

**Upper Mississippi River Basin Association**  
**Water Quality Task Force Meeting**  
May 2, 2007

***Meeting Summary***

**Participants**

Gregg Good	Illinois EPA
Matt Short	Illinois EPA
John Olson	Iowa DNR
Marvin Hora	Minnesota PCA
Gaylen Reetz	Minnesota PCA
Mohsen Dkhili	Missouri DNR
Jim Baumann	Wisconsin DNR
John Sullivan	Wisconsin DNR
Bill Franz	U.S. EPA Region 5
Holly Arrigoni	U.S. EPA Region 5
Larry Shepard	U.S. EPA Region 7
Holly Stoerker	UMRBA
Dave Hokanson	UMRBA

**Call to Order**

The Water Quality Task Force (WQTF) meeting was called to order by Jim Baumann at 8:35 a.m.

**Meeting and Agenda Overview**

Dave Hokanson previewed the agendas of the WQTF meeting and combined WQTF/Water Quality Executive Committee (WQEC) meeting. He noted that the WQTF would need to communicate to the WQEC its priorities and plans during the joint meeting, adding that the WQEC would be discussing budget and staffing options for water quality work following the joint meeting. Further, Hokanson stated that the UMRBA Board would ultimately make staffing and budget decisions during its May 2007 meeting, while establishing an FY 08 budget for UMRBA.

**Approval of Summary of Previous Meeting**

Hokanson asked for any comments or corrections regarding the summary of the January 24-25, 2007 WQTF meeting. He noted that meeting summaries for the WQTF would be posted on the UMRBA website, beginning with the summary of the January 24-25, 2007 meeting.

The following corrections and amendments were made to the January 24-25, 2007 meeting summary:

- Third paragraph, page 12: Gregg Good asked that “Chicago Area Waterways” be substituted for “Calumet River”.
- Page 5: John Olson noted that the upcoming fish contaminants forum is for 2007 (not 2008 as written).
- Page 10: Mohsen Dkhili noted that the segment described on this page should be “Meramec River to Lock and Dam 27”.

Good moved that the summary be accepted, with the above changes. Marvin Hora seconded motion. The meeting summary was approved.

## **Changes to WQTF Contact Information**

The following changes and corrections to contact information were requested by the WQTF:

- All Illinois EPA staff email addresses should end with “Illinois.gov,” including those for Matt Short and Bruce Yurdin.
- Dkhili asked that Mark Osborn be removed from the list of Missouri contact persons.
- Baumann noted that Chuck Burney was planning to retire in July 2007. He also noted that Wisconsin DNR staff email addresses should end with “Wisconsin.gov,” including those for himself and Russ Rasmussen.

## **General Updates**

### *Minnesota Report*

#### Minnesota Mercury TMDL

Hora reported that Minnesota’s statewide mercury TMDL was approved by U.S. EPA on March 23, 2007. He added that this TMDL covers 512 impairments, including the Mississippi River, and that stakeholder groups will be convened to discuss how to achieve mercury reductions.

#### Perfluorochemicals

Hora provided an update of Minnesota’s efforts regarding perfluorochemicals (PFCs), including the recently issued fish consumption advisory for the Mississippi River, Pools 2 through 6. He explained that known sources of PFCs in Minnesota include the historic discharge of PFCs from the 3M plant in Cottage Grove, as well as Twin Cities metro area landfills where waste from 3M facilities had been disposed. Hora added that MPCA is working on water quality standards for a number of PFCs, including PFOA, PFOS, and PFBA.

In regard to the fish consumption advisories, Hora explained that the advisories for PFCs illustrate trends different than those related to other contaminants. He indicated that the highest levels of PFCs were being observed in smaller centrachids, which is not what has been observed for other contaminants. Hora added that PFCs had also been found in tissue of fish taken from urban lakes in the Twin Cities area, and in this case, the source of the PFCs has not yet been identified.

Hora indicated a willingness to share the Minnesota fish tissue data with other States. He noted that analysis for PFCs in fish tissue is very expensive (approximately \$600 a fillet) and currently can only be done by a limited number of laboratories.

Hokanson suggested that PFCs, as an emerging contaminant, might be an area where the WQTF would like to receive additional information in the future. He also asked Hora about the human health and/or environmental effects related to PFCs. Hora responded that PFCs accumulate in liver tissue and may cause developmental impacts, though there was still much to be learned regarding effects. He also explained that PFCs are very persistent in the environment, and those compounds having a 6- or 8- carbon chain are much more persistent than those with a 4- carbon chain.

Hora noted that MPCA is undertaking a \$1.2 million investigation related to PFCs. Shepard asked if this would include water sampling, as well as fish tissue. Hora replied that water sampling and fish tissue would be included. He added that sampling conducted to date did not demonstrate the presence of PFCs in the St. Croix River.

