Upper Mississippi River Hazardous Spills Coordination Group Meeting

October 26-27, 2011
Dubuque, Iowa

Meeting Summary

Participants

Roger Lauder	Illinois EPA
Vicki Morris	Iowa HSEM
Rodney Tucker	Iowa DNR/USCG
Mark Marcy (1)	Minnesota HSEM
David Morrison	Minnesota PCA
Rick Gann (1)	Missouri DNR
Tom Kendzierski (1)	Wisconsin DNR
John Punkiewicz	USACE, Rock Island District
Colin Fogarty	USCG, Sector UMR
Bryan Klostermeyer	USCG, Sector UMR
Eric Prufer	USCG, Quad Cities MSD
Tim Ross	USCG, Quad Cities MSD
Kody Stitz	USCG, Quad Cities MSD
Steve Faryan	US EPA, Region 5
Ann Whelan	US EPA, Region 5
Jaci Ferguson (1)	US EPA, Region 7
Mike Coffey	US FWS
Chris Biellier	Seneca Companies/Illinois MABAS 39
Dennis Greaney	Environmental Restoration
Caleb Tufts	Environmental Restoration
Bob Baumgartner	TransCanada
Matt Stokes	Safety Training and Response Strategies
Megan Carlson (1)	UMRBA
Sanhita Chatopadhyay (1)	UMRBA
Mark Ellis (1)	UMRBA
Dave Hokanson	UMRBA

(1) *By telephone.*

Call to Order and Introductions

The meeting of the Upper Mississippi River Hazardous Spills Coordination Group (Group) was called to order at 1:05 p.m. by Chair David Morrison. Introductions of all in attendance followed.

Approval of Previous Meeting Summary

Morrison asked for any changes or corrections to the summary of the Group's April 5-6, 2011 meeting. No changes or corrections were requested and the meeting summary was approved.

Roundtable: Mississippi River Floods and Response Activities

Iowa
Rodney Tucker said 2011 had been the fourth consecutive year in which flooding was an issue in Iowa and that this year's flooding had more impacts along the Missouri River than along the Mississippi River. He noted that, from a spill response/hazardous materials response perspective, the 2011 floods had not been as problematic as other recent floods in terms of containers floating, lost, or leaking. Tucker said reasons for reduced problems with containers included more advanced warning time and fewer businesses being flooded, although impacts in agricultural areas were greater than in other recent floods. He added that less funding had been made available for container recovery during 2011 than in previous years.

Vicki Morris said Iowa had used WebEOC as a resource management tool during the floods and this had worked well in aiding the allocation of resources. She said the biggest challenge of the 2011 floods was simply their duration. Morris said another challenge had been working with businesses and individuals who did not want to evacuate.

Illinois
Roger Lauder said the opening of the Birds Point floodway to protect Cairo, Illinois had been the predominant event associated with the 2011 floods. He deferred to Rick Gann of Missouri DNR for a more detailed discussion of the Birds Point floodway opening.

Missouri
Gann summarized spill response issues related the opening of the Birds Point floodway. He said most landowners in the affected area appeared to have at least some knowledge of the easement on their properties and the potential for a release from the floodway. Gann said Missouri DNR took a number of steps to reduce spills in advance of the flooding. He explained that these included assessing the likely impact from flooding, pre-removal of some tanks, and tethering of others. Gann said objectives in this work included not only reducing spills but also preventing floating tanks from ending up the UMR, where they become a hazard to navigation. He said projected flood inundation maps provided by USACE were extremely helpful, as they allowed Missouri DNR to focus effort on areas most likely to be flooded.

US EPA
Steve Faryan said US EPA Region 5 was not involved to any great extent with the 2011 floods. He said he was working on a flood response training with Joe Davis of US EPA Region 7, and that any individuals interested in such a training should speak with him.

Others
Chris Bieller said Seneca Companies had staged equipment on high ground to aid facilities as needed, and that many facilities learned a lot in the process of dealing with the floods. Matt Stokes said he had worked with CP Rail on its response to flooding in the St. Paul rail yard.

Inland Sensitivity Atlas Update

Hokanson reported that the Illinois statewide update of the Inland Sensitivity Atlas had recently been completed. Whelan said the Ohio update had also recently been finished. Hokanson said

the atlases are available in DVD format from US EPA Region 5. Whelan noted that she had brought along a few copies of Illinois atlas to the meeting for distribution. Stokes asked if the "UMR DVD," which includes of all of the maps for the Mississippi River corridor, would now be updated. Mark Ellis said he is working on an updated version of the UMR DVD and Hokanson added that this will likely be available for the next meeting of the UMR Spills Group. The Group indicated strong interest in an updated UMR DVD.

