Minutes of the 121st Quarterly/31st Annual Meeting of the Upper Mississippi River Basin Association

February 29, 2012 Davenport, Iowa

UMRBA Chair Dru Buntin called the meeting to order at 9:33 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				
Craig O'Riley	Iowa Department of Transportation				
Dru Buntin	Missouri Department of Natural Resources				
Robert Stout	Missouri Department of Natural Resources				
Jim Fischer	Wisconsin Department of Natural Resources				
JIII PISCHEI	Wisconsin Department of Natural Resources				
Federal UMRBA Liaiso	ns:				
Tom Christensen	Natural Resources Conservation Service				
Charles Barton	U.S. Army Corps of Engineers, MVD				
Ken Westlake	U.S. Environmental Protection Agency, Region 5				
Josh Svaty	U.S. Environmental Protection Agency, Region 7				
Tim Yager	U.S. Fish and Wildlife Service, UMR Refuge				
Dave Bornholdt	U.S. Geological Survey, MWA				
Others in Attendance:					
Bernie Schonhoff	Iowa Department of Natural Resources				
Greta Gauthier	Minnesota Department of Agriculture				
Tim Schlagenhaft	Minnesota Department of Natural Resources				
Janet Sternburg	Missouri Department of Conservation				
Sheri Walz	Wisconsin Department of Transportation				
Rich Sims	Natural Resources Conservation Service, Iowa				
Renee Turner	U.S. Army Corps of Engineers, MVD				
Terry Birkenstock	U.S. Army Corps of Engineers, MVP				
Gary Meden	U.S. Army Corps of Engineers, MVR				
Roger Perk	U.S. Army Corps of Engineers, MVR				
Ken Barr	U.S. Army Corps of Engineers, MVR				
Mark Cornish	U.S. Army Corps of Engineers, MVR				
Kelly Baerwaldt	U.S. Army Corps of Engineers, MVR				
Marv Hubbell	U.S. Army Corps of Engineers, MVR				
Karen Hagerty	U.S. Army Corps of Engineers, MVR				
Brian Johnson	U.S. Army Corps of Engineers, MVS				
Kat McCain	U.S. Army Corps of Engineers, MVS				
Bob Clevenstine	U.S. Fish and Wildlife Service, UMR Refuge				
Rick Nelson	U.S. Fish and Wildlife Service, RIFO				
Jon Duyvejonck	U.S. Fish and Wildlife Service, RIFO				
Amber Andress	U.S. Fish and Wildlife Service, RIFO				
Barry Johnson	U.S. Geological Survey, UMESC				
Bill Paape	U.S. Maritime Administration, St. Louis				
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Tom Boland	AMEC, St. Louis
Steve Sletten	Atkins
Jay Michels	Emmons & Olivier Resources
Gary Loss	HNTB
Olivia Dorothy	Izaak Walton League
Brad Walker	Missouri Coalition for the Environment
Cecily Smith	Prairie Rivers Network
Don Powell	SEH Inc.
Todd Strole	The Nature Conservancy
Greg Genz	Upper Mississippi Waterway Association
Barb Naramore	Upper Mississippi River Basin Association
Dave Hokanson	Upper Mississippi River Basin Association
Kirsten Mickelsen	Upper Mississippi River Basin Association

Minutes

Barb Naramore reported that Paul Rohde had requested that the word "unfavorable" be stricken from the second sentence of the fourth paragraph on page 6 of the draft minutes. She said Rohde was concerned that this adjective might be misread as indicating that costs exceeded benefits for all scenarios examined in the NESP feasibility study. Jim Fischer moved and Arlan Juhl seconded a motion to approve the draft November 15, 2011 minutes, with the Rohde's requested change. The motion passed unanimously.

Executive Director's Report

Barb Naramore distributed copies of a recent Fish and Wildlife Service letter concerning a proposed hydropower project at L&D 8 and invited Tim Yager to describe its contents. Yager explained that letter serves to inform Symbiotics, the preliminary permit holder, that the project, as proposed, would likely entail an incompatible use of refuge lands. In response to a question from Robert Stout, Yager said there are other hydropower proposals that would involve construction on refuge lands and thus raise similar potential issues. Yager stressed that project proposals must be consistent with the Service's Appropriate Use Policy and Compatibility Policy in order for the Service to permit a new, renewed, or expanded use on refuge lands. In the case of the L&D 8 proposal, Yager said the project would likely be inconsistent with the UMR Refuge's Comprehensive Conservation Plan. Yager said the Service has communicated directly with FERC as well, to explain what an applicant needs to do to demonstrate compatibility for projects affecting refuge lands.

Naramore reported that the Steering Committee for the America's Great Watershed Initiative (AGWI) has released a draft Call to Action, reproduced on pages B-5 and B-6 of the agenda packet. Naramore said she and other Steering Committee members would welcome comments on the draft. She also reported that the Steering Committee is planning a second basin summit, as a follow-on to the June 2010 Inner Coast Summit. The event will be designed to move AGWI to its next phase.

Naramore directed the Board's attention to pages B-7 to B-10 of the agenda packet for the current Treasure's Statement, Profit and Loss Statement, and Balance Sheet. As of February 13, 2012, ordinary income totaled \$493,078 and expenses totaled \$381,289, for net ordinary income of \$111,789. Citing the typical timing of revenues and expenditures, Naramore said the net income figure will decline over the remainder of the fiscal year. Arlan Juhl moved and Diane Ford seconded a motion to accept the FY 12 Profit and Loss Statement and Balance Sheet dated February 13, 2012. The motion carried unanimously.

