

**AGENDA**  
**Upper Mississippi River Conservation Committee**  
**Water Quality Technical Section**  
**Radisson Hotel**  
**La Crosse, Wisconsin**

**March 24, 2009**

Chair: Matt Short, Illinois Environmental Protection Agency  
Phone: (217)557-8761; FAX: (217)557-8728;  
e-mail: [matt.short@illinois.gov](mailto:matt.short@illinois.gov)

Tuesday, March 24, 1:00 to 4:30 p.m.

- Welcome and introductions
- State/Agency updates: IA, IL, MN, MO, WI, USGS/UMESC, LTRMP field stations, Metropolitan Council, ACOE, USFWS, USEPA, UMRBA, others
- Coordinator's report: Scott Yess, USFWS, Onalaska
- Submersed Aquatic Vegetation Targets-Lake Pepin TMDL: John Sullivan, WDNR
- DO study on Brown's Lake HREP: Dave Bierl, Rock Island COE

Break

- Discussion on NESP Ecosystem Objectives and Water Quality Criteria
- Chesapeake Bay IBI Development: Jackie Johnson, USEPA, Chesapeake Bay Program
- Announcements
- Closing

The spring meeting of the UMRCC Water Quality Technical Section (WQTS) was held March 24, 2009 at the Radisson Hotel in La Crosse, Wisconsin. The meeting was attended by:

Dennis Anderson	U.S. COE, St. Paul, MN
Dave Bierl	U.S. COE, Rock Island, IL
Rob Burdis	Minnesota DNR, Lake City, MN
Jason Crites	Missouri Department of Conservation, Jackson, MO
Peg Donnelly	U.S. EPA Region 5, Chicago, IL – UMRBA
Terry Dukerschein	Wisconsin DNR – LTRMP, La Crosse, WI
Bill Franz	U.S. EPA Region 5, Chicago, IL
Shawn Giblin	Wisconsin DNR, La Crosse, WI
Tex Hawkins	U.S. Fish and Wildlife Service, Upper Miss. Refuge, Winona, MN
Jon Hendrickson	U.S. COE, St. Paul, MN
Kraig Hoff	Wisconsin DNR – LTRMP, La Crosse, WI
Dave Hokanson	Upper Mississippi River Basin Association, St. Paul, MN
Jeff Houser	U.S. Geological Survey-UMESC, La Crosse, WI
Jacqueline Johnson	Interstate Commission on the Potomac River Basin,
Heidi Langrehr	Wisconsin DNR, La Crosse, WI
Dan McBride	U.S. COE, Rock Island, IL
Bob Meade	U.S. Geological Survey
Megan Moore	Minnesota DNR, Lake City, MN
John Olson	Iowa DNR, Des Moines, IA
Walt Popp	Minnesota DNR – LTRMP, Lake City, MN
Jim Rogala	U.S. Geological Survey-UMESC, La Crosse, WI
Matt Short	Illinois EPA, Springfield, IL
John Sullivan	Wisconsin DNR, La Crosse, WI
Christine Urban	U.S. EPA, Region 5, Chicago, IL
Brad Walker	Izaak Walton League
Scott Yess	U.S. Fish and Wildlife Service, Onalaska, WI
Xiaoli Yuan	U.S. Geological Survey-UMESC La Crosse, WI

Meeting Summary:

State Updates: Updates on the status of state 303(d) listing concerning the Mississippi River were given by Illinois (Matt Short), Iowa (John Olson), Wisconsin (John Sullivan) and Missouri (Cindy Distefano via email). The primary issues are related to fish consumption (widespread) followed by more localized issues related to primary contact and public water supplies. Lake Pepin is the only section where turbidity and nutrients have been identified as contributing to an impairment. Status of the State's biennial 303(d) lists approval by U.S. EPA regions 5 and 7 varies with all 2006 list now approved. Some 2008 list are still under review.

Federal Agency Updates: Dave Bierl (USCOE Rock Island) provided updates on several monitoring efforts on the Illinois River waterway Starved Rock pool restoration, Mississippi

River Pools 11 and 12, Lake Odessa HREP and transparency tube measurements at the lock and dams. Jeff Houser (USGS) provided an update to monitoring activities with the LTRMP.

UMRBA Update: (Note several UMRCC WQTS members also serve on the UMRBA Water Quality Task Force): Dave Hokanson. The UMRBA has an upcoming workshop (May 2009) on biological indicators for the Upper Mississippi River. This is an outgrowth of last years' workshops looking at improving integration between Clean Water Act and Ecosystem Protection/Restoration activities on the river. Peg Donnelly (USEPA Region 5) is working with UMRBA on a PIA to look at Clean Water Act designated uses for the UMR. The five UMR states are also looking at the potential for directing additional monies available under the 604(b) grants at work on the UMR.

