Duluth-Superior Metropolitan Interstate Council

HARBOR TECHNICAL ADVISORY COMMITTEE

Meeting Summary

September 7, 2011

WITC Conference Room, Superior, WI

HTAC Voting Members Present				
Representative	**Organization**		**Representative**	**Organization**
Ed Anderson, *Chair*	MIC		Chuck Froseth	City of Duluth
Dan Belden	WLSSD *(Alternate)*		Joel Johnson	Industry – Recreation
Dale Bergeron	MN Sea Grant		Zachary Jorgenson	US Fish & Wildlife Service *(Alternate)*
Cameron Bertsch	Douglas County		Nancy Larson	WI DNR
Julene Boe	St. Louis River Alliance *(Alternate)*		Jason Laumann	NWRPC
Steven Brossart	US Army Corps (USACE)		Bob Libby	Industry – Pilots/Vessel Operations
CDR Kenneth Bryan	US Coast Guard MSU		Ed Montgomery	Industry – Harbor Services
Gene Clark	WI Sea Grant		Jim Sharrow	Duluth Seaway Port Authority
Pat Collins	US Fish & Wildlife Service		Scott Smith	St. Louis County
Larry Didomenico	US Coast Guard MSU *(Alternate)*		Ted Smith	Marine Tech
Martin Forbes	WisDOT		Danny Weber	Natural Resources Conservation Service
Nelson French	MPCA			

HTAC Voting Members Absent				
Representative	**Organization**		**Representative**	**Organization**
Mark Erickson	Industry - Ore		Mike McCoshen	Industry – General Bulk
Jack Ezell	WLSSD		Denise McDougall	Industry – General Cargo
Patty Fowler	MN DNR		Nancy Paisley	Save Lake Superior Association
Gary Glass	Izaak Walton League		Jason Serck	City of Superior
Dick Lambert	MnDOT		Mick Sertich	Industry – Grain
Bill Majewski	St. Louis River Alliance		Fred Shusterich	Industry – Coal

Other Stakeholders Present				
Representative	**Organization**		**Representative**	**Organization**
Jason Berkner	USACE		John Morris	WDNR
Gini Breidenbach	LimnoTech		Lisa Neitzel	Surge Communications
Lt. Kevin Broyles	Vintage Vessel NCOE		Tim Olson	Rep. Cravaack's Office
Scott Byykonen	MIC Intern		Guy Partch	BARR Engineering
Ron Chicka	MIC Staff		Richard Price	USAERDC
Laurel Davis	MIC Staff		Ted R. Smith	Technical Advisor
Joe Graham	WDNR		Kody Thurnau	MIC Staff
Jackie Halberg	Duluth City Council		Heidi Timm-Bijold	City of Duluth
Marc Hershfeld	MPCA		Rondi Watson	MIC Staff

Tom Jerow	WDNR		Don Willecke	Western Great Lakes Pilots Association
Barbara Lambus	US Customs Service		Carol Wolosz	GLMRI
Mollie Mahoney	USACE		Larry Zanko	NRRI
Cordell Manz	WDNR		Xianben Zhu	UMD Civil Engineering
Andy McDonald	MIC Staff			

1. Agenda Review / Introductions

HTAC **Chair Ed Anderson** called the meeting to order at 9:05 am. All participants introduced themselves. No changes to the agenda were put forward.

2. Committee Business

June 1, 2011 HTAC Meeting Summary

Chair Ed Anderson called for changes to the previous meeting summary. Hearing none, he asked for a motion to approve.

Martin Forbes/Joel Johnson moved to approve the previous HTAC Meeting Summary with no changes. The motion carried unanimously.

3. Subcommittee Updates

Gene Clark gave a dredging subcommittee update, mentioning the Moccasin Mike landfill demonstration project using dredged materials that Larry Zanko would be presenting. He said there was a good summary of the project in the Summer 2011 issue of North Star Port magazine from the Port Authority, along with the article about the HTAC which he feels would make a good education and outreach tool. He also reported that the Port Authority has a permit application submitted to the Wisconsin DNR to bring in coarse material from Erie Pier, and it's getting good support.

Steve Brossart reported that Erie Pier has been a beehive of activity as the 2011 harbor dredging started. He said that high rain fall has caused the Nemadji River to pump out a lot more material than usual and the extra dredging may push work into next spring rather than finish this year. All that material is scheduled to go into Erie Pier and it "may be interesting getting it in there."

Ted Smith discussed the Harbor Maintenance Trust Fund stating that they are still struggling to have legislation enacted that would ensure that all fees collected are used for their stated purpose, that is, for maritime transportation infrastructure maintenance and development. He added that the Great Lakes has taken a big hit with the budget situation-- our dredging dollars were reduced by 30% compared to 10% for the rest of the nation and only eleven ports will be dredged next year. Because the Great Lakes is a closed system closing one port can impact freight movement at all the other ports.