Interbasin Diversion Consultation

Dru Buntin explained that the five states are party to the 1989 Upper Mississippi River Basin Charter, which sets forth a notification and consultation process for any new or increased water diversion out of the basin that will exceed an average of 5 million gallons per day during any 30-day period. The Charter also requires the signatory states to report on their involvement in qualifying diversion requests at UMRBA's annual meeting. The states reported as follows:

Illinois, Arlan Juhl	- no qualifying diversion requests
Iowa, Diane Ford	- no qualifying diversion requests
Minnesota, Greta Gauthier	- no qualifying diversion requests
Missouri, Dru Buntin	- no qualifying diversion requests
Wisconsin, Jim Fischer	- no qualifying diversion requests

While not a proposal to divert water from the Upper Mississippi River Basin (UMRB), Fischer did report that the City of Waukesha has applied to use Lake Michigan water to supplement the ground water on which its public water supply currently relies exclusively. The city's treated wastewater will continue to be released to the UMRB.

Buntin asked Barb Naramore to send UMRBA's customary letters to the Governors conveying the results of the states' annual diversion reporting.

Inland Waterways Trust Fund

Nicollet Island Coalition Perspectives

Olivia Dorothy outlined the Nicollet Island Coalition's perspectives regarding the Inland Waterways Trust Fund (IWTF) and the NESP navigation improvements authorized in the 2007 Water Resources Development Act. She explained that members of the Nicollet Island Coalition (NIC) include the Izaak Walton League, Sierra Club, Taxpayers for Common Sense, National Wildlife Federation, Institute for Agriculture and Trade Policy, Missouri Coalition for the Environment, Prairie Rivers Network, and River Alliance of Wisconsin. In February 2010, NIC released a report entitled *Big Price — Little Benefit*. Dorothy highlighted major conclusions from that report, including:

- 1. The authorized new 1,200-foot locks on the UMRS are not economically viable, due in part to declining traffic levels and lower cost non-structural options for addressing traffic delays.
- 2. The current 50 percent non-federal cost share for navigation infrastructure construction and major rehabilitation should be maintained.
- 3. Industry should also be required to cost share operation and maintenance of the navigation system through the IWTF.
- 4. Cost overruns at construction projects, such as Olmsted, must be curtailed.

Dorothy said the current fuel tax on barges is generating less than \$85 million annually for the IWTF, leaving the Fund vastly oversubscribed and the Corps with a 30-year project backlog. She acknowledged both the Inland Marine Transportation System (IMTS) Plan favored by industry and the Administration's alternate plan. While NIC concurs that cost-overruns must be addressed, Dorothy said the group rejects the IMTS proposal to eliminate industry cost share for dams and major rehabilitation projects costing less than \$100 million. She also described industry's proposal to increase the fuel tax by between \$0.06 and \$0.09 per gallon as inadequate. She noted that the Obama Administration's proposed alternative, which involves new user fee to supplement the fuel tax, is quite similar to a

proposal offered by the Bush Administration. Dorothy said NIC favors reforms to reduce project costs, coupled with increased revenues into the IWTF (e.g., new user fees and/or increased fuel taxes). She emphasized the Coalition's opposition to any proposal that would shift costs from industry to taxpayers.

Industry Update

Paul Rohde explained that the Olmsted project, which is replacing existing L&Ds 52 and 53 on the Ohio River, continues to command a large portion of both private and public resources that are available to support navigation construction. According to Rohde, the in-the-wet approach to dam construction and other challenges have escalated project costs and extended the completion schedule substantially since its 1988 authorization. In August 2011, USACE issued a press release indicating that it would be revising its cost estimate again. On February 13, 2012, USACE announced that the increase would be approximately \$800 million, bringing the total estimated project cost to \$2.9 billion. This compares with an initial authorized project cost of \$775,000 million. Because this new estimate does not include an inflation factor, Rohde said the final costs will almost certainly exceed \$2.9 billion. The revised estimate also came with a 10-year extension in the schedule for completing to project, which was slated to be complete in 2016 as recently as last year. Rohde emphasized that, under current cost sharing requirements, industry shoulders 50 percent of navigation project cost overruns, with no ability to contain these costs.

At \$144 million, Rohde said the Administration's FY 13 request for Olmsted represents 90 percent of its proposed budget for navigation construction. Without reform and additional resources, Rohde said Olmsted will continue to block meaningful progress on other inland navigation priorities for many years. Lost benefits to shippers are escalating and the costs to complete other projects are also being driven up by the inefficient funding stream. Rohde said the IWUB and other industry advocates believe Congressional action is needed. In response to a question from Barb Naramore, Rohde said industry has not yet formally asked committee leadership to intervene. But he said the Waterways Council Inc. (WCI) and others are talking with key members, including House Appropriations Committee Chair Hal Rogers (KY-R).

In response to a question from Naramore, Rohde said the issue of reactivating the IWUB is not yet resolved. He explained that members' terms have expired and a procedural debate within the Department of Defense continues to block action on filling vacancies. Rohde said there has been word of recent progress and he is cautiously optimistic the matter will be resolved within the next few weeks.

Asian Carp

ANS Control Options

Mark Cornish provided a brief overview of the draft Aquatic Nuisance Species (ANS) Control Technologies Report, developed as part of the Great Lakes and Mississippi River Interbasin Study (GLMRIS). He explained that the report identifies available options and technologies for preventing ANS transfer, with the selection criteria including relevance to ANS of concern, potential to prevent spread via aquatic pathways, human health and safety risks, and readiness to deploy. The 39 ANS of concern for GLMRIS were grouped into eight taxa and the potential technologies were screened for effectiveness at the taxa level. The report examines 90 individual control technologies, grouped into 27 categories. The report does not rank the options by effectiveness, but does include a variety of information in a fact sheet for each option, including targeted species, selectivity, the area of potential relevance [i.e., Chicago Area Waterways (CAWS) vs. basin-wide], status, prior experience, general effectiveness, operating constraints, and cost considerations. Cornish said the study team is currently revising the report in response to agency and public comments and will issue the final report in April 2012.