Hora indicated that other sources of PFCs, such as fire-fighting foam, may have contributed PFCs to the environment. Sullivan asked whether fire retardants used on roofs may contribute as a source. Hora replied that this was possible, but probably an unlikely PFC source.

Olson asked whether this issue would be addressed at the upcoming 2007 Fish Contaminant Forum. Arrignoi asked if Pat McCann is the contact person in Minnesota (Minnesota Department of Health) regarding PFC-related fish consumption advisories. Hora confirmed McCann as the correct contact point. He added that currently there is limited laboratory ability to perform analyses for PFCs and that MPCA is using a laboratory in Vancouver, Canada to perform its analyses

Noting the larger scale at which the issue may become important, Hora indicated that ORSANCO has expressed an interest in the topic. Short observed that there is also a 3M plant located on Pool 14 of the UMR. Hora further noted that there is a class action lawsuit in Alabama related to PFCs.

Sullivan reported that EMAP had conducted some monitoring for PFCs on the UMR using whole fish samples, as well as the Ohio and Missouri rivers (10 sites on each river). He indicated PFCs were found throughout the UMR, but that all detections were of PFOS, one specific type of PFC. Sullivan added that EMAP samples did not detect a widespread distribution of PFCs in the Ohio and Missouri rivers.

Baumann stated that Minnesota had shared its PFC information with Wisconsin's fish consumption advisory staff. Hora indicated that the fish consumption advisories on the UMR related to PFCs would likely result in an impairment listing in the 2008 cycle.

Good noted that the PFC issue is an example of where a UMR-wide monitoring strategy would be helpful.

#### Lake Pepin TMDL

Gaylen Reetz reported that 2009 is still the target completion date for the Lake Pepin TMDL. He noted that ongoing work includes isotope analysis to determine sources of sediment (such as banks, bluffs, or fields). Baumann commented that Lake Pepin TMDL work has included modeling of inputs and the modeled impacts of "shutting off" certain inputs.

#### Other Minnesota Topics

Hora commented that the Minnesota Legislature remains interested in endocrine disruptors. Arrignoi added that the Great Lakes National Program Office is looking at this issue. Olson asked what was driving the interest in endocrine disruptors in Minnesota. Hora replied that MPCA had initiated work in this area, but recently the Minnesota House Finance Committee had taken up the topic and in particular was considering the development of a statewide endocrine disruptor network.

Reetz noted that permit implications of water quality impairments had driven much of the interest in water quality issues at the State Legislature, adding that approximately 100 permits are still held up pending a decision in the Annandale-Maple Lake case.

#### *Illinois Report*

##### Coordinating Councils

Good reported that the Lt. Governor continues to be interested in the development of "coordinating councils" for the Mississippi, Ohio, and Wabash rivers that would be similar to the existing Illinois River Coordinating Council. However, no meetings of councils for other rivers beyond the Illinois River have yet been held or scheduled.

##### UMR Monitoring

Good also reported that some of the water quality monitoring on the Mississippi River previously performed by the Des Plaines office of Illinois EPA is now going to be performed by the Springfield office.

## *Missouri Report*

### 303(d) Impairment List

Mohsen Dkhili reported that Missouri's Clean Water Commission has approved the State's 2004/2006 303(d) impairment list. He noted that US EPA had added 5 segments to the State's list (all related to bacterial contamination), but that none of these were on the UMR.

### Methodology for 2008 Cycle

Dkhili also reported that Missouri is working on its methodology for the 2008 assessment and listing cycle, noting that US EPA Region 7 has asked to review the methodology, as it is considered linked to the State's standards. Shepard confirmed this, indicating that since Missouri's methodology is incorporated into their standards, any change to methodology is considered a standards change subject to review by US EPA. Baumann asked if this would apply in the case where the methodology is included in administrative rules, but not necessarily the rules related to water quality standards. Shepard responded that the placement of methodology in administrative rules would not necessarily mean that it was exempt from EPA review.

More generally, Baumann observed that it would be problematic to develop a TMDL based on something other than standards. Dkhili noted that Missouri's opinion is that standards are not necessarily required in order for a TMDL to be done, giving the example of a bacterial TMDL developed for outstanding waters. Hora concurred, indicating that this approach is really the interpretation of a narrative criterion, and that this was similar to Minnesota's approach for Lake Pepin.

Dkhili suggested that a productive exercise for the WQTF may be to run a set of data through all the State's methodologies and then compare the results. He suggested that such an effort may point out areas where greater consistency could be pursued.

### Antidegradation Implementation Policy

Dkhili reported that the Missouri Clean Water Commission had recently approved an antidegradation implementation policy. He asked whether the other States had a similar policy addressing antidegradation implementation. Hora replied indicating that Minnesota has a guidance document on this matter and that there is increasing interest in this area. He noted that complexity of this issue is significant. Olson added that Iowa will also be developing an antidegradation implementation policy.

