

**Minutes of the 123<sup>rd</sup> Quarterly Meeting  
of the  
Upper Mississippi River Basin Association**

**August 29, 2012  
La Crosse, Wisconsin**

UMRBA Chair Diane Ford called the meeting to order at 9:10 a.m. Participants were as follows:

UMRBA Representatives and Alternates:

Arlan Juhl	Illinois Department of Natural Resources
Dan Stephenson	Illinois Department of Natural Resources
Diane Ford	Iowa Department of Natural Resources
Dave Frederickson	Minnesota Department of Agriculture
Robert Stout	Missouri Department of Natural Resources

Federal UMRBA Liaisons:

Gary Meden	U.S. Army Corps of Engineers, MVR
Ken Westlake	U.S. Environmental Protection Agency, Region 5
Charlie Wooley	U.S. Fish and Wildlife Service, Region 3
Dave Bornholdt	U.S. Geological Survey, MWA

Others in Attendance:

Tim Schlagenhaft	Minnesota Department of Natural Resources
Ron Benjamin	Wisconsin Department of Natural Resources
Sheri Walz	Wisconsin Department of Transportation
Karrie Jackelen	U.S. Representative Ron Kind (WI)
Steve Jones	U.S. Army Corps of Engineers, MVD (by phone)
Dave Romano	U.S. Army Corps of Engineers, LRD
Paul Machajewski	U.S. Army Corps of Engineers, MVP
Thomas Hodgini	U.S. Army Corps of Engineers, MVR
Marvin Hubbell	U.S. Army Corps of Engineers, MVR
Karen Hagerty	U.S. Army Corps of Engineers, MVR
Charlie Hanneken	U.S. Army Corps of Engineers, MVS
Eric Allness	U.S. Department of Agriculture, NRCS, Wisconsin
Kevin Foerster	U.S. Fish and Wildlife Service, Region 3 Refuges
Bob Clevensine	U.S. Fish and Wildlife Service, Region 3 Refuges
Mike Jawson	U.S. Geological Survey, UMESC
Tom Boland	AMEC
Steve Sletten	Atkins
Greg Graske	EOR, Inc.
Gary Loss	HNTB
Brad Walker	Missouri Coalition for the Environment
Cecily Smith	Prairie Rivers Network
Bill Franz	Private Citizen
Don Powell	SEH, Inc.
Barb Naramore	Upper Mississippi River Basin Association

Dave Hokanson           Upper Mississippi River Basin Association  
Kirsten Mickelsen       Upper Mississippi River Basin Association

### **Minutes**

Arlan Juhl offered a correction to the draft minutes of the May 23, 2012 meeting. He explained that the third sentence of the second full paragraph on page 13 contains a stray word and should read “Eder explained that the GLC/GLSLCI’s analysis calculated costs and benefits in present value, but acknowledged that those estimates are not based on fully designed projects.” Brad Walker said page 7 of the draft minutes presents an overly brief summary of his remarks regarding subsidization of commercial transportation. He requested that the final paragraph on page 7 be revised to read: “Brad Walker pointed out that the inland waterway system is unique in that it is the most subsidized system in the country. He said these subsidies total \$1 billion per year and asked what giving the rail industry \$1 billion each year would do to decrease its rates to users. Walker said there is no ‘free market’ on the river, but said we do need to reevaluate the law that requires the river to be free to use by all users. Finally, he suggested that the states and UMRBA consider these matters when they are deciding whether to support the WAVE4 Act, H.R. 4342, on the IWTF.”

Dave Frederickson moved and Robert Stout seconded a motion to approve the draft minutes of the May meeting with the changes requested by Juhl and Walker. The motion carried unanimously.

Stout moved and Juhl seconded a motion to approve the draft minutes of the Board’s June 20, 2012 conference call as written. The motion carried unanimously.

### **Executive Director’s Report**

Barb Naramore said she joined representatives of the Waterways Council, Inc., The Nature Conservancy, and the St. Louis District of the Carpenters’ Union in visiting nine Congressional offices on July 17-19, 2012. The visits were focused on navigation issues. Naramore said members and their staff have a good understanding of the UMRS’s navigation needs, but see many obstacles to progress. In particular, she said frustration is high on the Hill with the fallout from the “no earmarks” policy. Staffers expressed interest in more routine communication with stakeholders and in enhancing collaboration within the delegation, perhaps through a reinvigorated UMR Task Force.

Naramore reported that Option Year 2 of UMRBA’s five-year services contract with USACE’s Rock Island District is nearing an end. She noted that the contract maximum for Option Year 3 is \$71,759. Arlan Juhl moved and Robert Stout seconded a motion authorizing Naramore to accept an exercise Option Year 3, if offered. The motion carried unanimously.

Naramore said UMRBA has submitted a proposal to USEPA, Region 5 to continue its oil planning and mapping work. The request includes \$150,000 of new federal funding, but Naramore noted that the ultimate amount is subject to change. Dave Frederickson moved and Arlan Juhl seconded a motion authorizing Naramore to execute a cooperative agreement with USEPA to support UMRBA’s continued spills planning and mapping work. The motion carried unanimously.

Naramore reported that America’s Great Watershed Initiative (AGWI) is holding a watershed-wide summit on September 26-27, 2012 in St. Louis. The focus will be on the potential benefits and challenges associated with water resources collaboration at the scale of the Mississippi River Basin, with the goal of developing recommendations regarding next steps for AGWI.

