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.

Recorded Events
Highlights
On-Campus Seminars
New Funding Opportunities
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 (August 11) and Travel Grants (May 26)
Colloquium Course – UN5100 – next offered: Spring 2018
Seminar Speaker Support Program
CUAHSI (Consortium of Universities for the Advancement of Hydrologic Science, Inc.)
Job Opportunities
Student Opportunities

1. Recorded Events

Photos and videos from the 2017 World Water Day events are available online for review:

Dr. Tchobanoglous’ World Water Day Keynote Lecture: Planned Potable Reuse: The Last Frontier

Panel Discussion: Wastewater: Health, Energy, Ecosystems, and Sustainable Communities

Photos from the student poster competition, dirty water competition, and the wastewater footprint display can be viewed on Flickr here.

For more information regarding World Water Day events, please see the World Water Day 2017 blog post.

2. Highlights

James DeGraff (GMES/GLRC) is the principal investigator on a project that has received a $27,500 research and development contract from the US Geological Survey. The project is "The Keweenaw Fault Geometry, Secondary Structures and Slip Kenematics Along the Bete Grise Bay Shoreline." This is a one-year project.
CUAHSI members will now receive discounted registration rates for CUAHSI events and workshops. Michigan Tech is a CUAHSI member, so Michigan Tech faculty, staff, and students are CUAHSI members, and are eligible for the member discount. The member discounts will go into effect for the 2017 CUAHSI Conference on Hydroinformatics. Simply choose the CUAHSI member registration type when registering to receive the discounted rate. The member discounts for CUAHSI training workshops will go into effect starting in 2018.

3. On-Campus Seminars

Thursday, May 11, 2017
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Green Film Series: Inhabit (2017)
The film Inhabit explores the many environmental issues facing us today and examines solutions that are being applied using the ecological design process called ‘Permaculture’. Permaculture is the development of agricultural ecosystems designed to be sustainable and self-sufficient and seeks to shift our agricultural impact from destructive to regenerative. Focused mostly on the Northeastern and Midwestern regions of the United States, Inhabit provides an intimate look at permaculture peoples and practices ranging from rural, suburban, and urban landscapes. (93 min.)
Facilitator: tbd
Forestry, Hesterberg Hall G002 7:00 - 8:30 pm
Cosponsored by Lake Superior Stewardship Initiative, Michigan Tech Great Lakes Research Center, Keweenaw Unitarian Universalist Fellowship, and Keweenaw Land Trust

July 22-27, 2017
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Summer Keweenaw Geotours by Land and Boat
Bill Rose (GMES) and Erika Vye (GLRC)
Five different one-day geotours are offered, focusing on Keweenaw Geoheritage, and using the RV Agassiz:
July 22: Glacial Geology
July 24: Lavas and the great rift
July 25: The Keweenaw Fault
July 26: Redbed sediments filling the Rift
July 27: Mining wastes and Lake Dynamics

For registration and more information, see this link.
4. 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.

**NASA ROSES 2017** has been announced. The table of program elements with updated due dates will be kept current in the "Open RFPs of ongoing interest" section of this newsletter.

**Water Resources Research National Competitive Grants Program**
G17AS00027  
Department of the Interior, Geological Survey  
Deadline: June 1, 2017

**Great Lakes Bay Watershed Education and Training Program (B-WET) FY18**
NOAA-NOS-ONMS-2018-2005158  
Department of Commerce, NOAA  
Deadline: June 2, 2017

**Coastal Watershed Restoration Grant Program for the Southeast New England Program (SNEP)**
EPA-R1-SNEP-2017  
Environmental Protection Agency  
Deadline: June 12, 2017

**BOEM FY 2017 Environmental Studies Program**
M17AS00015  
Department of the Interior, Bureau of Ocean Energy Management  
Deadline: June 6, 2017

**BOEM 2017 Environmental Studies Program**
M17AS00017  
Department of the Interior, Bureau of Ocean Energy Management  
Deadline: June 17, 2017

**BLM NV Groundwater Modeling in Nevada**
L17AS00066  
Department of the Interior, Bureau of Land Management  
Deadline: June 20, 2017

**Cooperative Ecosystem Studies Unit, Great Lakes Northern Forests CESU**
G17AS00052  
Department of the Interior, Geological Survey  
Deadline: April 14, 2107
Dear Dr. Shonnard,

We are writing to share information about postdoctoral fellowship opportunities with the Fulbright US Scholar Program. We hope that you will share this message with eligible colleagues and graduate students, or recommend someone via our online referral system. We will follow up with all referred individuals, providing tailored guidance on the application process and directing them to the most appropriate awards. Highlights for the 2018-19 competition include:

**Postdoctoral Fellowship to Israel**
These unique and prestigious grants are open to researchers in all academic disciplines and support programs of work for up to 20 months (two academic years). Applicants may be hosted by any accredited institution of higher education or research center in Israel. To be eligible for a Fulbright fellowship beginning in 2018, candidates must have received their Ph.D. degrees no earlier than April 2015. Holders of tenure track positions are not eligible to apply. Individuals who have already begun postdoctoral research activities in Israel prior to the application date are also not eligible.

