# Matthew J. Van Grinsven

# Associate Professor

Department of Earth, Environmental and Geographical Sciences Northern Michigan University 1401 Presque Isle Avenue Marquette, MI 49855 Email: <u>mvangrin@nmu.edu</u> Website: <u>https://nmu.edu/eegs/faculty-and-staff#accordion\_collapse\_234</u>

# **Adjunct Assistant Professor**

College of Forest Resources and Environmental Science Michigan Technological University 1400 Townsend Dr. Houghton, MI 49931

PROFESSIONAL SUMMARY	An Earth systems scientist and Associate Profe biogeochemical research & monitoring method collection and handling techniques, use of data natural tracers, analytical instruments, and adva Research, management and consulting areas of quality assessments, groundwater and surface w wetland & forest resource management, ecolog agricultural science.	ls including professional sample loggers, field-portable analyzers, nced computational procedures. expertise include soil and water vater resource investigations,	
PROFESSIONAL	Microsoft Office packages: Word, Excel, Acc	cess	
SKILLS	<ul> <li>Database operation: Microsoft Access, USGS-NWIS, NOAA-NCEI, USEPA-STORET</li> <li>Data Science: Linear Mixed Effects Modeling, Quantile Regression, Maximum Likelihood Procedures, Extreme-Value Distribution, Numerical Modeling</li> <li>Programming: R, Matlab</li> </ul>		
EDUCATION	<b>Michigan Technological University</b> Ph.D. Forest Science (4.0 GPA) Title: Impacts of the Emerald Ash Borer or Wetland Hydrology, Soils, and Carbon Cycli		
	Michigan Technological University M.S. Geology (4.0 GPA) Title: Estimation of Vertical Groundwater F Streambed through Continuous Temperatur Monitoring and the Relationship of Ground Coaster Brook Trout Spawning Habitat	e Profile	
	Northern Michigan University B.S. Earth Science (Cum Laude) Minors: Biology & Conservation	2006	

	August 2021 – Present
Associate Professor of Physical Geography Department of Earth, Environmental and Geographic Northern Michigan University (NMU)	al Sciences (EEGS)
	August 2016 – Present
Adjunct Professor of Forest Science College of Forest Resources and Environmental Science Michigan Technological University, Houghton, Michiga	. ,
	August 2015 – 2021
Assistant Professor of Physical Geography Department of Earth, Environmental and Geographic Northern Michigan University (NMU)	al Sciences (EEGS)
Au Forest Science Research Assistant (Dr. T. Pypker & Dr U.S. Forest Service Northern Research Station & College of Forest Resources and Environmental Science Michigan Technological University, Houghton, Michiga	ce
	May 2012 – May 2014
<b>Co-instructor</b> (Ms. S. Beiring) 8 <sup>th</sup> Grade Earth Science, Houghton Middle School National Science Foundation GK12 Fellow; MTU Glo	
	Jan 2012 – May 2013
<b>Co-instructor</b> (Dr. T. Pypker) CFRES 4370 Forest Hydrology, spring semester 2012 & Michigan Technological University, Houghton, Michiga	
Hydrological Scientist & Executive Director	May 2011 – April 2012
Nipissing Water Works Environmental Consulting Firm	n, Hancock, MI
<b>Hydrologic Science Technician</b> (GS-07 Permanent) National Park Service: Inventory and Monitoring Progr Northern Colorado Plateau Network, Moab, Utah	May 2009 – April 2011 ram
	August 2006 – May 2009
Geological Science Research Assistant (Dr. A. Mayer) Department of Geological & Mining Engineering & So Michigan Technological University, Houghton, Michiga	
Augus <b>Teaching Assistant &amp; Lab Instructor</b> (Dr. J. Gierke and GMES 3850 Geohydrology, fall semester 2007 & 2008 Michigan Technological University, Houghton, Michiga	
A Teaching Assistant & Lab Instructor (Dr. T. Bornhorst GMES 2000 Understanding the Earth, 2006 – 2008 (3 Michigan Technological University, Houghton, Michiga	semesters)
	July 2007
<b>Co-instructor</b> (Dr. John Gierke and Mrs. L. Hansen) Department of Engineering Fundamentals (ENG) ENG 5301 Engineering Applications in the Earth Scien Michigan Technological University, Houghton, Michiga	

