Michigan Tech Water Newsletter

Please send water-related items to post in the weekly email to Carol Asiala at glrcadmin-l@mtu.edu. We would especially like to include on-campus seminar announcements, off-campus conferences and webinars, and notifications of new funding and other member highlights.

On-Campus Seminars
New Funding Opportunities
Courses for Spring 2018 -
Request Contribution numbers for GLRC Publications
Reports and Action Plans
Conferences & Webinars
Open RFPs of ongoing interest
Graduate Certificate in Sustainable Water Resources Systems
Student Research Grants (morning of December 4) and Travel Grants (December 29)
Colloquium Course – UN5100 – next offered: Spring 2018
Seminar Speaker Support Program
Job Opportunities
Student Opportunities

1. On-Campus Seminars

**Friday, December 1, 2017**

Philip Hartmeyer, certified maritime archaeologist
Thunder Bay National Marine Sanctuary, Alpena, Michigan

*Role, techniques and applications of advanced digital documentation methods in surveying the shipwrecks within the Thunder Bay National Marine Sanctuary*

Michigan Technological University Archives Travel Grant program
East Reading Room of the Van Pelt and Opie Library 4:00 pm

**Monday, December 4, 2017**

Amlan Mukherjee, Faculty, Civil & Environmental Engineering

*Communicating Life Cycle Assessment Outcomes using Environmental Product Declarations in the Civil Infrastructure Industry*

Environmental Engineering Seminar Series
GLRC 202 3:00 pm

**Monday, December 4, 2017**

EPSSI seminar: Dr. Lynn Mazzoleni, Dept. of Chemistry

*Investigating Complex Mixtures using Ultrahigh Resolution Orbitrap Elite Mass Spectrometry: The Molecular Composition of Wildland Fire Aerosol*

Earth, Planetary, and Space Sciences Institute (EPSSI) Seminar Series
M&M U113 4:00 pm

**Wednesday, December 6, 2017**
**Summer Undergraduate Research Fellowship (SURF) Workshop**

SURF is a research fellowship program that offers undergraduate students a $4000 stipend to work for 10 weeks on research on campus in the summer. Applications are open to all Tech undergraduates who have at least one semester remaining after the summer. This workshop, led by Will Cantrell, will help prepare you for the application process.

Fisher Hall, 131
6:00 pm

**Friday, December 8, 2017**

**Masters Defense: Andrew Kennedy, Biological Sciences**

Advisor: Rupali Datta

*Metabolomic Assessment of Tetracycline Degradation Pathways within Vetiver Grass (Chrysopogon zizanoides [L.nash]) in Hydroponic Systems*

GLRC 202
11:00 am

**Monday, December 11, 2017**

**Pengfei Xue, Faculty, Civil & Environmental Engineering**

Environmental Engineering Seminar Series

GLRC 202
3:00 pm

**Monday, December 11, 2017**

**EPSSI seminar: Dr. John Cook, Center for Climate Change Communication**

George Mason University

*Responding to alternative facts in a post-truth world*

Earth, Planetary, and Space Sciences Institute (EPSSI) Seminar Series

M&M U113
4:00 pm

**Tuesday, December 12, 2017**

**CEE Senior Design Colloquium**

MUB Ballroom A1 & A2
8:00 - 10:00 am

**Tuesday, December 12, 2017**

**Masters Defense: Maria Diletta Acciaro, Geology**

Co-advisors: Thomas Oommen and John Gierke

*Regional Probabilistic Landslide Hazard Assessment for Enguri Dam (Jivari, Georgia)*

DOW 633
2:00 pm

**Thursday, December 14, 2017**

**Johann Kowalko, PhD, Department of Genetics, Iowa State University**

*Understanding the genetic basis of trait evolution in the cavefish, Astyanax mexicanus*

Biological Sciences Seminar

MEEM 402
3:00 pm

---

### 2. New Funding Opportunities

New proposals can be submitted through the Great Lakes Research Center. Director Guy Meadows’ signature will be needed on the PI signature page of the transmittal sheet.
Reminder: The GACS pilot program offered by the Michigan Tech Graduate School has been extended to offer tuition support on proposals. There is no current end date set for this program.

Michigan Space Grant Consortium (MSGC)
If you have applied for an MSGC grant, you should have received an email from Sponsored Programs approving your application today with the letters from Sponsored Programs and the Pavlis Honors College. If you have not received an email yet today, please email Carol Wiitanen (cawiitan@mtu.edu) or Jennifer Bukovich (jlbukovi@mtu.edu) and ask them to check on the status of your application. The deadline for the final upload to MSGC is 5:00 on Monday, December 4.