Area and Sub-Area Planning Updates

Minneapolis-St. Paul
Hokanson said the Minneapolis-St. Paul Sub-Area Committee is examining options for conducting exercises related to the Minneapolis-St. Paul Sub-Area plan in 2012.

Quad Cities
Ann Whelan said Ramon Mendoza of US EPA Region 5 is working on a pipeline response guide for the Quad Cities. Hokanson said he had spoken with Davis of US EPA Region 7 and, while there was not a Quad Cities Sub-Area Committee meeting scheduled in conjunction with the current UMR Spills Group meeting, there would likely be a Quad Cities meeting in conjunction with the Spring 2012 UMR Spills Group meeting. Whelan suggested bringing the drinking water sector into discussions at the next Quad Cities meeting.

Region 5 Area Plan
Whelan said work continues in augmenting the Region 5 Area plan, adding features that were not included in the initial version of the plan.

Other Agency Updates

Wisconsin DNR
Tom Kendzierski said there have been no recent spills of note affecting the Mississippi River in Wisconsin.

Missouri DNR
Rick Gann said Alan Rinkenmeyer has taken the position of Director of the Division of Environmental Quality at Missouri DNR. He said there have been no recent spills of note affecting the Mississippi River in Missouri.

Gann described a situation where a segment of an Enbridge pipeline crossing the Mississippi River had been exposed and over 15,000 sandbags containing grout were used in stabilizing the exposed pipeline. Caleb Tufts of Environmental Restoration provided further detail, saying the pipeline is located just above the Chain of Rocks in the St. Louis area. He said 65 feet of pipeline had been exposed but there were no leaks and the pipeline had been temporarily shut down. Colin Fogarty said US Coast Guard also responded. He said Enbridge had done good work in communicating with Coast Guard and the situation was handled well by all involved.

Morrison asked how deep the pipeline is submerged. Fogarty responded that the pipeline can be as far as 32 feet below the surface during high flow periods. Bob Baumgartner asked whether incident command system (ICS) was used in responding to the incident. Fogarty said the

structure was available if needed, but it was not employed as industry did what was needed to respond to the incident and resolve the situation.

US Fish and Wildlife Service
Mike Coffey said USFWS Region 3 is updating its regional plan to integrate ICS to a greater degree.

Iowa HSEM
Vicki Morris said the Tri-State Hazardous Materials Group is holding a communications exercise on March 1, 2012. She said the exercise scenario covers the area along the UMR from Winona, Minnesota to Dubuque, Iowa. Morris said the specifics of the scenario are still to be determined, but will include a river spill starting in Winona.

USACE
John Punkiewicz said there have not been notable spills recently that have come to USACE's attention and affected the Mississippi River. He said USACE has been doing work to inspect damage to levees as a result of recent flooding.

Illinois EPA
Roger Lauder said Illinois EPA has been working with US EPA Region 5 on readiness training. He also said Illinois EPA also recently completed an exercise at Peoria utilizing a scenario involving an anhydrous ammonia release. Lauder asked whether any of the Group members knew where Coast Guard jurisdiction changes from Sector UMR to Sector Lake Michigan on the Illinois River, as this was a question that came up during the exercise. Fogarty replied that the jurisdiction changes near LaSalle/Peru, Illinois. (Note: Inquiry subsequent to the meeting identified this boundary more specifically as being at Illinois River mile marker 187 near Lacon, Illinois.)

Lauder also commented that there has been much activity regarding mutual aid efforts in Illinois, including the Mutual Aid Box Alarm System (MABAS) and other organizations. He noted the Illinois Public Works Mutual Aid Network (IPWMAN) in particular as a group he has been working with. Lauder said this organization focuses on collaboration among local entities to share distributed assets (e.g., backhoes) that may be needed in a response or emergency situation.

US Environmental Protection Agency, Region 5
Steve Faryan reported that US EPA Region 5 had worked alongside Illinois EPA in responding to a recent 10-rail car ethanol spill and fire. Lauder observed that there is a growing consolidation of product types being hauled by rail, noting over 100 cars carrying ethanol can be part of a single train. He added that cars are more tightly linked than in the past, so that if a derailment occurs, more than one car will be taken off the tracks. Faryan concurred with Lauder's observations, adding that the recently produced ethanol guide was used in this response.

Regarding other US EPA Region 5 activities, Faryan said the Biowatch system (used for regional detection of biological agents) is being tested in DuPage County, Illinois. He noted that planning

continues associated with the G8 and NATO Summit to be held in Chicago in May 2012. Faryan also said US EPA Region 5 will be holding a 400 level ICS training in Wisconsin in January.