WORK

EXPERIENCE

Research Assistant, Volunteer (10 hrs/mo). Dr. R. Regis Department of Earth, Environmental and Geographical Sciences Geophysical Survey, Seney Wildlife Refuge Northern Michigan University, Marquette, Michigan

May 2005 – August 2005

**Biologic Science Technician, Field Crew Co-leader** Superior Watershed Partnership, Marquette, Michigan

April 2004 - July 2004

Expeditionary Trip Leader (Isle Royale National Park) Camp Manitowish YMCA: Outpost Camp, Boulder Junction Wisconsin

May 2003 - August 2003

Biological Science Technician & Leave No Trace Intern National Park Service: Isle Royale National Park Isle Royale Institute, Houghton, Michigan

TEACHING	Northern Michiga	n University
	1. 2019 – Prese	nt Instructor – GC 488 Earth & Environmental Science Capstone Research
	2. 2019 – Prese	nt Instructor – GC 362 <i>Wetlands</i>
	3. 2017 – Prese	nt Instructor – GC 465 Hydrology
	4. 2017 – Prese	nt Instructor – GC 482 Earth Systems Interactions
	5. 2016	Instructor – GC 255 Physical Geology
	6. 2016 – Prese	nt Instructor – GC 205 Introduction to Geographic Research
	7. 2015 – Prese	nt Instructor – GC 202 Soils
	8. 2015 – Prese	nt Instructor – GC 100 Physical Geography
	Michigan Technol	ogical University
	1. 2012 – 2014	Co-Instructor – NSF GK12 Applied Watershed Science Education, 8 <sup>th</sup> Grade
	2. 2012 – 2013	Co-instructor – CFRES 4870 Forest Hydrology
	3. 2007 – 2008	Lab Instructor – GMES 3850 Geohydrology
	4. 2006 – 2008	Lab Instructor – GMES 2000 Understanding the Earth
	5. 2007	Co-Instructor – ENG 5301 Engineering Applications in the Earth Sciences

PROFESSIONAL MEMBERSHIPS	Society of Wetland Scientists (2019 – Present) Sigma Xi Scientific Research Society (2015 – Present) American Geophysical Union (2007 – 2019) Society of American Foresters (2016 – 2017) Michigan Tech Center for Water and Society (2007 - 2015) Michigan Tech Ecosystem Science Center (2011 – 2015) National Groundwater Association (2007 – 2008) Ecological Society of America (2008) Gamma Theta Upsilon (2006 – Present)	
AWARDS	NMU Reassigned Time Award (2016 & 2017) National Science Foundation Fellowship (GK12) 2012-2014 MTU Distinguished Thesis Award: Nominee of Distinction 2012	
FUNDING	<ol> <li>2013 Michigan Technological University Center for Water &amp; Society Graduate Research Grant \$750 Principal Investigator (PI): Matthew Van Grinsven</li> <li>2012 Michigan Technological University Center for Water &amp; Society Graduate Research Grant \$750 PI: Matthew Van Grinsven</li> <li>2012 Michigan Technological University Ecosystem Science Center Graduate Research Travel Grant \$500 PI: Matthew Van Grinsven</li> <li>2012 Michigan Technological University Center for Water &amp; Society Graduate Research Travel Grant \$500 PI: Matthew Van Grinsven</li> <li>2012 Michigan Technological University Center for Water &amp; Society Graduate Research Travel Grant \$300 PI: Matthew Van Grinsven</li> <li>2012 Michigan Technological University Ecosystem Science Center Graduate Research Grant \$1,000 USD PI: Matthew Van Grinsven</li> <li>2010 Michigan Technological University Center for Water &amp; Society Graduate Research Travel Grant \$300 USD PI: Matthew Van Grinsven</li> <li>2010 Michigan Technological University Center for Water &amp; Society Graduate Research Travel Grant \$300 USD PI: Matthew Van Grinsven</li> <li>2008 Huron Mountain Wildlife Foundation Research Grant \$2,500 USD Co-PI: Alex Mayer, Matthew Van Grinsven</li> <li>2008 Trout Unlimited &amp; Kalamazoo Community Foundation Research Grant \$2,500 USDPI: Matthew Van Grinsven</li> <li>2007 DeVlieg Foundation Research Grant \$5,000 USD PI: Matthew Van Grinsven</li> </ol>	
SERVICE	Northern Michigan University1. 2021 – PresentNMU Parking & Traffic Committee Member and Co-Chair of the Appeals Sub-Committee2. 2017 – PresentNMU-EEGS Outdoor Learning Area Mushroom Growing Workshop Event Coordinator and Co-Educator3. 2016 – PresentChair or Co-Chair of NMU-EEGS Outdoor Learning Area Committee4. 2019 – 2023Marquette County Conservation District Agri-Palooza: Soil Conservation Education Station Organizer & Lead Instructor5. 2019 – 2021NMU UNITED Conference Planning Committee Member6. 2019Marquette Regional History Center's Guided Hike of Presque Isle Park: Invited Speaker and Natural History Field Guide	