Cornish said the draft report's inventory of available fish controls includes modified velocity or water quality, biological controls, hydrologic separation, pheromones, piscicides, and various deterrents. Considerations in evaluating the potential options will include effectiveness, availability, constructability, risk, and cost. Cornish said experience operating the electric barriers near Lockport illustrates several real world considerations, including human safety, availability of an emergency backup, durability, compatibility with existing uses, risk communication, operating costs, and project lifecycle.

Following revision of the ANS Control Technologies Report, Cornish and his fellow team members will gather data to help establish screening criteria and develop an ANS risk assessment methodology. In response to a question from Jim Fischer, Cornish said he did not have, but could provide, annual operating cost figures for the electric barriers near Lockport. He estimated initial construction costs for a single barrier at that location at \$10 million.

eDNA

Kelly Baerwaldt reported on a current project to calibrate eDNA methods, in an effort to refine application of this genetic surveillance tool. The interagency Monitoring and Rapid Response Work Group (MRRWG) responsible for coordinated eDNA sampling in the CAWS is using a peer-reviewed Quality Assurance Project Plan (QAPP) that articulates detailed procedures and ensures standardization. Baerwaldt reviewed eDNA sampling results from above the barriers in the CAWS, explaining that MRRWG views positive eDNA results as an indicator of the possible presence of live Asian carp. However, she emphasized that there are many unanswered questions and that alternate sources of the genetic material cannot currently be ruled out. These questions are the impetus for the eDNA Calibration Study (ECALS).

A two-year study, ECALS is scheduled for completion in September 2013. Baerwaldt highlighted the study's three major components as follows:

- 1. Vectors investigate viable alternate sources (i.e., not live fish) of eDNA
- 2. Markers improve efficiency of sampling and processing, which will enhance rapid response and facilitate population estimates
- 3. Calibration explore the influence of environmental variables, determine degradation rates, and model eDNA transport in the CAWS

Baerwaldt described work under each of these major components. She noted that alternate vectors for the transport of carp eDNA include barges, fish eating birds, storm sewers, and fertilizers. She outlined the 2012 ECALS product schedule, including interim reports in March and December of 2012.

Update re Governor Dayton's Action Plan

Tim Schlagenhaft reported that both silver and bighead carp have been caught in Minnesota waters, though there is no evidence of a reproducing population. In addition, there have been numerous eDNA hits as far north as the Twin Cities. Schlagenhaft acknowledged that it is not yet clear how well adapted Asian carp will be to conditions in Minnesota. However, he stressed that the impacts have been tremendous elsewhere on the Mississippi River where carp populations have been established. He said Governor Dayton and other Minnesota leaders are committed to doing what they can to prevent Asian carp from infesting Minnesota's rivers and lakes. Governor Dayton released an Asian Carp Action Plan in September 2011 that calls for enhanced information regarding distribution, evaluation and potential implementation of deterrent barriers, accelerated research, and improved habitat for native species.

Consistent with the Action Plan, Schlagenhaft said Senator Amy Klobuchar (MN-D) and Representative Keith Ellison (MN-D) are drafting federal legislation that would provide USACE with emergency authority to close the lock at Upper St. Anthony Falls if certain criteria are met and would also authorize a feasibility study regarding the potential benefits and costs of closing Upper St. Anthony to prevent the upstream spread of carp.

Schlagenhaft explained that Upper St. Anthony provides perhaps the best opportunity to establish a permanent fish barrier in the Twin Cities metro area. The dam has a high head and is not gated, meaning the only opportunity for fish to move above the dam is through the lock chamber. As such, lock closure could provide a 100 percent effective, long-term barrier to upstream movement on the river, something that is a high priority for Minnesota DNR. He noted that the Minnesota River is also a high priority resource for the state. However, with its wide floodplains and long free flowing reaches, the Minnesota River does not present many good opportunities to establish a barrier, according to Schlagenhaft. The St. Croix River is similar, in that its mouth is likely too wide to establish an effective barrier. However, Schlagenhaft said Taylor's Falls further upstream on the St. Croix presents a natural barrier.

Based on the state's assessment thus far, Schlagenhaft said electricity appears to be the most effective navigation-compatible barrier option for potential application in the Twin Cities. However, he emphasized that there are a number of issues that would need to be addressed, including public and worker safety. Minnesota is working closely with the Corps to identify and evaluate these issues. Ultimately, if the state proposes to modify any Corps structure, it will need to go through a formal Section 408 process. Schlagenhaft said the Minnesota legislature is considering a combination of bonding and Legacy Amendment funds to support the state's investment in fish barriers.

Schlagenhaft said the state recognizes that any proposed lock closure will be very controversial and will require full evaluation of both likely efficacy and impacts. The Metropolitan Council is currently conducting an economic impacts study, the results of which are due by May 1, 2012. He also emphasized the need to accelerate research on, and deployment of, various control technologies. Schlagenhaft said Minnesota is also following ECALS closely and hopes it will shed light on how best to understand and interpret positive eDNA hits.

In response to a question from Ken Westlake, Schlagenhaft said Minnesota's top priorities for an electric barrier are currently L&D 1 and Upper St. Anthony. The potential to use electric barriers at L&D 2 and on the Minnesota River at Mankato is also under examination. In response to a question from Bernie Schonhoff, Schlagenhaft explained that the gates are not often out of the water at L&D 2, but are out frequently enough to potentially limit the utility of a barrier in the lock chamber at this location. He said resource managers need to know more about velocities at the gates and the Asian carp species' swimming speeds in order to more fully assess the potential effectiveness of a barrier at L&D 2. He also noted that the electric barriers near Lockport have been very expensive to construct (\$10-20 million), operate (\$30,000 to \$50,000 per month for electricity), and maintain (c. \$1 million per year per barrier).