US Coast Guard
Bryan Klostermeyer said the only recent spill of note on the UMR was a release of 200 gallons of crude oil just above the Chain of Rocks in the St. Louis area. He explained that the spill resulted from a broken fill line. Fogarty said Captain Byron Black has recently taken command at Sector UMR and that introductory letters will soon be sent to partner agencies and Congress.

Iowa Department of Natural Resources
Rodney Tucker said Roger Lande has been appointed as the new Director of Iowa DNR and that Chuck Gipp has been appointed as Deputy Director. Tucker added that Bill Ehm has replaced Wayne Gieselman as Environmental Services Division Director, as Gieselman has taken the position of Deputy Director of Water, Wetlands, and Pesticides with US EPA Region 7.

Tucker also described a spill that had taken place at the Mississippi River National Museum in Dubuque, where a small tug housed at the museum sank and lost some oil. Eric Prufer noted that USGC had been part of the response to this spill. Tucker said another small spill had occurred in the lock chamber at Lock and Dam 11 in the Dubuque area.

Tucker reported on recent TRANSCAER tour activities, saying that the most recent tour had involved 407 participants at nine locations.

Minnesota Pollution Control Agency
Morrison described a July 21, 2012 incident on the UMR near La Crosse, Wisconsin, where a group of asphalt barges struck a bridge spanning the River. He said three of the four barges in the group broke loose and the lead barge ultimately grounded. Morrison reported that, although the barges were damaged, no product was discharged, so a spill was avoided. He said the vessel involved was older and may not have been able to respond quickly enough to avoid the bridge. Morrison noted that the double-hull construction of the barges likely helped prevent the spill, adding that this is an important requirement. He thanked the Coast Guard for its work in enforcing the double-hull requirement. Morrison said this particular bridge poses difficulty for navigation, so other Group members may want to be aware of it as a hazard to navigation.

Others
Bob Baumgartner reported that TransCanada has been focused on internal training activities during the current year and efforts in the next year may address the Mississippi River. He noted that TransCanada has been developing templates for use by the environmental unit, based on what US EPA had asked Enbridge and Exxon Mobil to develop for recent incidents. He said this is among the lessons learned from the Kalamazoo River spill.

Cooperative and CAER Development on the UMR

Matt Stokes began his report on cooperative and CAER development by thanking CP Rail for their continued support of these efforts. Stokes continued by saying that Wakota CAER's recent one day training proceeded successfully, but that its three-day training has been delayed until October due to weather and river conditions.

Stokes said the Red Wing Cooperative has been holding monthly meetings, along with training sessions. He said these training sessions have included the use of UMR planning and response tools, including the Inland Sensitivity Atlas and pool-specific response plans, as well as ICS concepts. Overall, Stokes observed that participation in the Red Wing Cooperative has been strong, with membership growing. He added that credentialing has also been employed to recognize training completed, and that training has been provided by USCG personnel at no charge. He said the cooperative contributed funding to provide for repairs on response trailers made available by USCG. Stokes explained that these trailers have been deployed at Red Wing and in Lake City, as well as at a site on the Wisconsin side of the UMR. He added that some changes have been made in the size of boom contained in the trailers, to provide boom that may be more effective in swift current.

Stokes said two training sessions were held in the Red Wing area, with over 30 individuals participating. He explained that the training sessions included sessions on boat safety, navigation, and boom deployment; as well as scenario-based exercise that included ICS. Stokes said about 2,000 feet of boom was deployed as part of the training, and demonstrations of skimming equipment and a vac truck were also part of the event. He said there has been good publicity surrounding the training sessions and that this has helped build up interest in the Winona and Wabasha areas; leading to discussions of how best to incorporate these regions into cooperative/CAER development. Stokes added that CP rail continues to be interested in developing CAER groups along the River from Red Wing to Muscatine.

Morrison asked how cooperative development efforts were faring in the La Crosse area. Stokes replied that there has not been significant interest in the La Crosse and that it may make the most sense to take a more regionalized approach here, possibly led by local agencies and seeking to drawn in regional industry. He added that if any of the Group members were aware of a potential industry partner in the La Crosse area, he would be happy to pursue any leads. Faryan commented that part of the challenge in La Crosse is due to the lack of success with a predecessor cooperative in the area.

Stokes said one challenge in cooperative development is the difficulty associated with sharing equipment among members, as this raises issues of ownership and liability. He added that, in the Red Wing area, the cooperative has drafted bylaws to help address some of these issues.

Morrison commented that he understood CP Rail is supporting Stokes' work on cooperative development, but asked Stokes whether Burlington Northern Rail had shown interest in also supporting this work. Stokes replied that he is pursuing discussions with Burlington Northern and is also interested in engaging pipeline companies in cooperative development.