7. 2018	NMU-EEGS Outdoor Learning Area Native Tree and Shrub
	Planting Workshop Event Co-Organizer and Co-Instructor
8. 2016 - 2019	NMU Sustainability Advisory Council member
9. 2016	Science Olympiad Event Supervisor (Dynamic Planet)

## Society of Wetland Scientists

1.	2023 - Present President-elect of the Northcentral Chapter of the Society of
	Wetland Scientists

- 2019 Present National and Northcentral Chapter Member of the Society of Wetland Scientists
- 3. 2021 2023 At Large Board Member (elected position) Northcentral Chapter of the Society of Wetland
- 2019 2021 2023 Society of Wetland Scientists Annual Meeting Planning Committee Member
- 5. 2019 2021 Northcentral Chapter of Society of Wetland Scientists Professional Wetland Mentorship Program Committee Member

## Manuscript Reviewer

1. 2018 Journal Forests

#### Marquette County Planning Department

1. 2020 Marquette County Water Coalition Technical Resource Team Partner

#### Science and Management of Ash Forests after EAB

1.	2017	Science and Management of Ash Forests Conference and
		Workshop Co-Organizer

#### Yellow Dog Watershed Preserve (YDWP)

 1.
 2018
 Geological interpreter, field guide, and educator for Yellow

 Dog Wild and Scenic River Storymap Project. See YDWP.

## Moosewood Nature Center

1. 2016 Scientific Bog Walk Event Co-Instructor

#### Michigan Technological University

- 1. 2006 2015 Center for Water and Society member
- 2. 2011 2015 Ecosystem Science Center member
- 3. 2011–2013 Western Upper Peninsula Science Fair Judge
- 4. 2011–2013 CFRES Graduate Seminar Committee member

### PUBLICATIONS

### **Refereed Journal Articles**

- Shannon, J.P., R.K. Kolka, M.J. Van Grinsven, and F. Liu. 2022. Joint Impacts of Future Climate Conditions and Invasive Species on Black Ash Forested Wetlands. Frontiers in Forests and Global Change. 5: 957526. 22 p. <u>https://doi.org/10.3389/ffgc.2022.957526</u>.
- Shannon, J.P., F. Liu, M.J. Van Grinsven, R.K. Kolka, and T.G. Pypker. 2021. Magnitude, Consequences, and Correction of Temperature-Derived Errors for Absolute Pressure Transducers under Common Monitoring Scenarios. *Hydrological Processes*, 36(1), e14457. <u>https://doi.org/10.1002/hvp.14457</u>
- J.C. Davis, Shannon, J.P., M.J. Van Grinsven., N.W., Bolton, J.W. Wagenbrenner, R.K. Kolka, and T.G. Pypker. 2019. Nitrogen cycling responses to simulated emerald ash borer infestation in Fraxinus nigra-

dominated wetlands. *Biogeochemistry*, 145(3), 275-294. https://doi.org/10.1007/s10533-019-00604-2

