Federal co-chair message for the Great Lakes Dredging Team

by Pauline Thorndike, U.S. Army Corps of Engineers

The quote “None of us is as good as all of us” comes to mind when I think of the teamwork and partnering across state, local, federal, non-governmental and private entities that’s needed to resolve dredge management issues on the Great Lakes. It truly takes a collaborative culture and team to better understand, plan, and think through potential actions. The quote also reminds me of the Great Lakes Navigation System - an interconnected system of commercial and recreational harbors. If one harbor is not maintained it will impact other harbors in the system, causing the light loading of ships and the reduction of cargo moved. Here’s wishing you a bountiful spring and summer season. We hope you can join us at our next annual meeting occurring June 3-4 in Green Bay, WI.

Observations from the State Co-chair

by Steve Galarneau, Wisconsin Department of Natural Resources

As we embark on another year of the Great Lakes Dredging Team we should reflect on what we’ve done well, the discussions that have opened up pathways for improved collaboration and coordination but also identify areas where we want to continue to dig into (pun intended). I was very pleased to see the level of engagement by the States, federal family and other key partners. Being at the table is crucial, but now that we have everyone at the table we need to continue our efforts at problem solving together – around the table and not across. There are going to be differences in opinion at times and bodies of science that are touted from both sides in a disagreement. Positions drawing lines in the sand (sediment) can look like full stops for progress or as areas that the GLDT should continue to work on. I say that we should work on the hard things and the easier ones will fall in place. I very much enjoy working with my very talented state colleagues, our energetic local partners, and our skilled and experienced federal partners. Professional science-minded people will always find paths towards mutually beneficial solutions and I look forward to another year of taking on the challenging issues regarding navigation dredging. I trust that together we will problem solve and succeed.

Introduction to Beneficial Use of Dredged Material

by Michèle Leduc-Lapierre, Great Lakes Commission

Navigation dredging of Great Lakes ports, harbors and shipping channels is essential to the economic health of the region; and doing it responsibly and sustainably is essential to the environmental integrity of the Great Lakes water resource. Each year, the U.S. Army Corps of Engineers (USACE) dredges between two and three million cubic yards of sediment to assure minimally safe depths for cargo vessels and recreational boaters. Historically, most of that sediment was simply transported to deep water and deposited into the lakes. But since the 1980s, concerns about harmful toxins in dredged sediment – largely the legacy of decades of industrial discharge – have greatly curtailed open water placement in favor of confined disposal of contaminated sediment, and beneficial use, or recycling, of uncontaminated material.

Slightly more than half of the dredged sediment bears enough contamination from past industrial discharge, agricultural runoff and other activity to require confined disposal in specifically designed facilities (CDFs). Over three decades of
environmental remediation and industrial site cleanup has reduced the legacy of contamination in many of the Great Lakes harbor sediments placed in CDFs today.

Consequently, dredged material only lightly contaminated is increasingly suitable for certain types of beneficial use. Among U.S. federal agencies, Great Lakes states and individual communities, there is an increasing awareness that much of the material dredged in the Great Lakes is clean enough to be managed not as a burden or a solid waste, but as a sustainable resource, a commodity with value. In addition to the obvious wisdom of sustainably recycling a commodity with potential value, a more urgent motivation to promote beneficial use is the diminishing availability of other dredged material management alternatives. Most of the CDFs, for example, are reaching their full capacity and construction of new CDFs is difficult because of high cost and reduced site availability.

Recognizing the value of dredged material, and identifying ways to maximize it, is the concept behind “beneficial use” as an environmentally practical and sustainable approach to dredged material management in the Great Lakes. Dredged material can be used for a variety of purposes, such as beach nourishment, capping, land creation and improvement, habitat creation or restoration, or fisheries improvement.

