



## Great Lakes Dredging Team Fall Webinar

November 17, 2015

10:00 a.m.-3:30 p.m. EST

### Welcome and introductions

The Great Lakes Dredging Team (GLDT) co-chairs Marc Tuchman (U.S EPA, Great Lakes National Program Office) and Steve Galarneau (Wisconsin DNR) welcomed the participants. They underlined the importance of collaboration and the need for all GLDT members to work together on dredging-related issues of common interest. Key to making progress is having an active engagement and constant input from the members. We are tackling complicated and important topics and everyone needs to contribute if we want to reach success. Co-chairs acknowledged the work of the Great Lakes Commission (GLC) staff in preparing the webinar, and on their day-to-day work for the team.

### USACE Great Lakes Dredging Program

Marie Strum (U.S. Army Corps of Engineers, Detroit District) presented an update on the Corps' Great Lakes Dredging Program. The highlights are:

- Water Resources Reform & Development Act (WRRDA) of 2014:
  - o Targets have been identified
  - o WRRDA is an authorization bill, and Congress has to appropriate the funds
  - o They are still awaiting implementation guidance from HQ
  - o The Implementation Guidance document will be posted online when ready
  - o The lack of implementation guidance does not prevent from meeting WRRDA
- Great Lakes Harbors
  - o 60 commercial, 80 recreational
  - o Half of the commercial harbors are low use (under 10M tons) and have not traditionally done well
  - o We have to remember that the Great Lakes harbors represent a systems of harbors
- Great Lakes Navigation funding history:
  - o 2008 was the first year when there was a budget for the Great Lakes
  - o The Corps always targets \$120K-\$130K, but the typical budget is around \$90K
- FY15 Additional Fund allocations
  - o There are criteria established by Congress for allocation of national Operations & Maintenance (O&M) funding
    - Complete ongoing work to maintain authorized widths and depths
    - Places with a Coast Guard presence
    - Enhance national, regional, or local economic development
    - Promote job growth or international competitiveness
    - National defense, public health and safety
  - o The projects funded with the additional funding were:
    - \$6M dredging (Rouge River-MI, Burns Harbor-MI, Sturgeon Bay-WI, St. Joseph Harbor-MI, Holland Harbor-MI, Waukegan Harbor-IL)
    - \$3.3M Soo Asset renewal
    - \$0.59M Chicago Lock electrical repair
    - \$2.122M Fox Locks transfer payment
    - \$1.2M Calumet Harbor dredged material management and shoreline protection
- FY15 Great Lakes Navigation Program
  - o \$115.7M O&M:
    - \$46.2M dredging (21 projects, 3.5M cubic yards)
    - \$10.3M dredged material management
    - \$8.65M Soo Asset renewal
  - o \$3.1M emergency funding: October 31 2014 storm, dredging in Muskegon
    - The pier repair in Grand Haven, MI, was deferred

- o When comparing dredging funding and requirements, there was a lot of progress made in FY15, but there still needs to be prioritization
- FY16 Funding
  - o The Corps is still awaiting appropriations
  - o In the meanwhile, they execute the program with President's budget funds
  - o Budget: \$111.6M for Great Lakes O&M
    - \$49M in Dredging (25 projects, 3.4M cubic yards)
    - \$8.4M in Dredged Material Management
    - \$3.7M in Soo Asset renewal
  - o For the first time since 2007, they are getting the minimum amount required with the President's Budget
- Historical low use dredging funding:
  - o The graphic shows both commercial and recreational harbors
  - o Up to 2006, could get these included in appropriations, but not anymore
  - o In 2008, 2009 and 2010, there was some individual additional help
  - o Low tonnage harbors are very important locally
- Criteria for prioritized funding:
  - o Harbor of Refuge: there is a list of designated harbors of refuge
  - o U.S. Coast Guard search and rescue: Sheboygan for example (because of the Straits of Mackinaw)
  - o Supports public transportation like ferry service
  - o Supports commercial fishing (not sport fishing)
  - o Commerce: harbors needed to provide goods to island for example, where nothing else can provide supplies
  - o Safety
  - o Each harbor has a factsheet
- Dredged material management initiatives:
  - o There are several great success stories in the basin: Cat Island, Duluth
  - o There are good partnerships with USEPA and GLRI
  - o There are several initiatives that also shows how can we reduce the amount of sediment that go in the navigation channels: Cleveland, Saginaw, bed load interceptor, partner with 516(e)
  - o The amount of material that goes into CDF is decreasing
- Locks
  - o There was a major issue this summer when the MacArthur lock was down for 20 days, they had to take the lock out of service, dewater, re-stressed, and reopened
  - o There was a \$850K economic impact for operating only

### **Duluth RAP assistance case study**

Susan Henshaw (U.S. Army Corps of Engineers, Detroit District) presented the Corps' remedial action plan (RAP) project in the St. Louis River in Duluth, Minnesota.

