The Michigan Technological University Center for Water & Society (MTCWS) Advisory Committee (AC) met April 20 at 8:00 am in GLRC 204. The purpose of this meeting was to 1) start thinking about next year's activities; 2) begin consideration of the next director of CWS; and 3) solicit input regarding interactions with GLRC.

Committee Members Present:
- Noel Urban, Director
- Latika Lagalo - SBE
- Joan Chadde – Western UP Center for Science, Mathematics & Environmental Education
- Jason Gulley – GMES
- Joe Wagenbrenner - SFRES
- Rupali Datta - BIO
- Carol Asiala, CWS administrative assistant
- Colin Brooks - MTRI

Attachments: Meeting Agenda presentation

1. CWS Activities in FY 2015

   Administrative Support:
   Carol creates the newsletter each week, updates the web page, helps with the organization of World Water Day, creates the annual report, and manages CWS expenses (travel & research grants, seminar support, outreach support, World Water Day expenses, poster awards)

   Seminars:
   - **September 18-19, 2014:** Dr. Ellen Spears, Environmental Historian, University of Alabama, Tuscaloosa
     "Circulating Toxics: PCBs and the Campaign for Toxic Chemical Policy Reform"
     "Toxic Knowledge: Race, Pollution, and Social Movements for Environmental Justice"
   - **September 19, 2014:** Dr. Celia Chen, Biological Sciences, Dartmouth College
     "Factors Controlling Mercury Fate in Aquatic Food Webs"
   - **October 17, 2014:** Dr. Peter B. McIntyre, Center for Limnology, University of Wisconsin-Madison
     "Making Connections: Linking Migratory Fish and Tributary Ecosystems in the Great Lakes Basin"
   - **March 16, 2015:** Kristin Floress, USDA Forest Service in Evanston, IL
     "Community Capacity for Watershed Management"
World Water Day:
- Green Film: “DamNation”
- World Water Day Poster Competition
- Guest Lecture: Peter Goodwin, University of Idaho
  “Contemporary Challenges of Sustainably Managing Large Ecosystems”
- Panel Discussion: “What role will dams play in future water resource management?”
  Moderator: Latika Lagalo, School of Business and Economics
  Panelists:
  Peter Goodwin, University of Idaho
  Jim Pawloski, Michigan DEQ, Water Resources Division, Dam Safety
  William Leder, Copper Country Trout Unlimited and CEE
  Dave Rulison, Otter Lake Landowner
- World Water Day and other CWS supported seminars provide the networking opportunities among CWS faculty and students.

Student Research and Travel Awards
4 Research awards and 13 travel awards have been funded. 5 travel grant applications and 1 Research application are pending.

Proposal Writing Support:
Carol Assisted with one CWS proposal.

2. CWS Goals
- Increase visibility – inside & outside MTU
- Increase funding/success
- Increase faculty participation

3. Activities for FY 2016
   a. Considerations for an Undergraduate certificate

List of current undergrad certificates offered at MTU:
Some are interdisciplinary. Lorelle Meadows may have more information on certificates.
- Certificate in Actuarial Science (CASC)
- Certificate in Business Analytics (CBA) [Business, Math, CS]
- Certificate in Coaching Endorsement (CCE)
- Certificate in Electric Power Engineering (CEPE)
- Certificate in Geographic Information Systems (CGIS)
- Certificate in Global Technological Leadership (CGTL)
- Certificate in Hybrid Electric Drive Vehicle Engineering (CHEV)
- Certificate in Industrial Forestry (CIF) [Business, Forestry]
- Certificate in Int'l Sustainable Development Engineering (CISE) [CEE, Business, ENVE, HU, SS]
- Certificate in Media (CMD)
- Certificate in Modern Language—Chinese (CCH)
- Certificate in Modern Language—French (CFR)
- Certificate in Modern Language—German (CGE)
• Certificate in Modern Language—Spanish (CSP)
• Certificate in Teaching English to Speakers of Other Languages (CTES)
• Certificate in Writing (CWR)

Is there a demand for a water related undergrad certificate? Is this valuable for employers?
• Perform literature search on the effectiveness of certificates for future employment.
• One benefit is that it shows specialization

Can the additional courses required for a certificate fit into a 4-year degree schedule?

b. **Seminars**
• 3 CWS Seminars are planned in addition to World Water Day for next year.
• Plan an early Fall welcome event 2 weeks into the Fall Semester
• Invite new faculty, including visiting scholars and visiting faculty with 1-year appointments

c. **Update web page (calendar)**
A google calendar called CWS has been created. CWS faculty and students have access to the calendar to edit and add events of interest to CWS. The calendar has also been added to the CWS web page.