Summer Undergraduate Research Fellowship (SURF) Program
2018-NIST-SURF-01
Department of Commerce, National Institute of Standards and Technology
Deadline: February 12, 2018

Earth System Model Development and Analysis
DE-FOA-0001862
Department of Energy - Office of Science
Pre-application Deadline: January 16, 2018
Application Deadline: March 19, 2018

3. Courses for Spring 2018 -

CEE 5520 Introduction to Hydrodynamic Modeling
3 Credits; Tues & Thurs 2:05 - 3:20 pm; Dillman 204
This is an introductory course of numerical methods used in hydrodynamic simulation. Topics include numerical model formulation, model simulation, data analysis, and parameter estimation. It provides fundamental concepts and various numerical methods used in hydrodynamic modeling. An introduction to the basic physical processes in the hydrodynamic system (e.g. oceans and lakes) and their numerical representation using governing equations will also be discussed. Students will have a chance to construct and use their own simplified numerical models to solve basic hydrodynamic questions in class projects. This class is aimed for helping student understand fundamental concepts of numerical modeling with its strengths and limitations and its application to the problems of coastal oceans and large lakes, as well as engineered systems that are of interest to environmental and other engineers.
**BL 5025 The Scientific Profession**

2 Credits - CRN 14130; T 11:05 - 12:45; ChemSci Bldg, Room 0215

This 2-credit class will be discussion-based, covering the practice of sciences for graduate students, including how to plan a research project, tips for preparing grants, conference presentations, publications, navigating the job market, and consideration of personal and social issues (e.g., diversity and bias, time management and work-life balance, etc.). It also fulfills the advanced RCR requirement for graduate students. More details can be found on the attached flier.

Although this course is offered through Biological Sciences, the topics covered are not specific to the field and I find that it works the best when students from other departments also participate. In the past the class had included students from many programs across campus, including SFRES, Chemistry and Chem Eng, Civil Environ Eng, Biomed Eng, Geol Eng + Sci, Mechanical and Electrical Eng, Humanities and Cognitive and Learning Sci. We typically have a mix of new and more established students, of traditional and non-traditional students, of US and international students, and of MS and PhD students.

![Image of bar graph](https://example.com/image.png)

"Piled Higher and Deeper" by Jorge Cham. [www.phdcomics.com](http://www.phdcomics.com). Used with permission

Contact: Amy Marcarelli, Department of Biological Sciences, ammarcar@mtu.edu

**BL 4465 Biological Oceanography**

3 credits - Lecture: MWF 11:05 - 11:55; ChemSci Bldg, Room 0215

The ocean is the majority of Earth and the largest biome on the planet. Processes that occur in the ocean are highly dynamic and central to regulating the planet’s biogeochemistry and climate which influences the resources and ecosystem services provided to humans. This course is an introduction to biological oceanography and will provide an overview of the factors governing productivity, population dynamics and distribution of organisms in major
ecosystems of the ocean, with some coverage of topics related to earth sciences. The course covers ecological themes such as trophic level interactions, nutrient cycling, ecology of plankton, invertebrates, fish, mammal and bird resources. Additional topics include basic water chemistry and light in oceans, climate variability and effects, and human influences on marine ecosystems.

Contact: **Dr. Jill Olin**, Great Lakes Research Center, jaolin@mtu.edu, GLRC 110

**BL 4070 Environmental Toxicology**
3 credits - Lecture: MWF 9:05 - 9:55; ChemSci Bldg, Room 104A
Prerequisites: BL1010, BL1020 or BL1040, CH1150 & CH1160
This course will provide an introduction to basic principles of toxicology and cover the history and scope of the field; study a wide range of pollutants from legacy PCB’s, DDT and mercury to emerging pollutants including pharmaceuticals and personal care products. Additional topics include consequences of pollutant release and exposure on human and environmental health and concepts such as bioconcentration, bioaccumulation and biomagnification, metabolism and elimination of toxicants, mechanisms of toxic action; carcinogenesis; as well as human and ecological risk assessment.

Contact: **Dr. Gord Paterson**, Department of Biological Sciences, gpaterso@mtu.edu, GLRC 112

**BL 4450 Limnology will be offered again in Spring 2018**
3 credits - CRN 15042 + 15043
Lecture: MW 10:05 - 10:55; Lab R 12:05 - 2:55
Limnology is the interdisciplinary study of biological, physical, and chemical processes of freshwater systems. This course is designed for advanced undergraduate and graduate students in Biology, Forestry, Wildlife, Civil and Environmental Engineering and other environmental disciplines seeking a deep understanding of how lakes work, and approaches for studying them.