### Dissolved Oxygen Criteria

Dkhili noted that the development of an "instantaneous minimum" criteria for dissolved oxygen has been problematic. He added that Missouri's efforts have been based on a 1986 guidance document from US EPA. Short noted that Illinois has also struggled with this issue, and that the instantaneous minimum may not be a realistic approach.

## *Iowa Report*

Olson indicated that Iowa's update would be incorporated into the assessment and listing consultation later in the WQTF meeting.

## *Wisconsin Report*

### Current Research/Great Rivers IBI

Sullivan reported that Wisconsin DNR staff are engaged in an effort to develop a common fish IBI for Great Rivers (including the UMR). He indicated that there was much interest in the effort and that it may be beneficial to take advantage of this enthusiasm and work towards a Great River/UMR IBI at this time. Sullivan also noted ongoing work in cooperation with Minnesota DNR to develop metrics for SAV on the upper portions of the UMR. He noted that these efforts were attempting to maintain consistency with EMAP-GRE work.

Good asked whether the applicable extent of the fish IBI would be throughout the UMR. Sullivan replied that the approach would be similar throughout, but that the IBI would adjust to different reaches of the river. He added that Erich Emery of ORSANCO was working with US EPA on IBI development, and indicated that Minnesota, Wisconsin and others are working together and anticipating the development of a Great Rivers IBI to move forward.

#### 303(d)/Integrated Report Methodology

Baumann stated that Wisconsin is reviewing its 303(d)/integrated report methodology. He indicated that numeric translators are being used to determine if designated uses are being met. Baumann added that the following categories are currently being considered: “headwaters streams”, “mainstem rivers” and “rivers”. He also raised the question of whether the category of “great rivers” or “UMR” should be added.

#### Nutrient Criteria

Baumann noted that Wisconsin is working on developing nutrient criteria for rivers and streams, and that he should be able to present a working draft of these materials by the next meeting of the WQTF.

#### *US EPA Region 5*

#### Modeling of Nutrient Contribution from Mississippi River Watersheds/Hypoxia

Franz reported that EPA will be providing a webcast on Friday, May 11 to provide an update of the work Dale Robertson and others are performing to model the nutrient contributions from Mississippi River watersheds. Baumann added that Robertson had intended to present information to the WQTF at this meeting, but it now appears that it will be better to have him report at the September 2007 meeting, as the SPARROW model has recently undergone some revisions, particularly in regard to phosphorus. Franz concurred, indicating that some of the assumptions made regarding phosphorus in the model were still under consideration. He added that the upcoming webcast was open to all interested parties. Franz also noted that the next meeting of the Hypoxia Task Force will be June 11 in New Orleans.

#### Upper Mississippi River Early Warning Monitoring Network

Franz reported on the effort being funded by US EPA to establish 3-4 biomonitoring-based early warning stations on the Upper Mississippi River. He indicated that the first station should be installed at the Minneapolis Water Works in June 2007, and that it would include a mussel-based biomonitor, a YSI multiparameter water quality sonde, and an ocean spectrometer. Franz noted that additional sites funded under this effort may be located at the University of Iowa (Fairport) and the University of Illinois (Alton). He added that the civil engineering department at the University of Minnesota is seeking funding from the National Science Foundation to support the installation of monitors from the Mississippi headwaters to Lake Pepin.

#### *US EPA Region 7*

#### Region 7 Staff Changes

Larry Shepard reported that Gale Hutton has retired, and Cheryl Chrisler is now acting director of the Environmental Services Division at Region 7.

#### Jamison Island Chute Project

Shepard described a recent issue involving the US Army Corps of Engineers and the State of Missouri, where a Corps project to perform mitigation on the Missouri River raised concerns among the public and Missouri’s Clean Water Commission when dredged materials were placed in the Missouri River. He reported that the Missouri Clean Water Commission requested that the Corps cease activity pending further review of materials composition. Shepard noted that the situation highlights a lack of mutual understanding between individuals involved in ecosystem restoration and those responsible for water

quality regulatory programs, and therefore may have relevance beyond just the Missouri River. He added that one difference in this scenario from the UMR is that the Missouri is actually lacking solids.

Sullivan asked whether Missouri had issued a permit for the project. Shepard replied that the Corps had a nationwide permit for the project and had received a general stormwater permit from Missouri. He added that the Corps had notified adjacent landowners, but not cross-river landowners, who then became concerned when observing the project take place. Sullivan and Franz noted that this type of issue had come up historically on the UMR.