Potential for a Barrier at L&D 19

Schlagenhaft observed that L&D 19 may present another unique opportunity to establish a fish barrier. With no gates and a high head, Schlagenhaft said a barrier in the lock at 19 could be quite effective. He stressed that silver and bighead carp are well-established above L&D 19, but said a barrier in this location could be important in limiting the spread of other species, including black carp and snakeheads. He also emphasized that any barrier on the UMR presents important issues that merit careful consideration, including likely impacts to native species such as skipjack herring. Schlagenhaft said Minnesota would like to work with other state and federal agencies of evaluate the full range of issues. Gary Meden concurred with Schlagenhaft's description of the potential opportunity at L&D 19, while also agreeing that there are many potential issues associated with a barrier at this location. He described L&D 19's history and illustrated its configuration, including both an existing and a proposed hydropower project. He also noted that the dam structure at L&D 19 is owned by AmerenUE, the operator of the existing hydro facility. Among the concerns or issues associated with a fish barrier at L&D 19, Meden highlighted the following:

- 1. Shallow water and bedrock at the lower end of the lock, limiting what can be placed there
- 2. Large outfalls through the guidewall just below miter gates present additional fish pathways
- 3. Proximity to the largest hydro powerhouse on the river
- 4. Stray electrical currents from the old powerhouse
- 5. Stray electrical lines
- 6. Keokuk water intakes located just upstream of the lift gate
- 7. Costs-design, construction, and operating
- 8. Impacts on L&D 19's c. 4,000 annual lockages
- 9. Effects on native species
- 10. Impacts to aging infrastructure
- 11. Ineffective as a barrier to downstream migration

Meden observed that the barrier construction authority enacted as part of the 2007 Water Resources Development Act is not site-specific and thus could potentially be used to construct a barrier at L&D 19. However, he stressed that this authorization has never been funded. He also noted that no single agency has a clearly established mandate to halt the spread of invasive species. From a practical perspective, Meden said success will only come from all agencies working together.

Greg Genz reported that the Upper Mississippi Waterway Association (UMWA) has sent a resolution to General Peabody calling for restricted recreational lockages at and above L&D 19 until such time as it is demonstrated that the restrictions have no effect in limiting the upriver movement of Asian carp. Genz explained that UMWA adopted the resolution in response to calls for restricted commercial lockages in the Twin Cities. If such limits on commercial navigation are under consideration, Genz said operators believe it is only reasonable to look at restricting recreational lockages at and above L&D 19. Genz said MVD's preliminary feedback to UMWA is that such a restriction on recreational lockages is not viable.

Genz said UMWA shares others' concerns with the spread of Asian carp on the UMR and supports navigation-compatible measures to restrict the carps' distribution and impacts. He noted that approximately two-thirds of lockages on the UMR are for recreational craft and expressed frustration that recreation interests have yet to engage meaningfully in discussions on the carp issue. Genz also said that the federal government is paying little attention to Asian carp on the UMR and stressed the need for increased focus by political leaders.

Genz suggested that the Peoria and La Grange dams' wicket gates, which are open approximately 30 to 40 percent of the time, may be particularly conducive to establishing large Asian carp populations. He asked whether dams with tainter gates might present something more of a barrier to carp movement.

Dru Buntin asked Schlagenhaft whether Minnesota is seeking any specific action from UMRBA at this point. Schlagenhaft said Minnesota's primary interest is in sharing its perspectives and generating interagency discussion regarding how best to move forward. He asked whether the other states see any

showstoppers regarding a potential barrier at L&D 19. He also noted that Minnesota will learn a lot form its Section 408 process in the Twin Cities and suggested that those lessons might help inform consideration of the potential for a barrier at L&D 19. Greta Gauthier noted that Minnesota's Commissioners of Agriculture, Natural Resources, and Pollution Control are all working together to seek increased federal resources to address Asian carp on the UMR. Genz added that Minnesota Department of Transportation is requesting barrier funding through the Federal Highway Administration, based on increased truck traffic that would accompany any lock closure in the Twin Cities.

Charles Barton said lack of funding limits the Corps' capacity to address Asian carp on the UMR. He stressed that MVD is keenly aware that the resources supporting GLMRIS and other Great Lakes-oriented work are not currently available to support carp efforts on the UMR. He said MVD is looking for options to take a more flexible approach. Arlan Juhl cautioned against putting the UMR in competition with GLMRIS for funding. Barton concurred and said USACE is coordinating very carefully internally.

Buntin suggested that Schlagenhaft work with UMRBA staff to convene federal and state agency personnel for further dialog regarding the potential for a barrier at L&D 19. Barton encouraged partners on the UMR to learn what they can from the experience implementing and operating the electrical barriers near Lockport.

Agricultural Certainty

Greta Gauthier explained that Minnesota's recently announced Agricultural Water Quality Certification Program has its origins with the work of multiple state and federal agencies. Things coalesced when NRCS Chief Dave White approached Minnesota Agriculture Commissioner Dave Frederickson about a possible pilot program to accelerate farmers' voluntary adoption of on-the-ground water quality practices. In exchange, participating farmers would be exempt from any requirement to adopt additional water quality practices for a specified period of time. Gauthier said this approach is a good fit for Minnesota, where only two percent of the population is involved in farming and public perceptions and expectations regarding water quality are changing. In addition, public and private leaders in the state are interested in taking new approaches. According to Gauthier, this program gives farmers a chance to be proactive and help create a solution to the state's water quality challenges. She emphasized that farmers must be 100 percent in compliance with current state requirements in order to participate in the program.