Naramore directed the Board’s attention to UMRBA’s FY 12 year-end financial statements (pp. B-10 to B-12) and FY 13 year-to-date statements (pp. B-13 to B-15). The Treasurer’s statement appears on

page B-9. For the year ending June 30, 2012, UMRBA had ordinary income of \$659,655 and expenses of \$639,048, for net ordinary income in FY 12 of \$20,607. Net income was approximately three percent of expenditures and exceeded projections by about \$18,000. Through August 13, 2012, FY 13 revenues totaled \$152,157 and expenses were \$49,972. Naramore said it is common for revenues to exceed expenses by a substantial amount during the first part of the year. She also reported that the independent accounting firm of Mahoney, Ulbrich, Christiansen, and Russ will be conducting UMRBA's biennial audit for FY 11 and 12 in September. Juhl moved and Stout seconded a motion to accept the FY 12 and 13 financial statements as presented. The motion carried unanimously.

## **Navigation**

### *Post-Panamax Report*

Wes Walker explained that Congress directed USACE's Institute for Water Resources (IWR) to develop recommendations on whether and how best to modernize the nation's ports and inland waterways to accommodate post-Panamax vessels (i.e., the larger ships that will be able to transit the expanded Panama Canal). IWR formed teams to address deep draft, inland waterways, and environmental considerations. Key factors considered included:

1. cost of deepening and widening deep draft harbors,
2. ability of ports and waterways to enhance export initiatives that will benefit manufacturing and agricultural sectors,
3. population trends that help distinguish between regional and local ports,
4. availability of intermodal access, and
5. environmental impacts from modernization.

Walker said his team focused on the inland waterways and included members from the Corps' Mississippi River Districts. While the primary report, *U.S. Port and Inland Waterways Modernization: Preparing for Post-Panamax Vessels*, is complete and presents major conclusions concerning the inland waterways, it contains relatively little detail on the inland analyses. A more detailed report on the inland system is scheduled for release this winter.

Walker summarized several major conclusions from the assessment, including:

1. Post-Panamax vessels' increased capacity will likely shift trade routes and lower costs — e.g., shipping costs from the Gulf of Mexico to Northeast Asia could fall by 9 percent, assuming Gulf ports expand to accommodate the larger ships.
2. Currently, only a handful of east and west coast ports in the U.S. can handle post-Panamax vessels, which require a 50' channel depth.
3. The number of foreign ports that can accommodate post-Panamax vessels is also currently limited.
4. Grains and perhaps coal will be the major bulk commodities driving transportation demand. But future growth rates in export demand are far from certain and will be influenced by a number of variables, including the responses of competing suppliers. Other key factors within the U.S. include whether exports will move through the Gulf or Pacific Northwest. And, of the Gulf-bound exports, what portion will arrive there via barge versus rail.
5. The existing UMRS navigation system can accommodate the currently projected traffic increases, though there will be increased delays, offsetting at least in part the reduction in ocean shipping costs.

6. IWR has concluded that current traffic projections do not justify federal investment in new locks on the UMRS, though increased investment in operation and maintenance and major rehabilitation of the existing system will likely be needed. Small scale measures to enhance capacity may be justified in the near term. An adaptive management approach to monitoring and projecting navigation demands is needed.
7. The current funding system cannot sustain any substantial investment in capacity expansion. Options include various combinations of tapping fuel taxes, user fees, federal funding, and public-private partnerships to fund future needs.

Arlan Juhl asked how transportation delays are translated into costs. Walker explained that a National Economic Development (NED) analysis focuses on opportunities to reduce the aggregate use of resources — i.e., is the cost of doing a project less than the benefits it will produce? NED does not consider impacts to specific sectors of the economy. In a Regional Economic Analysis, the Corps is permitted to consider who benefits from a particular project alternative. However, under Principles and Guidelines, NED is the primary factor in determining the Corps' recommended plan.

#### *Navigation O&M and Major Rehab*

Steve Jones explained that preparations related to Hurricane Isaac precluded his attendance in-person and expressed appreciation for the opportunity to make his presentation by phone. Jones reviewed recent major rehabilitations on the UMRS, including L&Ds 3, 11, 19, and 24; Lock 27; and Lockport L&D. Approximately \$150 million in funding under the American Recovery and Reinvestment Act (ARRA) allowed USACE to accelerate four of these UMRS projects. Jones said low balances in the Inland Waterways Trust Fund (IWTF) pose a significant constraint on future progress, with virtually no potential for new rehabilitation projects until the Trust Fund's revenue shortfalls are addressed. On the UMRS, affected projects include the La Grange and TJ O'Brien locks on the Illinois River, for which Rehabilitation Evaluation Reports (RERs) have been completed.

Jones said limited O&M funds and aging navigation infrastructure are combining to increase lock outages, nationally and on the UMRS. Both scheduled and unscheduled closures are rising. As a high priority part of the inland system, the UMRS is doing somewhat better than other segments of the system in competing for limited resources, according to Jones. He said the upward trend in outages on the UMRS is not yet alarming. However, he stressed that the unmet needs are very real and growing, particularly on the Illinois River. He said recapitalization through both replacement and major rehabilitation is critical to keeping outages within acceptable bounds. Jones explained that the Corps conducts periodic operational condition assessments (OCAs), which inform its efforts to determine priorities across all of its structures. In the 2010 OCA, four of the 38 UMRS locks and dams were ranked as failed or failing, with only four rated as good and the remaining structures characterized as either inadequate or poor. He noted, however, some of the most urgent issues, including gates at Lock 27, have been addressed since the 2010 OCA, reducing the number of UMRS structures rated as failing.