For more information, several references are available:

Beneficial Use of Dredged Material at Areas of Concern
by Jan Miller, U.S. Army Corps of Engineers

In 1970, Congress created the authority for the construction of confined disposal facilities (CDFs) for managing contaminated sediments dredged from Great Lakes harbors under the premise that the provisions of the Clean Water Act would make future sediments clean enough that CDFs would not be required after 10-15 years. The concept was on target, although the timeframe has proven overly optimistic. Forty-five years later, the promise of cleaner sediments is finally being realized.

Sediments at Great Lakes harbors and channels are much cleaner that they used to be, and this is especially true at Areas of Concern (AOCs) identified under the U.S.-Canada Great Lake Water Quality Agreement. The infusion of more than $2 billion from the Great Lakes Restoration Initiative (GLRI) has greatly accelerated the cleanup and delisting of AOCs. “Restrictions on dredging activities” is one of fourteen beneficial use impairments (BUIs) that must be eliminated to delist AOCs and beneficial use of dredged material is a part of the cleanup and ecosystem restoration at several AOCs. At many Great Lakes harbors, confined disposal of dredged material has been the routine for more than 40 years. Shifting to a new form of dredged material management is not always easy. However, the shared goal of eliminating BUIs and accomplishing AOC delisting has
helped focus local, state, and federal attention on solutions that are environmentally responsible and economically practical, like beneficial use.

The St. Louis River AOC (MN/WI) is a good case study. For many years, dredged material from Duluth-Superior Harbor was placed into a CDF at Erie Pier, MN. Capacity in this facility was always an issue. Over the past 27 years, the Port Authority and Detroit District have applied a crude soil washing process to “mine” clean sand from the CDF for use as construction fill. This created more capacity in the CDF and bought time for other beneficial use options to be developed. When GLRI funding became available, the Corps, Minnesota Pollution Control Agency, and Port Authority demonstrated a new form of beneficial use where dredged material was placed into an abandoned turning basin to restore shallow water aquatic habitat that was needed along the St. Louis River. As a result of the successful demonstration, two additional habitat restoration sites along the St. Louis River were identified for future beneficial use. This type of collaborative planning has provided capacity for many years of navigation dredging and is bringing the AOC closer to delisting.

The Buffalo River and Niagara River AOCs are situated side-by-side in New York. Sediments from the Buffalo River and Harbor have been placed into multiple CDFs since 1968, and these facilities have served their purpose quite well. GLRI funding and the availability of the CDF have enabled the Buffalo District and USEPA to remove over 1 million cubic yards of contaminated sediments from within and outside the navigation channel. By removing the “residual” contaminated sediments from inside, upstream and adjacent to the navigation channel, there is an expectation that future navigation dredging will be clean enough for a variety of beneficial uses. The Buffalo District is currently partnering with the Buffalo-Niagara Riverkeeper on a project that will use Buffalo Harbor and River dredged material to restore aquatic habitat on Squaw Island, which is a critical step in delisting the Niagara River AOC. In addition, Times Beach, a former CDF in Buffalo has become a center for Corps research and demonstration on aquatic plant control technologies.

The Beneficial Use White Paper will document how sediments can be a valuable resource within the Great Lakes ecosystem suitable for a variety of beneficial uses. Around the country and within the Great Lakes, dredged sediment has been used to nourish beaches, replenish eroding shorelines, create wildlife habitat, and restore urban brownfields. These and other examples all share key lessons learned that can be applied in ports and harbors, starting with the local recognition that dredged sediments are a resource to be sought and used strategically to maximize economic and environmental benefits.

To promote increased use of dredged sediments for beneficial purposes, it is necessary to understand federal, regional and even local regulations, opportunities, and attitudes toward dredged material and its beneficial uses. Success stories show that the development of beneficial uses for dredged material is best accomplished when led by local interests with financial planning incorporated in team activities. The forthcoming white paper is aimed at promoting and providing guidance for such activities.