Contact: **Amy Marcarelli**, Department of Biological Sciences, ammarcar@mtu.edu

---

4. **Request Contribution numbers for GLRC Publications**

Please email Carol Asiala (glrcadmin-l@mtu.edu) when you are preparing publications. We are continuing to follow in the time-honored tradition of many Institutes by recognizing Contribution Numbers in papers that we publish in the peer-reviewed literature. You are welcome to participate. All you need to do is -

1. Contact Carol Asiala/Beth Hoy (glrcadmin-l@mtu.edu) to request a Contribution Number. Please provide as much citation info as possible - author(s), title, journal/book, etc.

2. Add to your acknowledgements section, "This is Contribution No. _ of the Great Lakes Research Center at Michigan Tech."

3. Get back to Carol when your paper is in print and give her the volume and page numbers.

Your participation is welcomed for this effort to enhance the visibility of the GLRC.
5. Reports and Action Plans

Federal Science Partners Periodic Update
November 17, 2017

Great Lakes Connections
International Joint Commission newsletter
November 2017

6. Conferences & Webinars

OneNOAA Science Seminars Series
Currently scheduled webinars: October 2017 - March 2018

December 11-15, 2017
AGU Fall Meeting
New Orleans, LA

February 15-16, 2018
2nd International Conference on Climate Change
Colombo, Sri Lanka
Abstract Deadline: November 23, 2017

February 20-22, 2018
23rd Annual Wetland Science Conference
Wisconsin Wetlands Association
Oconomowoc, Wisconsin
  • Call for Symposia. SUBMISSION DEADLINE: Sept. 29, 2017.
  • Call for Presentations & Posters – to be issued September 2017.
    SUBMISSION DEADLINE: Nov. 15, 2017
  • Student Scholarships – APPLICATION DEADLINE: Jan. 12, 2018
    Note: we will also be holding a student presentation competition with cash prizes!
  • Registration – to open December 2017. EARLY BIRD DEADLINE: Jan. 19, 2018

May 16-17, 2018
2018 AOC Annual Conference
United States Environmental Protection Agency and the Wisconsin Department of Natural Resources
Sheboygan, WI

June 18-21, 2018
9th International Charr Symposium
Duluth, Minnesota
Call for papers will be sent in Sept-Oct 2017

**IAGLR 2018**
International Association for Great Lakes Research (IAGLR)
Conference Theme: *Great Science for Tomorrow's Solutions*
**Conference Dates:** June 18-22, 2018 in Toronto

---

7. **Open RFPs of ongoing interest**

**2017 National Fish Habitat Action Plan**
F17AS00016
Department of the Interior, Fish and Wildlife Service
Deadline: Applications are accepted on a rolling basis

**United States - Israel Binational Science Foundation**
NSF-BSF Joint Funding Program
Deadlines are dependent on program: October - January

**Young Faculty Award (YFA)**
Solicitation Number: DARPA-RA-17-01
Agency: Other Defense Agencies
Office: Defense Advanced Research Projects Agency
Deadline: December 4, 2017

**FY 2017 and FY 2018 Training and Technical Assistance to Improve Water Quality and Enable Small Public Water Systems to Provide Safe Drinking Water**
EPA-OW-OGWDW-17-01
Environmental Protection Agency
Deadline: December 4, 2017

**Cooperative Ecosystem Studies Unit, Great Lakes Northern Forests CESU**
G18AS00011: model for the fate and transport of oil-particle aggregates (OPAs) in natural rivers after an oil spill incidence
Department of the Interior, Geological Survey
Deadline: December 5, 2017

**Innovative Solutions for Fish Passage at Hydropower Dams**
DE-FOA-0001662
Department of Energy, Golden Field Office
Deadline: December 7, 2017

**FY18 Nancy Foster Scholarship Program**
NOAA-NOS-ONMS-2018-2005346
Department of Commerce, NOAA
Deadline: December 8, 2017
FY18 ENVIRONMENTAL WORKFORCE DEVELOPMENT AND JOB TRAINING (EWDJT) GRANTS
EPA-OLEM-OBLR-17-10
Environmental Protection Agency
Deadline: December 15, 2017

Coastal Resilience Planning Support
Michigan Sea Grant
Eligible applicants are Michigan coastal communities
Deadline: December 15, 2017