UMR Response Equipment Inventory

Stokes said US Coast Guard Auxiliary staff at MSD St. Paul are collecting information for the inventory, and that this effort has extended downstream to the La Crosse, Wisconsin/ Dresbach, Minnesota area of the River. He said a database of contacts will be created alongside of the inventory of equipment *per se*. Dennis Greaney asked whether the information being collected as part of the inventory could be integrated with the equipment data that oil spill response

organizations (OSROs) already report. Stokes said this should be possible, adding that one of the challenges in assembling the inventory is finding out what types of equipment are held by local entities, such as fire departments.

Whelan said Minnesota and Wisconsin are part of a project to develop a standardized format to maintain equipment information. She added that one important consideration regarding equipment is that OSRO equipment is available for hire, while some of the cooperative equipment may be available depending on need.

Faryan asked Stokes whether there had been much success in obtaining information from pipeline companies. Stokes said that there had not been much success to date and that it has been challenging to identify contacts for the pipeline companies.

Morris asked if any similar effort had been undertaken for the Missouri River. Stokes said he is not aware of any similar effort on the Missouri River. Chris Bieller said that coordination of the Missouri trails behind that on the Mississippi River. Tucker added that there is not much equipment present on the Missouri River.

Tucker said there have been indications that a major, national OSRO may be establishing a presence in the Quad Cities. Stokes said OSROs face difficulty with intermittent demand and being able to move resources to where they are needed when an incident occurs.

Baumgartner said each state has a pipeline association, which may be a good initial contact in conducting the equipment inventory. Tucker noted that the next meeting of the Iowa Pipeline Association is taking place the week after the UMR Spills Group meeting.

Morrison commented that developing the inventory helps prompt improvements in readiness. He added that there are important players in response who are not OSROs, such as local fire departments and marinas, and that the UMR Group could potentially target outreach to these entities. Whelan concurred, adding that ethanol facilities are another group where outreach is needed. Morrison and Stokes agreed that ethanol facilities would be an important target group for outreach.

Morrison asked Fogarty whether local fire departments are typically engaged in US Coast Guard training or education events. Fogarty replied that local fire departments are not typically engaged by US Coast Guard, but agreed that they are an important audience for outreach efforts.

Considering Cultural Resources in Planning and Response

Morrison introduced the discussion by saying that historic and cultural resources can be critical considerations in emergency response activities, giving an example that determining locations of cemeteries may be an important in flood events. Whelan concurred, noting that in recent responses on the Yellowstone and Kalamazoo Rivers, local tribes became involved in cultural resource issues. She continued, saying that in some cases it can be difficult to determine what should be considered as a cultural resource. Coffey noted that an archeologist may need to be involved with a response effort to address cultural and historic resources. John Punkiewicz said USACE has also encountered these issues in levee maintenance.

Whelan said one of the challenges here is that responders have been asked to take different approaches to cultural resources in different response settings. She suggested that a representative from a state historic preservation office (SHPO) be invited to the next meeting to discuss these issues.

Stokes noted that private firms are also engaged in NEPA work related to cultural and historic resources. Whelan concurred and added that tribes may also be interested in the discussion, as tribal and ceded lands may be relevant in response. Baumgartner asked whether state SHPOs are typically making the decisions on how cultural resources are treated. Whelan replied that, in the recent Yellowstone River spill, both Exxon's contractor and the Crow Nation were involved in cultural resource decisions. Baumgartner asked whether these entities were integrated into the ICS structure. Whelan said they were integrated via the liaison office. Baumgartner said TransCanada has current cultural information along the path of its pipelines. Whelan said the SHPOs have cultural and historic data, therefore this does not need to be collected separately, rather it can just be obtained from the SHPO. She added that the presence of cultural and historic site and artifacts is widespread.

Morrison said this is an important incident command and management issue. He suggested that Hokanson arrange for guest speakers to participate in the next meeting to address the issue. Hokanson said he would pursue this.

Training Opportunities and Ideas

Coffey said USFWS has an interest in adding a wildlife response component to response training sessions, which have been focused primarily on booming and on-land containment strategies. He discussed how wildlife recovery and rehabilitation fits into the incident command structure, and the steps typically taken in wildlife recovery and rehabilitation during a response.

Stokes asked whether there is specific training or credentialing required for individuals to work with oiled wildlife. Coffey responded that there often are state-specific requirements addressing training requirements. He said an entity such as Tri-State Bird Rescue and Research is often hired for a cleanup, and that they will bring in trained individuals. However, Coffey added, it is also necessary to deal with volunteers, and that the UMR plan does not currently address the use of trained staff or volunteers in wildlife recovery and rehabilitation.