#### Review of Region 7 Water Program by US EPA-Headquarters

Shepard reported that US EPA-Headquarters had recently completed a review of Region 7's Water Program. He noted items of interest from those discussions as follows:

- Thermal issues on the Missouri River, including ambient exceedances of water quality standards.
- Ethanol production, both in terms of water consumption by ethanol plants and expansion of corn production into marginal/erodible lands.

Good noted the importance of the ethanol issue, reporting that 32 new plants are currently being proposed for Illinois. Reetz observed that high profits are currently driving the rapid expansion of the ethanol industry. Baumann concurred that the two major concerns from a water resources perspective related to ethanol production are: 1) water consumption in the production of ethanol, and 2) impacts on water quality resulting from the expansion of corn production into erodible lands.

#### National Conference on Ecosystem Restoration

Shepard provided a brief report on the 2<sup>nd</sup> National Conference on Ecosystem Restoration which was held April 23-27 in Kansas City. One observation he noted from the meeting is that the Corps is seeking to go beyond the protection of threatened and endangered species for the Missouri River, and is interested in pursuing the protection of ecosystems/ecosystem services. Shepard also noted the potential competition between restoration programs (EMP, Chesapeake Bay, Everglades, etc.) at a time of declining federal (EPA) funding.

#### *UMRCC-Water Quality Technical Section*

Olson reported on the March 2007 meeting of the UMRCC-Water Quality Technical Section. He noted the following in his report:

- Cindy DiStefano of the Missouri Department of Conservation has taken over as Chair of the Section.
- UMRCC is drafting a letter in support of the North American Benthological Society (NABS) position that new data on ammonia toxicity to freshwater mussels be included in any updates of EPA's ammonia water quality criteria document.
- UMRCC has also sent letters to federal agencies and elected officials regarding the need to repair, operate, and fund electronic fish passage barriers on the Chicago Sanitary and Ship Canal, in order to prevent the spread of exotic species between the Great Lakes and Upper Mississippi River System.
- A presentation was made by Terry Dukerschein of Wisconsin DNR regarding the comparison of potential approaches in developing a fish IBI for great rivers.
- Light penetration data for Pools 8 and 13 was reviewed in presentation by Shawn Giblin of Wisconsin DNR, with the observation made that Pool 8 met the UMRCC-developed criteria for SAV protection, while Pool 13 did not.
- Hokanson had given a presentation on the work of the WQTF and Water Quality Executive Committee, which had caused some questions to be raised regarding the potential for overlap between the Tech Section and the WQTF.

Shepard asked whether consideration would be giving to listing Pool 13 as impaired, given that it did not meet the UMRCC criteria. Olson replied that it would not be likely in Iowa because the criteria had not been through standards review. Sullivan added that the conclusion was reached using only one season (2003) of data, so its applicability may be limited. Short stated that it would be unlikely that Illinois would list, adding that there is also a perception of vegetation being viewed as a negative attribute on the river. Shepard replied that “existing and readily available information” may be a driver towards States listing this as an impairment. Short responded that States only need to consider this information, but are not required to make decisions based on it, and would be unlikely to do so if it was not included in methodology or standards.

Good asked if there was indeed a functional overlap between the WQTF and UMRCC-Water Quality Technical Section. Sullivan indicated that discussion of monitoring is likely to be the most duplicative, and that the “CWA-Ecosystem Restoration” workshops being pursued by UMRBA may also duplicate conversations going on within UMRCC. Hokanson mentioned that this issue would be brought to the attention of the Water Quality Executive Committee, both to familiarize its members with UMRCC-Water Quality Tech Section and so that they could consider how they would like their States to work with the UMRCC.

*Environmental Monitoring and Assessment Program-Great Rivers Ecosystems (EMAP-GRE)/Survey of the Nation’s Rivers and Streams*

Shepard reported that the EMAP program is facing significant funding cuts in FY08, with about a 50% reduction in regional EMAP funding anticipated. He added that plans to continue EMAP-GRE work on the Lower Mississippi River have been suspended and no field monitoring for EMAP is anticipated for FY08. Shepard explained that EMAP-GRE will now be focusing on assessment of the data that has been collected to date. Shepard reminded the WQTF that EMAP is considered a research and development program in EPA’s Office of Research and Development (ORD) and, as such, is not part of the Office of Water’s programs – though the Office of Water has generally supported a probabilistic approach to monitoring. He noted that the “EMAP role” in the future may be incorporated into the Survey of the Nation’s Rivers and Streams.

In regard to this national survey, Sullivan asked at what scale the assessment would occur. Good responded that it is essentially an ecoregion or EPA region level assessment. Shepard added that the assessment has been portrayed as “repeatable,” but the actual time frame for repeating may be different than the proposed five year cycle. Good asked whether, with the potential movement of EMAP work into the national assessment, more funds would be taken off the top of 106 grants to support the national assessment. Shepard replied that the supplemental monitoring money was added onto pre-existing 106 funds for participating states, so that 106 funds for States have not actually been reduced.