Coastal Zone Management Program FY19
Michigan DEQ
Deadline: December 15, 2017

FY2018 Marine Debris Prevention
NOAA-NOS-ORR-2018-2005333
Department of Commerce, NOAA
Deadline: December 16, 2017

EPA’s 2018 SBIR Phase I
EPA
Deadline: December 19, 2017

Fox River Natural Resource Damage Assessment
F17AS00186
Department of the Interior, Fish and Wildlife Service
Deadline: December 31, 2017

Solid Waste Management Grant Program
SWMFY2018
Department of Agriculture, Utilities Programs
Deadline: January 2, 2018

TAT Grant Program FY18
Technical Assistance and Training (TATFY18)
Department of Agriculture, Utilities Programs
Deadline: January 2, 2018

Yukon River Salmon Research and Management Assistance FY2018
F17AS00303
Department of the Interior, Fish and Wildlife Service
Deadline: January 5, 2017

CZM Projects of Special Merit Competition - FY2018
NOAA-NOS-OCM-2018-2005389
Department of Commerce, NOAA
Deadline: January 5, 2017
Great Lakes Fish and Wildlife Restoration Act
F18AS00012
Department of the Interior, Fish and Wildlife Service
Deadline: January 8, 2017

Fishery Research and Sea Lamprey Research
Great Lakes Fishery Commission
Pre-proposal Deadline: January 15, 2018

Chesapeake Bay Program Office Fiscal Year 2018 Request for Proposals for Support for both the Small Watershed and the Innovative and Nutrient Sediment Reduction Grant Programs
EPA-R3-CBP-18-01
Environmental Protection Agency
Deadline: January 15, 2018

FY2018 Coastal and Ocean Modeling Testbed Project
NOAA-NOS-IOOS-2018-2005452
Department of Commerce, NOAA
Deadline: January 19, 2018

FY 2018 NATIONAL ENVIRONMENTAL INFORMATION EXCHANGE NETWORK GRANT PROGRAM
EPA-OEI-18-01
Environmental Protection Agency
Note: Michigan Tech is designated as an Instrumentality of the State of Michigan and if therefore eligible to lead a proposal
Deadline; January 26, 2018

Fiscal Year 2018 NMFS-Sea Grant Fellowships in Marine Resource Economics
NOAA-OAR-SG-2018-2005450
Department of Commerce, NOAA
Deadline: January 26, 2017

Fiscal Year 2018 NMFS-Sea Grant Fellowships in Population and Ecosystem Dynamics
NOAA-OAR-SG-2018-2005442
Oceanic and Atmospheric Research (OAR), National Oceanic and Atmospheric Administration (NOAA), Department of Commerce
Deadline: January 26, 2018

Coastal Hypoxia Research Program (CHRP)
NOAA-NOS-NCCOS-2018-2005327
Department of Commerce, NOAA
Deadline: January 30, 2018

National Estuarine Research Reserve System (NERRS) Land Acquisition and Construction Program for Fiscal Year 2018
NOAA-NOS-OCM-2018-2005340
Department of Commerce, NOAA
Deadline: February 1, 2018

**Round 3 of Research to Operations Initiative: NGGPS and HFIP**
NOAA-NWS-NWSPO-2018-2005325
Department of Commerce, NOAA
Deadline: February 7, 2018

**Round 3 of Research to Operations Initiative: NOAA Testbeds**
NOAA-NWS-NWSPO-2018-2005317
Department of Commerce, NOAA
Deadline: February 7, 2018

**2018 Regional Ecosystem Prediction Program (REPP): Understanding Coral Ecosystem Connectivity in the western Gulf of Mexico**
NOAA-NOS-NCCOS-2018-2005334
Department of Commerce, NOAA
Deadline: February 9, 2018

**Identification and application of acidification thresholds in coastal ecosystems**
NOAA-NOS-NCCOS-2018-2005323
Department of Commerce, NOAA
Deadline: February 13, 2018

**Environmental Justice Collaborative Problem-Solving (EJCPS) Cooperative Agreement**
EPA-OP-OEJ-18-01
Environmental Protection Agency
Deadline: February 16, 2018

**Atmospheric System Research**
DE-FOA-0001845
Department of Energy - Office of Science
Deadline: February 28, 2018

**Environmental System Science**
DE-FOA-0001855
Department of Energy - Office of Science
Deadline: March 31, 2018

**Environmental Literacy Grants: Supporting the education of K-12 students and the public for community resilience**
NOAA-SEC-OED-2018-2005455
Department of Commerce, NOAA
Deadline: April 6, 2018