Whelan said local capacity to care for wildlife can quickly become overwhelmed in a spill, and therefore it can be advantageous to identify local resources in advance of an incident. She also concurred with Coffey that management of volunteers can become a significant issue in a response. Whelan explained that any volunteers need HAZWOPER and wildlife training to help with oiled wildlife. She noted that local areas may choose to develop a cadre of trained individuals in advance of an incident, but this would be very hard to do on a UMR-wide level. Whelan asked Coffey if he envisioned dealing with volunteers on an incident management level or actually conducting volunteer training. Coffey said he thought some discussion could be built into the UMR Plan and this could also be addressed in the pool-specific planning efforts. In addition, he said he has been considering the creation of an eco-collaborative forum to facilitate

information sharing on a regional level, something he will discuss in more detail later in the meeting.

Faryan said his recent conversations with Joe Davis led him to believe that Davis is interested in organizing a UMR-based training in the near future. Hokanson concurred that he had heard the same from Davis. Tucker said if training is being considered; late summer 2012 would provide the best opportunity from his perspective.

The meeting adjourned for the day at 5 p.m. and reconvened at 8 a.m. on October 27th.

Reflections on Day1 Discussions, Additional Topics for Day 2

Morrison highlighted outcomes from the first day's discussions, including:

- A need to continue the cultural/historic resources discussion at the Group's next meeting.
- A desire to conduct training on the UMR in the near future.
- An interest in integrating oiled wildlife considerations into training activities, as well as addressing the topic in the UMR Spill Plan.
- Ongoing work on the UMR response equipment inventory, and that any information relevant to the inventory should be shared with Matt Stokes.

As an additional item for discussion, Coffey asked whether the UMR DVD, which contains all UMR corridor Inland Sensitivity Atlas (ISA) maps and contingency plans, will be updated in the near future. Hokanson responded that an UMR DVD update is in process, and that it will include the recently completed Minnesota and Illinois maps.

Coffey asked whether critical mussel bed habitats are now reflected in the ISA maps. Mark Ellis responded that these have been incorporated into the maps and are represented by a hexagon, which buffers the specific area where the habitats are found. Coffey suggested that, for future mapping updates, it might be preferable to show these as cross-hatched areas. Whelan suggested that these habitats could possibly be identified in the future as a special designated area (SDA) in the ISA. Ellis said the SDA approach could be used if the areas carried some form of legal protection. Morrison asked whether an index of biotic integrity was used to measure mussel population health in defining these critical habitats. Coffey responded that this was not the case and the habitat delineations are tied to the listing of species as endangered. Whelan commented that the identification of critical areas is part of a species' recovery plan. Coffey agreed, adding that mapping critical habitats can provide at least some measure of protection against spills.

Shoreline Cleanup Assessment Techniques (SCAT) on the UMR

Overview of Silvertip Pipeline/Yellowstone River Spill and Response
Whelan gave a presentation from the recent Yellowstone River spill to illustrate some of the considerations in implementing SCAT on an inland waterway. She described how the response effort was broken up spatially into sections and how emphasis was placed on moderately and heavily oiled sites.

One challenge Whelan noted was that, while material safety data sheets (MSDSs) are designed for use by workers, their interpretation by the public can become problematic. She noted that many public comments received during the incident appeared to be due to concerns raised by the information contained in MSDSs.

Preliminary Lessons Learned from Yellowstone River Spill
Whelan presented lessons learned from the Yellowstone River spill. Among these were:

- The rapid rotation of staff hindered the effectiveness of the response.
- Repetition is important and necessary in sharing messages with the media and with the public.
- Community meetings should be held on an ongoing basis throughout a response of this scale, and these meetings should be started as soon as possible during a response.
- In an agricultural area, there is a need to address issues not only regarding human health, but also potential impacts on livestock.
- It was difficult to end the operation, as there is always more that could be done and response contractors would like to keep working.
- There needs to be a clear expression to the responsible party of when the cleanup has reached an endpoint.
- Technology and geospatial information are key in making a response successful.
- Candid communication is critical.

Faryan asked if evacuations had been part of this response. Whelan replied that evacuations had not taken place, aside from some initial relocation of workers.

Whelan said there is interest in developing a Yellowstone River Sub-Area Contingency Plan. She explained that this interest includes engaging stakeholders, pre-planning response tactics, and training/exercising. Whelan commented that a core of SCAT-trained individuals is a potential asset to this and other areas, as SCAT was a dominant consideration in this response. With this observation made, Whelan moved to the SCAT-focused portion of her presentation.