- N.J. Noh, N.W. Bolton, J.P. Shannon, J.C. Davis, M.J. Van Grinsven, T.G. Pypker, R.K. Kolka, and J.W. Wagenbrenner. 2018. Temperature responses of carbon dioxide fluxes from coarse dead wood in a black ash wetland. *Wetland Ecology and Management*. <u>https://doi.org/10.1007/s11273-018-9649-0</u>
- Van Grinsven, M.J., J.P. Shannon, N.W. Bolton, J.C. Davis, J.W. Wagenbrenner R.K. Kolka, and T.G. Pypker. 2018. Response of Black Ash Wetland Gaseous Soil Carbon Fluxes to a Simulated Emerald Ash Borer Disturbance. *Forests* 9(6), 324. <u>https://doi.org/10.3390/f9060324</u>
- J.P. Shannon, M.J. Van Grinsven., J.C. Davis, N.W. Bolton, N.J. Noh, T.G. Pypker, and R.K. Kolka. 2018. Water level controls on sap flux of canopy species in *Fraxinus nigra* wetlands. *Forests* 9(3), 147. <u>https://doi.org/10.3390/f9030147</u>
- Bolton, N.W., J.P. Shannon, J.C. Davis, M.J. Van Grinsven, N.J. Noh, S. Schooler, R.K. Kolka, T.G. Pypker, and J.W. Wagenbrenner. 2018. Bolton, Nicholas, et al. "Methods to Improve Survival and Growth of Planted Alternative Species Seedlings in Black Ash Ecosystems Threatened by Emerald Ash Borer. *Forests* 9(3), 146. <u>https://doi.org/10.3390/f9030146</u>
- Van Grinsven, M.J., J.P. Shannon, J.C. Davis, N.W. Bolton, J.W. Wagenbrenner, R.K. Kolka, T.G. Pypker. 2017. Source water contributions and hydrologic responses to simulated emerald ash borer infestations in depressional black ash wetlands. Ecohydrology. <u>https://doi.org/10.1002/eco.1862</u>
- Van Grinsven, M.J., A.S. Mayer, and C.J. Huckins. 2011. Estimation of streambed groundwater fluxes associated with coaster brook trout spawning habitat. Ground Water. <u>https://doi.org/10.1111/j.1745-6584.2011.00856.x</u>

### **Other Refereed Publications**

- Weissinger, R., D. Witwicki, H. Thomas, A. Wight, K. Lund, M.J. Van Grinsven. Riparian Monitoring of Wadeable Streams Protocol for the Park Units in the Northern Colorado Plateau Network: V 1.05. 2018. U.S. Deptartment of the Interior National Park Service Inventory and Monitoring Program. <u>NPS/NCPN/NRR—2018/1636</u>
- Perkins, D. W., R. Wissinger, D. Witwicki, H. Thomas, A. Wight, K. Lund, M. Van Grinsven, L. McCoy, and E. Soles. 2018. Riparian Monitoring Protocol Implementation Plan for park units in the Southern Colorado Plateau Network. Natural Resource Report <u>NPS/NCPN/ NRR—2018/1766.</u> National Park Service, Fort Collins, Colorado.
- Van Grinsven, M.J., D. Thoma, M. Malick, and M. Moran. 2010. Water quality in the Northern Colorado Plateau Network, 2006–2009. Natural Resource Technical Report <u>NPS/NCPN/NRTR—2010/358</u>. National Park Service, Fort Collins, Colorado.

### **Other Non-Refereed Publications**

- Van Grinsven, M.J. 2018. "Societal Benefits of Wetland Ecosystems: A Great Lakes Perspective". A Dive into the Great Lakes Cycle: Scientific and Artistic Exploration of Paintings by Alexis Rockman. J.B.K Leonard, T. Cleary and D. Christian. 2018. Multimedia etext available through Northern Michigan University at <u>www.nmu.edu/greatlakescycle</u>.
  - Shannon, J.S., and **M.J. Van Grinsven**. 2018. "Sap Flux and Water Levels for Black Ash Wetlands in western Michigan, USA from 2012 to 2014". *Knowledge of Network Biocomplexity*. <u>doi:10.5063/F12J6911</u>