Great Lakes remedial action plan and sediment remediation:

- Provide technical, planning, and engineering assistance to states and local governments and non-governmental entities in implementing RAPs in a Great Lakes Area of Concern (AOC)
- Projects are cost-shared at 65% federal and 35% non-federal
- Projects do not include construction or implementation; they include planning, design, and technical assistance only.

St. Louis River AOC

- Was listed as an AOC in 1987, 9 out of the 14 beneficial use impairments (BUIs) are present.
- Partnership agreement signed between the Corps and Minnesota Pollution Control Agency (MPCA) in 2013
  - o Five year agreement for planning and designing seven sites

- \$3.4M (65/35 cost shared) for planning and design only
- 7 project areas:
  1. 21<sup>st</sup> Ave West
  2. 40<sup>th</sup> Ave West
  3. Grassy Point
  4. Perch Lake
  5. Kingsbury Bay
  6. Knowlton Creek
  7. Chamber's Grove
  - For site 1, 2 and 3: total of 860 acres. The objective is to restore aquatic habitat by restoring the bathymetry
  - Site 6: objective is to enhance the habitat for trout
  - Site 4: the hydrology is disconnected from the Great Lakes and the objective is to restore connectivity
- Chambers Cove:
  - Issues:
  - Objective: restore the shoreline
  - Design completed in July 2015
  - Now the pile has completely gone
  - Progress is great news for the AOC
- 21<sup>st</sup> Ave West, 40<sup>th</sup> Ave and Grassy Point:
  - May require up to 750,000 cubic yards of material to restore the habitats
  - Work in partnership: state will have the opportunity to use the sites once the design is completed
    - State is partnering with US FWS for the design
  - Main action: restore shoreline, removing material in parts that are too shallow and using the material to fill parts that are too deep, create islands on the outskirts
  - There are 2 shipwrecks in the area, the Corps is working with state to address the problems caused by these
- 21<sup>st</sup> Ave West:
  - This was a pilot project in a small space
  - Objective: create shallow habitat using dredged material
  - Used 350,000 cubic yards in the first phase
  - Under RAP program, they are going further by utilizing a design framework and ensure remove beneficial use impairment
  - They are analyzing aquatic macro invertebrate in the area
  - They are modeling benthic macro invertebrate and looking at how the design could change that
  - They will analyze sediment characteristics and evaluate risks to the environment
- Schedule:
  - 21<sup>st</sup> Ave West: design finalized December 2015 and implementation 2016-2018
  - 40<sup>th</sup> Ave: design finalized fall 2016 and implementation 2017-2019
  - Grassy Point: design finalized fall 2016 and implementation 2017-2019
  - Kingsbury: design finalized fall 2016 and implementation 2017-2019
  - Perch: design finalized summer 2016 and implementation 2017
  - Knowlton: design finalized July 2015 and implementation 2016
  - Chambers: design finalized July 2015 and implementation October 2015, this project is complete

### **Mitigation of open water habitats**

Matt Wartian, PhD., port, energy and environmental services specialist for the Burns & McDowell engineering design firm, discussed the opportunities and challenges of open water mitigation involving dredged material in the Great Lakes. Challenges identified by Wartian included:

- An unclear regulatory process
- Timeframe issues for receiving credits
- Lack of existing open water mitigation banks
- Inability to use other types of mitigation for open water impacts

He also discussed enabling legislation such as the 2008 U.S. Army Corps of Engineers/U.S. EPA Mitigation Rule in the Clean Water Act Section 404, and a 2015 Presidential Memorandum encouraging private investment in restoration and public-private partnerships, and directing agencies to look for and use available advance compensation that has achieved its intended environmental outcomes.

Other mitigation considerations discussed included permitting – both through individual permits and regional general permits; mitigation bank purchase credits – for both single and multiple users; and funding requirements that must cover both construction and preservation. The mitigation banking process was outlined from market evaluation and site selection, to entitlement, to construction, to maintenance and monitoring, to finally long term management.