**Fulbright-EHESS Post-Doctoral Award (Junior Research) to France**
The Ecole des Hautes Etudes en Sciences Sociales (EHESS) is an esteemed university located in Paris, France. The first mission of the EHESS is to help young researchers acquire an international scientific background through the quality of its training, the international profiles of its professors and the quality and scope of its research. In addition to pursuing his or her own research, the grantee will participate in a seminar series conducted by the associated research center. French language proficiency sufficient to complete the research project is required, and applicants must obtain their Ph.D. by June 2018 to be eligible.

Applicants are welcome to join us on May 10 at 2PM EST for our annual Fulbright Grants for Postdoctoral and Early Career Applicants webinar. You can also explore hundreds of other grant opportunities in our Catalog of Awards. Applications are due August 1, 2017.

For additional information, please contact middleeastnorthafrica@iie.org or EuropeEurasia@iie.org.
5. 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.

6. Reports and Action Plans

Federal Science Partners Periodic Update
April 29, 2017

Great Lakes Connections
International Joint Commission newsletter
April 2017

7. Conferences & Webinars
May 5 - May 30, 2017
CUAHSI Cyberseminar Series on Hillslope Hydrology in Earth System Models!
Friday, May 12, 2017 at 3:00 p.m. EDT
How do we carry this to the global scale? How many units do we need for each CLM grid in different parts of the world? What are the terrain features to pull out of hi-res DEMs and other global databases to derive parameters for hillslope models in CLM?
   Nate Chaney, Princeton University
   Jon Pelletier et al., University of Arizona

May 30, 2017 at 11:00 a.m. EDT
A Synthesis
   Sean Swenson, NCAR and Dave Lawrence, NCAR on the latest in CLM
   Ying Fan Reinfelder, Rutgers University and Martyn Clark, NCAR on synthesis paper outline and writing tasks

May 10-11, 2017
Untrouble the Waters
Freshwater Lab Summit 2017
University of Illinois at Chicago

Thursday, May 11, 2017
Dr. Bopaiah Biddanda, Ph.D., Grand Valley State University, Anis Water Resources Institute
“Finding and Tracking the “Goldilocks Zone” for Carbon Cycling in a Great Lakes Watershed”
Great Lakes Seminar Series
Remote participation is available via webinar. 1:00-2:00 pm EDT

May 15-19, 2017
International Association for Great Lakes Research (IAGLR)
IAGLR Theme for 2017: “From Cities to Farms: Shaping Great Lakes Ecosystems”
Detroit, MI

Monday, May 15, 2017
Event Invitation - Fish Spawning Reef Planning Techniques
Register now for a professional development seminar on planning techniques for fish spawning reef projects. The seminar is being held in conjunction with the IAGLR conference in Detroit. You do not need to register for IAGLR to participate.

This team-taught seminar will explore strategies for establishing fish spawning reefs to promote the recovery of native species. Specific topics will include site assessment and selection, hydrodynamics and sedimentation concerns, reef design and construction strategies, and monitoring of early life stages of fish. Participants will discuss how techniques used in the St. Clair and Detroit rivers could be applied in other locations.

The seminar is open to all types of restoration practitioners, including professional engineers, biologists, project managers, students, researchers and anyone hoping to champion, design or
monitor a constructed spawning reef in Great Lakes nearshore areas, connecting channels or larger rivers. Participants will receive a certificate showing they completed 7 hours of continuing education suitable for professional license renewals.

When: 9:00 a.m. - 4:30 p.m., Monday, May 15, 2017
Where: Cobo Center, 1 Washington Blvd, Detroit, Michigan
Costs: $75 for professionals, $30 for students (includes lunch)

Wednesday, May 17, 2017
The Current Webinar 28: Seeing Your Story: Data Visualization and Mapping in Education and Outreach
May 17, 2017, 2-3 p.m. CT (3-4 p.m. ET)
Presenter: Shane Bradt, University of New Hampshire Extension
North Central Region Water Network: Extension-led, community-driven outreach and education
Register here

Thursday, May 25, 2017
Topic: Riparian Zone Restoration: Multifunctional Floodplain Reconnection
Presenter: Laura Vanden Berg, U.S. Army Corps of Engineers
Interagency Ecological Restoration Quality Committee Webinar Series
To join: WebEx Webinar Link; Phone 800-782-1258, access code 1025910
11:00 - 12:00 pm ET

