



**To:** Michigan Tech Center for Water & Society Advisory Committee  
**From:** Alex Mayer, Director, Michigan Tech Center for Water & Society  
**Date:** April 3, 2006  
**Subject:** March 30, 2006 Michigan Tech Center for Water & Society Advisory Committee Meeting

**Attachments:** Meeting agenda  
Strategic Plan for MTCWS

The last biweekly meeting of the Michigan Technological University Center for Water & Society (MTCWS) Advisory Committee (AC) was held March 30, 2006, 9:00 to 10:00 am in the Dow Environmental Engineering & Sciences room 426. The purpose of this memo is to describe the results of the meeting.

Present were: Alex Mayer, Director  
Kathy Halvorsen, representative, Social Sciences  
Noel Urban, representative, Civil & Environmental Engineering  
Nancy Auer, representative, Biological Sciences  
Gary Campbell, representative, School of Business  
Joan Chadde, representative, Western Upper Peninsula Center for Science, Mathematics & Environmental Education  
Linda Nagel, representative, Forest Resources & Environmental Science  
Chris Anderson, representative, Educational Opportunity  
Carol Asiala, CWS administrative assistant

### **1. Minutes from last Meeting**

Approved March 16, 2006 minutes  
Next Advisory Committee Meeting will be April 13, 2006

### **2. World Water Day Tent**

Folded brochure of water facts was distributed on tables in the MUB and the DOW building to recognize World Water Day, and plans will be made to do more about World Water Day next year. It was noted that World Water Day will fall during MTU's Earth Week celebration.

### **3. UNESCO nomination submitted**

A letter was submitted to UNESCO to nominate Alex Mayer as the representative of MTCWS

on the U.S. National Committee for the International Hydrological programme. The first meeting of this committee will be May 1, 2006.

UNESCO website: <http://www.unesco.org/water>.

#### **4. Degree programs subcommittee report**

The Degree programs subcommittee met and explored the possibility of establishing a water minor and a graduate certificate. Their goal is to have a plan submitted by the end of the Fall 2006 semester.

Kathy Halvorsen will organize a list of all water-related courses that currently exist at MTU. The committee would like to see all courses that are either all about water or contain a significant component about water.

#### **5. Seminars and symposia subcommittee report**

The Seminars and symposia subcommittee met and discussed the Role of Water in Michigan's Economy Symposium. It was also agreed that the MTCWS website should list all talks and seminars on campus that concern water. Carol will start by contacting Nancy Sprague in the Graduate School to be included in a list of upcoming graduate defenses.

#### **6. CUAHSI membership (refer to <http://www.cuashi.org>)**

It was agreed to hold off for a few more weeks to make a decision on CUAHSI membership to allow the advisory committee more time to look into the organization.

4/13/2006 Correction of minutes: The MTCWS will not pursue membership in CUAHSI. The Departments of Geological & Mining Engineering & Science and Civil & Environmental Engineering will pursue this membership.

#### **7. Policy on distribution of overhead return funds**

A subcommittee was formed to create an official policy for determining how MTCWS overhead returns should be spent from the MTCWS incentive account.

Subcommittee:       Noel Urban  
                              Nancy Auer  
                              Christine Anderson

#### **8. Strategic planning (see attached excerpt from proposal to establish the center as point for starting this discussion)**

Will request that all MTCWS participants to review the strategic plan, and submit their comments, suggestions, and modifications to Alex Mayer.

Noel Urban suggested that the Center's focus should include promoting scientific and engineering research at MTU.

## **9. Other Topics**

- An annual report will be completed, and will be due in June, 2006.
- Plan a weekly email announcement of MTCWS activities, funding opportunities, and seminars to be distributed to all MTCWS participants.
- If topics arise in the Advisory Committee meeting concerning potentially allocating funds to an individual member, that member can be temporarily excused from the meeting to allow open discussion.
- Agenda items for April 13<sup>th</sup> meeting:  
Plan summer objectives for MTCWS  
Discuss brochure for center

### **Agenda for MTCWS Advisory Committee Meeting 3/30/06**

1. Minutes from last meeting (see attached)
2. World Water Day table tent
3. UNESCO nomination submitted
4. Degree programs subcommittee report
5. Seminars and symposia subcommittee report
6. CUAHSI membership (refer to <http://www.cuashi.org>)
7. Policy on distribution of overhead return funds
8. Strategic planning (see attached excerpt from proposal to establish the center as point for starting this discussion)

