

	ENVIRONMENTAL ASSESS	MENT FOR AN EMERGENCY ACTION								
AGENCY	U.S. Army Corps of Engineers, Rock	U.S. Army Corps of Engineers, Rock Island District)								
PROJECT TITLE	Emergency Dredging, Lock and Dam 22 Lower Dredge Cut, Pool 24, River Mile 300.0–301.0, Upper Mississippi River									
1. PURPOSE AND NEE	ED									
		In 2020, the U.S. Army Corps of Engineers (Corps), Rock Island District (District), identified up to 66,000 cubic yards (CY) of material blocking the navigation channel in the Mississippi River 9-Foot Navigation Channel in Pool 24 at river mile (RM) 300.6 (Appendix A, <i>Maps and Project Site Information</i> , Pages A-1, A-2, A-3). This shoal developed downstream of the Lock 22 approach. As water levels continued to drop, the approach became challenging or impassable for commercial shipping traffic, creating an emergency situation.								
	This is an Environmental Assessment (EA) documenting the alternatives the District considered and the environmental impacts occurred during the emergency, the	This Emergency Dredging, Lock and Dam 22 Lower Dredge Cut, Pool 24, River Mile 300.0–301.0, Upper Mississippi River (Project) averaged about 8,300 CY per job over the past 20 years. The District has not dredged this area in Pool 24 since 2014 (Appendix A, page A-8). Due to lack of dredging requirements at this location and concerns about mussel resources at historic placement sites, the District prepared this EA to evaluate the environmental impacts of emergency dredging and placement of dredged material.								
	resulting Federal action, and future impacts	The District's purpose was to maintain a commercial navigation channel to avoid disruption to the transport of commodities, and to maintain the channel in such a manner so as to avoid personal injury, and/or property damage and/or potential loss of life resulting from inadequate maintenance of the channel and subsequent groundings and/or closures of the main channel. The maintenance of a reliable Federal navigation system is essential to the economic well-being of the Midwest and the Nation.								
		The emergency and time constraints prevented completion of all National Environmental Policy Act (NEPA) requirements prior to the accomplishment of emergency work to restore the channel to its authorized depth. Engineering Regulation (ER) 200-2-2, <i>Environmental</i>								

		Quality, Procedures for Implementing the National Environmental Policy Act, Paragraph 8, Emergency Actions, allows the District Commander to respond to emergency situations to prevent or reduce imminent risk of life, health, property, or severe economic losses without first preparing specific documentation. Such documentation may also be accomplished after the completion of emergency work, if appropriate. Work was completed on August 13, 2020. Further action may be required if shoaling continues at this site.					
LOCATION	Mississippi River, Pool 24 River Mile 300, Pike County, Illinois and Ralls County, Missouri (Near Saverton, MO) (Appendix A, Page A-1)						
AUTHORITY	The Rivers and Harbors Acts of July 3, 1930, February 1932, and August 30, 1935; and a Resolution of the House Committee on Flood Control of September 18, 1944, authorized the Nine-foot Navigation Channel Project, and subsequent channel maintenance dredging in support of continued Project operation, In accordance with 33 CFR Parts 335-338, the District is required to maintain the Mississippi River 9-foot Navigation Channel Project,						
EMERGENCY DECLARATION	Reason for the Emergency	A shoal developed downstream of the Lock 22 approach due to a high water event. The Lock 22 approach become impassable as water levels					
2. ALTERNATIVES							
1. No Action Alternative considered b	out not acceptable.	Under the No Action Alternative, the District would not have dredged the navigation channel at the Lower Lock 22 Dredge Cut. Due to the shoaling taking place in the navigation channel, commercial navigation through this area would halt. While the No Action Alternative was not viable due to the authorized requirement to maintain the 9-foot navigation channel, the District used this alternative as a baseline condition to compare all the other alternatives.					

