

# Water Resources Development Act (WRDA) Illinois Pilot Project

## Safe use of Waukegan dredged material to protect against shoreline loss

The 2016 Water Resources Development Act (WRDA), a national law, directs the US Army Corps of Engineers (USACE) to identify ten pilot projects for the beneficial use of material removed from regular maintenance of federally-authorized ports, harbors, and navigation channels. This reflects a growing national interest in using clean dredged material, such as lake sand, in a more sustainable and cost-effective manner.

Four Illinois coastal communities – City of Evanston, Glencoe Park District, Lake Bluff Park District, and Foss Park District of North Chicago – developed one of the selected pilot projects – the only one in the Great Lakes region. In partnership with USACE, Chicago District, the communities will protect 55,000 yards of public parks and beaches from shoreline loss caused by high water levels using dredged material from Waukegan Harbor. The pilot program is projected to have a budget of \$10 million, and most project costs will be covered by the USACE. This assistance will maintain important public lakefront in a cost-effective way. The planning phase for the project will begin in summer 2019.

### Where is the sand coming from?

Lake sand moves into ports and harbors by wave action. Before the sand can continue its natural course along the lakefront, it can be trapped by manmade structures and natural features. USACE annually dredges clean sand from the Waukegan Harbor Approach Channel. The sand moves into the channel and prevents safe navigation, especially by large commercial ships. In the past, USACE has placed the sand south of the harbor in Lake Michigan, where it often does not reach sand-starved shorelines where it is most needed. This project would instead place the clean material on or near community beaches, where it can enhance recreation, maintain lakefront access, and improve habitat. In the past, communities have had to purchase and truck sand in from quarries, a costly and unsustainable process.



Above: Dredging in the Waukegan Harbor Approach Channel (IDNR, 2015)

Below: Locations of current Operation and Maintenance dredging in the Waukegan Harbor Approach Channel and Advanced Maintenance Dredging Area (USACE, 2019)



## What will the sand look like & how do we know the sand is safe?

At Waukegan Harbor, dredging is carried out in the harbor using large barges with cranes to scoop up sand. The sand can then be placed on a beach via pipeline in a process called hydraulic offloading. When the sand arrives on community beaches, it may look darker than the quarry sand typically used because it has less exposure to oxygen under water. But it is certainly clean and safe.

The International Joint Commission (IJC) declared Waukegan Harbor an Area of Concern in 1987. Waukegan Harbor received this designation in part because of nearby superfund areas - the Johns Manville property and the Outboard Marine Corporation site. Many partners have invested significantly in the area's clean up. In 2013, the United States Environmental Protection Agency (USEPA) dredging removed all but trace levels of contamination (particularly polychlorinated biphenyls or PCBs) from inner harbor sediment. The Waukegan Harbor Approach Channel has never experienced PCB contamination. USACE has conducted water quality and sediment monitoring in the Approach Channel, as required by Illinois Environmental Protection Agency (IEPA) approvals. USACE has found no contaminants of concern in its monitoring.

Both the Illinois Attorney General's office and USACE independently monitored for asbestos fibers in the Waukegan Approach Channel to ensure that no contamination is present. All studies concluded that there is about a one-in-a-million risk in asbestos exposure from the channel sediment.



USACE shares community concerns for the protection of public health and safety. It follows the Great Lakes Testing Manual guidance developed by USEPA and USACE for characterizing sediment to ensure that it is clean and safe for use on our Lake Michigan beaches. USACE complies with the Clean Water Act and with 401 Water Quality Certifications issued by IEPA.

For more information or to review the data from these reports and other studies, please visit:

- <https://www.dnr.illinois.gov/cmp/Pages/sandmanagement.aspx>
- <https://www.lrc.usace.army.mil/Missions/Civil-Works-Projects/Waukegan-Harbor-Dredging/>