Gauthier reviewed the roles of various state and federal agencies involved in the program, including:

- 1. Minnesota Department of Agriculture administer program
- 2. Minnesota Board of Soil and Water Resources provide funding and technical assistance
- 3. Minnesota Pollution Control Agency provide regulatory certainty
- 4. Minnesota Department of Natural Resources support
- 5. Natural Resources Conservation Service provide funding and technical assistance
- 6. US Environmental Protection Agency affirm state primacy and support voluntary approach/certainly assurance

Gauthier explained that Governor Mark Dayton, NRCS Chief Dave White, and EPA Administrator Lisa Jackson signed a memorandum of understanding for the new program on January 17, 2012. Next steps include establishing a 15-member Technical Advisory Committee, which will include a diverse group of interests and will be the primary vehicle for input to the Minnesota Department of Agriculture

concerning the program. State and federal agencies will also be undertaking a standards synchronization process.

Diane Ford asked about stakeholder response to the program thus far. Gauthier said both agricultural and environmental interests have expressed some reservations and concerns. She stressed Minnesota's commitment to making the program transparent and accessible. In response to a question from Robert Stout, Gauthier said the level of funding available and anticipated participation levels remain to be determined. In response to Barry Johnson, Gauthier said there will be some monitoring to assess the effectiveness of the water quality measures, adding that this will be one of many items the Technical Advisory Committee is asked to address.

In response to a question from Ford, Tom Christensen said NRCS is actively looking for other states interested in similar pilot projects. There is currently an established program in Michigan, with programs under development in Virginia and Minnesota. Discussions are underway with five other states, including Iowa. He said NRCS views certainty programs as a promising addition to existing voluntary conservation programs, offering the potential to accelerate and increase conservation, provide reasonable assurance that additional requirements will not be imposed within a prescribed timeframe, and foster innovation.

Christensen reviewed the Conservation Effects Assessment Project (CEAP) sub-basin reports completed thus far and scheduled for completion in 2012. Key findings from the completed sub-basins, which include the UMRB, are as follows:

- 1. The voluntary, incentives-based conservation approach is achieving results.
- 2. Opportunities exist to further reduce sediment and nutrient losses from cropland.
- 3. Comprehensive conservation planning and implementation are essential.
- 4. Targeting enhances effectiveness and efficiency.
- 5. Full treatment of the most vulnerable acres will require suites of conservation practices, as no single practice or set of practices is a universal solution.

Christensen said NRCS is focusing its certainty efforts on priority small watersheds in order to optimize the use of limited funding, accelerate demonstrable results, and avoid inefficiencies associated with a less focused approach. He said keys to success will include long-term commitment by partners, outreach and education to producers, quality technical assistance, clear alignment between the conservation measures and water quality goals, streamlined processes, on-farm verification, and project monitoring and evaluation. While certainty frameworks will vary somewhat from state to state, core components will include an MOU among cooperating agencies, an agreement between USEPA and the state water quality agency to establish the certainty provisions, and agreements between the state water quality agency and individual producers. Christensen said NRCS's contributions will include technical and financial assistance, tools for assessing needs and outcomes, training, and data and models. Benefits to participating producers will include on- and off-farm sustainability, priority access to technical and financial assistance, regulatory certainty for a fixed period of time, and positive recognition. He stressed that certainty programs must be state-led and should focus on conservation systems, not individual best management practices.

Tim Schlagenhaft asked whether certainty programs will work with producers on a whole farm- or individual field-basis. Christensen said that will depend on the state. For example, he said Michigan is choosing to look at a producer's entire operation. In response to a question from Ford, Christensen said 10 years seems likely to be the optimal length for most certainty agreements.

FY 13 Federal Budget Highlights

Natural Resources Conservation Service

Tom Christensen reported that the President's FY 13 budget request for NRCS totals \$4.1 billion, which would be a 6 percent decrease from FY 12. Mandatory programs would drop by 7 percent, while discretionary programs would decline by 3 percent under the President's proposal. Staffing would decrease by four percent. Within the \$3.3 billion mandatory program request, the Environmental Quality Incentives Program (EQIP) would remain flat at \$1.403 billion. Authorization for new enrollments in the Wetlands Reserve and Grasslands Reserve Programs ends in FY 12, so the President's FY 13 budget would fund only existing acreage enrolled in these programs. Within the discretionary program, Conservation Operations would receive relatively flat funding, while the President is once again proposing to eliminate several smaller programs, including the Watershed and Flood Prevention Operations Programs (P.L. 534 and P.L. 566), Watershed Rehabilitation Program, and Water Bank Program. The President's FY 13 initiatives include increasing mandatory conservation funding targeted to watersheds with high levels of nonpoint source nutrient impairment, stimulating commitment to voluntary action, and positioning NRCS to adapt to declining funding. Budget-related legislative initiatives include proposals to reduce EQIP funding by \$1 billion annually for 10 years and to institute user fees for conservation planning technical assistance. Under the President's budget, the trend away from flexible Conservation Operations technical assistance and toward assistance tied to specific farm bill programs would continue, according to Christensen.

Corps of Engineers

Charles Barton reported that the President's FY 13 Civil Works request is \$4.7 billion, up \$100 million from the Administration's FY 12 request. He said the FY 13 request was again built using performance-based budgeting, with a strong emphasis on job creation, increasing exports, and maintaining and improving infrastructure. As part of this performance-based approach, Barton said USACE will no longer carry projects on its books if they have been inactive for 10 years.