*Upper Mississippi River Early Warning Monitoring Network (UMR-EWMN)*

Hokanson provided a brief update on the status of the UMR-EWMN project. He described the establishment of a pilot monitoring station at Lock and Dam 15 in Rock Island, IL and the email notification system that had been tested along with the pilot monitor. Hokanson further noted that the device which had been deployed had reached the end of its useful life, and that the UMR-EWMN Scoping Group and UMR Spills Group were considering the next steps for the system and would need to address issues including: 1) replacement of current equipment, 2) ongoing funding for the system, and 3) organizational structure to support and manage the system. He added that a presentation regarding the system would be given by Roger Lauder of IL EPA and Hokanson to the UMRBA Board at its May meeting. Good pointed out that one of the challenges in running such a system was identifying personnel at smaller utilities who would have time available to monitor and calibrate equipment.

Sullivan asked how data from the monitor could be obtained, as the website apparently makes it available only in 30-day batches. Hokanson replied that he would look into data and provide to Sullivan as available.

#### *LTRMP-Additional Program Elements (APEs)*

Hokanson noted that the “focusing questions” had been established for the FY08 LTRMP APEs and that expressions of interest in working in these areas were invited (through the State field stations) through May 18, 2007. He noted that, of the five APE focusing questions, the one related to submerged aquatic vegetation was probably of most interest to the Task Force. Hokanson indicated that further questions should be addressed through the state members of the LTRMP Analysis Team (A-Team). Sullivan noted the challenges in having A-Team members communicate with other staff in their States.

#### *Clean Water Act-Ecosystem Restoration Workshops*

Hokanson indicated that the proposed Clean Water Act-Ecosystem Restoration Workshops are currently being planned for September 2007, in conjunction with the meeting of the Water Quality Task Force. He added that funding had not yet been finalized for the workshops, but requested that Task Force members hold September 11-13 dates open at this time for the WQTF meeting and workshop.

### **Sediment and Fish Consumption Advisory Projects**

#### *Fish Consumption Advisories (FCAs)*

Hokanson reviewed the 2 page summary document regarding FCAs that was provided in the meeting packets. He recalled the mixed reaction to the prospect of an interstate workgroup expressed by fish consumption advisory staff during the previous meeting of the Task Force. Hokanson also noted that potential next steps included: 1) a side-by-side comparison of the Great Lakes Protocol, RAFT Protocol, and ORSANCO Protocol, 2) sharing of data between States, 3) creating a proposed agenda for an interstate fish consumption meeting regarding the UMR, and 4) resuming communication with FCA staff once the previous steps were initiated/completed. He also noted the obstacles to continued progress, including resource constraints, limited interest by FCA staff (due to indirect connection between their work and CWA), interagency communication difficulties, competing priorities, limited empowerment of FCA staff to commit to changes, and allegiance to the Great Lakes Protocol by some States that may preclude interest in taking a potentially different approach on the UMR.

Holly Arrigoni reported that some progress has been made by ORSANCO on harmonizing fish consumption advisories, in particular the fact that the States appear to be comfortable with a unique protocol being applied on the Ohio River, which would be different from each statewide protocol. Arrigoni indicated that she would share information regarding ORSANCO’s work with Hokanson and the Task Force.

Hora commented that there may be some value in having US EPA Region 7 look at the Great Lakes Protocol, but noted that it is unlikely that Minnesota (or Wisconsin) would move away from the Great Lakes Protocol. He added that it might just be best to be satisfied with the progress made in this area so far, and move on to a different effort. Baumann concurred that progress in the short run was unlikely, but stated that there was still value in continued discussions and information exchange, which might lead to greater consistency in the long run.

Shepard suggested that it is important to consider what the best way to do FCAs for the UMR is, regardless of the particular approaches currently used by States. Hora replied that those States using the Great Lakes Protocol feel that it *is* the best approach and therefore are unlikely to change. He added that there is also often a concern about loss of historical data when changes are made in protocols. Arrigoni



noted that ORSANCO has the advantage of being a single entity collecting samples itself and disseminating data to the States.

Shepard emphasized that, if the WQTF chose not to pursue this effort further, it should be able to explain the decision and give the WQEC a rationale for this course of action.

Baumann asked the State representatives present to describe the roles played by their agencies (those with Clean Water Act programs) in Fish Consumption Advisories. Responses were as follows:

<b>State (CWA Agency)</b>	<b>Collects Samples</b>	<b>Maintain Data</b>	<b>Issue Advisory</b>
<b>Illinois EPA</b>	No	Yes	Yes
<b>Iowa DNR</b>	Yes	No	Yes
<b>Minnesota PCA</b>	Yes	Yes	No
<b>Missouri DNR</b>	No	No	No
<b>Wisconsin DNR</b>	Yes	Yes	No

Sullivan offered that the UMRCC has created a database of fish tissue results, and that this is available as a resource for fish consumption advisories.