Jones stressed that, as USACE addresses the challenges associated with its aging infrastructure and limited O&M resources, it is attempting to take a balanced and nationally consistent approach. As part of this effort, the Corps has established new, traffic-based guidelines for levels of service at its locks. A minimum threshold of 1,000 commercial lockages per year has been set to justify 24/7 operation. Locks with between 500 and 1,000 commercial lockages annually will operate two shifts per day, with further reductions in service at locks falling below the 500 lockage threshold. Jones explained that some of the lowest traffic locks may operate for only a few hours per day, or by appointment only. He emphasized that these levels of service are guidelines, and Districts are being encouraged to work with their operators to modify implementation if that is justified. But Jones emphasized that the need to reduce operating costs at lower use facilities is very real.

In response to a question from Tim Schlagenhaft, Jones said it may be difficult to determine the precise cost savings associated with the reduced levels of service. In part, curtailing operating hours will enable lock staff to shift more focus to maintenance activities. To the extent this happens, maintenance work will be advanced, but the cost savings from reduced operations will not necessarily be large. Paul Machajewski said MVP estimates it will save approximately \$770,000 annually by reducing service hours at its three Twin Cities locks.

Arlan Juhl observed that lowering O&M costs by reducing service levels may well increase costs to operators and shippers. He noted that the Kaskaskia lock, which is also targeted for reduced operating hours, serves a growing export area that Governor Quinn is promoting heavily. Juhl asked how the Corps balances these kinds of considerations when determining how to allocate its O&M resources. Jones acknowledged that there will be impacts, but said the new levels of service guidance focuses on low use facilities. He observed that only locks averaging less than three lockages per day are affected by the new guidelines. Should traffic grow beyond this cut-off at a particular facility, Jones said service could be restored to 24/7. He described the service level reductions as a reasonable way for the Corps to ensure some national consistency in its response to increasing O&M constraints.

*Statement from Missouri Coalition for the Environment*

Brad Walker thanked the UMRBA Board members for the opportunity to address them regarding the Association's consideration of navigation-related issues. He read the following statement:

*The May and August UMRBA meetings' agendas have been heavily filled with expert testimony and documents on navigation, almost exclusively supporting large expenditures for the expansion of the inland waterways system [IWS]. It seems that the problem, as it has been for some time, is that the experts are largely from industry or benefit directly from the navigation system. There is a dearth of information coming from experts who question these expenditures and who are more critical of the economic and environmental claims of the navigation industry.*

*It also seems that important facts are largely ignored or glossed over. The statements implying that the IWS is environmentally friendly are specious. Billions of dollars are needed to repair the environmental damage caused by the construction and operation of the IWS on virtually all of our large rivers and billions of dollars of free ecosystem services have been degraded or completely lost because of the system. The assertion that the system's fuel efficiency is better than rail is an industry exaggeration and does not in any way redeem the system for all other damages it has caused.*

*As has been mentioned in several meetings[,] the IWS is far more subsidized than any other commercial shipping system, yet the proposals from the industry, through their surrogate government institutions, would create a significant increase in the taxpayer's already heavy burden. Industry's offer of a few pennies per gallon of increased fuel tax is far from compensation for the lack of increases in this fuel tax over the last 17 years or for the overall burden the taxpayers suffer for paying over 90% for its operation, maintenance and construction costs or to offset the increase they expect the taxpayers to accept with H.R. 4342. H.R. 4342 is somewhat of an insult to Americans who struggle to make ends meet and to replace lost jobs; and it's doubtful that we have anything left to give for even more corporate welfare. However, there are plenty of sound projects that need to be built that would provide both new jobs and real public benefits, which could be undermined by this bill being passed and siphoning off funds.*

*The IWS is not supposed to be a public service; it is supposed to be a part of the often touted free enterprise system. So if it, or specific portions of it, cannot survive without the immense handouts*

*that the taxpayers provide, the IWS' economic viability should be seriously questioned and evaluated. Our future should not be filled with more handouts to special interests for questionable and damaging endeavors. It must be a future where we strive for true environmental sustainability and economic fairness through a political and social system that counts and properly internalizes all costs.*

#### *UMRBA Next Steps*

Arlan Juhl requested an accounting of savings and costs associated with changes in service levels at UMRS locks. Steve Jones said such calculations would likely be difficult. He expressed confidence that the affected locks will be able to accommodate all traffic within their reduced hours, but said it would be difficult to calculate the costs to operators and shippers of having to adjust to those reduced operating hours. Wes Walker said the only way to make such a calculation would be to talk to the individual shippers to determine impacts and costs, since these will be unique to the individual shippers. He noted that, even at low use locks, there are some interesting and unique usage patterns. Walker cautioned that such a cost accounting would be very expensive to conduct.

#### **Asian Carp**

##### *GLMRIS Update*

Dave Romano explained that he has been serving as interim manager of the Great Lakes and Mississippi River Interbasin Study (GLMRIS) following Gary O'Keefe's retirement. Romano reported that USACE will likely name a permanent study manager within the next few weeks.