Wartian presented two case studies: 1) The Port of Los Angeles Umbrella Mitigation Bank which has created 900 acres of new land since 1985, and 2) The Craney Island, VA Habitat Equivalency Assessment involving wetland restoration and oyster reef creation using dredged material.

### **DredgeFest / DRC**

Sean Burkholder from SUNY University at Buffalo presented the work of the Dredge Research Collaborative (DRC), especially the DredgeFest events. Burkholder highlighted the event held in Duluth in the summer of 2015. These events focus on the sediment management regime related to a specific region. There have been three already done this far: New York City, Louisiana and Great Lakes. A fourth one will be held in California.

#### **DredgeFest New York City (September 28-29, 2012)**

- For this first event, there was a symposium and a field trip
- Symposium: talked about the process of dredging and how it's related to a larger sediment regime, the evolution of the handling of sediment resources, and the emergence of dredge as a resource for environment regeneration
- Field trip: during a boat tour, participants visited sites where there is research done, mostly in and around the Port of New York

#### **DredgeFest Louisiana (January 11-17, 2014)**

- The event focused on different issue compared to NYC. There was a symposium, field trip but they added a three-day workshop to the program.
- Symposium: discussed regional issues related to dredging, including dredged material use for construction and creation of land. There was also discussion about changes in the land, a situation unique to this region.
- Field trip: participants visited several location around the Mississippi River basin
- Workshop: several topics were covered during the three-day workshop, including hybrid landscape, adaptive devices, sediment choreography and management potential

#### **DredgeFest Great Lakes (August 14-21, 2015)**

- The symposium and workshops were held at the University of Minnesota in Minneapolis and the field tour was held in Duluth.
- Symposium: the theme for this event was "Shifting Baselines and they discussed issues related to dredging in the Great Lakes through five topics (freshwater basin, choreographing sediments, landscapes of dredge material, new economies, participation and engagement)
- Field trip: participants visited sites in Duluth where dredged material is used for several projects, including habitat creation

- Workshop: the theme for the workshops was “Dredge Futurism” and covered scenarios related to dredged sediment cycle
- There was also a large exhibition during the symposium that showcased illustrations based on mapping

Why are they doing DredgeFest?

- Dredging is part of a larger scale of sediment movement, a cycle
- People involved in dredging can be considered a type of geological actor
- There is a transdisciplinary approach to dredging that the group brings

Next steps for DRC

- There will be a fourth DredgeFest in California, where the issues are different: presence of the bay, larger delta, presence of a lot of structures

After the presentation, Dave Knight (Great Lakes Commission) said that there will be a lot of opportunities for sharing between the GLDT and DRC. He also mentioned that the August 2014 issue of Landscape Magazine featured DRC. The GLDT could also work with DRC on putting up an exposition with illustrations used at DredgeFest Great Lakes.

### **Member Roll Call**

Because of the large number of attendees, there was no official roll call taken. A list of webinar participants is attached.

### **Great Lakes Dredging Team Business:**

Tom Crane (Great Lakes Commission) presented the progress report and an update on the activities of the team since the June 2015 Annual Meeting:

- Posted Annual Meeting summary and presentations on the GLDT website
- Reviewed and posted the committee workplans on the website
- Organized the Fall Webinar
- Started to plan the 2016 Annual Meeting
- Document reviewed
  - o Guide to Beneficial Uses of Dredged Material in the Great Lakes
    - This document received a lot of attention, primarily from the Technical Committee
    - Initially, it was a draft document prepared as a white paper, but it evolved since
    - It was initially prepared by Ecology and Environment, Inc. (E&E) but has since been transferred to the GLDT
  - o Dredged Material Management plan
    - The review was coordinated by USACE-Detroit
    - Used GLDT listserv for the review process
    - Process has not been fully completed yet
  - o Great Lakes Beneficial Use Testing Manual
    - Developed by Richard Price (U.S. Army Corps of Engineers, Environmental Research and Development Center) who had since retired
    - Karen Keil (U.S. Army Corps of Engineers, Buffalo District) took over the project
    - Contacted states for their comments
- One of the main actions coming out of the Annual Meeting was an interest of the GLDT to plan and convene a state of the science and policy symposium
  - o There was a directive (and commitment) to seek funding support after the annual meeting
  - o Funding has recently been secured
    - The GLDT Steering Committee worked with GLC staff to prepare a detailed abstract for the Buffalo District (LRB) of the USACE, regarding the interest in and purpose for a state of science and policy symposium