**Fiscal Year 2019 National Sea Grant College Program Dean John A. Knauss Marine Policy Fellowship**
NOAA-OAR-SG-2019-2005447
Department of Commerce, NOAA
Deadline: April 6, 2018

FY18 Funding Opportunity Announcement (FOA) for the Office of Naval Research (ONR) Navy and Marine Corps Science, Technology, Engineering & Mathematics (STEM), Education and Workforce Program
N00014-18-S-F003
Department of Defense - Office of Naval Research
Deadline: September 28, 2018

Coastal Program -- Great Lakes Restoration Initiative
F18AS00025
Department of the Interior, Fish and Wildlife Service
Deadline: September 30, 2018

Coastal
F18AS00013
Department of the Interior, Fish and Wildlife Service
Deadline: September 30, 2018

Partners for Fish and Wildlife
F18AS00011
Department of the Interior, Fish and Wildlife Service
Deadline: September 30, 2018

Interpreting the Conditions of the Nation's Freshwater, Wetland and Coastal Resources
US EPA
Research Associateship Programs, Fellowship Office, Policy and Global Affairs
Deadlines: February 1; May 1; August 1; November 1

MI DEQ Nonpoint Source Implementation RFP (FY2018)
2018 Draft Schedule for Implementation Grants
2/17/17: Watershed Plans must be submitted for Approval
6/12/17: Draft RFP information Released
7/19/17: RFP Released
7/19/17: Watershed Plans must be 319 Approved
7/25/17: Webinar – RFPs, Eligibility, Priorities, and NOI form
8/16/17: Notice of Intent Letters due
8/30/17: Invitations for Full Proposals sent via e-mail
9/12/17: Webinar – Priorities, Project and application tips
10/13/17: Proposals due
Proposal Review
Projects Awarded Early Summer 2018

MI DEQ Nonpoint Source RFP schedule (FY2018)
2018 Draft Schedule for Planning Grants
6/12/17: Draft RFP information Released
7/19/17: RFP Released
7/25/17: NPS Webinar
9/11/17: Proposals due
Proposal Review
Projects Awarded Mid-January 2018 -OR- after Federal FY18 Budget Approval

**FY18 Long Range Broad Agency Announcement (BAA) for Navy and Marine Corps Science and Technology**
N00014-18-S-B001
Department of Defense, Office of Naval Research
Deadline: September 28, 2018

**FY 2018 – 2020 - Broad Agency Announcement (BAA) Announcement Type: Initial**
NOAA-NFA-NFAP0-2018-2005418
Department of Commerce, NOAA
Deadline: September 30, 2020