2. Dredge to the authorized depth and place in the Channel Border adjacent to the dredge cut The Preferred Alternative	Initially the District mechanically dredged a narrow pilot channel and placed the 6,402 CY of dredged material along the Gilbert Island shoreline (RM 298). The District used the Dredge Potter to hydraulically dredge 107,246 CY to the open water channel border adjacent to the dredge cut. Material was placed channelward of the wing dams to avoid impacting habitat between the wing dams or mussel beds along the Illinois bankline. Due to time constraints, this was the preferred alternative to avoid placing material on top of known mussel beds along the Illinois and Missouri shorelines (See Alternatives 3 & 4). The On Site Inspection Team (OSIT)¹ concurred this location would be the most environmentally acceptable placement site (Appendix B, Enclosure 2), If the District conducts emergency dredging in this location in the next 5 years and these placement sites have adequate capacity, the District may use these sites, pending OSIT approval.	
3. Dredge and place material along the Missouri bankline adjacent to the Missouri Thompson Conservation Area Alternative considered but not carried forward due to presence of mussels.	While the District placed dredged material at this location in the past (1940s–2014), recent mussel surveys indicate a rich mussel bed in this area. If placement were to take place here, the District would have to add retention measures to keep placed material in place to avoid impacts to the mussel bed	
4. Dredge and place material along the Illinois bankline adjacent to the Cottel Island (or Brown's Island). Alternative considered but not carried forward due to presence of mussels.	This is a historic placement site (1960s, 1996), Recent mussel surveys along the Cottel Island bankline indicate a good assemblage of mussels.	

¹ The OSIT is a multi-agency group that assists the District by making dredged material placement recommendations, The OSIT is comprised of Federal and state natural resource agencies, States represented include Wisconsin, Iowa, Illinois, and Missouri, The OSIT was a product of the GREAT II study.

5. Dredge to the authorized depth and place at the Lock and Dam 22 DMMP, Upland Site 8 Alternative considered but not carried forward due to lack of real estate clearances The District considered placing dredged material upland at Site 8 (Appendix A, Page A-5)identified in the 2004 Lock and Dam 22 Dredged Material Management Plan (DMMP). This alternative would have avoided impacts to mussel resources near the dredge cut and historic placement sites. Although NEPA documentation was completed for this site and the Finding of No Significant Impact (FONSI) signed in 2004, the District never acquired the real estate rights for this site. While this is not an acceptable option given the time constraints, this would be viable for future placement if real estate acquisition occurs as this dredge cut does not currently have sufficient upland placement options.

3. BASELINE CONDITIONS (pre and post emergency but before the corrective action), Were these resources impacted by the emergency event? They may be on site or off, but still affected.	Yes	No	N/A	Details (Required if Yes)
Floodplains (EO 11968; 10 CFR 1022)		Х		The Mississippi River's floodplain was generally broad prior to urban and agriculture levees construction. The floodplain was considered to extend from bluff to bluff.
Wetlands [EO 11990; 10 CFR 1022; 40 CFR 1506.27(b)(3)]	x			The main channel border is not considered a wetland; however, the Gilbert Island shoreline meets the bottomland hardwood wetland criteria beginning at the tree line.
Threatened, endangered, or candidate species and/or their critical habitat, and other special status (e.g., statelisted) species [16 USC 1531; 40 CFR 1508.21(b)(3)] Attach IPAC documentation.		х		According to the U.S. Fish and Wildlife Service (USFWS) Official IPaC Species Lists (Consultation Codes: 03E18000-2020-SLI-2308 and 03E14000-2020-SLI-2963), dated July 28, 2020, federally-protected species potentially occurring in the Project area include Indiana bat (<i>Myotis sodalis</i>), northern long-eared bat (<i>Myotis septentrionalis</i>), gray bat (<i>Myotis grisescens</i>), pallid sturgeon (<i>Scaphirhynchus albus</i>), Higgins eye (<i>Lampsilis higginsii</i>), sheepnose mussel (<i>Plethobasus cyphyus</i>), spectaclecase (<i>Cumberlandia monodonta</i>), prairie bush-clover (<i>Lespedeza leptostachya</i>), decurrent false aster (<i>Boltonia decurrens</i>) (Appendix B, Enclosures 3 & 4).
Bald Eagles and Migratory birds		Χ		No bald eagle nests are known to occur within the Project area at this time.
Prime or unique farmland [7 USC 4201; 7 CFR 658; 40 CFR 1508.27(b)(3)]		х		There are no prime and/or unique soils in the Project area.