May 31 - June 1, 2017
Emerging Contaminants in the Aquatic Environment Conference
The Illinois Sustainable Technology Center (ISTC) and Illinois-Indiana Sea Grant (IISG) Champaign, IL
Abstract Deadline: Feb 6, 2017

May 31 - June 2, 2017
Great Lakes and St. Lawrence Green Infrastructure Conference
Detroit, MI

Bioenergy Institute for Educators, UW-Madison, June 26-30: Join us for an intensive 5-day program at the Great Lakes Bioenergy Research Center to learn about the latest developments in bioenergy research and high-quality, NGSS-aligned materials to use with students. Includes $400 stipend, credit option. Accepting applications through May 1. Learn more: https://www.glbrc.org/education/educational-programs/bioenergy-institute-educators-bie

Energy Institute for Educators, UW-Madison, July 19-21: Engage in the breadth of research and education resources at the UW-Madison Wisconsin Energy Institute related to the theme of Energy, Sustainability and Climate Change. Highlights include lab tours, discussions, hands-on experience with classroom materials, and support in implementing NGSS-aligned lessons with your students. Includes $300 stipend, credit option. Applications accepted through May 15th. Learn more: http://energy.wisc.edu/education/energy-institute-educators
June 2, 2017 - Abstract Deadline
Michigan Aquatic Restoration Conference
Conference Dates: October 25-27, 2017
Boyne Falls, MI

July 20-21, 2017
2017 Naval Future Force Science and Technology (S&T) EXPO
Walter E. Washington Convention Center in Washington, D.C.

July 25-27, 2017
CUAHSI’s 2017 Conference on Hydroinformatics
Swimming in Data without Drowning in the Deluge
University of Alabama in Tuscaloosa, AL
Registration Deadline: July 10

8. 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

Conservation Innovation Grant
USDA-NRCS-PR-CIG-17-01
Department of Agriculture, Natural Resources Conservation Service
Deadline: April 28, 2017

BOEM FY 2017 Environmental Studies Program
M17AS00012
Department of the Interior, Bureau of Ocean Energy Management
Deadline: April 28, 2017

Cooperative Training Partnership in Aquatic Toxicology and Ecosystem Research
EPA-G2017-ORD-E1
Environmental Protection Agency
Deadline: May 16, 2017

Cooperative Program for Atmospheric Science Education
NOAA-SEC-OED-2017-2005168
Department of Commerce, NOAA
Deadline: Mary 17, 2017
**2018 Urban and Community Forestry Challenge Cost Share Grant Program**
USDA-FS-UCF-01-2018
Department of Agriculture, Forest Service
Deadline: May 24, 2017 Due to Dept. Administration Hold on all grant RFP Announcements. This RFP status is pending.

**National Fish Passage Program**
F17AS00030
Department of the Interior, Fish and Wildlife Service
Deadline: September 30, 2017

**Coastal Program** F17AS00014
Department of the Interior, Fish and Wildlife Service
Deadline: September 30, 2017

**FY2016 to FY2017 NOAA Broad Agency Announcement (BAA)**
NOAA-NFA-NFAPo-2016-2004791
Department of Commerce, NOAA
Deadline: September 30, 2017

**Partners for Fish and Wildlife**
F17AS00015
Department of the Interior, Fish and Wildlife Service
Deadline: September 30, 2017

**MI DEQ Nonpoint Source RFP schedule (based on FY2017)**
–plan next year’s program in advance
Watershed Plans must be submitted for Approval: Feb 2016
Draft RFP information Released: June 2016
Implementation RFP Released: July 2016
New Watershed Plans must be 319 Approved: 7/20/16
Notice of Intent Letters due: 8/17/16
Invitations for Full Proposals sent via e-mail: 8/31/16
Proposals due: 10/16/16
Projects Awarded: Early Summer 2017