Use of SCAT in Silvertip Pipeline/Yellowstone River Spill
Whelan noted that, due to the limited choices for response in the inland area, just one set of SCAT instructions was created for the Yellowstone River spill. She added that entities involved in the response included the responsible party, their contractors, state and federal staff, and the Crow Nation.

Whelan described the approved treatment techniques (ATMs) employed in the response. She noted the following:

- No cleaning agents were used.
- Only shallow soil removal was performed.

- There was substantial debris to deal with, but often only pockets of oil within the debris. This raised the question of how much should be done to remove the oil from the debris.
- There was a technical team in place to address questions when approved techniques were not successful.
- Treatment to cover residual oil, using various materials including sand, sawdust, and kitty litter was examined. Ultimately, locally present soil was determined to work best in covering oiled materials.
- Use of light equipment was eventually allowed in the response.

Considering SCAT on the UMR

Coffey described how current tools for shoreline assessment and cleanup are primarily focused on coastal environments, and that there is a need to develop SCAT tools which are applicable on inland waterways. He observed that the SCAT process greatly improves when there is involvement from multiple entities, including the responsible party and natural resource trustees.

Coffey explained that one of the key considerations for inland waterways is the presence of vegetation, and that this is something that tools developed for coastal areas do not fully address. Therefore, he said one of the goals of developing SCAT tools for inland waters is to expand shoreline classifications to address different vegetated habitat types.

Coffey said the 2004 USGS publication *General Classification Handbook for Floodplain Vegetation in Large River Systems* provides a good starting point for examining different habitat types. He said one objective to pursue in aiding response on inland waterways is documenting the sensitivity of vegetation types in various habitats to both oil and removal techniques.

Coffey commented that administrative orders and engineering create a push for removal in a spill response, but that may not always be the best choice for preserving habitats and species. He said a better understanding of the impacts of removal actions can help lead to improved decision making and understanding of the consequences of such choices. Coffey said the development of habitat-specific response guides for the UMR in particular and inland waterways generally, could help inform response decisions. Whelan concurred, emphasizing that the distinction in developing such guides is that they are based on habitat, rather than geomorphological characteristics alone.

Coffey emphasized that there are many connections within ecosystems that there is a potential impact in removing any element from the system. Whelan gave a example, from the Yellowstone River spill, that driftwood debris piles are an essential component of the ecosystem and removing them due to oiling may be very detrimental to the system overall.

Whelan and Coffey emphasized that, by developing tools such as fact sheets, there is not an intent to replace notification and consultation, but rather to provide tools to assist and facilitate decision-making.

Coffey said it is important to consider the key ingredients that make up habitat – water, soil, and vegetation – when executing a response, with a goal of maintaining and restoring the ecological

services provided by a habitat both during and following a response. He said in some cases this relatively easily done, but in other instances it may be more challenging or not possible. In the latter case, Coffey explained, it may be necessary to recreate the habitat in another location, though location may be a crucial part of the ecosystem services provided. He added that topography is also an important element and can be very hard to re-create if damaged. Whelan said these considerations are not limited to extremely rare habitats, but also apply more commonly in responses.

Faryan pointed out that maintaining ecological structure and function, while also removing oil, can be very difficult. He gave the example that, in the Kalamazoo River spill, some river banks were initially left in place in the hope of maintaining river structure and function, but that they were ultimately removed as they continued to release oil. Kody Stitz noted that an ongoing challenge is in communicating that the best choice for the environment may sometimes be to let oil stay in place. Whelan concurred, adding that a better understanding of phytoremediation might help in communicating this message (i.e., finding out which plants, under what conditions can help degrade oil most successfully). Coffey said this topic would be addressed in upcoming RRT conversations.

Faryan noted that in the Kalamazoo River spill, the issue of continued release of oil from certain areas became problematic. Ultimately, he said, removal was executed in areas which had originally been left in place. Whelan concurred, but added that those opposing bank removal might no longer have been speaking up when removal was finally pursued. More generally, she said, whether or not to pursue removal will likely depend on the severity of contamination. Whelan added that another option for retaining banks is to put in place a sheen boom with solidifier around the area to capture any product that may seep out over time. Faryan said the Kalamazoo River spill has in many ways offered a "laboratory" for response, and it is important that lessons learned here are shared in order to improve future responses.

Habitat-Specific Response Fact Sheets

Whelan said a tool currently in development, as previously discussed, are facts sheets designed to aid response in various inland waterway habitats. She explained that these discuss the features of habitats, as well as their sensitivity to both spills and response actions, adding that they are an outgrowth of the fact sheets originally created for Net Environmental Benefits Analysis (NEBA) exercise, but are much more specific regarding riverine habitats. Whelan said one application of these fact sheets is to provide a place to begin a SCAT process on an inland waterway. She said the upcoming Region 5 RRT meeting would include an exercise looking at up to three draft fact sheets.