Romano explained that GLMRIS is one part of the Corps' four-pronged Asian carp strategy. Other elements include the electric barriers in the Illinois Waterway; interagency monitoring; and the Efficacy Study, which is focused on implementing solutions as funding and authority permit. Romano briefly reviewed the GLMRIS authorization and scope. With a Congressional charge to identify options for preventing the spread of aquatic nuisance species (ANS) between the two basins through aquatic pathways, the study is concerned with more than just Asian carp. The study area is divided into two focus areas. Focus Area 1 includes all of the Chicago Area Waterways (CAWS), and Focus Area 2 is looking at other potential aquatic pathways between the two basins.

In the recently enacted transportation authorization (MAP-21, P.L. 112-141), Congress directed USACE to accelerate GLMRIS, giving the Corps until January 2014 to submit its study report. MAP-21 also requires the Corps to submit an Interim Report by October 4, 2012, detailing how it will meet the new schedule and what resources will be required. Romano said Headquarters has directed the Study Team to present two plans in the Interim Report, one that would complete the study within 18 months using existing resources and the other that would also meet the new deadline but would require increased resources and involve preconstruction engineering and design work. Romano noted that USACE had previously committed to releasing an Array of Alternatives Report in December 2013. In preparing the Interim Report, Romano said the Corps will consider whether the scope of the alternatives report will meet the Map-21 directive.

According to Romano, implementing any recommended alternatives for either the CAWS or Focus Area 2 will almost certainly require nonfederal cost-share sponsors. As a result, he said the Corps will seek to identify potential sponsors as it develops its recommendations. He suggested that a joint meeting with UMRBA and Great Lakes Commission might provide a helpful opportunity to explore that states' potential interest in cost sharing.

Romano reviewed the schedule of upcoming study products. Major opportunities for public engagement will include the April 2013 Risk Assessment, Screening Criteria, and Refined List of Controls and the December 2013 Array of Alternatives Report. He stressed that the states and other study partners will be encouraged to participate in screening the prevention alternatives.

In response to a request from Arlan Juhl at UMRBA's May quarterly meeting, Romano described GLMRIS's process for identifying the ANS of primary concern. Initially, the Study Team identified 259 ANS in one or both basins. Of these, 103 present in both basins were eliminated, as were 31 determined to represent minimal or no risk. The remaining 119 were evaluated for highest likelihood of near-term transfer and likelihood of significant impact if dispersed. Following this additional analysis, the 2010 ANS White Paper identified 39 species on which to focus the remaining study. Those 39 species will be categorized as high, medium, or low level threats. Romano said the Study Team's goal is to develop its array of alternatives based on a narrowed list of highest threat ANS and most promising controls. He said the December 2013 Array of Alternatives Report will include a hydrologic separation option.

Romano also announced that USACE will start releasing a series of Focus Area 2 reports in September. These will evaluate the potential aquatic pathways that have been identified throughout Focus Area 2. Each pathway will be assessed in terms of likelihood of transfer from the Great Lakes Basin to the MRB and vice versa. A summary report will be released first, with individual state reports following over the next several weeks. Romano said USACE will coordinate with each affected state in advance of releasing the reports. He said that next steps for Focus Area 2 will be determined following release of these reports.

In response to a question from Dave Bornholdt, Romano said it remains to be determined how the risk assessment results will be communicated — i.e., whether there will be a standalone risk assessment report. Charlie Wooley praised the Corps' efforts to engage other federal agencies, the states, and stakeholder groups in GLMRIS.

Ron Benjamin cautioned against focusing only on aquatic pathways. He stressed that other pathways, if unaddressed, could well undermine any public investments in preventing aquatic transfer. Romano acknowledged that there is significant residual risk outside of the aquatic pathways that Congress directed the Corps to examine in GLMRIS. Dan Stephenson reported that Illinois DNR recently hired two conservation police officers to address some of the non-aquatic pathway risks.

Juhl asked about the process for selecting between the two options that will be presented in the October Interim Report — i.e., completion with current resources vs. expanded resources. Romano said that decision will be up to Congress and the Administration. He stressed that the Corps does not want to initiate an approach only to find that there are not sufficient funds to complete the work by the January 2014 deadline.

Mike Jawson asked whether GLMRIS's array of alternatives will be limited to currently available control technologies. Romano said the Corps will need to draw the line somewhere, but will consider options that are deemed to be reasonably close to being available.

#### *UMESC Tour Preview*

Jawson explained that USGS is working with an extensive array of partners to develop and evaluate ANS control technologies. He said this builds off of USGS's earlier research on habitat suitability and likely pathways, which indicated that, at minimum, portions of the lower Great Lakes can meet Asian carp's habitat needs. Ongoing life cycle and habitat research is exploring additional questions that will

inform development of effective controls — e.g., where are the Asian carps' nursery areas? why aren't the Asian carp better established further north? is L&D 13 functioning as a choke point and, if so, why?

Jawson invited meeting attendees to participate in a tour of the Upper Midwest Environmental Sciences Center (UMESC) following today's meeting. He said the program will include a presentation regarding USGS's ongoing eDNA research, in addition to a facility tour.

### *Minnesota Update*

Tim Schlagenhaft reported that Minnesota has accelerated its Asian carp monitoring, but has no additional live captures since those reported in March 2012 and has found no evidence of reproduction in Minnesota waters. In addition to Minnesota DNR's baseline sampling, Minnesota has intensified its monitoring in the Twin Cities and has contracted with commercial fishermen.