**NSF Announcements:**

<table>
<thead>
<tr>
<th>Program Nbr</th>
<th>Title</th>
<th>Proposal Deadline</th>
</tr>
</thead>
<tbody>
<tr>
<td>16-503</td>
<td>National Science Foundation Research Traineeship Program (NRT)</td>
<td>Letter of Intent: December 6, 2017</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Proposal: February 6, 2018</td>
</tr>
<tr>
<td>17-512</td>
<td>Division of Environmental Biology (core programs) (DEB)</td>
<td>Pre-Proposal: Jan. 23, 2018 Full Proposal: Aug 2, 2018</td>
</tr>
<tr>
<td>17-513</td>
<td>Long Term Research in Environmental Biology (LTREB)</td>
<td>Pre-Proposal: Jan. 23, 2018 Full Proposal: Aug 2, 2018</td>
</tr>
<tr>
<td>17-543</td>
<td>Antarctic Research</td>
<td>next deadline not set yet</td>
</tr>
<tr>
<td>18-510</td>
<td>Research Coordination Networks in Undergraduate Biology Education (RCN-UBE)</td>
<td>January 30, 2018</td>
</tr>
<tr>
<td>17-537</td>
<td>Faculty Early Career Development Program (CAREER)</td>
<td>July 18, 2018: BIO, CISE, EHR</td>
</tr>
<tr>
<td></td>
<td></td>
<td>July 19, 2018: ENG</td>
</tr>
<tr>
<td></td>
<td></td>
<td>July 20, 2018: GEO, MPS, SBE</td>
</tr>
<tr>
<td>14-559</td>
<td>Opportunities for Promoting Understanding through Synthesis (OPUS)</td>
<td>August 1, 2018</td>
</tr>
<tr>
<td>15-506</td>
<td>Science, Technology, and Society (STS)</td>
<td>February 2, 2018</td>
</tr>
<tr>
<td></td>
<td></td>
<td>August 3, 2018</td>
</tr>
<tr>
<td>15-577</td>
<td>Collections in Support of Biological Research (CSBR)</td>
<td>August 13, 2018</td>
</tr>
<tr>
<td>PD 98-1650</td>
<td>Biological Oceanography</td>
<td>February 15, 2018</td>
</tr>
<tr>
<td></td>
<td></td>
<td>August 15, 2018</td>
</tr>
<tr>
<td>PD 98-1610</td>
<td>Physical Oceanography</td>
<td>February 15, 2018</td>
</tr>
<tr>
<td></td>
<td></td>
<td>August 15, 2018</td>
</tr>
<tr>
<td>PD 98-1670</td>
<td>Chemical Oceanography</td>
<td>February 15, 2018</td>
</tr>
<tr>
<td></td>
<td></td>
<td>August 15, 2018</td>
</tr>
<tr>
<td>PD 98-1620</td>
<td>Marine Geology &amp; Geophysics</td>
<td>Proposals Accepted Anytime</td>
</tr>
<tr>
<td>17-566</td>
<td>Geography and Spatial Sciences Program</td>
<td>September 6, 2018</td>
</tr>
<tr>
<td>PD 17-7643</td>
<td>Environmental Sustainability</td>
<td>October 20, 2017</td>
</tr>
<tr>
<td>PD 17-1417</td>
<td>Chemical and Biological Separations</td>
<td>October 20, 2017</td>
</tr>
<tr>
<td>PD-17-1440</td>
<td>Environmental Engineering</td>
<td>October 20, 2017</td>
</tr>
<tr>
<td>PD 09-6882</td>
<td>Environmental Chemical Sciences (ECS)</td>
<td>October 31, 2017</td>
</tr>
<tr>
<td>15-536</td>
<td>Research Experiences for Teachers (RET) in Engineering and Computer Science&lt;br&gt;Limited Submission – Internal Deadline: August 29</td>
<td>October 10, 2017</td>
</tr>
<tr>
<td>15-600</td>
<td>Integrated Earth Systems (IES)</td>
<td>November 14, 2017</td>
</tr>
<tr>
<td>18-503</td>
<td>Dynamics of Coupled Natural and Human Systems (CNH)</td>
<td>January 23, 2018</td>
</tr>
<tr>
<td>16-506</td>
<td>Improvements in Facilities, Communications, and Equipment at Biological Field Stations and Marine Laboratories (FSML)</td>
<td>December 8, 2017</td>
</tr>
<tr>
<td>15-568</td>
<td>Earth Sciences Postdoctoral Fellowships (EAR-PF)</td>
<td>January 9, 2018</td>
</tr>
<tr>
<td>15-504</td>
<td>Major Research Instrumentation Program (MRI)&lt;br&gt;Limited Submission – Internal Deadline:</td>
<td>January 10, 2018&lt;br&gt;October 25, 2017</td>
</tr>
<tr>
<td>16-517</td>
<td>National Robotics Initiative (NRI)</td>
<td>January 11, 2018</td>
</tr>
<tr>
<td>PD 98-1680</td>
<td>Ocean Technology and Interdisciplinary Coordination</td>
<td>February 15, 2018</td>
</tr>
<tr>
<td>17-593</td>
<td>Long-Term Ecological Research (LTER) -renewal proposals only</td>
<td>March 2, 2018</td>
</tr>
<tr>
<td>17-527</td>
<td>NSF Scholarships in Science, Technology, Engineering, and Mathematics (S-STEM)</td>
<td>March 28, 2018</td>
</tr>
<tr>
<td>15-558</td>
<td>Hydrologic Sciences (HS)</td>
<td>Accepted Anytime</td>
</tr>
<tr>
<td>PD-06-5740</td>
<td>Climate and Large-Scale Dynamics</td>
<td>Accepted Anytime</td>
</tr>
<tr>
<td>15-560</td>
<td>Geomorphology and Land-use Dynamics (GLD)</td>
<td>Accepted Anytime</td>
</tr>
<tr>
<td>15-516</td>
<td>Earth Sciences: Instrumentation and Facilities (EAR/IF)</td>
<td>Accepted Anytime</td>
</tr>
<tr>
<td>16-595</td>
<td>Arctic Research Opportunities</td>
<td>Accepted Anytime</td>
</tr>
</tbody>
</table>