	National			MVD	
	FY 12 Actual	FY 13 Request		FY 12 Actual	FY 13 Request
	(in millions of dollars)				
General Investigations	125	102		27	17
Construction General	1,694	1,471		56	70
Operation & Maintenance	2,412	2,398		445	417
Mississippi River &	252	234		252	234
Tributaries					

At the major account level, the President's budget breaks down as follows:

Barton said the MR&T budget request is limited to mainstem projects, with no funding included for any tributary work. Nationwide, the Administration's construction priorities include South Florida Ecosystem Restoration (\$153.3 million), Herbert Hoover Dike project (\$153 million), Olmsted Locks and Dam (\$144 million), Columbia River Fish Mitigation (\$98 million), American River Watershed (\$86.7 million), and Wolf Creek Dam (\$85 million). The EMP, which is not a highlighted construction project this year, would receive \$17.88 million under the President's request. Within the \$417 million national O&M program, \$193 million would go to UMR navigation under the President's budget.

In response to a question from Barb Naramore, Barton explained that USACE currently has many inactive general investigation projects. These include unfinished feasibility studies and projects for which a non-federal sponsor could not be found. The Corps will take these projects off its books if they

have been inactive for 10 years or more. This will reduce the number of projects in the Corps' project backlog that have little chance of moving forward. In response to a question from Arlan Juhl, Barton said these projects will not lose their authorization unless Congress acts. Naramore requested a list of affected projects. Barton said he would provide a list when one becomes available. In response to a question from Robert Stout, Barton said USACE will coordinate fully with any affected project sponsors.

U.S. Environmental Protection Agency

Ken Westlake reported that the President is requesting \$8.3 billion in FY 13 funding for USEPA, down approximately \$100 million from the FY 12 enacted level. However, EPA's clean and safe water programs would decline by \$561 million to \$3.782 billion, in order to fund Administration priorities in other areas. Within the water program, Westlake highlighted the following provisions in the President's FY 13 request:

- Section 106 funds \$265.3 million, down \$26.9 million from FY 12
- Section 319 nonpoint grants \$164.8 million, down \$264,000 from FY 12
- Clean Water SRF \$1.17 billion, down \$0.3 billion from FY 12
- Drinking Water SRF \$850 million, down \$70 million from FY 12
- Public Water Systems \$109.7 million, down \$4.4 million from FY 12
- Homeland Security Infrastructure Protection \$40.1 million, down \$1.9 million from FY 12 (includes Water Sentinel program)

Westlake said requests for geographic programs within the clean and safe water budget include:

- Great Lakes Restoration \$300.0 million, a \$500,000 increase from FY 12
- Chesapeake Bay \$72.6 million, an increase of \$15.3 million from FY 12
- Gulf of Mexico \$4.4 million, a decrease of \$1.0 million from FY 12

The President did not renew his request for nutrients-related funding for the UMRB. Congress rejected the Administration's request for \$6.6 million in such funding for FY 12.

U.S. Fish and Wildlife Service

Tim Yager briefly reviewed the Service's implementation of American Recovery and Reinvestment Act (ARRA) projects, noting that Region 3 is on track to complete its 72 ARRA-funded projects on time and within budget. Of Region 3's \$30 million in ARRA funding, 25 percent went to projects in the UMRB, including a new La Crosse Operations Base that will open this year.

Yager reviewed the President's FY 13 request for the Service by major account as follows:

	<u>2012</u>	<u>2013</u>
Ecological Services Program	300M	307M
National Wildlife Refuge System	486M	495M
Migratory Bird Management &	127M	128M
Law Enforcement		
Fisheries Program	135M	132M
Science Applications	32M	33M
General Administration	147M	153M

He noted that the President's budget for the Service includes a \$2.9 million increase for Asian carp control. Once again this year, the President is seeking to eliminate the National Wildlife Refuge Fund, which is the source for payments in lieu of taxes (PILT) that are used to compensate local communities for the loss of tax base on refuge lands.

Yager estimated approximately \$750,000 would be available under the President's FY 13 budget for UMR-related work by the three Ecological Services field offices on the river. Among the top issues for the field offices will be hydropower development and power line crossings, Middle Mississippi conservation efforts, completing Endangered Species Act listings for the sheepnose and spectaclecase mussels, and pool-based spills planning. Yager said the UMR refuges will likely have a base budget that is flat or down relative to FY 12's \$7.8 million funding level, which itself was a decrease from FY 11. He said the President's outyear planning calls for keeping refuge funding level between FY 11-15. This presents significant management challenges, and many vacancies achieved through voluntary retirements will remain unfilled. Among the FY 12 highlights for the UMRS Refuges will be continued implementation of the Comprehensive Conservation Plans, completion of several HREPs, and joining The Nature Conservancy in seeking a Wetlands of International Importance designation for Emiquon. Under the umbrella of the America's Great Outdoors Initiative, the Service is collaborating with other federal agencies, the 10 Mississippi River states, and many NGOs on the Summer of Paddling 2012. More than 100 paddling events will be held along the river.

Yager also reviewed the work of the Service's Genoa hatchery, three Fish and Wildlife Conservation Offices, and Fish Health Center in La Crosse. Overall funding for Fisheries programs will remain flat, with areas of emphasis continuing to be aquatic nuisance species control, large migratory species, endangered mussels, and habitat restoration. Region 3 will also continue to work actively on partnerships through its Joint Ventures and Landscape Conservation Cooperatives. In response to a question from Brian Johnson, Yager said he did not have complete details on how the President's proposed increase for land acquisition would be allocated. However, Yager said the UMR Refuge would likely receive some increased acquisition funding.