Schlagenhaft said Minnesota is continuing to evaluate eDNA. He characterized eDNA as an important research tool, but said the state and others still need to determine its appropriate use in a management context. He reported that duplicate testing this spring suggests that some earlier eDNA hits were likely false positives, perhaps attributable to Asian carp DNA sources other than live fish, other fish species, or sample contamination. He said additional eDNA sampling will be conducted in September 2012, with the University of Minnesota funding USGS to analyze the samples. This will include repeat sampling in areas that previously yielded hits, as well as in lakes that are deemed very unlikely to contain Asian carp.

Regarding potential lock closures, Schlagenhaft said Upper St. Anthony remains Minnesota DNR's top priority. He explained that it is the only existing structure in the Twin Cities with the potential to be 100 percent effective in preventing Asian carp from swimming further upstream. He noted that the Metropolitan Council and Minnesota DNR recently released reports estimating the economic impacts of lock closure and the value of the recreational fishery, respectively. Schlagenhaft reported that there has been no further activity on S. 2164, the measure sponsored by Senators Klobuchar and Franken. This bill would authorize lock closure under certain circumstances, direct a study on the impacts of closure, and expand the federal government's role in preventing the spread of Asian carp within the UMRB.

Schlagenhaft reported that Minnesota DNR has received \$7.5 million from the state's Outdoor Heritage Fund to support barrier design, construction, and evaluation. Sites under consideration include L&D 1, five sites in southwestern Minnesota's Little Sioux watershed, and one location in northwestern Iowa that would be cost-shared with Iowa. DNR is also further evaluating the potential for barriers at L&D 2, on the Minnesota River near Mankato, and at the mouth of the St. Croix River, though each of these sites presents distinct challenges. Schlagenhaft explained that L&D 1 is DNR's top priority among these sites, noting that a barrier at L&D 1 could potentially keep fish away from St. Anthony Falls. The sites in the Little Sioux and in Iowa would involve a mix of measures designed to prevent spread from infected areas of the Missouri Basin in Iowa. Additional evaluation at L&D 2, Mankato, and the Lower St. Croix will focus on assessing the potential applicability of barrier technologies to the specific characteristics of these sites and making a recommendation whether to pursue barriers at any of these locations.

Minnesota DNR has hired a consultant to develop preliminary barrier designs for L&D 1. This will include electric, sound/bubble, and combination designs. USACE will evaluate these preliminary designs and its response will dictate the state's next steps. If a barrier appears feasible, the state will develop a final design and submit a Section 408 application to the Corps. Contingent on Corps approval and sufficient funding, Schlagenhaft estimated that a barrier could be in place by spring of 2014.



Schlagenhaft said Minnesota continues to believe a barrier at L&D 19 should be evaluated. He acknowledged that silver and bighead carp are established above L&D 19, but said a barrier at this location could effectively block other invasive fish species. With its high head and lack of gates, Schlagenhaft said L&D 19 is in many ways an ideal barrier candidate. He stressed, however, that leadership for a barrier at L&D 19 would need to come from Illinois, Iowa, or a federal agency. If there is interest and a viable design is developed, Schlagenhaft said Minnesota might participate as a cost share partner.

However, Schlagenhaft stressed that fisheries managers in the other UMR states have consistently raised questions about the potential impacts of an L&D 19 barrier on migratory native fish species, such as the skipjack herring. He said these questions would need to be carefully evaluated before any decision could be made on the merits of a barrier at this location. Charlie Wooley observed that the states could possibly pool their fisheries federal aid grant money to fund a barrier at L&D 19, if they decide to proceed.

On the research front, Schlagenhaft reported that the Minnesota Legislature has provided \$3.8 million for a new ANS research center at the University of Minnesota. The research focus will include Asian carp as well as other invasives, and the work will be coordinated closely with USGS and other entities working on the Great Lakes.

## **Sand Mining**

### *Dredged Material*

Paul Machajewski reported that USACE has received inquiries about the potential use of UMR dredged material as frac sand. He explained that the St. Paul District dredges an average of 872,000 cubic yards of material annually from 285 miles of the UMR and its navigable tributaries. Typically, the material is placed in temporary island transfer sites as it is dredged. The dredged material is then later shifted to longer term upland placement sites. Currently, some material is claimed for beneficial use by other USACE programs (including UMRR-EMP), the states, local units of government, and private sector interests. Common uses include island building, roadway fill, winter sand, construction, and livestock bedding. However, even with these beneficial uses, supply outstrips demand. Machajewski estimated that MVP spends approximately \$3 – 5 million annually maintaining and unloading its placement sites.

Machajewski said industry representatives have estimated that the dredged material may contain between 40 to 70 percent sand suitable for use in fracking. MVP has developed its own plan to sample and test the dredged material from four sites near Wabasha, Minnesota. This will include examining particle size, shape, impurities, and crush strength. Machajewski said the District will let the contract for this testing work soon.

On a parallel track, MVP has initiated efforts to explore relevant policy issues. Machajewski reported that he convened a conference call with interagency members of MVP's On-Site Inspection Team and other partners. Participants raised four major issues, including NEPA compliance, questions about on-site processing and potential infrastructure needs, reservations about river channel mining, and impacts to current users of dredged material. Machajewski said MVP will address these and other issues and will ultimately develop guidelines governing removal of material from the placement sites. He said the District would likely not allow sand washing at the upland placement sites, but would probably permit separation by size, something the DOTs have commonly done before removing material. Machajewski observed that access considerations and other factors will likely make the upland sites more attractive than the island placement sites. He said MVP is not saying "no" to river channel mining at this point, but emphasized that this would raise significant additional issues and would need to be extensively regulated if it is ultimately allowed.