#### PRESENTATIONS

#### **Published Abstracts**

- Gray, L., R. Swaty, M.J. Van Grinsven. 2023 Comparing LANDFIRE's Existing Vegetation Type Classification with the USFWS National Wetlands Inventory Classification to Improve Wetland Mapping. Society of Wetland Scientists Meeting 2023. Abstract ID#25.
- Kelly, M., A. Naito, M. O'Donnell, M.J. Van Grinsven. 2023. Use of Aerial Light Detection and Ranging Survey to Support Restoration and Management Objectives for Mitigation Wetlands in Marquette, MI, USA. Society of Wetland Scientists Meeting 2023. Abstract ID#24.
- Waatti, E., M.J. Van Grinsven, K. Robinson, C. O'Loughlin, M. O'Donnell. 2022. Vegetation Composition Assessment and Trend Analysis of Forested Mitigation Wetlands in Marquette Michigan, USA. Joint Aquatic Sciences Meeting 2022. Abstract ID#1924.
- O'Loughlin., C., M.J. Van Grinsven, K. Robinson, E. Waatti, M. O'Donnell. 2022. Investigating the Hydrological Connectivity of Forested Mitigation Wetlands Between 2019 - 2021 in Marquette Michigan, USA. Joint Aquatic Sciences Meeting 2022. Abstract ID#1993.
- Donajkowski, A., M.J. Van Grinsven, 2022. An Assessment of the Pollution Vulnerability of the Traverse Group Aquifer in Alpena Township, Michigan Using Geographic Information Systems (GIS) and The DRASTIC Index. Frontiers in Hydrology 2022 Annual Meeting. Abstract ID#1035099.
- Van Grinsven, M.J., E. Hautzinger, K. Robinson, M. Watkeys. 2021. Evaluation of Planted Seedling Survival and Growth in Forested Mitigation Wetlands in Marquette Michigan, USA. Society of Wetland Scientists 2021 Annual Meeting.
- Robinson, K., M. Van Grinsven, E. Hautzinger, M. Watkeys. 2021. Examining Hydrologic Connectivity of Mitigated Forested Wetlands in Marquette Michigan, USA. Society of Wetland Scientists 2021 Annual Meeting.
- Shannon, J., M.J. Van Grinsven, R. Kolka, and F. Liu. 2020. Integrating the effects of climate change and invasive species on wetland ecohydrology to evaluate management options. American Geophysical Union Annual Conference. San Francisco, CA
- Van Grinsven, M.J., J.P. Shannon, N.W. Bolton, J.C. Davis, K.L. Hofmeister, N.J. Noh, E. Stimmel, J.S. Wagenbrenner, R. Kolka and T.G. Pypker. 2019. Ecohydrological Evaluation and Management Implications for Black Ash Wetland Ecosystems Threatened by Emerald Ash Borere. 2019 Society of Wetland Scientists Annual Meeting, abstract #1126.
- Hofmeister, K.L., J.P. Shannon, J.C. Davis, E. Stimmel, M.J. Van Grinsven, N.J. Noh, J.S. Wagenbrenner, T.G. Pypker, F. Liu, and R. Kolka. 2019. Assessing Ecosystem Carbon Pools in Black Ash Wetlands Across the Great Lakes Region. 2019 Society of Wetland Scientists Annual Meeting, abstract # 1214.
- Shannon, J.P., K.L. Hofmeister, M.J. Van Grinsven, V. Porter, R. Kolka, F. Liu. E.S. 2019. Runoff and Stream Water Chemistry Responses to Simulated Emerald Ash Borer Invasion in Black Ash

Wetlands in Northern Michigan. 2019 American Geophysical Union Fall Meeting, abstract # H53L-1950.