Excerpt from  
**Proposal for Establishment of Michigan Tech Center for Water and Society**

*Mission Statement.* The mission of the MTCWS is to support research, education, and outreach in all disciplines at Michigan Tech related to water issues. The goal is to establish Michigan Tech as a state, regional, national and international leader in these disciplines and, in particular, in interdisciplinary approaches to solving water-related problems. The objectives of the MTCWS are

- to serve as a focal point for instructional and research activities in water-related fields and water-related outreach activities across the Michigan Tech campus;
- to provide an organizational structure that supports continuing growth in water-related fields and outreach activities and encourage interdisciplinary projects;
- to support interdisciplinary graduate and undergraduate education and research in water related fields; and
- to pursue external funding opportunities to support these objectives and to facilitate MTCWS participating faculty to obtain external support.

*Description of Proposed Activities.* The MTCWS will be initially established as a “virtual” Research Center. By virtual, we mean that the MTCWS will not occupy physical space, but will be a consortium of people at Michigan Tech whose focal point is water-related activities. We anticipate the following activities as a focus for MTCWS efforts in the first five years.

- (1) Develop an identity for the MTCWS at Michigan Tech and beyond. We will establish a web page to showcase water-related research, educational and outreach efforts at Michigan Tech. We will establish a seminar series which will have two critical missions: external speakers will give the Michigan Tech community views from outside the university and will expose those from outside the university to our efforts; internal speakers will serve to educate ourselves as to the array of water related activities on campus.
- (2) Establish Michigan Tech as the "think tank" for resolving water issues in the state of Michigan. We anticipate that the first efforts will include holding workshops at Michigan Tech, involving individuals from Michigan Tech and invited experts. The focus of these workshops will be producing white papers on the critical water issues facing the state, including: continuing loss of wetlands in Michigan; ongoing challenges of creating viable new wetlands to mitigate wetland losses; effective ways to meet the economic needs of communities that enhance rather than impact local water resources; storm water runoff management; land use; watershed management; coastal zone management; development of monitoring techniques that can easily be utilized by citizens and local communities; and engaging the business community in promoting sustainable water use and protection.

- (3) Coalesce and expand international activities at Michigan Tech related to water issues, by capitalizing on ongoing research on international water issues, the Peace Corps/Master's International programs, the Sustainable Futures Institute, our ongoing work with the University of Sonora on water problems in Sonora, Mexico, and other relevant educational, research and outreach activities. A recent step is the submission of a pre-proposal to establish an NSF IGERT program on international water and sanitation.
- (4) Support and expand current K-12 and community education/outreach water-related activities at Michigan Tech, especially activities of the Western UP Center for Science, Mathematics and Environmental Education and the Center for Science and Environmental Outreach. We will encourage research and educational activities with a local focus, but also projects that focus on the Upper Peninsula, the Lake Superior watershed, Michigan, and the entire Great Lakes region. Our goal is to tie academic research to meeting the needs of pressing resource management and land use issues, and to make research relevant to meet the needs of K-12 students and teachers, local residents, and local governmental agencies and NGOs concerned with water resources. Our education and outreach efforts will include the production of curricula and informational materials and the delivery of workshops and institutes that will increase public understanding and involvement in water-related decision-making.
- (5) Develop new degree programs and coursework and emphasize existing, unique educational offerings related to water. The focus of these efforts is to enhance educational offerings related to water issues and to promote these offerings to recruit undergraduate and graduate students. We will seek to establish a new inter-departmental PhD program in water resources management that recognizes the interdisciplinary nature of water and requires students to take courses in at least two departments, such as biological sciences and engineering, or education and engineering. The program will encourage PhD dissertations that also address the multi-disciplinary aspects of water resource management. We believe that this PhD program could be developed as a program that is unique to the US and thus encourage applications from a diverse pool of prospective students. This program could include an international component that addresses the growing conflict over water availability, ownership, and impacts on water quality due to increasing industrial development in developing countries. We will also seek to establish a new concentration in environmental and water resource education that would focus on education communities, local decision-makers, teachers, and non-formal educators about the hydrologic function, management, and monitoring of groundwater, stream monitoring, wetlands, lake monitoring, drinking water, wastewater treatment, threats from air pollutants, and more. This year, we will introduce a perspectives course called "Water and Society." The intent of the course will be to encourage undergraduates to consider the multi-disciplinary aspects of water issues. The course also is intended to be established as a distribution course.