Beneficial Use Policy White Paper Summary

by Preetam Kuchikulla, Ecology and Environment, Inc. (E&E)
Ohio’s lawsuit against the U.S. Army Corps of Engineers over Cleveland Harbor dredging and Senate Bill 1

On April 7 2015, Ohio Attorney General Mike DeWine, Ohio Environmental Protection Agency Director Craig W. Butler and Ohio Department of Natural Resources Director James Zehringer announced that the state has filed a lawsuit against the U.S. Army Corps of Engineers (the Corps) for its plan to place dredged material from Cleveland Harbor and the Cuyahoga River in Lake Erie, or not dredge the entire navigation channel unless a non-federal partner pays to place it in confined disposal facilities (CDFs).

Ohio EPA issued a water quality certification on March 31, 2015, which allows the Corps to dredge up to 225,000 cubic yards of material from six miles of the Cuyahoga River and deposit it in the designated CDFs. The Corps proposed to dispose of the dredged material in open water but the state is concerned that this will increase levels of PCBs. The Corps says it will not dredge the last mile of a six-mile stretch of the Cleveland Harbor channel that contains heavily contaminated sediment unless a non-federal partner agrees to pay the more than $1 million cost of confined disposal.

In the lawsuit, the state asks the court to order the Corps to dredge the full Cleveland Harbor federal channel without disposing of any dredge material into the open waters of Lake Erie and to prohibit the Corps from requiring a non-federal sponsor to pay for disposal into a CDF. It also asks the court to prevent the Corps from openly placing dredge material in future such projects, until the Corps issues an environmental impact statement and receives proper authorization from the Ohio Environmental Protection Agency (OEPA) and Ohio Department of Natural Resources (ODNR).

The water quality certification complies with Governor Kasich’s Executive Order, signed on Feb. 11, 2015, which requires OEPA to prohibit the open lake disposal of dredge material in Lake Erie if the material could result in higher levels of a chemical in fish that bioaccumulates throughout the food chain, such as PCBs, or if the disposal of dredge material would violate any international treaties or compacts. These requirements are part of the state’s Coastal Management Program, which is enforced through the federal Coastal Zone Management Act.

On April 2nd, Senate Bill 1 was signed by Governor John Kasich. This bill “enacts section 6111.32 of the Revised Code […] to establish requirements governing dredged material” among other things. It will restrict the placement of dredged material after July 2020 to beneficial use projects (e.g. beach nourishment, placement in littoral drift, habitat restoration) and some exceptions (Maumee river, Maumee Bay federal navigation channel, Toledo harbor) approved by the director of environmental protection. The ODNR director will also have to approve the location of disposal of dredged material.

Members Update

U.S. Army Corps of Engineers

In Fiscal Year (FY) 15, USACE will be dredging 22 projects across the Great Lakes, removing over 3.1 million cubic yards of material to keep the primary commercial channels maintained for waterborne commerce. The final dredging funding in FY15 is $46M. Many contracts have either already been awarded or are in the acquisition process. We expect dredging to begin in early spring, once ice conditions allow. The FY16 President’s Budget included $49M for dredging 25 projects. The Corps estimates that over 3.4 million cubic yards will be removed from the navigation channels. Notably, this includes dredging funds for 12 low use harbors. Low use harbors are critical elements of the Great Lakes’ interdependent system of channel and harbors and key to maintaining a viable commercial trade network in the Great Lakes. This amount of funding may increase if additional funds are allocated through the Congressional appropriation process. Contact: Marie Strum, Marie.T.Strum@usace.army.mil

U.S. Coast Guard

U.S. and Canadian Coast Guard crews concluded the nation’s largest domestic ice breaking operation Monday May 4, after more than four months of ice breaking operations in the Great Lakes. During the 122 days of the operation, seven U.S. Coast Guard and three Canadian Coast Guard ice breakers spent more than 3,181 hours breaking ice for convoys and assisted in 677 commercial vessel transits to move an estimated 23.7 million tons of dry bulk and liquid cargoes with an estimated value of $829 million. These crucial
commodities sustain industrial production and power generation for the Great Lakes region during the winter months. Ice breakers provided direct assistance for 353 of the transits. An additional 3,658 hours of ice breaking established and maintained tracks through the ice-choked waterways of Georgian Bay, Straits of Mackinac, Green Bay, southern Lake Michigan, and St. Mary’s River, and across Lake Superior coordinated by Sector Sault Ste. Marie Operation Taconite.