U.S. Geological Survey

Dave Bornholdt said the President's FY 13budget includes \$1.1 billion for USGS, an increase of \$34.5 million over the agency's FY 12 enacted level. As part of a \$200 million government-wide research and development initiative, the President's request includes a \$50 million increase to support USGS work in the areas of water, energy, ecosystems, disaster response, and ocean and coastal stewardship. Of this \$50 million, Bornholdt said approximately 27 percent would go to USGS's ecosystem mission area. Specific projects include \$13 million to address hydrofracking issues, \$13 million for Water SMART studies, \$5.5 million for the National Streamflow Information System (NSIP) as part of an \$8.6 million increase for natural hazards response, and \$16.2 million for priority ecosystems. Bornholdt explained that the priority ecosystems funding includes Asian carp money for both the Great Lakes and Upper Mississippi River. Partially offsetting these requested increases are proposed decreases for several water-related programs, including a \$6 million cut to the National Water Quality Assessment (NAWQA), a \$5 million decrease in the Cooperative Water Program, and a \$2.8 million cut in NSIP.

Bornholdt also reviewed highlights from the Water Science Centers in the five UMR states. These include work related to nutrients, large river geomorphology, sand mining, enhanced streamgages, and a range of water quality questions. He described current and planned Midwest Area Science Initiatives, which are funded with discretionary money available to the Regional Executive. A current project is examining the influence of retired agricultural land on water quality and stream ecology. A project

currently in planning will examine issues related to river sediment and nutrients. Partners will be asked to provide input on that project's scope at a workshop this fall.

Bornholdt explained that USGS's Asian carp work on the Great Lakes is funded through a mix of base funding and transfers from the Great Lakes Restoration Initiative. Funded at or above \$4 million for the past few years, USGS's work has focused on preventing establishment of Asian carp populations on the Great Lakes. This includes efforts in the areas of risk assessment, control technologies, and monitoring. An oral delivery mechanism that uses an already-registered toxin may be field tested this summer or fall.

In response to a question from Arlan Juhl, Bornholdt said total funding for streamgaging under the President's FY 13 budget would decline.

Sand Mining Update

Barb Naramore noted that the Board charged staff with tracking developments related to sand mining at its May 2011 meeting. Jim Fischer explained that there has been a modest level of silica sand mining along the UMR for many years. However, more recently, there's been a dramatic surge in demand for use in hydrofracking operations. Fischer explained that the region's silica sand is particularly well-suited to use in fracking fluids due to its purity, spherical shape, and strength.

As a result of this increased demand, local units of government are seeing many applications for new sand mining permits, and Wisconsin DNR is fielding many more inquiries from local governments and the public. In response, Wisconsin DNR recently completed an Informational Assessment designed to summarize the best available information on the sand mining process, potential environmental impacts, and applicable regulations. Fischer noted that several local units of government have imposed, or are considering, temporary moratoria on new permits. He also reported that Wisconsin DNR recently declined a request to develop criteria for airborne silica.

In response to a question from Tim Schlagenhaft, Fischer estimated that approximately 30 to 40 percent of dredged material might be suitable as fracking sand. Don Powell said MVP is currently working with the Corps' Engineer Research and Development Center (ERDC) to explore this potential use of dredged material.

Robert Stout asked about bonding requirements for sand mine operators in Wisconsin. Fischer explained that permitting for non-metallic mines is delegated to counties in Wisconsin. However, the state does require a reclamation plan. In some instances, operators are required to post a bond to ensure capacity to execute the reclamation plan. Fischer and Powell observed that the infrastructure requirements related to a mine site are relatively modest and relate primarily to water, power, and transportation needs. Greta Gauthier said Minnesota DOT reports that some frack sand is moving by barge to port cities, where it is off-loaded to rail for transport to North Dakota.

Kirsten Mickelsen said all of the UMR states appear to delegate primary permitting authority for sand mining to local government. In response to the unanticipated uptick in mining applications, several counties in Minnesota and Wisconsin have imposed temporary moratoria, according the Mickelsen. She explained that the counties are seeking time to more fully assess issues related to transportation impacts, reclamation, recreation, and public health. Goodhue County in Minnesota has hired a contractor to complete a one-year study of local, state, and federal policies; best management practices, and any issues that may be unique to frack sand mining. Mickelsen said she is unaware of any local moratoria in Illinois, Iowa, or Missouri.

Aquatic Life Designated Uses

Dave Hokanson provided background on UMRBA's draft Aquatic Life Designated Uses report, explaining that it stems the states' decision to focus on foundational elements of their Clean Water Act (CWA) programs, with the goal of enhancing interstate consistency and advancing water quality protection on the UMR. With support from USEPA via an intergovernmental personnel agreement (IPA), the project addressed the following question: *Are the aquatic life communities on the UMR distinct enough to merit differentiation in a CWA context*?

Hokanson reviewed the project process and described the draft report's contents. Major findings, which have been reviewed by both the Water Quality Executive Committee (WQEC) and Water Quality Task Force (WQTF), are as follows:

- 1. The states have similar, but not identical, aquatic life use definitions for the UMR.
- 2. Differences among the states in use definitions, criteria, monitoring, and methodologies impede comprehensive, consistent aquatic life use assessment.
- 3. Current criteria are not necessarily predictive of aquatic community health. Limited use of biology means current CWA assessments may not accurately capture aquatic life health.
- 4. There are spatial distinctions, both laterally and longitudinally, in UMR aquatic communities that merit differentiation. Temporal patterns also important.
- 5. Opportunities exist to improve consistency, assessments, and protection on the UMR.

Based on these findings, Hokanson said the draft report recommends a UMR classification structure that includes four longitudinal and four lateral distinctions. That classification structure would then be used to guide future work by the WQEC and WQTF, such as the ongoing monitoring strategy project. It would also facilitate interstate coordination, and the states would take steps to reflect the structure in their water quality standards.

Diane Ford congratulated the WQEC, WQTF, and staff on an excellent project. She expressed confidence that the report will prove to be a valuable tool. Hokanson observed that USEPA staff made invaluable contributions through the IPA. Jim Fischer echoed Ford's comments.

Ford moved and Fischer seconded a motion to approve the draft report as written. The motion carried unanimously.