Baumann suggested that some of the work, such as the comparison of protocols, could be done by the WQTF without necessarily involving the FCA experts.

Shepard pointed out that interstate inconsistencies in FCAs could potentially be identified as an issue by the GAO at some point in the future. Stoerker added that the compelling case, from a Clean Water Act perspective, is that inconsistencies in 303(d) listings result from differences in States' FCAs and the processes by which the FCAs are incorporated into States' listing decisions.

Olson pointed out that progress has been made in improving consistency, particularly in Iowa taking a more similar approach to other States in terms of advisory issuance. He added that the RAFT protocol only applies to sampling, and does not give an advisory protocol.

Hora suggested that the WQTF may seek to have US EPA Regions 5 and 7 work on improving consistency in FCAs.

Baumann proposed the following options in regard to continued work on UMR FCAs:

- 1) Consider the progress made to be what is achievable at this time. Table further action.
- 2) Enhance data sharing role.
- 3) Work to develop a consistent "message" regarding FCAs among UMR States.
- 4) Focus on emerging issues related to FCAs (such as PFCs)

He added that the recommendations of the 2005 FCA report imply a facilitator role for UMRBA.

Hora suggested that it may be best to be forward-looking, focusing on emerging issues such as PFCs, rather than expending further energy on PCB- or mercury-related FCA issues.

Good offered that increased consistency is certainly desirable, but without a federal mandate, it may be difficult to achieve.

Baumann asked the group how it wanted to proceed. Hora suggested that the issue be referred to the WQEC, so that the WQEC could provide input on this project as a priority. The group agreed to bring the following to the attention of the WQEC regarding the FCA project:

- 1) Current status and why seeking consistency in FCAs continues to be important.
- 2) Challenges holding back further progress on FCA work.
- 3) Options for continued effort.
- 4) Request for WQEC to assign a priority in work on the FCA project.

#### *Sediment-Related Water Quality Criteria*

Hokanson provided a summary of the status of the sediment-related water quality criteria project as follows:

- The issue paper was finalized in February 2007 and distributed to the UMRBA Board at their February 2007 meeting. The Board did not make many specific comments about the report, aside from encouraging its further distribution.
- Hard copies of the issue paper were also distributed to the WQTF, the WQEC, contributors to the report and other interested parties.

Hokanson noted that items for discussion by the WQTF at this point include:

- Consideration of how the WQTF communicates with the WQEC regarding next steps.
- Revisiting whether an MOU is still needed to govern further work on the project.
- Whether the WQTF would like more feedback on the issue paper from interested parties (beyond those who have already received the report).
- What is the impact, if any, of Wisconsin's possible listing for suspended sediment impairment on the upper reach of the UMR.

Olson reported that he distributed the report to Iowa fisheries staff, but received no comments. He added that it would be desirable to develop guidance on how to use data in evaluating sediment impairment.

Baumann commented that he had shared the report with researchers in Wisconsin and received the feedback that they do not have any more information beyond what is in the report. He did add, however, that other areas of the State are facing similar challenges, such as SAV in Green Bay, and that the report points out the need for subcategories of the aquatic life use to be developed.

Dkhili commented that Missouri DNR does not view sediment, in general, as a priority issue and that this may impact the ability to address sediment concerns on the UMR.

Good suggested that it could be possible to work on the research needs list, but that other work regarding sediment-related water quality criteria may need to be tabled until after there is further progress on the designated use effort. Baumann commented that, while awaiting further progress on the project, States should still move ahead with listings where a use impairment has been identified using current approaches (such as in Minnesota and Wisconsin). Good concurred with this perspective.

Baumann added that the planned workshops addressing the relationship between the Clean Water Act and ecosystem restoration on the UMR may also be a forum where further discussion/progress could be made regarding sediment.

Hokanson pointed out that it may be important to keep communicating the research needs identified in the report. As an example, he mentioned that one of the focus areas under consideration for LTRMP

Additional Programs Elements (APEs) had recently been revised in a manner that would actually be less likely to address the research needs given in the report.

Stoerker summarized for the group the reasons it appeared that further action on the sediment project was likely to be tabled as:

- 1) Need to work on designated uses before moving any further on criteria, and
- 2) The timeliness and importance of the work is varied for the different UMR States (with the recognition that States should not hold off in actions related to sediment issues simply because the WQTF has not completed all portions of the sediment project).

Sullivan asked for clarification on whether States should wait for guidance from the WQTF or move ahead as they see fit. Hora replied that States still have the right to move ahead as they see fit at this time.