Coast Guard Sector Detroit coordinates Operation Coal Shovel, an ice breaking operation facilitating the flow of commerce across southern Lake Huron, Lake St. Clair, the St. Clair and Detroit River systems, Lake Erie and Lake Ontario. It commenced January 9, 2015, and concluded April 17, 2015. Seasonal aids to navigation are annually scheduled to be placed back into service between March 28 and June 1. Since many of the U. S. Coast Guard buoy tenders are also ice breakers and this year the ice conditions required a later than normal ice breaking season the aids will be commissioned slightly later than their advertised dates in the light list.

**Contact:** Doug Sharp, William.D.Sharp@uscg.mil

**Northeast-Midwest Institute**

On Monday, March 23, the NEMWI hosted a Capitol Hill briefing entitled, “The Army Corps’ Role in the Great Lakes” featuring Michael O’Bryan from the U.S. Army Corps of Engineers. O’Bryan gave an overview of the Army Corps’ work in the Great Lakes region. He highlighted the connectedness and interdependence of the ports in the Great Lakes Navigation System, and its designation as a system within the Water Resources Reform and Development Act of 2014. The Corps also highlighted the importance of key system points, including the Soo Locks, where the estimated economic impact of a 30-day closure would be $160 million. The Corps is currently reviewing an analysis of the benefits of the Soo Locks and possible solutions should the biggest lock, the Poe Lock, shut down. Mark Barker, President of the Interlake Steamship Company and Chair of the Lake Carriers’ Association, discussed the efficiency of the maritime system and the importance of maintaining the Great Lakes Navigation System to maximize transportation and economic growth in the region. Jim Weakley, President of the Lake Carriers’ Association, said that budgeting for the Great Lakes as a system, similar to the Mississippi River, would be desirable and would focus on the interdependence of the ports. Honorary cosponsors of this briefing were Senate Great Lakes Task Force Co-Chairs Sens. Mark Kirk (IL) and Debbie Stabenow (MI), Senate Vice-Chairs Sens. Rob Portman (OH) and Amy Klobuchar (MN), and House Great Lakes Task Force Co-Chairs Reps. Candice Miller (MI-10), Marcy Kaptur (OH-09), Sean Duffy (WI-07), and Louise Slaughter (NY-25). The House Great Lakes Task Force led a letter supporting multiple Army Corps of Engineers programs, including dredging and other maintenance. The letter, signed and led by the Co-Chair offices Reps. Candice Miller (MI-10), Louise Slaughter (NY-25), and Sean Duffy (WI-07) and was sent to the House Appropriations Subcommittee leaders, including the fourth Great Lakes Task Force Co-Chair, Rep. Marcy Kaptur (OH-09). Relatedly, the Great Lakes Task Force Co-Chairs led a similar support letter for the St. Lawrence Seaway Development Corp.

**Contact:** Danielle Chesky, dchesky@nemw.org

**Illinois**

Dredging and disposal of dredged material in Lake Michigan is regulated by the U.S. Army Corps of Engineers, the Illinois Department of Natural Resources/Office of Water Resources (IDNR/OWR) and the Illinois Environmental Protection Agency (IEPA). On Lake Michigan the IDNR/OWR and the IEPA issue a joint permit. Dredging and disposal permits have a ten year life span, with approval of the IEPA required prior to each year’s dredging. This year the State of Illinois has received four dredging applications: City of Evanston to annually dredge up to 10,000 CY at their Church Street boat launch and dispose of the material in the Lake Michigan nearshore; Park District of Highland Park to annually dredge up to 2,400 CY at their Park Street boat launch and dispose of the material in the Lake Michigan nearshore; Midwest Generation to periodically dredge up to 150,000 CY at their Waukegan Generating Station and dispose of the material upland; and Chicago Park District to annually dredge up to 2,400 CY at their Jackson Harbor and dispose of the material in the Lake Michigan nearshore; and U.S. Army Corps of Engineers may dredge up to 75,000 CY from the Waukegan Harbor approach channel and place the material in the Lake Michigan nearshore. **Contact:** James Casey, james.casey@illinois.gov