3. BASELINE CONDITIONS (pre and post emergency but before the corrective action). Were these resources impacted by the emergency event? They may be on site or off, but still affected.	Yes	No	N/A	Details (Required if Yes)
State or national parks, forests, conservation areas, or other areas of recreational, ecological, scenic, or aesthetic importance?		x		The Missouri Thompson Conservation Area is adjacent to the Project area. This area is all along the Missouri mainland and was not impacted by the emergency action. The Missouri Anderson Conservation Area is an upland site just downstream from the Project area. This area was not impacted by the emergency action.
Wild and scenic rivers [16 USC 1271; 40 CFR 1508.27(b)(3)]?			Х	
Property of historic, archaeological, or architectural significance (including sites on or eligible for the National Register of Historic Places and the National Registry of Natural Landmarks) [16 USC 470; 36 CFR 800; 40 CFR 1508.27(b)(3)]		Х		No shipwrecks or submerged cultural resources are documented within the Project area. Lock and Dam 22 is a historic district located immediately upstream of the Project area.
Native American' concerns (16 USC 470; 42 USC 1996)		х		No Native American concerns were identified prior to or during the emergency dredging operation.
Minority and low-income populations (including a description of their use and consumption of environmental resources) (EO 12898)		х		This emergency action did not displace or negatively impact the community, regardless of minority and/or low-income, race, or religion.
Air		Х		No air issues occurred during the emergency dredging. The Project area is not in a containment area.
Water Quality and Water Resources (aquifers)		Х		
Municipal or private drinking water supplies			Х	
Geology/soils		Х		Sand dredged and placed into the river's thalweg blended into the river's bedload without significant impacts.
Fish		Х		Riverine fishes frequent the main channel and main channel habitats.

3. BASELINE CONDITIONS (pre and post emergency but before the corrective action). Were these resources impacted by the emergency event? They may be on site or off but still affected.	Yes	No	N/A	Details (Required if Yes)
Wildlife		Х		Shorebirds, turtles, and other riverine wildlife frequently use island shorelines and forests on Gilbert Island.
Minerals			X	
Human health			Х	
Transportation or other public infrastructure (navigable waters, highways, etc)	Х			The Mississippi River is an important shipping channel connecting the Upper Midwest to international markets for grain and other commodities. No highways or other land-based transportation is in the Project area.
Waste Management (Hazardous, toxic & radioactive waste)			Х	
Socioeconomic resources	Х			Socioeconomic resources are directly tied to the river, navigation, and shipping.
Land Use and Land Use Plans (i.e. master plans, zoning plans, etc)			Х	
Sustainability, Greening and Climate Change			Х	
Other?			Х	
Does the description of the affected environment provide the necessary information to support the impact analysis, including cumulative impact analysis?	х			All data used was the most recent information available.
Does the EA appropriately use incorporation by reference? Is/are the incorporated document(s) up-to-date			х	
If this EA adopts, in whole or in part, a NEPA document prepared by another Federal agency, has the Corps independently evaluated the information?			х	