- 12. Van Grinsven, M.J., J.P. Shannon, E.S. Kane, N.W. Bolton, J.C. Davis, Noh, N.J., J.W. Wagenbrenner, S. Sebestyen, R.K. Kolka, and T.G. Pypker. 2017. Stream water, carbon and total nitrogen load responses to a simulated emerald ash borer infestation in black ash dominated headwater wetlands. 2017 American Geophysical Union Fall Meeting.
- Adamski, A. D. Becker, M.J. Van Grinsven. 2017. Soil Microbial Interactions with Agricultural Plants in Depleted Urban Soils Amended with Various Organic Fertilizer Treatments. 2017 Managing Global Resources for a Secure Future Annual Meeting.
- 14. Van Grinsven, M.J., J.P. Shannon, E.S. Kane, N.W. Bolton, J.C. Davis, Noh, N.J., J.W. Wagenbrenner, S. Sebestyen, R.K. Kolka, and T.G. Pypker. 2017. Black ash wetland watershed hydrology and soil biogeochemistry responses to a simulated emerald ash borer infestation. 2017 Science and Management of Ash Forests after EAB. Duluth, MN.
- 15. Bolton, N.W., J.C. Davis, J.P. Shannon, M.J. Van Grinsven, N.J. Noh, S.S. Schooler, J.W. Wagenbrenner, R.K. Kolka, T.G. Pypker. 2017. Timing, microsite, site preparation, browse deterrent, and species selection for artificial regeneration within black ash dominated forests at risk of EAB infestation. 2017 Science and Management of Ash Forests after EAB. Duluth, MN.
- Noh, N.J., M.J. Van Grinsven, J.P. Shannon, N.W. Bolton, J.C. Davis, S. Sebestyen, T.G. Pypker, R.K. Kolka, J.W. Wagenbrenner. 2017. Short-term responses of dissolved carbon and nitrogen concentrations to simulated emerald ash borer infestation in a black ash dominated paired watershed. 2017 Science and Management of Ash Forests after EAB. Duluth, MN.
- Davis, J.C., J.P. Shannon, N.W. Bolton, M.J. Van Grinsven, R.K. Kolka, T.G. Pypker. 2017. Vegetation responses to simulated emerald ash borer infestation in Fraxinus nigra-dominated wetlands: implications for management. 2017 Science and Management of Ash Forests after EAB. Duluth, MN.
- Shannon, J., J. Davis, M. Van Grinsven, N. Bolton, N. Noh, T. Pypker, R. Kolka, J. Wagenbrenner, and S. Sebestyen. 2017. Water level controls on transpiration of co-dominant species in black ash wetlands. Science and Management of Ash Forests After Emerald Ash Borer Workshop. Duluth, MN
- Rockett, M., M. Williams, M.J. Van Grinsven. "Environmental Justice in Flint, MI: Comparing Lead Concentrations in Domestic Water Supplies among Household Income Levels and Race Demographics in Connection with Aid Formation and Allocation". 2017 National Environmental Justice Conference and Workshop.
- Van Grinsven, M.J., J.P. Shannon, N.W. Bolton, J.C. Davis, N.J. Noh, J.W. Wagenbrenner, S.D. Sebestyen, R.K. Kolka, T.G. Pypker. "Gaseous soil-carbon flux responses to simulated emerald ash borer disturbances in black ash wetlands with contrasting soil types". 2016 Society of American Foresters Fall Meeting, abstract ID# 441
- Van Grinsven, M.J., J.P. Shannon, N.W. Bolton, J.A. Davis, J.W. Wagenbrenner, S.D. Sebestyen, R.K. Kolka, and T.P. Pypker. 2016. Hydrological response to simulated emerald ash borer infestations in depressional black ash wetlands. Society of American Foresters Annual Conference. Madison, WI.