Dale Bergeron spoke regarding invasive aquatic species, stating that there was a long list of things to do. He said there are two new studies out, one by the EPA and the other by the Coast

Guard which have similar conclusions about ballast water standards, and that they would be meeting in Maryland with the IS Collaborative hoping to create a set of standards.

4. Vintage Vessel National Center of Expertise

Lieutenant Kevin Broyles, VVNCOE Supervisor, U.S. Coast Guard, gave a presentation on the creation and purpose of the Vintage Vessel National Center of Expertise. He stated that in 2008, a Marine Safety Study Group was developed in light of an acknowledged decrease of expertise in the Marine Safety and Vessel Inspections fields. Out of this came the Marine Safety Performance Plan, and the National Centers of Expertise (NCOEs) were one of the programs created by the group to increase training, improve customer service, and develop highly competent Coast Guard Marine Safety professionals.

He said there are seven NCOEs around the country:

Cruise Ship NCOE – Miami, FL.

Gas Carrier NCOE – Port Author, TX.

Investigations NCOE – New Orleans, LA.

Outer Continental Shelf NCOE – Morgan City, LA.

Suspension & Revocation NCOE – Martinsburg, WV.

Towing Vessels NCOE – Paducah, KY.

Vintage Vessels NCOE – Duluth, MN.

He went on to explain that the function of the NCOEs was to enhance marine safety by bringing consistency and competency to inspections, education in specialized areas of expertise, and serving as a resource for such things as policy making and training.

Then Broyles discussed the Vintage Vessel NCOE, stating that it was located in Duluth due to the large concentration of vintage vessels on the Great Lakes, specifically the Lakers. The unique environmental conditions of the fresh water means there are 50 plus year old ships operating on steam and diesel propulsion. The scope of the VVNCOE also includes the MARAD reserve fleet on all three coasts, as well as any vintage vessel such as WWII era ships and any vessels having been built of technologies no longer in standard current production practice.

The VVNCOE primarily focuses on older or non-contemporary technology such as steam plant propulsion and riveted hulls. The importance of establishing the VVNCOE is to ensure that these older technologies, which aren't commonly used by most of industry or trained for within the Coast Guard, are not lost. Furthermore, the VVNCOE provides consultation to field members in rare occasions that they run into inspections, casualty investigations, and operational concerns that most inspectors aren't accustomed with.

Current projects of the VVNCOE not only include consultation and technical support, but also an ongoing educational component to improve inspector competency and further the knowledge of older technologies. Other projects include the collection of best

inspection/investigation practices, and to establish a body of historical information on the Great Lakes fleets.

Ed Anderson commented on the collection of best practices and asked if they were publishing policy out their office. Broyles replied that they didn't create policy but provided advice to others who were.

Dale Bergeron asked what the role of the VVNCOE was in the reengineering of older ships. Broyles explained that they get very involved because they find there is a misconception of applicability, and when you modify with newer technologies you have to update several other things such as watertight doors, and determine if it is cost effective to do so. Bergeron then asked if they were involved in the installation and adaptation of ballast water systems to control invasive species, and Broyles explained that at this point they tend to stay back from that due to state regulations, but that eventually they will have to get involved.

CDR Kenneth Bryan got up to add a few words to the presentation. He said the events of 9/11 resulted in significant changes for the Coast Guard, causing them to become heavily involved with port security, and as a result their marine inspection activities didn't get as much emphasis as previously. The NCOEs were established to assist local field units as a repository of historical knowledge and technical expertise. He said that although they don't have any regulatory authority, when their office advises his they listen very closely. He also said that if they don't know the answer, they do the research and figure it out, and that high turnover means the knowledge retained is very important to the community.

5. Current Area of Concern (AOC) Activities and Implementation Framework

Marc Hershfield of MPCA, started the presentation by giving an overview of the St. Louis River Area of Concern (AOC). He defined the area as encompassing 1016.75 square feet, and pointed out that it covers more area than twenty one other AOCs combined. In addition, it's very complex, and has an extensive list of Beneficial Use Impairments (BUIs) which includes such things as restrictions on dredging, fish tumors and disease, beach closings and body contact restrictions, and loss of fish and wildlife habitat. Hershfield described the problem as "eating an elephant one bite at a time, or everyone takes a bite", and talked about the progress they've made with Rices Point.