4. ENVIRONMENTAL EFFECTS	Yes	No	N/A	If yes to any resource in Section 3 detail the emergency resolution impacts to that resource.
Floodplains [EO 11968; 10 CFR 1022]		Х		Placement of material did not result in a rise in future flood levels.
Wetlands [EO 11990; 10 CFR 1022; 40 CFR 1506.27(b)(3)]	X			Bankline placement at Gilbert Island encroached from the river up to the shoreline: The shoreline is generally void of vegetation, transitioning to typical bottomland hardwood forest. No dredged material was placed past the existing tree line on the shore. No wetland mitigation was required. The District's placement of material in the main channel border adjacent to the dredge cut: This area is void of vegetation. However, since this location contributes to the navigation channel stability, the site is considered Waters of the United States and required Section 404, Clean Water Act and Section 10, Rivers and Harbors Appropriation Act of 1899, review. The Mississippi Valley Division Commander, Major General Holland, granted approval for the emergency action under the Clean Water Act. All requirements not completed prior to the action are now completed after the fact. The 2014 Clean Water Act, Section 404(b)(1), Programmatic Evaluation for Navigation Activities, adequately covers this action. The associated Section 401 Water Quality Certification also meets the requirements for this action.
Threatened, endangered, or candidate species and/or their critical habitat, and other special status (e.g., state-listed) species [16 USC 1531; 40 CFR 1508.21(b)(3)] See Appendix B, <i>Pertinent Correspondence</i> .		х		The District determined the emergency dredging and placement action would have no effect to Indiana bat, northern long-eared bat, gray bat, pallid sturgeon, prairie bush-clover, and decurrent false aster due to lack of suitable habitat in the Project area. Suitable habitat for Higgins eye, sheepnose mussel, and spectaclecase is known to exist in the vicinity of the Project area. The District avoided placing on top of these areas of suitable habitat. The Illinois Department of Natural Resources (IL DNR) conducted a mussel survey on August 6, 2020, with divers in the Project area and found no live mussels. A pollywog of the bankline found few live specimens and no state- or federally-listed species. Although erosion of material may occur due to placement, mussel resources adjacent and downstream will adjust to these incremental changes over time. Therefore, the District determined the emergency dredging and placement action would have no effect the Higgins eye, sheepnose mussel, and spectaclecase.
Bald Eagles and Migratory birds			Х	

Prime or unique farmland [7 USC 4201; 7 CFR 658; 40 CFR 1508.27(b)(3)]		х	
State or national parks, forests, conservation areas, or other areas of recreational, ecological, scenic, or aesthetic importance?		Х	
Wild and scenic rivers [16 USC 1271; 40 CFR 1508.27(b)(3)]?		Х	
Property of historic, archaeological, or architectural significance (including sites on or eligible for the National Register of Historic Places and the National Registry of Natural Landmarks) [16 USC 470; 36 CFR 800; 40 CFR 1508.27(b)(3)]	×	(This action did not have any direct or indirect impacts to the Lock and Dam No. 22 Historic District immediately north of the Project area. A No Historic Properties Effected determination was coordinated with the Illinois and Missouri State Historic Preservation Officers (SHPO) and appropriate tribal representatives (Appendix B, Enclosure 5. The Illinois SHPO and Missouri SHPO concurred with this determination (Appendix B, Enclosures 6 & 7). There were no concerns or objections received from tribes.
Native American' concerns [16 USC 470; 42 USC 1996]	Х	(There were no impacts to Native American resources.
Minority and low-income populations (including a description of their use and consumption of environmental resources) [EO 12898]		Х	There were no impacts to minority and low-income populations.
Air	Х	(There were short term de minimis air impacts resulting from the Dredging vessels' exhaust.
Water Quality and Water Resources (aquifers)	Х	(No aquifers were impacted during the emergency dredging activities. The dredged material (sand primarily) did not degrade water quality significantly
Municipal or private drinking water supplies		Х	
Geology/soils	X	(There were no impacts to topography, geology, or soils.
Fish	Х	(Fish in the Project area during the dredging operations were temporarily displaced. This impact had a short duration and not significant.
Wildlife	X		Animals utilizing the Gilbert Island placement site were temporarily displaced. Once the placement ended, these animals could return to their daily routine.
Minerals	×		The District placed dredged material in an adjacent river location. This resulted in no net loss of mineral resources in the Project area.