**NSF Announcements:**

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<th>Proposal Deadline</th>
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<td>Long-Term Ecological Research (LTER) New Site Competition</td>
<td>No date set for next year yet</td>
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<td>Pre-Proposal: Feb. 1, 2016</td>
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<td>Full Proposal: Aug. 2, 2016</td>
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<tr>
<td>16-503</td>
<td>National Science Foundation Research Traineeship Program</td>
<td>No date set for next year yet</td>
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<td></td>
<td>(NRT)</td>
<td>LOI: December 9, 2016</td>
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<td>Prop: February 7, 2017</td>
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<td>15-609</td>
<td>Division of Environmental Biology (core programs) (DEB)</td>
<td>Pre-Proposal: Jan. 23, 2017</td>
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<td>Full Proposal: Aug 2, 2017</td>
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<tr>
<td>16-500</td>
<td>Long Term Research in Environmental Biology (LTREB)</td>
<td>Pre-Proposal: Jan. 23, 2017</td>
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<td>Full Proposal: Aug 2, 2017</td>
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<td>PD 17-7643</td>
<td>Environmental Sustainability</td>
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<td>PD 17-1417</td>
<td>Chemical and Biological Separations</td>
<td>October 20, 2017</td>
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<td>PD-17-1440</td>
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<td>October 20, 2017</td>
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<td>PD 09-6882</td>
<td>Environmental Chemical Sciences (ECS)</td>
<td>October 31, 2017</td>
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<td>13-589</td>
<td>Oceanographic Facilities and Equipment Support</td>
<td>November 15, 2017</td>
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<td>Ship Operations</td>
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<td>Oceanographic Technical Services</td>
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<td>Oceanographic Instrumentation</td>
<td>December 15, 2017</td>
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<td>Shipboard Scientific Support Equipment</td>
<td>Accepted Anytime</td>
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<td>Ship Acquisition and Upgrade &amp; Other Facility Activities</td>
<td>Accepted Anytime</td>
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<td>15-536</td>
<td>Research Experiences for Teachers (RET) in Engineering and Computer Science</td>
<td>November 1, 2017 ? not posted yet for 2017</td>
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<td>15-600</td>
<td>Integrated Earth Systems (IES)</td>
<td>November 14, 2017</td>
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<td>14-601</td>
<td>Dynamics of Coupled Natural and Human Systems (CNH)</td>
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9. 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 CWS:**
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:**
CWS Web page: [http://www.mtcws.mtu.edu/education_gradcert.html](http://www.mtcws.mtu.edu/education_gradcert.html)
Grad School: [http://www.mtu.edu/gradschool/administration/academics/forms-deadlines/pdfs/Certificates-ICSW.pdf](http://www.mtu.edu/gradschool/administration/academics/forms-deadlines/pdfs/Certificates-ICSW.pdf)

10. **Student Research Grants** (**August 11**) and Travel Grants (**May 26**)

**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 9, 2016**
- **March 3, 2017**
- **August 11, 2017**

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.).
The research should support the Center's mission ([http://www.mtcws.mtu.edu/about.html#mission](http://www.mtcws.mtu.edu/about.html#mission)).

**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 and Research 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 ([CWS Faculty](http://www.mtcws.mtu.edu/education_gradcert.html)) 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;

11. 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)  
http://www.mtcws.mtu.edu/education_colloquium.html
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.

12. 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 form should be emailed to Carol Asiala at mtcws@mtu.edu.

13. CUAHSI (Consortium of Universities for the Advancement of Hydrologic Science, Inc.)  
Michigan Technological University is a member university of CUAHSI (http://www.cuahsi.org) through the support of the Center for Water & Society and the CEE and GMES departments. Explore their website for resources available to faculty and research.

CUAHSI Cyberseminar Schedule: https://www.cuahsi.org/Cyberseminars
CUAHSI members will now receive discounted registration rates for CUAHSI events and workshops. Michigan Tech faculty, staff and students are CUAHSI members, and are eligible for the member discount. The member discounts will go into effect for the 2017 CUAHSI Conference on Hydroinformatics. Simply choose the CUAHSI member registration type when registering to receive the discounted rate. The member discounts for CUAHSI training workshops will go into effect starting in 2018.

14. Job Opportunities

Extension Associate
Great Lakes Coastal Processes and Hazards Specialist
New York Sea Grant
Cornell University - College of Agriculture and Life Sciences (CALS)
Review of applications will begin on June 12, 2017.

Habitat Restoration Engineer/Scientist
NOAA Great Lakes Environmental Research Lab in Ann Arbor, M
Posted April 11, 2017

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)

15. Student Opportunities

Superior Watershed Partnership summer positions
posted April 3, 2017

Michigan Sea Grant Fellowships
University of Michigan + Michigan State University, NOAA
Deadline: May 26, 2017

Graduate fellowships with Michigan Sea Grant or a partner organization
  ●  [Michigan Sea Grant Graduate Student Fellowship](#): May 26, 2017

**May 15-19, 2017**

*International Association for Great Lakes Research (IAGLR)*

IAGLR Theme for 2017: *“From Cities to Farms: Shaping Great Lakes Ecosystems”*

Detroit, MI

*Graduate Research & Training Scholarship Program (GRTSP)*

NOAA

Applications accepted twice per year

*Sea Change - climate change on Lake Superior through sailing experience*
  ●  month-long voyage - May 5 - June 4, 2017
  ●  seeking crew, ages 18-25
  ●  includes data collection, research, citizen engagement

*Research Associateship Programs*

The National Academies

4 application deadlines throughout the year

Participating agencies include: NOAA and EPA