Coordinators Report: Scott Yess provided an update on several administrative issues including the changes to the UMRCC Web site, library and membership database. Other significant projects/issues include the quarterly newsletter, Fishers and Farmers fish habitat initiative, the connectivity paper, NESP, invasive species, sturgeon and designating the UMR National Wildlife Refuge as a wetland of international importance.

Speakers:

John Sullivan described efforts for developing a submersed aquatic vegetation target for the turbidity-impaired reach of the UMR extending from Pool 2 to upper Lake Pepin. This was a cooperative effort involving vegetation and water quality specialist from Wisconsin's and Minnesota's Long Term Resource Monitoring (LTRMP) Field Stations and USGS Upper Midwest Environmental Sciences Center. The work relied heavily on the Long Term Resource water quality and vegetation data and recent EMAP vegetation sampling conducted by Minnesota and Wisconsin in Pool 1 to 11 reach of the UMR.

A significant relationship between main channel TSS and submersed aquatic vegetation was derived from LTRMP data. Using this relationship and various vegetation targets based on historical conditions or desirable reference conditions, a TSS target was derived from the impaired reach of the river. The TSS target will be used to derive watershed level sediment reductions, primarily in the Minnesota River basin, which will address the turbidity/sediment impairment problem identified by Minnesota and Wisconsin. It is expected that the vegetation-derived TSS target may also form the basis for a site-specific water quality standard in the impaired river reach.

Dave Bierl gave a talk on 2009 study at Browns Lake, a 1989 HREP project designed to keep backwater areas oxygenated during the winter. Sedimentation since the projects initial completion had resulted in low dissolved oxygen levels during recent winters. Removal of sediment from the inlet channel resulted in increased oxygen levels indicating that the project was still functioning. In addition to sediment entering the upper inlet channel, it was also found that water and sediment could back flow into the lake due to ice jams on the Mississippi River main channel.

Jacqueline Johnson presented an overview of the development of biological indicators in Chesapeake Bay. The bay is divided into various habitat types and designated uses (i.e., shallow water-bay grass use areas) and applicable indicators are used for each type. Two take away points were the problems in finding and defining reference sites (condition), and second, data management and QA issues are vitally important to the effort and ended up being more time consuming than originally estimated. Good public communications, given the highly populated regional concerns, were also vital to the effort.

The WQTS meeting closed with a discussion (Bill Franz-USEPA, John Hendrickson-COE) on the ongoing NESP Ecosystem Objective and the effort to include water quality concerns as part of that process. The UMR is divided into four areas: Upper Impounded Pools (1-13), Lower Impounded Pools (13-26), Middle Mississippi (open river) and Illinois River. The idea is to develop unique characteristics, stressors and objectives for each of the different reaches. WQTS members have been involved in different, reach specific, meetings and this provided a good overview of how the discussion were evolving within those reaches.

Attachments:

### **Cindy Distefano, Missouri Department of Conservation, March 19, 2008**

The Long Term Resource Monitoring Program (LTRMP) continues to monitor several sites in the open river below LD 26. Missouri Department of Natural Resources (MDNR) will continue to periodically collect and analyze fish from the river for contaminants in tissue, and intends to collect sturgeon in spring 2010 at Chester in collaboration with the Missouri Department of Conservation (MDC). Fish tissue data collected in the past has resulted in only an indication of a possible impairment of designated uses on the Mississippi that MDNR currently recognizes. Sturgeon eggs in the Mississippi above the Missouri have shown elevated levels of PCBs, and those between the Missouri and the Ohio have shown both elevated PCBs and chlordane. However, because consumption rates of these eggs within Missouri are unknown and likely low, this contamination was judged not to constitute an impairment of the fish consumption use.

MDC will be sampling fillets and eggs from paddlefish in the Mississippi River (Cape Girardeau area) for contaminant analysis during 2009.

Missouri's final 2004/2006 303(d) list, which was approved by EPA in January 2009, does include a segment of the Mississippi River impaired by lead and zinc from the lead smelter at Herculaneum. Because EPA does not recognize impaired segments shorter than those segments listed in the state's Water Quality Standards, the entire segment between the Missouri and Ohio rivers is on the 303(d) list. The proposed 2008 303(d) list does not include this or any portion of the upper Mississippi. The proposed 2008 303(d) list is currently on public notice until April 10 and list information can be found at: <http://dnr.mo.gov/env/wpp/waterquality/303d.htm>.