**NASA ROSES 2017**

<table>
<thead>
<tr>
<th>APPENDIX</th>
<th>PROGRAM</th>
<th>NOI/Step 1 DUE DATE [2]</th>
<th>PROPOSAL DUE DATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>A.1</td>
<td>Earth Science Research Program Overview</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>A.8</td>
<td>Supporting UN Sustainable Development Goals 14 and 15 in the Context of Climate Variability and Change</td>
<td>TBD</td>
<td>TBD</td>
</tr>
<tr>
<td>A.24</td>
<td>DSCOVR Science Team</td>
<td>TBD</td>
<td>TBD</td>
</tr>
<tr>
<td>A.29</td>
<td>Rapid Response and Novel Research in Earth Science</td>
<td>N/A</td>
<td>Rolling submissions through 3/29/2018</td>
</tr>
<tr>
<td>A.34</td>
<td>Earth System Science Pathfinder (ESSP) Venture-class Science Investigations: Earth Venture Suborbital-3</td>
<td>Comments due by Oct 31, 2017</td>
<td>TBD</td>
</tr>
<tr>
<td>A.40</td>
<td>Earth Science Applications: Disaster Risk Reduction and Resilience</td>
<td>TBD</td>
<td>TBD</td>
</tr>
<tr>
<td>A.42</td>
<td>Advancing Collaborative Connections for Earth System Science</td>
<td>12/1/2017</td>
<td>1/31/2018</td>
</tr>
<tr>
<td>E.2</td>
<td>Topical Workshops, Symposia, and Conferences</td>
<td>N/A</td>
<td>Rolling submissions through 03/29/2018</td>
</tr>
</tbody>
</table>
8. Graduate Certificate in Sustainable Water Resources Systems

Currently enrolled students can download the Certificate Degree Schedule to plan their coursework. When they have completed the required courses, or are enrolled in the last ones, the certificate degree schedule should be submitted to Nancy Byers Sprague (nspr@mtu.edu) in the Graduate School.

Request from GLRC:
If you plan to complete the certificate, please email Carol Asiala (mtcws@mtu.edu)
- If you are not already on the glrc-student-community-1 email list, you will be added and will receive announcements of water-related activities and the opportunity to apply for travel and research grants.
- We would like to keep a list of students working towards the certificate, and then we also have an idea of which students need to enroll in the UN5100, the Water and Society colloquium course.

Links to certificate degree schedule:
Grad School:

9. Student Research Grants (December 1) and Travel Grants (December 29)

Research Awards: Graduate and undergraduate research awards are now due the first Friday in December and March of each year, and the 2nd Friday in August.

December 1, 2017 March 2, 2018 August 10, 2018
(research proposals will be accepted through Monday morning, Dec 4)

Each award can be up to $750. Awards can also be used to support undergraduate research in formal class settings (e.g. Enterprise, Senior Design, Pavlis, senior thesis, capstone classes etc.).

Applications and Requirements for Research Grants are online at:
http://www.mtu.edu/greatlakes/about/documents/glrc-studentresearchgrant.pdf

The research should support the Center's mission (http://www.mtu.edu/greatlakes/about/documents/strategic-plan.pdf).

Travel Awards: Graduate student travel grants ($500) are also available through the Center for Water and Society to present a water related paper at a conference. Applications are reviewed on the last Friday of each month, and must be submitted at least 2 weeks in advance of planned travel.
Applications for Travel grants are online at: [http://www.mtu.edu/greatlakes/about/documents/glrc-travel-grant-app.pdf](http://www.mtu.edu/greatlakes/about/documents/glrc-travel-grant-app.pdf)

Student advisors must be a faculty member of the GLRC or the students must be supported on a GLRC-affiliated research grant.

Students will also be required to indicate how they would like to provide a return on the GLRC investment. Options include:

- a. presenting a poster at World Water Day in March;
- b. assisting with preparations for World Water Day;
- c. assisting with GLRC-sponsored outreach activities;

10. Colloquium Course – UN5100 – next offered: Spring 2018

**Water & Society Colloquium Course**

**Spring 2017 Topic:** “Holistic Health Assessment for a Waterborne Contaminant from Multiple Perspectives”

**Course Number:** UN5100, CRN 13023, 1 credit

**Time/Location:** Tuesdays 3:35-4:25 in Dow 875 (Confirmed)

**Course Organizer:** Noel Urban (nurban@mtu.edu)

Each week, participants will read a journal paper or scientific report in preparation of discussion sessions on Tuesdays. Select films from the Green Film series (held Thursday evenings) will be used in lieu of the paper/Tuesday discussions. Students not registered for the course and faculty are encouraged to participate.