Faryan said the participation of NOAA and USGS in the creation of these fact sheets would be very helpful. Baumgartner said the fact sheets may be able to characterize response considerations to a certain extent, but that the degree of oiling often drives decisions-making. Therefore, he added, it may be helpful for the fact sheets to acknowledge the importance of degree of oiling in the selection of response techniques. Whelan agreed, adding that the fact sheets do not replace other response considerations, but rather add to the tools available in a response.

Morrison asked Whelan and Coffey if there is a particular action item for the Group at this time in regard to the fact sheets. Whelan said she envisioned, in the term, utilizing groups such as the UMR Spills Group to provide input and feedback on the fact sheets as they are drafted. She added there may also be role for a more dedicated review group or that perhaps this is an item for discussion by an eco-collaborative team.

Next Steps for Upper Mississippi River National Wildlife and Fish Refuge Spill Contingency Planning

Hokanson reminded the Group that geographic response plans had recently been completed for UMR Pools 7 and 13, and that a decision soon needs to be made regarding the next pool for which to develop these materials. Rodney Tucker suggested that Pool 19 might be a candidate, as NEBA work has already been completed there, which could speed the process of response strategy development. Coffey said working in Pool 10 would have the advantage of brining in multiple refuge districts.

Tucker observed that any of the pools has sensitive resources, so it is most important to continue work rather than be delayed over picking a next pool. Whelan said it is important to focus on addressing Refuge lands in selecting a next pool. Tucker and Stokes said the Sabula Bridge has been the site of several barge incidents and therefore would be important to address if it is not already covered in existing plans. Stokes also noted that Pool 10 has numerous sensitive resources and limited response capability nearby. Tucker emphasized that, regardless of the specific pool chosen, it is important to keep the pool IAPs consistent in format from this point forward.

During the break, Tucker, Whelan, Coffey, and Punkiewicz all discussed pool selection and looked at navigation charts to identify River features potentially important to pool selection. At the end of the break, they recommended Pool 10 be the next pool where geographic response strategies are developed. The Group as a whole concurred with this recommendation.

Eco-Cooperative Forum

Coffey suggested establishing a forum to bring more natural resource personnel into conversations regarding UMR spill response. He suggested that a quarterly conversation of some form could take place. Coffey said this kind of input has been helpful in other settings and locations in response. Coffey said this type of collaborative can be forward-looking in identifying and preparing for potential releases and impacts to sensitive areas, bringing scientific and technical expertise to bear in response preparations.

Coffey noted that his experience in other regions, such as the Gulf of Mexico, has been that more frequent spill events have led to a cadre of individuals, including both spill responders and natural resource managers, who are familiar with natural resource issues, experienced in response, and comfortable working together. He suggested that an eco-collaborative form could potentially cultivate such a cadre on the UMR in (fortunate) absence of frequent spills. Coffey said this, in his view, would not be a formal team as identified in the National Contingency Plan (NCP), but a less formal collaborative. He added that cross-discipline training could be another important role of such a collaborative. Coffey proposed several potential topics for initial discussion, including:

- Plans for responding to oiled birds
- Endangered species emergency consultation templates
- Job aids for working within SCAT
- Measures to minimize impacts from responses in sensitive habitats
- Field sampling plans analytical needs
- Monitoring protocols/ecological goals

Referencing the preceding discussion regarding habitat fact sheets, Lauder asked whether spill response contractors are typically familiar with the variety of riverine habitats. He added that the visual component of tools such as these fact sheets is very important. Whelan concurred that providing visual information regarding the various habitats is critical.

In regard to the eco-collaborative discussion, Whelan asked Coffey whether he envisioned a combination of responders and natural resource trustees as part of the collaborative. Coffey replied that he felt that a mix of individuals representing responders and trustees would be appropriate. Punkiewicz said USACE has subject matter experts who could be part of a collaborative effort. Coffey said ICS training for natural resource managers may be one starting point for collaborative work.

Hokanson asked whether the proposed collaborative would function on a regional, UMR, pool-specific or other scale. Coffey replied that this would still need to be determined. He suggested one way to conduct further exploration of the collaborative idea is to bring responders and natural resource experts together in a conference call to discuss possibilities for collaboration. Whelan suggested that the Midwest Natural Resource Group (MNRG) could potentially be engaged in discussions. She said existing venues such as MNRG and UMRBA quarterly meetings could be utilized to facilitate discussions.