Machajewski said reducing the Corps' unloading costs, and potentially charging for the dredged material, could free up substantial resources to meet other O&M needs on the UMR. Dave Frederickson asked if the ownership of dredged material has been clearly established. Machajewski said he understands that reviews in the 1970s as part of the Great River Environmental Action Team (GREAT) process established that the Corps owns the bed of the river in the navigation channel. Fredrickson observed that, based on the numbers Machajewski shared earlier, MVP's dredging might yield of as much as 500 cubic yards of frac sand annually. He asked whether this is significant relative to the current market for frac sand from the region. Based on the level of industry interest expressed, Machajewski said it does appear dredged material could be a significant source of frac sand. In response to a question from Tim Schlagenhaft, Machajewski estimated that the island sites currently contain approximately 15 to 16 million cubic yards of material.

Diane Ford said Iowa will want to explore legal issues around this potential new use of dredged material, particularly if there is to be a charge for the sand. Machajewski emphasized MVP's desire to work closely with partners, but said the District first wants to get the material characterized so all parties better understand the potential resource. In response to a question from Robert Stout, Machajewski said no one has yet approached MVP seeking to mine sand in the river channel. Ken Westlake asked whether the other UMR districts are seeing similar interest in their dredged material. According to Machajewski, neither the Rock Island nor the St. Louis District has reported receiving inquiries. Arlan Juhl said there is a new frac sand mine proposed for the Starved Rock area in Illinois. He also noted that the Illinois Supreme Court has ruled that the river bed is owned by the citizens of Illinois, but that USACE has a right to dredge the channel. Juhl cautioned that, if dredged material is subsequently sold, it could raise property rights issues under the Court's ruling.

In response to a question from Barb Naramore, Machajewski confirmed that, if there is a fee for frac sand suppliers, there would likely be a fee for all users of dredged material, private and public sector alike. He noted that, under the current free system, there is a priority for granting access to the dredged material, with federal users receiving top priority, then state, local, and private users. Ron Benjamin observed that, even at relatively high purity rates, there would presumably still be plenty of "waste" sand available for other users. He noted that this remaining sand, cleared of the highly spherical component, would actually be superior for some applications than the unsorted material.

#### *GEIS Petition in Minnesota*

Frederickson reported that the Minnesota Environmental Quality Board (EQB) has received a petition to conduct a generic environmental impact statement (GEIS) regarding frac, or silica, sand mining in the state. EQB is scheduled to discuss the petition at its September meeting and will likely act on the matter in coming months.

According to Frederickson, there are currently six active silica sand mines in Minnesota, with many more proposed or under consideration. He observed that local units of government, which are the primary regulators of sand mining in the state, are challenged in responding to the dramatically increased level of activity. Several cities and counties in southeastern Minnesota have imposed temporary moratoria on new mines and processing facilities, to provide an opportunity to consider both procedural and substantive issues. He noted that one of the most controversial proposals is for a processing and loading facility that would introduce heavy truck traffic on rural roads used by many Amish people in the area.

Ken Westlake asked about the states' regulatory authority over sand mining. Frederickson explained that local units of government are the primary regulators of sand and gravel mining in Minnesota, though state statute does empower Minnesota's Governor to stop all new activity by issuing a critical

habitat area designation. However, Frederickson said Governor Dayton is unlikely to exercise this option. He stressed the state's interest in balancing economic development with ensuring appropriate protection of natural resources and public health and safety. Barb Naramore observed that the regulatory scheme for sand mining is quite similar in all five UMR states — i.e., the states regulate air and water impacts through their permitting programs and may establish reclamation requirements, while the fundamental question of whether to allow a new sand mine is a local land use decision.

## **Drought**

Steve Jones reported that USACE is monitoring river conditions very closely and is providing frequent updates about harbor closures and active dredging locations on its web site. Jones said MVD does not anticipate a problem maintaining channel depth and width over the next four weeks, despite projections that the Lower Mississippi could lose another foot of water elevation during that period. Downbound tows on the LMR are being limited to 25 barges. Barb Naramore asked whether MVD has sufficient funding to meet the increased dredging demand. Jones said the flood supplemental measure enacted following last year's high water included money to address flood-related dredging needs. Many of the locations that are causing problems under the current low flow conditions received significant sediment deposits during the flood and thus are precisely the places that the flood supplemental was intended to address.

Dave Frederickson said that, overall, drought impacts in Minnesota are less severe thus far than in many other states. Among the state's agricultural producers, livestock operators are feeling the greatest effects. Frederickson observed, however, that averages can be deceiving and noted that some individual producers are experiencing substantial drought impacts while others are enjoying a good year. Impact assessment is an ongoing process.

Arlan Juhl reported that he is co-chairing Illinois' Drought Response Task Force, which maintains a website at [www.drought.illinois.gov](http://www.drought.illinois.gov). He said crop yields in Illinois will be down substantially, with soybeans faring somewhat better than corn. Livestock producers are also experiencing impacts, including high costs for hay. Lack of water for industry has also been a challenge, with some coal mine operators seeking alternate water sources and power generators facing low flow-related limitations under the terms of their permits. He noted that some power plant operators found the temperature of their intake water exceeding the release temperature specified in their permits, leading Illinois EPA to issue variances. Juhl said groundwater levels in many areas will take quite some time to recover, presenting a longer term issue for many rural water users.

