake Protection Association. Lake Chelan, WA, USA, Oct 17-19.

 2007 Future Directions in Karst Research. Karst Waters Research Institute, San Antonio, TX, USA, May 3-5.

 2007 Illinois Lake Management Association Annual Meeting. St. Charles, IL, USA, Feb 22 - 24.

 2006 26th Annual Meeting of the North American Lake Management Society. Indianapolis, IN, USA, Nov 8-10.

 2006 Illinois Lake Management Association Annual Meeting. Findlay, IL, USA, Mar 9-11.

 2005 6th International Crustacean Congress, University of Glasgow, Glasgow, Scotland, Jul 18-22.

 2005 Illinois Lake Management Association Annual Meeting. Quad Cities, IL, USA, Mar.

 2004 19th th Illinois Lake Management Association Annual Meeting. Chicago, IL, USA, Mar 25-27

 2003 Annual meeting of The Crustacean Society. Williamsburg, VA, USA, Jun 1-5.

 2003 C2000 Karst Short Course. Taught by Ozark Underground Laboratories. Monroe County Annex, Waterloo, IL, USA, Mar 12.

 2002 American Society of Limnology and Oceanography Annual Conference. Victoria, B. C. Canada, Jun 10-14.

 2001 DIALOG IV (Dissertation Initiative for the Advancement of Limnology and Oceanography. Bermuda Biological Station for Biological Research, St. Georges, Bermuda, Oct 13-20.

 2001 XXVIII Societas Internationalis Limnologiae Congress, Melbourne, Australia, Feb 4-10.

 2000 Annual Conference of the New Zealand Limnological Society, Christchurch, New Zealand, Nov 20-24.

1999 Annual Conference of the New Zealand Limnological Society. Wairakei, New Zealand, Nov 29-Dec 3.

 1999 Ecology and Management of Northwest Salmonids: Bull trout II Conference. Canmore, AB, Canada, Nov 17-20.

 1999 18th Annual Conference of the Society of Canadian Limnologists. Edmonton, AB, Canada, Jan 7-10.

 1998 18th Annual meeting the North American Lake Management Society. Banff, AB, Canada, Nov 10-13.

 1997 4th International Workshop on Ecosystem Manipulation. Jasper National Park, AB, Canada, Oct 14-17.

 1996 3rd Canadian Continuous-Flow Isotope Ratio Mass-Spectrometry Workshop. National Hydrology Research Institute, Saskatoon, SK, Canada, Sep 9-11.

 1996 44th Annual Meeting of the North American Benthological Society. Kalispell, MT, USA, Jun 3-7.

 1995 14th Annual Conference of the Society of Canadian Limnologists. Ottawa, ON, Canada, Jan 5-7.

 1994 The Interactions of Climate Change, Increasing UV-B Exposure and Dissolved Organic Carbon, and their Implications for Aquatic Ecosystems. Jasper National Park, AB, Canada, Nov 4-7.

 1993 American Society of Limnology and Oceanography Annual Conference. Edmonton, AB, Canada, May 30-Jun 4.

 1993 41st Annual Meeting of the North American Benthological Society. Calgary, AB, Canada, May 25-30.

 **Outreach:**

 None

 **Administration/Management:**

 None