Baumann summarized the discussions of the WQTF regarding the sediment project as follows:

- 1) There should be continued work on the research needs list.
- 2) Work on the guidance document should be tabled for now because:
  - There is a need to focus effort on the designated use project and the designated uses may inform criteria implementation guidance.
  - There is a need for more data to be assembled which will allow for the better identification of a use impairment.

## **Interstate Assessment and Listing Consultation**

### *Minnesota*

Hora reported that Minnesota's 2008 impairments will likely be the same as those for 2006, with the exception that impairments related to PFCs may be added, due to the recently issued FCAs resulting from the levels of PFCs present in fish tissue.

### *Wisconsin*

Baumann described two proposals for impairment listing currently being considered by Wisconsin for the 2008 listing cycle:

Nutrient Enrichment in Off-Channels Areas from the St. Croix River to Lock and Dam 9: Baumann described this potential impairment as being based on three factors: 1) pH values in exceedance of the criteria of 9.0 (though not in all seasons), 2) reduction of dissolved oxygen below the criteria of 5.0 mg/l, and 3) consideration of mats of filamentous algae and duckweed as an exceedance of the State's narrative water quality criteria. Additionally, the proposal notes that a portion of the affected reaches (Lake Pepin) has been listed by Minnesota for impairment due to nutrient enrichment.

### High Suspended Solids and Turbidity from the St. Croix River to Upper Lake Pepin:

Baumann summarized this potential impairment as based on: 1) consideration of suspended solids/turbidity levels as an exceedance of the State's narrative water quality criteria, 2) negative impacts of high suspended solids and turbidity on the growth of SAV in the area, and 3) increased sedimentation resulting from high suspended solids and turbidity levels. The proposal also notes that turbidity values exceed Minnesota's numeric criteria and that Minnesota has listed the reach for turbidity-related impairment.

Baumann noted that, in both cases, the challenge facing the proposals is establishing a tie to Wisconsin's water quality standards and demonstrating an impairment of a designated use. He added that, since Minnesota already has listed the uppermost reach for turbidity impairment, the impact of a

matching listing by Wisconsin may not be large. However, he indicated that a nutrient-related listing by Wisconsin on the lengthier stretch of river may have broader implications. Baumann also noted that Minnesota and Iowa had been made aware of the potential listings via a meeting and conference call.

Stoerker asked whether US EPA had been consulted regarding these potential listings. Baumann replied that he was not aware of any specific conversations with the US EPA. Hokanson noted that, since the nutrient enrichment proposal addresses off-channel areas, it may be relevant for any work the WQTF does to identify designated uses that only apply in certain areas of the river. Hora commented that Minnesota makes some of these distinctions when addressing lakes, but has generally been reluctant to “dice up” a water body into many pieces. Short concurred, indicating it was possible to cut a waterbody into too many pieces.

Hokanson mentioned that, as of the most recent conference call, the three States directly affected by this decision (Wisconsin, Minnesota, and Iowa) agreed to have one more conference call before a final decision is made in October 2007. Baumann explained that this forum is being used because it was felt that it would be difficult to gather all the participants for a WQTF meeting and that there may not be time in the WQTF meeting to fully address the issue. Hokanson and Baumann did note, however, that there would be one more WQTF meeting (in September 2007) where the issue could be brought up before Wisconsin makes its decision in October 2007.

Hokanson asked Bauman how the other States’ review and input would feed into Wisconsin’s decision. Baumann indicated that Wisconsin is interested in informing the other States, and getting opinions from them – but would not be bound to the input coming from other States in making its decision.

#### *Iowa*

Olson began Iowa’s report by commenting on Wisconsin’s proposal for a nutrient enrichment-related listing. He indicated that, while Iowa would not object to such a listing by Wisconsin, it would prefer to see the impairment tied to a numeric translator such as chlorophyll. Olson also commented that potential permitting issues are concern for Iowa.

Olson next summarized the content of Iowa’s 2006 impaired waters list, which had recently been released for public comment. He noted that, in total, 135 waterbodies had been added, 80 had been dropped, and that the total number of impaired waterbodies was 274. For the Mississippi River, he noted that impairments related to indicator bacteria (fecal coliform) and aluminum were newly added to the list for 2008. In both cases, he noted that these impairments were determined using data provided by Illinois EPA, though Illinois does not have a numeric criterion for aluminum and therefore does not list an aluminum impairment.

Baumann commented that Wisconsin has previously chosen not to list for aluminum impairment, as its opinion is that the aluminum exceedance is more a product of pH levels than the presence of aluminum per se. Hora asked whether Iowa’s aluminum criterion applies at a specific pH. Olson replied that it is simply a measurement of total aluminum, and is not tied to pH. Hora noted that a downstream aluminum listing may imply that upstream alum use is a potential contaminant source.

Short asked why Iowa is using total, rather than dissolved, aluminum in its criteria. Shepard noted that some States have chosen to stay with total aluminum because permits were written using total aluminum.