**Michigan**

The State of Michigan responded to the record-breaking low water levels in 2013 with an Emergency Dredging Plan. The plan included 59 locations around the state experiencing unprecedented low water conditions and facing severe economic hardships. The state mobilized all available Waterways funds and the legislature added some General Funds dollars to fund $21,000,000 in anticipated dredging to keep facilities and harbors open. The Department of Environmental Quality streamlined the permit process, with the
help of the legislature, to help move these projects through the permitting process and into construction. The last two of the Emergency Dredging Plan projects will be completed this year. The program was a successful initiative that saved many locations from closing their doors due to low water levels. Contact: Bill Boik, boikw@michigan.gov

New York
The New York State Department of Environmental Conservation has recently updated a sediment screening document, The Screening and Assessment of Contaminated Sediment, intended to assist assessing impacts of contaminated sediment to aquatic and marine life. It provides sediment guidance values for a robust list of chemical compounds, classifying the sediment into three separate threshold categories depending on the chemical concentration of the sediment. Each category provides insight on the ecological effects that the sediment may have on aquatic life. Officially adopted as Commissioner Policy in December 2014, it also provides extensive detail on the screening, classification, and assessment methodology used in the establishment of the sediment guidance values. Although not specifically designed for dredge material permit evaluations, this updated document may be used as another tool in the decision making process, in conjunction with current technical guidance documents, for determining whether or not proposed dredging and/or in water placement techniques are protective of aquatic life. The document may be obtained through the Department’s website: www.dec.ny.gov/regulations/64558.html. Contact: Damianos Skaros, Damianos.Skaros@dec.ny.gov

Ohio
For a dredging update from the state of Ohio, please see the story entitled “Ohio’s lawsuit against the U.S. Army Corps of Engineers over Cleveland Harbor dredging and Senate Bill 1” above.

Wisconsin
The annual meeting of the U.S. Army Corps of Engineers and State of Wisconsin Department of Natural Resources, Department of Transportation, and Department of Administration representatives was held April 16 in Madison. These yearly work planning meetings serve to exchange information in a face-to-face venue; to have open discourse regarding the technical and regulatory aspects of harbor maintenance work conducted by the Corps and how these projects relate to various projects and programs across multiple state agencies. In May, the Wisconsin DOT Harbors Assistance Program (HAP) advisory council was scheduled to meet to review applications and select grantees for the 2015 HAP Grant. Applicants are typically municipalities or maritime businesses seeking to improve infrastructure and functionality at one of Wisconsin’s 23 eligible ports through localized dredging, bulkhead repair, dock construction, etc. An estimated $6 Million will be awarded in this upcoming grant cycle. Finally, the 2015 Port of Green Bay Symposium was held on April 17. This annual event provides the opportunity for private and public partners to gather and exchange information on current issues concerning the Port of Green Bay and the Great Lakes. Contact: James Killian, James.Killian@wisconsin.gov

What is the Great Lakes Dredging Team?
The Great Lakes Dredging Team is a partnership of federal and state agencies created to assure that the dredging of U.S. harbors and channels throughout the Great Lakes, connecting channels and tributaries is conducted in a timely and cost effective manner while meeting environmental protection, restoration, and enhancement goals. It serves as a forum for both governmental and non-governmental Great Lakes dredging interests to discuss the region’s dredging needs. In collaboration with its partners, it supports timely, cost-effective and environmentally sustainable dredging practices at U.S. harbors and channels throughout the Great Lakes, connecting channels and tributaries. For more information, please visit our website: http://greatlakesdredging.net/