d. **Update course listing/grad certificate**
• The course listing at on the CWS web page was created in 2011. It needs to be updated to remove courses no longer offered, and add new courses.
• Also revisit the course listings in the degree schedule for the Graduate Certificate in Sustainable Water Resources Systems.
• Suggested to add a new track to the graduate certificate which would focus on Social Sciences and Business to allow non-engineering students the opportunity to earn the certificate.

e. **Other forms of research support**
It was suggested that CWS work on involvement with Cognitive Learning Sciences (CLS) to increase involvement with educational segments on research grants and to get CWS members more involved in education grants.

f. **Newsletter for outside MTU**
Not discussed at this meeting

g. **Facilitate initiation of large proposals**
• Form 3rd committee or reorganize existing into Education, Research.
• Meet twice a semester to identify large proposal opportunities (GLRI, LTER, NRT, NSF-CNH, Long term Bio, Coastal SEES)
• Solicit faculty to participate in discussion of research opportunities and form a team to submit specific proposals

4. **New Leadership**

a. **CWS policy for term of center director:**
The Director will be selected by the Advisory Committee from members of the Advisory Committee or CWS members nominated by Advisory Committee members. The candidate
Director selected by the Advisory Committee will be subject to approval by the Vice President for Research. The position of Director is meant to be rotated among Advisory Committee members or other particularly active CWS members. The Director’s term will be a minimum of one year and a maximum of four years. The existing Director can be appointed to multiple terms. The new Director is to be determined at least a month before the end of the old Director’s term, to allow an orderly transition.

b. Status of current Director:
Noel Urban has been the director of CWS for 4 years, and the option of a new director needs to be considered. He is willing to serve as director for 2 more years, but then will be going on sabbatical. A new director will need to be chosen before his sabbatical starts. The advisory committee has been asked to talk to their constituents about the director position, and get their input on new leadership.

5. Interactions with GLRC
One third of the CWS membership does not use the facilities and resources of the GLRC. All proposals submitted through CWS contribute 20% of the IRAD to CWS and an additional 10% to the GLRC. Proposals submitted directly to the GLRC contribute 30% IRAD to the GLRC. The GLRC has been charged to become self-sustaining, and is under pressure to increase research funding as the main objective in reaching this goal. Not all GLRC members are CWS members.

a. how can CWS & GLRC best pool resources, avoid duplication, and enhance water research at MTU?
   • What should be nature of interaction?
   • How can information flow be enhanced?

b. Existing conflicts:
   • Perceived to compete with GLRC for IRAD funds ➔ pressure on GLRC members to only submit through GLRC;
   • Competition for faculty time/involvement;
   • CWS “benefits” not available to just-GLRC members therefore why should GLRC benefits be available to CWS members;
     o 10% IRAD from CWS projects is contributed to the GLRC. CWS receives no funding from GLRC projects. CWS members benefit by merging the two interwoven research groups together to increase opportunities for collaboration.
     o Should GLRC members automatically become CWS members?
   • Should GLRC members benefit from CWS resources if they have never submitted and never plan to submit projects through CWS (i.e., none of their projects will generate IRAD for CWS)?
     o CWS support of research, travel, outreach, and seminar support has never been dependent on how much funding the requesting faculty has through CWS, but each request has been
granted based on the merit of each request, and the benefit to be obtained by CWS and the university as a whole.

- As an example, Joan Chadde’s outreach program receives significant funding from CWS, but is under pressure to submit projects only through the GLRC because her programs use the Agassiz, and her group uses the physical space of the GLRC for office and classroom space. However, most of Joan’s projects provide very little overhead return, so they don’t contribute a large portion of IRAD no matter where they are submitted.

c. **CWS perceptions:**
   - GLRC/CWS members submit proposals through the GLRC if they have offices and labs within the GLRC building or their research requires GLRC technicians, research vessels, and underwater vehicles.
   - Research at the GLRC is centered around the Laurentian Great Lakes
   - CWS projects include and extend beyond the Laurentian Great Lakes
   - CWS projects use minimal if any resources of the GLRC
   - CWS is perceived to be more academic than the GLRC
CWS Advisory Committee Meeting

April 2015
Agenda

- Activities this year (FY15);
- Activities for next year (FY16);
- New Leadership?
- Interactions with GLRC;
## FY2015 Budget

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Goals

- Increase visibility – inside & outside MTU
- Increase funding/success
- Increase faculty participation
Activities FY2016

• Previously suggested:
  • Undergraduate certificate
  • 3 CWS Seminars
  • Update web page (calendar)
  • Update course listing
  • Other forms of research support

• Additional suggestions?
  • Newsletter for outside MTU
  • Facilitate initiation of large proposals
    • Form 3rd committee or reorganize existing into Education, Research
    • Monthly identify large proposal opportunities
    • Solicit faculty to participate in discussion of opportunity
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Relationship with GLRC

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