Discussion sessions will be led by a group of students and faculty. This group will prepare a few questions or comments the week preceding the discussion and send these to the class as a way to begin focusing the discussion. The group will begin the discussion session with a 10-minute summary of the major issues covered by the preceding week’s reading and repeat the discussion questions.

This course (or SS 5325) is required for the CWS Graduate Certificate in Sustainable Water Resources Systems.

11. Seminar Speaker Support Program

Great Lakes Research Center members can apply for assistance in bringing seminar speakers to Michigan Tech. Lecture topics should be of interest to the GLRC, and the visit should correspond with GLRC goals. The [Seminar Speaker Request](mailto:glrcadmin@mtu.edu) form should be emailed to Carol Asiala at glrcadmin@mtu.edu.

12. Job Opportunities

-------- Forwarded message --------
From: Amber Wutich <Amber.Wutich@asu.edu>
Date: Thu, Nov 2, 2017 at 4:47 PM
Subject: New postdoc position - USDA funded study of water & stakeholder engagement
To: SEA-L@list.kennesaw.edu

I am hiring, along with my collaborator Sarah Porter (Director, Kyl Institute for Water Policy), a postdoctoral researcher for a new USDA-funded study of water, agriculture, and community and stakeholder engagement. This is a large-scale collaboration with ASU, Penn State, and U Nebraska. The postdoc would be based in Phoenix, AZ. Please reach out if you are interested in applying!

**Postdoctoral Research Associate Morrison Job #12187**
Arizona State University Morrison Institute  
first close date will be November 29, 2017

Best, Amber Wutich  
Professor of Anthropology  
Director, Center for Global Health  
School of Human Evolution & Social Change  
Arizona State University

-------------------------------------------

**Postdoctoral Position in Watershed Modelling**
The Ohio State University  
Posted: Oct 13, 2017

**Postdoctoral Position in Coastal Ecosystem-Based Management**
University of Maryland Center for Environmental Science (UMCES)  
Application review begins: December 1, 2017
The University of Maryland Center for Environmental Science (UMCES) is seeking a post-doctoral Assistant Research Scientist to work on a funded 2-year project in Ecosystem-Based Management (EBM). This unique position, coordinating with a multidisciplinary team of research leaders in EBM involving oceanographers, fisheries scientists, social scientist and science policy experts, provides an opportunity to work at the intersection of science and policy on fundamentally challenging ecosystem questions. The successful candidate will interact with researchers, planners and policy makers in several regions of the US to help identify and address the significant information gaps that limit implementation of an ecosystem approach. The position will involve literature research, workshop development and stakeholder surveys to create implementation strategies for enabling EBM in regional coastal ecosystems. The appointee will have opportunities to collaborate with scientists across UMCES ([www.umces.edu](http://www.umces.edu)). A Ph.D. in Marine Science, Environmental Policy or a related field is preferred. Salary will be commensurate with experience. Full university health and retirement benefits are available.

Review of applications will begin on December 1, 2017. Applications should include CV, copies of up to 3 publications, statement of research interests, one-page summary of Ph.D. thesis, names/addresses of four references.

For further information contact Mike Roman at postdoc-roman@umces.edu. Applications will be reviewed until position is filled.

UMCES is an AA/EOE institution. Individuals with disabilities, veterans, women, and minorities are encouraged to apply.

**IAGLR Job Board**
Job Opportunities in the Great Lakes

The Stewardship Network – Job Postings

State of Minnesota
Hydrologist & Natural Resources positions
https://statejobs.doer.state.mn.us/JobPosting
Search on Job Grouping=Environmental Sciences
Or Department = Pollution Control Agency  (includes summer jobs for students)

The Ohio Environmental Council – Careers & Internships

Positions posted on CUAHSI web site
(Careers/fellowships/post-docs/research assistantships/faculty positions)

13. Student Opportunities

Fiscal Year 2018 NMFS-Sea Grant Fellowships in Marine Resource Economics
NOAA-OAR-SG-2018-2005450
Department of Commerce, NOAA
Deadline: January 26, 2017

FY18 Nancy Foster Scholarship Program
NOAA-NOS-ONMS-2018-2005346
Department of Commerce, NOAA
Deadline: December 8, 2017

Fiscal Year 2019 National Sea Grant College Program Dean John A. Knauss Marine Policy Fellowship
NOAA-OAR-SG-2019-2005447
Department of Commerce, NOAA
Deadline: April 6, 2018

Graduate Research & Training Scholarship Program (GRTSP)
NOAA
Applications accepted twice per year

Research Associateship Programs
The National Academies
4 application deadlines throughout the year
Participating agencies include: NOAA and EPA