- Noh, N.J., J.P. Shannon, N.W. Bolton, J.A. Davis, M.J. Van Grinsven, T.P. Pypker, R.K. Kolka, and J.W. Wagenbrenner. 2016. Carbon dioxide efflux from coarse dead wood in black ash wetlands. Society of American Foresters Annual Conference. Madison, WI
- 23. Davis, J.C, N.W. Bolton, J.P. Shannon, M.J. Van Grinsven, N. Noh, J.W. Wagenbrenner, R.K. Kolka, and T.G. Pypker. 2016. Nutrient dynamics and vegetation impacts of simulated emerald ash borer infestation in black ash wetlands. Society of American Foresters Annual Conference. Madison, WI.
- Bolton, N. J. Davis, J. Shannon, M. Van Grinsven, N. Noh, S. Schooler, J. Wagenbrenner, R. Kolka, and T. Pypker. 2016. Controls on Alternative Species Seedling Survival and Growth in Black Ash Ecosystems. Society of American Foresters Annual Conference. Madison, WI.
- Van Grinsven, M.J., J.P. Shannon, J.C. Davis, N.W. Bolton, N.J. Noh, J.W. Wagenbrenner, S.D. Sebestyen, R.K. Kolka, T.G. Pypker. 2016. Ecosystem implications of emerald ash borer disturbances in black ash wetlands. American Association of Geographers - Great Lakes Division Meeting. Marquette, MI.
- Bolton, N., J. Davis, J. Shannon, M. Van Grinsven, J. Wagenbrenner, S. Sebestyen, R. Kolka, and T. Pypker. 2015. Microsite implications for seedling survival following simulated emerald ash borer invasion in northern Michigan wetlands. Society of American Foresters Conference. Baton Rouge, LA.
- Davis, J.C., M.J. Van Grinsven, N.W. Bolton, J.P. Shannon, R.K. Kolka, J.W. Wagenbrenner, and T.G. Pypker. "Changes in nitrogen cycling resulting from simulated emerald ash borer mortality in black ash wetlands of northern Michigan." 2015 Ecological Society of America Annual Meeting, abstract ID PS 68-79.
- Van Grinsven, M.J., N.W. Bolton,, J.P. Shannon, J.C. Davis, J.W. Wagenbrenner, S.D. Sebestyen, R.K. Kolka, T.G. Pypker. Water table and soil gas emission responses to disturbance in northern forested wetlands. 2014 American Geophysical Union Fall Meeting, abstract# B23E-0259.
- 29. Van Grinsven, M.J., N.W. Bolton, J.C. Davis, J.P. Shannon, J.W. Wagenbrenner, S.D. Sebestyen, R.K. Kolka, T.G. Pypker. Hydrology of black ash wetlands and water table response to a simulated emerald ash borer disturbance in the upper peninsula of Michigan. 2014 Science in the Northwoods Conference.
- Bolton, N.W., M.J. Van Grinsven, J.P. Shannon, J.C. Davis S.D. Sebestyen, R.K. Kolka, J.W. Wagenbrenner, T.G. Pypker. Unexpectedly high methane emissions through black ash lenticels in forest wetlands of northern Michigan. 2014 American Geophysical Union Fall Meeting, abstract# GC21D-0589.
- 31. Davis, J.C., M.J. Van Grinsven, N.W. Bolton, J.P. Shannon, R.K. Kolka, J. Nelson, J.W. Wagenbrenner, T.G. Pypker. Simulated impacts of emerald ash borer on throughfall and stemflow inputs of water and nitrogen in black ash wetlands in northern Michigan. 2014 American Geophysical Union Fall Meeting, abstract# H23S-02.
- Van Grinsven, M.J., T.G. Pypker, and R.K. Kolka. 2012. Use of isotopic and hydrometric monitoring methods to partition hydrologic contributions to forested wetlands in the Upper Peninsula of Michigan. 2012 American Geophysical Union Fall Meeting, abstract# H31B-1120.
- 33. **Van Grinsven, M.J.**, A.S. Mayer, and C.J. Huckins. Estimation of vertical groundwater fluxes into a streambed through continuous

temperature profile monitoring and the relationship of groundwater fluxes to coaster brook trout spawning habitat. 2010 American Geophysical Union Fall Meeting, abstract# H24C-03.

- 34. **Van Grinsven, M.J.**, A.S. Mayer, and C.J. Huckins. Associations between groundwater-surface water dynamics and coaster brook trout spawning habitat in the Salmon Trout River, Marquette County, Michigan. 2008 Ecological Society of America Meeting, PS 1-18.
- 35. **Van Grinsven, M.J.**, A.S. Mayer, and C.J. Huckins. Associations between groundwater-surface water dynamics and coaster brook trout spawning habitat in the Salmon Trout River, Marquette County, Michigan. 2007 American Geophysical Union Fall Meeting, abstract# H13D-1540.