He said that since then they have been able to optimize federal money to get state of the art technology for doing core sampling in summer and winter and that sediment characterization work has been completed in some areas. What they are looking for is areas that need to be cleaned up, but also areas that are restoration ready. They were able to tap in to NOAA money for five years to enter data, primarily looking for heavy metals. He said the big challenge is how all this data is going to be tied into removing contaminants.

Their approach to getting AOCs delisted starts with the concept of remediation to restoration, which involves looking at conditions in the area before there were human inhabitants and trying to restore some of the features that have been lost. He compared a 2003 photo of the St. Louis River with a map from 1861to illustrate the kind of features that were lost, and discussed potential contributing factors such as contaminated sediments, industrial substrates and shoreline hardening. Hershfield also presented a slide that showed how a potential

restoration might play out, which included added island builds and establishing aquatic beds, but he stressed that they would maintain a focus that the heart of this area's activity is industry and shipping.

He summed up his introduction by stating that the goal is to restore 1700 acres of habitat and they have over 300 acres restored, nearly 20% done. He encouraged everyone to look at the list of projects for the St. Louis River AOC created by the St. Louis River Alliance, identify ones of their own concern and get involved.

Virginia Breidenbach, of Limno Tech, then took over the presentation to go over the proposed Implementation Framework that could be used to guide the restoration projects. The key goals of the framework are to develop a stakeholder vetted plan for delisting AOCs, identify high priority projects so when funding cycles come up they will be ready to move, track progress, and enable local partners to advance strategically aligned projects.

Key project elements include BUI Blueprints, which compare historical conditions with current ones and outline a path to delisting, a model of stressors, BUIs and their sources, identifying a set of measurable indicators of success, and a prioritized list of actions and R2R (restoration to remediation) plans, all of which combine to create a roadmap to recovery.

Breidenbach explained that these things are created with a lot of participation from local experts. The project will make use of the work that's being done in the area and form groups of experts for each BUI. Federal partners are involved with oversight, and an Implementation Leadership Team formed of executives from industry and other agencies will lead the project.

Year 1 of the of project which consisted of data gathering and planning of end products has been completed, and the project is now in Year 2 where they are in the process of forming the expert groups and developing BUI blueprints. They expect to have short term BUI blueprints ready to go by June 2012 so they can be prioritized and ready to submit for funding, the goal being to take care of some of the smaller issues and get them removed from the list. Year 3 will be planning and prioritizing of long term BUI blueprints.

Dale Bergeron and **Joel Johnson** both noted that the expert groups did not contain any input from industry representatives and felt that the information they could give would be very important in terms of who owns what, and other concerns. **Jim Sharrow** agreed that adjacent landowners have certain rights, and many good projects have been derailed due to pushback when they haven't been included in the planning stages. **Breidenbach** stated that this has been discussed and there are ways to go about getting that information. She also said that the expert groups are not exclusive of anyone and industry would be welcome to weigh in. **Julene Boe** commented that the expert groups were intended to focus on identifying the BUIs and solutions for them, and **Bergeron** said he understood that but felt that industry needed not just to be invited to give input but to be explicitly identified at the same level as environmental issues.

Nelson French explained that Hershfield indicated going in that this is a working harbor and that point shouldn't be forgotten, but that the expert groups were geared toward technical input and the industry experts would fit more into the Implementation Leadership Team, and that the two groups would be sharing information with each other. **Bergeron** wasn't sure

many of the industry people would feel they belonged there and for that all-important buy-in they needed to be invited to participate at the planning stages.

Nancy Larson and **Ed Anderson** both felt the HTAC served as an industry expert group, and **Boe** and **Breidenbach** agreed and said that's why this presentation was taking place.

Gene Clark asked for clarification as to whether the list of projects for the St. Louis River Area were ones that had received funding, and **Hershfield** explained that they had been submitted for funding.

6. Using Erie Pier Material in Wisconsin Projects

John Morris of the Wisconsin DNR reported on the use of the Erie Pier dredge materials in Wisconsin projects. He began by giving an overview of the traditional approach which consisted of bringing material from one area to another specific area for a specific use, and required individual review and approval. Any changes would require new approval.

He then explained that the new approach, which he stressed is an internal procedural change, not a legislative one, is based on pre-approved uses for the material. Individual WDNR review and approval is no longer required, and the pre-approved uses are not tied to one specific location. Currently, the pre-approved uses include confined fill under asphalt or concrete, confined fill under two feet of clean soil, and construction material used to make brick, concrete or asphalt.

The pre-approval process was based on some initial testing done by the Duluth Port Authority on the Erie Pier material to be sure that it fell within maximum contaminant levels, and contained no more than 7% fines in the sand. Future testing will include annual testing for chemical contaminants, and grain size testing every 10,000 cycles of sand removed. A further part of the approval process will involve the documentation of testing, volume of material sent to Wisconsin and records of who receives the sand and how much. The approval currently lasts five years, with provisions to revise the approval at that time based on a longer history of testing, and a better understanding of uses for the material.