Baumann asked whether Iowa’s nutrient (slime) impairment near the ADM facility was at all related to upstream inputs. Olson replied that it was strictly a localized point-source issue, and not related to any upstream sources.

### *Illinois*

Short stated that there were no new developments in Illinois regarding impairment listings, noting that Illinois 2006 list had previously been completed. He anticipated that April 2008 would be Illinois' goal for completion of their 2008 list.

### *Missouri*

Dkhili commented that no impairments for the Mississippi River are included in Missouri's proposed 2004-2006 combined listing. In regard to manganese, Dkhili commented that Missouri only applies a manganese criterion to ground water, and not to surface water. He also explained that, although Missouri uses Illinois' fecal coliform data, it has not found a fecal coliform-related impairment of the river, due to differences in assessment methodology. Dkhili noted that this highlights the importance of considering methodology in seeking consistency of listings among UMR States.

Short added that a change in Illinois' methodology (to use of a geometric mean calculation) resulted in an increase in the number of impairments related to fecal coliform.

Baumann suggested that the impairment comparison chart should reflect the fact that Missouri has approved TMDLs for chlordane and PCBs in place on the UMR, rather than simply stating "not listed".

### *U.S. EPA Region 5*

Franz applauded Iowa for adjusting its listings to more closely match those of a neighboring State. In general, he indicated that the level of discussion in the interstate consultations has been improving.

### *U.S. EPA Region 7*

Shepard deferred any specific Region 7 commentary to the subsequent discussion of questions posed to the Task Force regarding assessment, listing, and reporting.

### *Questions Distributed to Task Force Regarding Assessment, Listing, and Reporting by UMR States*

Hokanson noted the summarized responses to questions that had been distributed to the WQTF subsequent to the January meeting. He asked Shepard to give his reactions to these responses, as Shepard had originally asked for these questions to be addressed to the WQTF.

Shepard offered the following observations regarding the questions and responses:

- The value of the questions is to be able to gauge where the States currently stand in terms of assessment, listing, and reporting.
- In terms of consistency:
  - To the extent consistency can be increased in procedures and processes, it is more likely that there will be consistency in outcomes.
  - States' making use of others' decisions (such as Iowa decisions being informed by Illinois' listings) can help improve consistency.
  - EPA Regions are required to impose a consistent level of review. When EPA notes an inconsistency between States, it is likely to "add" the impairment to the State where it was not present.
- With the advent of the integrated report format, it does not make sense to have a distinction between waters that are "305(b) impaired" and "303(d) impaired".

Hokanson commented that the responses to the first two questions highlighted the fact that the UMR States have either already implemented integrated reporting or will soon be using integrated reporting.

Hora noted that there is still a distinction in the method used for a 305(b) assessment vs. a 303(d) assessment. Baumann concurred, noting that there are differing levels of complexity for the two assessments, different levels of data needed, and different levels of public comment. Hora added that even though there is an integrated report, there are still separate processes for 305(b) and 303(d) completion.

In regard to the States' use of the "minimum set of assessment reaches" agreed to by the WQTF, Dkhili noted that Missouri actually needs to incorporate these reaches into their water quality standards before they can be used for assessment purposes. He added that Missouri is currently working on revising their standards to reflect these reaches. Hokanson asked whether other States needed to incorporate the assessment reaches into their standards. Hora replied that this was not the case in Minnesota.

Shepard next referred to the question which asked States whether they would be willing to make an impairment listing due to the fact that a neighboring State had made a listing, noting that the States' responses had indicated that individual methodologies largely prevented listing on this basis. He added that the States can either seek consistency themselves or potentially be forced by EPA into a more consistent approach.

Hokanson asked what obligation was incurred by a State when a neighboring State listed an impairment on a shared water. Baumann replied that the immediate impact was in relation to permitting, where permitting a new discharge to impaired water would be restricted.

Dkhili commented that this discussion highlights the need for consistency in methodology, and that this should be the focus of seeking greater consistency in listings. He again suggested a comparison in protocols across the States as an approach for identifying interstate inconsistencies.

Hokanson indicated that he would update the summarized responses according to the discussion, and then share with the WQTF and WQEC.

### **WQEC Activities/Report to the WQEC**

Hokanson provided a brief update on the recent activities of the WQEC, including their efforts to implement the recommendations of the Organizational Options report and pursuit of funding for the UMRBA's water quality activities.

Baumann summarized the following issues to be reported on to the WQEC at the joint meeting on May 3:

- Status of fish consumption advisory and sediment-related water quality criteria projects
- PFCs
- Questions & responses on assessment, listing, and reporting

### **Adjournment**

Dkhili moved to adjourn, Good seconded. The meeting was adjourned at 5:00 pm.