Juhl observed that Illinois' water laws are generally designed to address issues associated with excess water, not drought. As a result, the state does not have comprehensive provisions in place for balancing and limiting water uses when necessary. He said the state is monitoring drought conditions very actively. Dan Stephenson reported that Asian carp have been dominant in many of the drought-related fish kills.

Robert Stout said Missouri has been experiencing conditions much like those in Illinois, but even more extreme. The entire state is rated as being in either extreme or exceptional drought, something that is unprecedented in Missouri. Stout reported that some municipalities are experiencing supply issues. In late July, Governor Nixon announced a package of relief efforts for livestock producers and farmers. As part of this effort, Missouri's DNR and Department of Agriculture have committed more than \$20 million to address water supply and distribution needs. The response among agricultural producers has been very strong, with more than 4,000 projects approved thus far and many applications still under review. Other drought-related impacts include fish kills and methane releases from cracked landfill caps. Stout said the extreme heat is also creating air quality issues.

Ron Benjamin reported that northern Wisconsin is doing relatively well, while the southern part of the state is experiencing severe drought. Governor Walker signed an emergency order allowing farmers to increase their water withdrawals. Although there have been some fish kills, Benjamin credited groundwater contributions with maintaining generally acceptable conditions in trout streams thus far. He noted that Wisconsin DNR closed trout streams to fishing in the severe drought of 1988, but found that the closures were not particularly effective. As a result, Benjamin said there are no plans to restrict fishing this year. He said most fish kills thus far in western Wisconsin have been in backwater lakes on the UMR.

Diane Ford reported that conditions in Iowa are very similar to those in Illinois and Missouri, with 70 percent of the state in exceptional drought and the remaining 30 percent rated as extreme. In addition to the lack of precipitation, conditions are exacerbated by the summer's heat. Ford said Iowa's Drought Task Force is issuing biweekly reports on conditions and impacts. DNR is addressing a range of drought-related issues, including fish kills, adjusting permit conditions, and opening state lands to grazing and haying where appropriate.

Ken Westlake said USEPA is aware that many industrial water users throughout the drought-affected area are struggling to meet their thermal discharge requirements. This is particularly true for power producers, and many states are issuing permit variances. Westlake encouraged states to submit information about drought impacts to USEPA, so the agency can prepare a regional impacts assessment. He noted that both this year's drought and recent experience with extreme precipitation events both point to the need to encourage land use practices that retain moisture on the landscape.

Charlie Wooley said fish and wildlife impacts thus far have been relatively mild, compared with what some industrial water users and agricultural producers are experiencing. However, he said the Service is monitoring closely for signs of avian botulism and other impacts frequently associated with drought conditions.

Dave Bornholdt reported that USGS has appointed a staff person to coordinate its drought monitoring and assessment efforts and is providing data to both Administration and Congressional leaders. He briefly described the drought-related information that USGS supplies at the state, regional, and national levels. Bornholdt also noted that USGS is adjusting its gauges as necessary in response to low flow conditions and is also monitoring groundwater levels.

Gary Meden said the LMR is experiencing more drought-related impacts than the UMR. The LMR's navigation channel is narrower than normal, dredging needs are up, and operators are light loading barges to reduce draft. In contrast, the Corps is actually dredging less on the UMR than it does in a typical year. Meden said the Corps' three Iowa reservoirs on UMR tributaries are at a Level 2 drought. Inflows are below minimum release levels at the reservoirs and evaporative losses exceed inflows when temperatures are high. But even under these conditions, Meden said the decline in reservoir levels has been modest and could be sustained for some time. In response to a question from Robert Stout, Meden said MG Peabody asked Corps Districts to identify any operational changes they could make to support flows on the LMR. However, Meden said maintaining LMR flows is not an authorized purpose for reservoirs in the Upper Mississippi or Missouri Basins.

Eric Allness reported that USDA is providing drought relief funding to producers, including those in all five UMR states. Priorities include incentives to maintain cover on highly erodible cropland. Allness said NRCS is working closely with producers to help them maintain conservation compliance under drought conditions. He said NRCS is updating its website regularly with information about current conditions and sources of assistance.

Diane Ford asked Board members whether they saw a need for any joint action through UMRBA. Juhl said a central source of information about drought-related assistance from the federal government would be helpful.

### **UMRBA Strategic Planning**

Diane Ford reported that UMRBA is nearing completion of its strategic planning effort, which is designed to ensure that the Association's resources and focus are aligned with the states' priorities. Since November 2011, the Board held four planning sessions, at which it has confirmed UMRBA's mission and other core assumptions, determined priority focus areas, and identified specific strategies and metrics within each focus area. Ford expressed the Board's deep appreciation to Andrea Balkenbush, Missouri DNR's Chief of Planning, for her efforts in facilitating this process. She also thanked UMRBA's partners for their survey responses, saying that the Board found this input very helpful.

In terms of next steps, Ford said UMRBA staff will distribute a draft plan for simultaneous review by Board members and state members of UMRBA's various work groups and committees. Each state's lead representative will be responsible for consolidating review comments within their state and providing those back to UMRBA staff. Ford said the goal is to have final text for Board approval in November, with publication and distribution of the plan by the end of the calendar year.