- A Contract amendment has been executed with Ecology & Environment (E&E) which serves as the support contractor for USACE-LRB
- A planning committee will be formed consisting of a group of individuals representing different interests of the GLDT. The planning committee will scope the project, identify time and location for the symposium, as well as topics and speakers
- GLDT Steering Committee: has met monthly since July
  - o Helped plan webinar
  - o Discussed dates and location for annual meeting
  - o Discussed the scope of work for the state of the science and policy symposium
- GLDT Membership: Ernie Drott (U.S. Army Corps of Engineers, Great Lakes and Ohio River Division) took a new position with the Corps and replaced by Kareem El-Naggar (U.S. Army Corps of Engineers, Great Lakes and Ohio River Division) as the federal co-chair of the Outreach Committee
- Danielle Chesky (Northeast-Midwest Institute) accepted a new position at the Canadian Embassy in Washington D.C. and we are now looking for a new non-federal chair for the Legislative Committee

Tom Crane added that GLDT members and interested parties are encouraged to consider being involved in the committees, especially state members.

Members of the Steering Committee were invited to provide some additional comments to the progress report. They supported Crane's encouragements for state colleagues to be more involved with the committees.

### **Status of product under development**

#### Guide to Policies and Projects Related to Beneficial Use of Dredged Material in the Great Lakes

Karen Keil presented an update on the preparation of this paper.

- This is the beneficial use policies white paper that was assigned to E&E staff initially.
- It will be used as a reference tool for members of the team
- E&E prepared initial drafts, but the finalization of the document is being coordinated by the Technical Committee of the GLDT
  - o Committee chairs have been reviewing the document and are working with GLC staff to address comments
- The Lake Carriers' Association provided several comments, and there will be a discussion with them about these
- One comment that still needs to be addressed is to identify the cost for beneficial use, inside and outside the Great Lakes basin
- The plan is to release the paper in early to mid-2016
- Participants are asked to contact Karen Keil or Michele Leduc-Lapierre if they are interested in reviewing the report
- GLC staff will work with Karen Keil, Technical Committee co-chair, to contact missing states

#### Dredge Material Management Plan

Karen Keil mentioned that the plan is on hold for now. All the comments received were incorporated in the document. The data should be available on the USACE website at some point. The objective is still to publish it, but we don't know when this will be possible.

#### Turbidity Research / Environmental Windows

Burton Suedel (U.S. Army Corps of Engineers, Environmental Research and Development Center (ERDC)) presented an update on ERDC research conducted on environmental windows and turbidity

- The Smallmouth bass research presented in Green Bay has been put in a research paper and submitted to the Journal of Great Lakes Research, the team expects the paper to be accepted
  - o The paper is summarizing info presented in Green Bay
- Technical note "Using the Fish Larvae and Egg Exposure System to Generate Effects Data for Informing Environmental Windows" about research conducted in the past 5-6 years
  - o Summarizes suspended effects studies on walleye, oysters, Atlantic sturgeon and Smallmouth bass
  - o The team expects to publish the paper by the next Annual Meeting in 2016

- Tom Crane mentioned that both documents will be valuable for the planning of the state of the science and policy symposium

### Great Lakes Beneficial Use Testing Manual

Karen Keil presented the update on the development of the testing manual (new title: Testing, Assessment, and Management of Dredged Material for Beneficial Use – A Regional Manual for the Great Lakes)

- This is not a document only on beneficial use and this is why they updated the title
- It will provide guidance on the determination of environmental suitability of dredged material
- It now has a comprehensive approach
- There are also other testing manuals currently being drafted, this will maintain consistency with them
- It's the first manual to focus only on beneficial use placement of dredged material, and they took the Great Lakes focus out of the manual
  - o Other people outside the Great Lakes will be interested in the manual
- The review team received input from four states (MN, MI, NY, and OH) and would like to have information from the eight Great Lakes states. GLC staff will work with Karen Keil to contact missing states.