### Community Presentations (not published)

- "Indicators of fire effects and post-fire recovery in North Creek, Zion National Park". Van Grinsven, M.J., D.P. Thoma. Utah Department of Environmental Quality Nonpoint Source Water Quality Conference, October 2010.
- "Associations between groundwater-surface water dynamics and coaster brook trout spawning habitat in the Salmon Trout River, Marquette County, Michigan". Van Grinsven, M.J., A.S. Mayer, and C.J. Huckins. Copper Country Chapter of Trout Unlimited, January 2008.

#### **Invited Presentations**

- Van Grinsven, M.J., J.P. Shannon, N.W. Bolton, J.C. Davis, N.J. Noh, J.W. Wagenbrenner, S.D. Sebestyen, R.K. Kolka, T.G. Pypker. "Gaseous soilcarbon flux responses to simulated emerald ash borer disturbances in black ash wetlands with contrasting soil types". 2016 Society of American Foresters Fall Meeting, abstract ID# 441
- "Estimation of vertical groundwater fluxes into a streambed through continuous temperature profile monitoring and the relationship of groundwater fluxes to coaster brook trout spawning habitat." Van Grinsven, M.J., A.S. Mayer, and C.J. Huckins. Michigan Technological University Environmental Engineering Graduate Seminar Series, September 2011.

### Other (Non-Published) Presentations

- Joyal, N.A., L. Putnum, D. Maki, M.J. Van Grinsven. "A Study of the Relative Commercial Viability of Cannabis Indica in an Organic "Super-Soil" Mycorrhizal Ecosystem" 2023 NMU Celebration of Student Scholarship.
- Burtrum, C.E., M.J. Van Grinsven, A.T. Naito. "Comparing soil carbon and organic matter among burn severity classes for the 2021 Brittle Fire, Michigan, USA" 2023 NMU Celebration of Student Scholarship.
- Zolman, L.G., M.J. Van Grinsven. "The Effects of Culverts on the Health of Whetstone Brook in Marquette, MP" 2023 NMU Celebration of Student Scholarship.
- 4. Eide, H. **M.J. Van Grinsven**. "Underground Pumped Hydro Energy Storage Potential in the U.S." 2021 NMU Celebration of Student Scholarship. \*Third place: Undergraduate Upper Division.

- Sternberg, C., M.J. Van Grinsven. "The Effects of the New Sugarloaf Mountain Parking Lot on the Abundance of Birds" 2021 NMU Celebration of Student Scholarship.
- 6. Haugen, C., **M.J. Van Grinsven**, M. Martin. "*Evaluating Solar Panel Performance Efficiency in Northern Michigan*" 2021 NMU Celebration of Student Scholarship.
- Anderson, N., M.J. Van Grinsven. "Annual Variation in Discharge and Effects on Specific Conductance in the Animas River of Southwestern Colorado" 2020 NMU Celebration of Student Scholarship.
- 8. Mier, A., **M.J. Van Grinsven**. *"Effect of Organic Amendments upon Soil and Plant Helath in Potted Beans"* 2019 NMU Celebration of Student Scholarship.
- Green, C., M.J. Van Grinsven. "Assessing the Relationship between Benthic Macroinvertebrate Populations and the Distribution of Grain-size within Sediment beds of the Yellow Dog Watershed". 2019 NMU Celebration of Student Scholarship.
- Toivonen, S., and M.J. Van Grinsven. "Storm Event Response of Whetstone Brooke, Marquette MI". 2019 NMU Celebration of Student Scholarship.
- Diederichsen, R., and M.J. Van Grinsven. "Land Use and Land Change Implications on Hydrological Processes of Adjacent Watersheds from 1975-2016" 2018 NMU Celebration of Student Scholarship. \*2<sup>nd</sup> Place Award – Undergraduate Upper Division.
- 12. Kantola, M., R. Rebertus, and **M.J. Van Grinsven**. "The Relationship between woodland Caribou, (*Rangifer tarendus caribou*) Soil, Vegetation, and Carbon Cycling on the Slate Islands Archipeligo in Central Ontario, Canada". 2018 NMU Celebration of Student Scholarship.
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