Morris stated that the next step was to work on language, conditions and approvable uses for the reuse of fine grain material in Wisconsin. The goal is to have this done in time for the 2012 construction season.

Carol Wolosz asked if gravel pits were required to go through this process as well, and **Morris** replied that the DNR does not get involved at that level and that gravel pits are not required to do any testing. **Wolosz** then asked if the testing and approval process for dredged materials would be ongoing and suggested they look long term and continue to try to streamline. **Morris** said after the first five year approval, testing may not need to be ongoing, but approval would always be needed because the material is considered solid waste. He also said approvals may possibly be expanded and made longer.

Jim Sharrow commented that in Minnesota dredged material is only considered solid waste if it tests out as that, but in Wisconsin it is always defined that way, and it would require a legislative change to alter that.

Ed Anderson suggested it would be wise for the DNR to arrange for testing of some of the online gravel pits. He felt people might be surprised at the results, but also felt that the comparison could show that the Erie Pier material is safe to use. **Morris** replied that the DNR didn't have the money to take on that task and that monitoring gravel pits is outside the agency's purview.

Ed Montgomery asked if there was a charge for the material, and **Morris** explained that the port owns the material and sells it, currently through a contract with Northland Constructors.

Dale Bergeron and **Ted Smith** both commented on how important this step is and thanked everyone involved.

Jim Sharrow stated that they would be meeting with Mn/DOT to discuss a similar process in Minnesota and it looks promising.

7. Dredged Material Reuse – Moccasin Mike Landfill Demonstration Project

Larry Zanko of the Natural Resources Research Institute presented on the Erie Pier Dredged Material Beneficial Use Study: Moccasin Mike Landfill. He first took time to acknowledge Marsha Meinders Patelke for her instrumental work on the project. He then went on to explain that one of the driving forces behind the search for beneficial use projects is the cost involved in transporting material to locations for use in such projects as mineland reclamation. The Moccasin Mike Landfill project is designed as a demonstration project to highlight how the material might be put to use closer to its source.

Moccasin Mike Landfill is a turf reestablishment project covering 33,831 square feet on the edge of the landfill, along the road. This project is especially significant because it marks the first time any city in Wisconsin has been cleared to use and transport this kind of material across state lines, and because of the excellent cooperation between the City of Superior, the Wisconsin DNR, the Minnesota DNR, St. Louis County and the Port Authority.

Material loading began June 8, 2011 and by September 6th the area had greened up and was looking very successful. The site has been closely monitored by the City of Superior and research has been done on the extent of invasive species present in the material. One small Purple Loosestrife plant was found growing, but that's within expected limits and is just a matter of maintaining control. **Zanko** described microwaves as one potential technology for Loosestrife mitigation that may prove useful in the future. Overall, the project was considered successful.

One potential future project would involve capping at the landfill, which could use up to 60,000 cubic yards of the finer material. **Zanko** said this could potentially represent a year's worth of dredging. He also said he sees other opportunities of this kind in the area, including farmers who may be able to take large loads of this material and use it to improve their land.

Heidi Timm-Bijold asked if they had results back on the testing of the microwave technology. **Zanko** said the results were not determined yet, but that it operates well.

Xianben Zhu asked if they used fertilizer to help with growth. **Zanko** replied that they did not, because as a growing medium dredge materials had enough nutrient value as demonstrated by the results at the Moccasin Mike site.

8. Roundtable Discussion of Local and Legislative Issues

Carol Wolosz announced that the Great Lakes Maritime Research Institute was holding their University Affiliates Meeting on September 22-23, 2011. She said there would be updates on many of the things discussed at the HTAC meetings, and anyone who would like to was invited to attend.

Ron Chicka mentioned that the Port Authority publication had a very good write up on the Moccasin Mike project, as well as a nice piece on the HTAC. He pointed out the HTAC is the only one on the Great Lakes and other cities are looking at us as a model.

Ron Chicka also reminded people that the Federal Transportation Bill expires this year and encouraged people to support it, as it's extremely important to MPOs across the country. He also mentioned that he'd been asked to speak at the Blue-Green Alliance on Sept 8, 2011, to lay the groundwork for more support.

Ron Chicka further mentioned that he'd met with Mary Willett (representative for Sean Duffy, 7th District Wisconsin), discussed the HTAC with her and invited her to attend.

9. Adjourn

No other items were brought forward for discussion and Joel Johnson/Ed Montgomery moved to adjourn the meeting at 11:34 am.

Respectfully Submitted,

Laurel Davis, Administrative Assistant