### **GLDT Committee reports**

#### Legislative Committee (JM)

Jan Miller (U.S. Army Corps of Engineers, Great Lakes and Ohio River Division) explained that because of its involvement with state and federal legislation, the committee is composed of non-federal members. Because the committee chair was Danielle Chesky (Northeast-Midwest Institute) and she is not working with the team anymore, Miller provided the update. The highlights are:

- WRRDA 2014: the committee is tracking development to implementation guidance by the Corps' Headquarters.
- Mining of dredged material and issues of capacity:
  - o The issues are multiple: Corps' policy, ownership of dredged material once it is in the facility, how funding can be used to remove material from existing confined disposal facilities (CDFs)
- Beneficial use of dredged material for aquatic habitat, restoration, shoreline protection, etc.:
  - o There are several projects for habitat restoration, but no shore protection projects, the committee is trying to figure out if this is a technical or legislative issue
- Brownfield use of dredged material to try to reclaim and/or restore brownfields:
  - o Placing dredged material in sites that are historically contaminated is a challenge
  - o They are trying to soften this to beneficial use of dredged material in brownfield sites
- The committee tries to address policy issues, but not necessarily work for new legislation

Other participants added information about the committee

- Mitigation banking is an emerging issue where the Technical and Legislative committees will overlap and collaborate
- One of the places where we see mining of CDF is in areas of concern (AOCs) where EPA has the Great Lakes Legacy Act to fund dredging and have sediments to dredge, and they are looking to place these sediments (remove ones that are clean to create capacity to add sediments that are contaminated)

#### Outreach Committee

Michele Leduc-Lapierre (Great Lakes Commission) provided the update for the Outreach Committee. The highlights are:

- Since the Annual Meeting, there has been a conference call every other month.
- With Ernie Drott leaving, the committee has a new federal co-chair, Kareem El-Naggar.
- The committee is helping E&E the planning of informational webinars, by finding topics and speakers.
- The committee worked on several products: second issue of the newsletter, GLDT Priorities, Guide to Policies and Projects Related to Beneficial Uses of Dredged Material in the Great Lakes. The committee is also responsible of maintaining the website.

### Technical Committee

Karen Keil and Jim Sharrow (Duluth Seaway Port Authority) presented the update on for the Technical Committee. The highlights are:

- The workplan is available on the GLDT website
- Most of the products have been talked about earlier during the webinar.
- Beneficial use outreach: the committee will assist with a pilot project at the Toledo Harbor
- Open water briefing paper: there was a draft prepared by GLC staff over a year ago, with input from the states. The paper is now moving towards a review by the Corps and the committee hopes that it can be finalized in a near future.
- The next committee conference call will be held in December. States and other stakeholders are invited and encouraged to participate in the work of the committee.

### **Regional Updates**

Dave Knight and Gene Clark reported on project work supported by the Center for Freight and Infrastructure Research and Education (CFIRE) at the University of Wisconsin-Madison promoting beneficial use of dredged material. A final report, "Integrated strategy for beneficial use of dredged materials in Great Lakes commercial ports," was submitted to CFIRE in Sept. 2015. Outreach products were completed including a video documentary on project objectives and methodologies, a print/PDF brochure on converting CDFs to processing and reuse facilities, and a related magazine article submitted to Great Lakes Seaway Review. Upgrades are underway for the existing GLC-hosted web tool Recycling Dredged Material in the Great Lakes; new data sets are in final stage of being integrated to the web tool and full functionality restored; the updated site will be re-introduced at the 2016 GLDT annual meeting.

### **New Business**

Marc Tuchman invited the team to the 2016 Annual Meeting that will be held on May 18-19 in Chicago, at the EPA building downtown. We are hoping the turnout will be as good as the one in Green Bay in 2015.

### Action items:

- The presentations from the webinar will be posted on the GLDT website
- GLC staff will prepare the summary of the and post it on the GLDT website
- GLC staff and Karen Keil will follow-up with members, especially state members, to make sure we have all inputs on:
  - o Guide to Policies and Projects Related to Beneficial Use of Dredged Material in the Great Lakes
  - o Great Lakes Beneficial Use Testing Manual
- GLC staff will start to send invitations to the annual meeting
- GLC staff will work with the Steering Committee to plan the annual meeting
- The Symposium planning team will work on dates, locations, topics and speakers
- GLC staff will send the latest issue of the Newsletter to the members and interested parties of the GLDT
- GLC staff and the Technical Committee co-chairs will work on improving participation in the committee, especially from state members

### **Adjourn**

The meeting was adjourned at 3:05 pm, EST.