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UPDATE BENEFICIAL USE OF DREDGED MATERIAL RECORD FISCAL YEAR 2020

Members,

The U.S. Army Corps of Engineers (USACE) Mississippi Valley New Orleans (MVN) beneficially used a record breaking 24.2 million cubic yards (mcy) of dredged material during channel maintenance activities along the Mississippi River below Venice in Fiscal Year (FY) 2019. The Great Flood of 2019 carried record amounts of sediment to the Mississippi River Ship Channel (MRSC) requiring the removal of 78.5 million cubic yards (mcy) of sediment to restore the Ship Channel. The MVN's FY 2019 channel maintenance activities also required the removal of 9.5 mcy from the Hopper Dredge Disposal Area (HDDA) increasing the total dredged to 88.0 mcy (78.5 mcy + 9.5 mcy). The recovery of the channel in the area of Southwest Pass (SWP) from the Great Flood of 2019 required the removal of 58.4 mcy of sediment that clogged this critical artery of trade, that is the second highest amount of material ever dredged from SWP. The record amount for material dredged from the area of SWP was generated by the sediment laden waters of the Flood of 1973. Due to the length of this historic flood, 62.7 mcy of sediment had to be removed from SWP in FY 1974. The average amount of sediment removed from the entire length of the Ship Channel in a fiscal year is 51 mcy. The MVN recently confirmed the acreage created through the beneficial use of dredged material removed from the Ship Channel and the HDDA in FY 2019 is a record for acreage restored as 1,724 acres of wetlands were created in the area of Southwest Pass (Venice to the Gulf of Mexico).

An important footnote that expands the comparison of FY 2019 with FY 1974 is that the total of 82.50 mcy of material dredged in FY 1974 from the length of the Ship Channel, is that the authorized draft of the Ship Channel in 1974 was 40 feet. The FY 2019 total of 78.5 mcy was removed with the Ship Channel at an authorized draft of 45 feet. Note also that this 2019 total does not include maintenance of the HDDA as the HDDA did not require maintenance in 1974.

FISCAL YEAR	CROSSINGS	N.O. HARBOR	SOUTHWEST PASS	TOTAL
2019	19.1 MCY	1.0 MCY	58.4 MCY	78.5 MCY
1974	16.6 MCY	3.2 MCY	62.7 MCY	82.5 MCY

Since cutterhead dredges were added to the channel maintenance toolbox in the area of Southwest Pass, approximately 10,665 acres of wetlands have now been restored. Enclosed with this document you will find a table titled "LARGEST WETLANDS RESTORATION PROJECT IN THE WORLD."

The Big River Coalition is committed to protecting maritime commerce across the Mississippi River and Tributaries (MRT). The Coalition's missions include securing increased funding from the Harbor Maintenance Tax and the Inland Users Fuel Tax, efforts to deepen the Mississippi River Ship Channel to 50 feet and to increase the beneficial use of dredged material through Sediment Recycling. Since cutterhead dredges were reintroduced to the channel maintenance toolbox by the USACE, the beneficial use of dredged material has been instrumental in restoring habitat for a wide range of wildlife and fisheries. This is reflected by partnerships with the Louisiana Department of Wildlife and Fisheries that manages the Pass A' Loutre Wildlife Management Area and the U.S. Fish and Wildlife Service that manages the Delta National Wildlife Refuge.

The top five records for beneficial use (sediment recycling) in the U.S. have all occurred along the Mississippi River Ship Channel. The top three records were established in the last four fiscal years:

- 1) 24.2 million cubic yards in FY 2019 were beneficially utilized while dredging the Ship Channel and the Hopper Dredge Disposal Area to restore 1,724 acres of wetlands.
- 2) 21.00 million cubic yards in FY 2015 were beneficially utilized while dredging the Ship Channel and the Hopper Dredge Disposal Area to restore 1,041 acres of wetlands.
- 3) 20.70 million cubic yards in FY 2017 were beneficially utilized while dredging the Ship Channel and the Hopper Dredge Disposal Area to restore 1,468 acres of wetlands.

The previous records for beneficial use were both established by projects that deepened the MRSC, a critical component of the deepening of the MRSC to 50 feet. The USACE has indicated that the deepening project would restore an additional 1,500 acres of wetlands below Venice.