Coffey emphasized that a primary goal of an eco-collaborative is to improve understanding among both responders and natural resource managers, particular regarding each others' roles in response and recovery.

Great Rivers Sub-Area Update

Jaci Ferguson gave an update on progress in the Great Rivers Sub-Area. She began by describing the geography of the sub-area, which covers portions of Arkansas, Illinois, Kentucky, Missouri, and Tennessee. Ferguson said the sub-area generally extends one county in from the Mississippi River, with exception that Missouri has incorporated entire planning districts in the sub-area and, as such, the sub-area extends further into Missouri. She noted that the sub-area ends north of Memphis, as the intent is to cover the area between St. Louis and Memphis.

Ferguson said response, emergency management, and natural resource agencies have all been participating in the sub-area discussions to date. She said efforts are being made to establish contact points with each of the counties in the sub-area.

Ferguson reported that a draft plan has been sent out for review and that further refinements to the plan will follow. She said the mapping approach to be used in the area is still being sorted out. Ferguson added that the possibility of a communications exercise for the sub-area is also being considered. Morrison suggested that Vicki Morris of Iowa HSEM may have insight into developing a communications exercise, as she is currently working with the Tri-State Hazardous Materials Group on a communications exercise in the La Crosse area. He also asked how industry is being included in the Great Rivers sub-area work. Ferguson replied that there has been some participation from local facilities and industry, but that further suggestions and ideas from the UMR Spill Group are most welcome. She suggested that any ideas for industry engagement be sent to her.

Upper Mississippi River Spill Response Plan (UMR Spill Plan) – Comprehensive Update

Hokanson reviewed the history of the UMR Spill Plan, noting its origin in 1991 and subsequent updates, including the most recent substantial update in 2006. He said a comprehensive update is part of UMRBA's current work plan in its cooperative agreement with US EPA Region 5 with a deadline for completion in September 2013. Hokanson stated that the update process is now beginning, with the intent of the discussion at the current meeting being to begin scoping the plan update. He then asked the UMR Spills Group for their input on content and process of Plan updating utilizing the following questions:

1) What UMR needs does plan meet? Not meet?
2) Scope still appropriate? How to relate to other plans? Pool-specific efforts?
3) What parts most valuable? What's missing? Anything to drop?
4) Does your agency use it? Why or why not? How can we make more useful?
5) Changes to form, content, and function?
6) Process preferences? How to work between meetings?

Lauder noted that the Ohio River Valley Water Sanitation Commission (ORSANCO) is currently looking at the UMR Plan as a source of ideas for an Ohio River plan and that the UMR Plan may also be informed by what is done on the Ohio River.

Coffey suggested that a section addressing volunteers should be added to the Plan, perhaps via an appendix addressing the issue.

Morrison suggested that an important first step is to establish a process and timeline for plan review. He thought a proposed timeline and process should be offered to the Group, with feedback due by January 1, 2012.

Whelan said the incident action plan (IAP) format should be considered in the Plan update. She indicated that the IAP format, along with the use of databases, are features she would like to see explored as part of the Plan update. Whelan added that some of the policies contained within the Plan may need to be revisited and updated. Punkiewicz said that USACE is organized by location, so a Plan approach more tailored to specific sections of the UMR would be congruent

with USACE's organization. Whelan clarified that her previous comment did not imply that an IAP or set of IAPs would replace the plan, rather that IAP(s) could be part of an updated plan.

Faryan said he has seen that users find the most value in the Plan's resource manual, as this is the unique piece not otherwise found in sub-area or region-wide plans. He added that enhancing the plan's electronic utility is also desirable. Whelan agreed, but noted that electronic function should also work independent of internet connectivity.

Whelan observed that the extent of the Plan revision may in fact drive the process of updating. For example, she said, if extensive revisions are needed, then a more intensive process is appropriate, whereas if changes are only minor, then a less intensive process is appropriate. Whelan added that a more intensive process would require more in person meetings, where a less intensive process could rely primarily on conference calls/webinars.

Morrison said it is important to be in synch with US Coast Guard when moving forward on the Plan updates. Stitz said, initially, more conversations are likely needed than just the twice yearly UMR Spills Group meeting.

Whelan suggested that the plan incorporate a section on planning for catastrophic events.

Hokanson suggested that he could send an email to the Group with the questions he had posed, as this would give the Group more time to reflect on both the update and process of the Plan update.

Next Meeting

The next meeting of the Group will take place in Spring 2012, with the location and specific date to be determined. Hokanson said he would send an email to determine a date and will also look into location options.

Morrison asked that Hokanson send out a list of meeting action items via email in the near future. Hokanson said he would do this.

With no further business, the meeting adjourned at 12:10 p.m. on October 27, 2012.