<u>River Training Structures</u>

Brian Johnson reported that, in response to a Congressional request, the Government Accountability Office (GAO) recently audited the St. Louis District's use of river training structures on the Middle Mississippi River (RM 0 to 195). The GAO initiated its study in September 2011 and released its report in December of the same year. The auditors were charged with examining:

- 1. key requirements and directives that govern the use of river training structures,
- 2. how the Corps has addressed key environmental requirements,
- 3. the extent to which training structures' hydrologic and environmental impacts are monitored, and
- 4. concerns that researchers have raised about hydrologic and environmental impacts and how the Corps has responded.

In conducting their investigation, Johnson said the GAO auditors reviewed relevant statutes, regulations, and agency documents and interviewed experts from USACE as well as other agencies and organizations.

In its December 2011 report, GAO made the following five recommendations:

- 1. Prepare an Environmental Assessment (EA) to determine whether significant new circumstances or information relevant to the Middle Mississippi navigation project's environmental impacts have emerged since publication of the 1976 Environmental Impact Statement (EIS). Prepare a Supplemental EIS (SEIS) or a finding of no significant impact, as appropriate following the EA.
- 2. Develop and present in the EA an approach to ensure that site-specific impacts are assessed for new river training structures in the Middle Mississippi.
- 3. Review and revise the St. Louis District's procedures to ensure that its determinations of whether existing National Environmental Policy Act (NEPA) documents need to be supplemented are performed and documented in accordance with USACE NEPA regulations.
- 4. Obtain Clean Water Act Section 404 permit-equivalents and state Section 401 water quality certifications as required for new river training structures in the Middle Mississippi.
- 5. Conduct physical and/or numerical modeling to provide further insight into the river training structures' cumulative effect on river stages during flood conditions on the Middle Mississippi. The Corps should determine and conduct the appropriate level of review for this modeling, including, potentially, independent external peer review.

Johnson emphasized that USACE believes the District is fully compliant with NEPA. However, MVS has voluntarily initiated an EA regarding the effects of channel training structures on the Middle Mississippi. In the EA, the Corps will present its future approach for addressing site-specific impacts and obtaining CWA permit-equivalents and state water quality certifications as needed. He reported that the scoping process for the EA is already underway, with the public, agencies, and industry partners all having been invited to provide input. Johnson encouraged all interested parties to submit scoping comments and provided the necessary contact information.

Johnson explained that the current schedule calls for the draft EA to be complete by September 30, 2012 and the EA to be finalized by November 1, 2012. However, he noted that, if MVS determines a SEIS is needed, the schedule will be modified accordingly.

Johnson said MVS identified the following two initial alternatives prior to scoping:

- 1. No Action i.e., no new river training structures
- 2. No Change i.e., continue to use new river training structures to help operate the navigation channel

In response to a question from Ken Westlake, Johnson said MVS would like scoping comments by mid-March. Dru Buntin asked how many training structures MVS constructs in an average year. Johnson said individual structures are usually constructed as part of a larger block, called a GP. The individual components of the GP combine to address a problem on a particular stretch of the river. GPs often encompass from three to eight individual structures. Needs are somewhat variable, but Johnson estimated that MVS averages two GPs per year. Buntin encouraged MVS to consult with the Illinois and Missouri permitting agencies as the District develops its strategy for CWA compliance going forward.

Barb Naramore asked about the potential system implications of the GAO report and the District's EA. Johnson concurred that there are certainly potential implications beyond the Middle Mississippi. He said that, at minimum, any new processes will likely be implemented district-wide within MVS. Quite possibly they will carry over to the other UMR districts as well, according to Johnson.

Jim Fischer asked whether MVS will evaluate an alternative that involves removing existing training structures. Johnson said representatives of the navigation industry have raised the possibility of removing structures that pilots regard as ineffective or detrimental.

In response to a question from Naramore, Board members indicated that they did not see a need to submit joint scoping comments through UMRBA. However, they asked staff to track the EA process and requested updates at future meetings.

Administrative Issues

Office Lease

Barb Naramore reported that UMRBA's lease on its current office space expires on June 30, 2012. She said the landlord appears willing to offer a two-year renewal on the existing space, at a reduced rental rate. According to a commercial broker with whom Naramore consulted, this reduced rate is competitive with market conditions in the Twin Cities. Because of uncertainties regarding UMRBA's future space needs, Naramore said she is recommending this two-year renewal rather than seeking a longer term lease at either the existing or a new location. Jim Fischer moved and Arlan Juhl seconded a motion to authorize Naramore to execute a two-year lease renewal for UMRBA's existing office and storage space in the Hamm Building, at or below the existing rental rate and under substantially the same terms and conditions as the existing lease, with the lease renewal to run through June 2014. The motion carried unanimously.

Election of Officers

Juhl moved and Fischer seconded a motion to elect Diane Ford as UMRBA Chair, Dave Frederickson as UMRBA Vice Chair, and Ken Vandermeer as UMRBA Treasurer. With no other nominations, the motion carried unanimously. Ford thanked Buntin for his service as UMRBA Chair.

Future Meetings

Barb Naramore announced that the next quarterly meeting series will run from May 22-24, 2012 in St. Louis, with the Board's strategic planning session on May 22, the UMRBA quarterly meeting on May 23, and the UMRR-EMP CC quarterly meeting on May 24. The August quarterly meeting series will be held August 28-30, 2012 in La Crosse, following the same three-day sequence. The UMRBA Board set its fall quarterly meeting for November 28, 2012 in the Twin Cities. Board members were asked to reserve November 27 for a possible joint meeting with UMRBA's Water Quality Executive Committee. The UMRR-EMP CC is expected to meet November 29.

With no further business, the meeting adjourned at 2:47 p.m.