- 4) 19.80 million cubic yards in FY 1961 attributed to the channel deepening from 35 to 40 feet.
- 5) 18.50 million cubic yards in FY 1987 attributed to the channel deepening from 40 to 45 feet.

The "Sediment Recycling" efforts have now beneficially used over 146.80 mcy of material to create or restore 10,665 acres of wetlands the equivalent of 16.66 square miles of marsh in the environmentally sensitive bird's-foot delta (since 2009). The total of 146.80 mcy represents the equivalent of approximately 14.70 million dump trucks of sediment being transported to our coast. Please refer to the attached table for a breakdown highlighting the cubic yardage and acreage added on a fiscal year basis.

In five of the last seven years, the MVN has restored over 1,000 acres of wetlands through the beneficial use of dredged material:

- 1) 2013 at 1,417 acres
- 2) 2015 at 1,041 acres
- 3) 2017 at 1,468 acres
- 4) 2019 at 1,724 acres
- 5) 2020 at 1,300 acres*
- The acreage listed for 2020 is an estimate based on the utilization of 15.4 mcy of material. The MVN will at a later date confirm the actual acreage based on satellite imagery and closer observation.

In the ten years since 2009 approximately 10,665 acres of wetlands have been recreated/restored along the Mississippi River Delta. This critical acreage helps protect the Ship Channel and restores areas critical to the migratory bird flyway and provides habitat for land dwelling or aquatic species. This successful sediment management project has yielded the Largest Wetlands Restoration Project in the World and important lessons have been learned along the way. The adaptive approach to sediment management has been achieved by cooperative efforts led by the MVN and with the support and partnership of the Big River Coalition, Bar Pilots, Crescent Pilots, Federal Pilots, Dredge Contractors, U.S. Coast Guard, Louisiana Department of Wildlife and Fisheries and the U.S. Fish and Wildlife Service.

The beneficial use of dredged sediment on the Lower Mississippi River has been instrumental in restoring habitat for a wide range of wildlife and fisheries. The wetlands created from this program also provide higher land elevations ideal for nesting birds and land mammals. The wetlands are designed to gently slope towards tidal mudflats and submerged sand bars providing excellent foraging habitat for wading birds and fisheries. The bird's-foot delta of the Mississippi River is a critical wintering ground for approximately 1 million migratory waterfowl and several hundred thousand shore and wading birds. The migrating birds flock to these newly restored wetlands to feed on the submerged aquatic vegetation, aquatic invertebrates and other food resources provided by the newly restored habitats.

The Mississippi River's bird's-foot delta is positioned between the freshwaters of the Mississippi River and the deep marine high salinity waters of the Gulf of Mexico. The diverse range of habitats vary in maturity and salinity regimes providing fisheries habitat for an impressive assemblage of fisheries species. The fringing marsh and barrier islands that have been restored provide estuarine habitat for juvenile and larval marine species while the interior fresh marsh provides habitat for many common freshwater species.

Wetlands restored with sediment recycled from the navigation channel of the Mississippi River Ship Channel are consistent with the goals of the 2017 Louisiana Comprehensive Master Plan for a Sustainable Coast, the North American Waterfowl Management Plan through the Gulf Coast Joint Venture Mississippi River Coastal Wetland Initiate Area, and the Louisiana Department of

Wildlife and Fisheries Wildlife Management Plan. Additionally, the restored wetlands provide habitats that benefit 49 Wildlife and Fisheries species identified as Species of Greatest Conservation Need as identified by the 2015 Louisiana Wildlife Plan which include the federally listed Piping Plover and Red Knot. Many of these wetlands are located on public properties within Delta National Wildlife Refuge and Pass A Loutre Wildlife Management Area which are open to public visitation and enjoyment. Each year in excess of 30,000 public users visit these areas for hunting, fishing, camping, and nature observation. Many of the wetlands they visit are those created with dredged material removed from the Mississippi River Ship Channel.

The Big River Coalition is committed to ensuring the future of navigation on the Mississippi River Ship Channel (MRSC) as one of the nation's fundamental natural resources and true economic powerhouse. The Mississippi River and Tributaries has an estimated annual impact of \$735 billion on the nation's economy and is responsible for 2.4 million jobs (585,000 jobs on the Lower River – Cairo, IL to the Gulf of Mexico and 1.86 million plus jobs on the Upper River-Lake Itasca, MN to Cairo, IL when including the IL River).

Sincerely, Sean M. Duffy, Sr.

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