Mike Jawson noted that the UMRR-EMP is facing considerable resource constraints. He asked whether UMRBA plans to advocate for increased UMRR-EMP resources. Ford said the draft includes a strong advocacy component across the various focus areas, as well as an emphasis on communications.

### **Water Quality Updates**

#### *Minnesota's Agricultural Certainty Program*

Dave Frederickson extended Minnesota's thanks to USEPA Administrator Jackson and NRCS Chief White for their extraordinary support of Minnesota's new Agricultural Water Quality Certification Program. Funded with a combination of NRCS and state money, the program is designed to accelerate farmers' voluntary adoption of on-the-ground water quality practices. Frederickson said Administrator Jackson's assurances that this is a truly voluntary program were instrumental in gaining farmer support. Following the state's execution of an MOU with USDA and USEPA in January, Minnesota has moved to establish a 15-member advisory committee that will be instrumental in advising Frederickson on program implementation. Frederickson said the target is to begin on-the-ground implementation in three pilot watersheds by 2013. Statewide expansion will follow in two to three years.

Participating farmers will receive assurance that they will not be required to implement additional conservation measures for a period of 7 to 10 years following enrollment, contingent upon compliance with the terms of their certainty agreement. Frederickson said the program includes a strong emphasis on measuring results.

In response to a question from Robert Stout, Frederickson said the process to identify the three pilot watersheds is underway. He said they will be significant in size, with one each likely located in the southeast, southwest, and northwest portions of the state. The three areas will have distinctly different cropping patterns, topography, water resources, etc., according to Frederickson. In response to a question from Arlan Juhl, Frederickson said questions such as whether certifications will be granted to the entirety of a producer's operation or separately to their crop and livestock operations remain to be determined.

Frederickson stressed that, if farmers want to avoid additional environmental regulation, they must make real progress addressing problems through voluntary programs such as this. Janet Sternburg noted that certification programs for sustainable forestry products have been well-received by consumers. She asked whether a similar approach might be employed by the certainty program. Frederickson said participants will be recognized publicly. In response to a question from Barb Naramore, Frederickson said the certainty program has skeptics within the agriculture community, who view it as a first step toward regulation, and critics within the environmental community, who argue that voluntary measures do not go far enough.

### *Joint UMR Monitoring Strategy*

Dave Hokanson explained that, while there are many water quality-related monitoring efforts on the UMR, there is no comprehensive, shared water quality monitoring strategy that meets the states' Clean Water Act (CWA) implementation needs. More specifically, the parameters, methods, and geographic scope of current monitoring efforts are not tailored to coordinated CWA implementation on the UMR. Hokanson hastened to add that this is entirely understandable, given that many of these monitoring efforts are designed and funded for entirely different purposes.

With CWA Section 106 supplemental monitoring funding from Illinois EPA, the UMRBA Water Quality Task Force is undertaking a collaborative effort to develop a five-state CWA monitoring strategy for the UMR. The strategy will address the full length of the interstate UMR and all four major designated uses — i.e., aquatic life, drinking water, recreation, and fish consumption. It will consider chemical, physical, and biological parameters. To the extent possible, it will identify monitoring tools and strategies for four lateral strata — i.e., main channel, side channel, impounded, and contiguous backwater. The primary focus is on supporting Section 305(b) use assessments and 303(d) impairment listings, though the strategy's contributions to other CWA functions, such as standards development and permitting, will also be considered.

Hokanson explained that development of the strategy will be an iterative process, with the strategy scheduled for completion by June 2013. He reviewed progress thus far and reported that a September 2012 work session will serve as an important opportunity for WQTF members and other participants to provide input regarding the draft strategy. Hokanson listed the potential work session participants identified thus far and invited additional suggestions. He emphasized that the final recommended strategy will be a UMRBA product, but stressed the WQTF's desire for input from other agencies and stakeholders. Ultimate implementation of the recommended strategy will, of course, be dependent on a number of factors, including funding.

### **Administrative Issues**

#### *FY 14-15 UMRBA Dues Assessment*

Barb Naramore explained that the UMRBA Board typically establishes UMRBA's dues assessment for the coming two fiscal years at its August meeting in even-numbered years. This is done to facilitate coordination with the states' biennial budgeting processes. Naramore noted that UMRBA's dues have been at \$48,000 per year per state since 2000. Robert Stout moved and Arlan Juhl seconded a motion to set UMRBA's dues for FY 14 and 15 at \$48,000 annually per state. The motion carried unanimously.

#### *Future Meetings*

Naramore announced that the next quarterly meeting series will be November 27-29, 2012 in St. Paul, with the Water Quality Executive Committee meeting on November 27, a joint Board/WQEC meeting and UMRBA quarterly meeting on November 28, and the UMR-EMP CC quarterly meeting on

November 29. The winter quarterly meeting series will be held February 26-28, 2013 in the Quad Cities, with February 26 reserved for a possible Board session, the UMRBA quarterly meeting on February 27, and the UMRR-EMP CC expected to meet on February 28. Naramore reported that June 4-6, 2013 appears to be the best set of dates for UMRBA to meet jointly with the Ohio River Valley Sanitation Commission (ORSANCO). The planning team has identified St. Louis as the preferred meeting location. Board members confirmed their interest in meeting jointly with ORSANCO and endorsed the proposed dates and location.

With no further business, the meeting adjourned at 3:33 p.m.