Human health		Х		The Project did not result in risk to human health.
Transportation or other public infrastructure (navigable waters, highways, etc)		х		One grounding occurred because of shoaling in the Project area prior to the dredging action. Emergency dredging and placement was required to avoid further groundings, a channel closure, and impacts to the Mississippi River Navigation Channel. Additional groundings occurred on August 30 and September 10, 2020, due to further shoaling following initial dredge event completed August 13, 2020.
Waste Management (Hazardous, toxic & radioactive waste)			Х	
Socioeconomic resources	х			A channel closure because of the emergency would cause some degree of economic loss due to groundings and delays in commercial shipping. The emergency action was required to avoid economic loss caused by additional groundings or a channel closure.
Sustainability, Greening and Climate Change		Х		The emergency dredging activities did not have significant impacts based on climate change or contribute to regional climate change impacts.
Other?			X	
5. ENVIRONMENTAL COMPLIANCE Does the Project comply with:	Yes	No	N/A	Notes
Archaeological Resources Protection Act of 1979			Х	
American Indian Religious Freedom Act			Х	
Bald and Golden Eagle Protection Act			Х	
Clean Air Act			Х	
				Emergency dredging and placement of dredged material resulted in placement of materials in Waters of the United States. The action complied with the Clean Water Act Section 404 via the Section 404(B)(1) Evaluation
Clean Water Act of 1972	X			titled, Evaluation Maintenance Dredging of the 9-Foot Channel Navigation Project, Upper Mississippi River Miles 300.0-614.0, 2014. The Project also complied with the Clean Water Act, Section 401 via the associated 2014 Water Quality Certification (both documents available upon request).

Coastal Zone Management Act of 1972		Х	
Endangered Species Act of 1973	х		The District coordinated this emergency dredging and placement, as well as endangered species determinations with the USFWS (Consultation Codes: 03E18000-2020-SLI-2308 and 03E14000-2020-SLI-2963), Missouri Department of Conservation, and IL DNR (Appendix B, Enclosure 8). While "no effect" determinations were coordinated with USFWS, the USFWS is under no obligations to respond. The USFWS responded with an email on August 13, 2020, stating "no objection" with the action as planned. Therefore, the District is in full compliance with the ESA (Appendix B, Enclosure 9).
Estuary Protection Act of 1968		X	
Farmland Protection Policy Act of 1981		Х	No Prime or Unique farmland is in the Project area.
Federal Water Project Recreation Act/Land and Water Conservation Fund Act		Х	
Fish and Wildlife Coordination Act of 1958, as amended.	x		The District coordinated the emergency action with USFWS and the state agencies via the OSIT. The USFWS responded with an email on August 13, 2020, stating "no objection" with the action as planned (Appendix B, Enclosure 9).
Magnuson-Stevens Fishery Conservation and Management Act		Х	
Marine Mammal Protection Act of 1972		Х	
Marine Protection, Research and Sanctuaries Act		Х	
Migratory Bird Treaty Act of 1918		X	
National Environmental Policy Act of 1969	Х		The District is in full compliance with the National Environmental Policy Act.
National Historic Preservation Act of 1966 (NHPA)	х		A No Historic Properties Effected determination was coordinated with the Illinois and Missouri State Historic Preservation Officers (SHPO) and appropriate tribal representatives. The Illinois SHPO and Missouri SHPO concurred with this determination (Appendix B, Enclosures 6 & 7). There were no concerns or objections received from tribes.

Native American Graves Protection			Х	
and Repatriation Act				
Resource Conservation and Recovery Act, as Amended by the Hazardous				
and Solid Waste Amendments of				
1984; CERCLA, as Amended by the			X	
Superfund Amendments and				
Reauthorization Act of 1986; Toxic				
Substances Control Act of 1976.				
Rivers and Harbors Act of 1899	X			
Submerged Lands Act of 1953			Х	
Wild and Scenic River Act of 1968			X	No water hadies with this designation in the Project area
			_ ^	No water bodies with this designation in the Project area.
EO 11514, Protection and Enhancement of Environmental	Х			
Quality	^			
EO 11593, Protection and				
Enhancement of the Cultural	Χ			
Environment	^			
				No significant impacts to the quality of the human environment are expected
EO 11988, Floodplain Management	X			from this action. No change in existing land use would result from the action.
EO 11990, Protection of Wetlands	Χ			Hom the determ to change in existing land dee would recall hom the determ
EO 12962, Recreational Fisheries			Х	
EO 12898, Federal Actions to				
Address Environmental Justice in				
Minority Populations and Low Income			X	
Populations				
EO 13007, Indian Sacred Sites			Х	
EO 13045, Protection of Children from				
Environmental Health Risks and			X	
Safety Risks				
EO 13089, Coral Reef Protection			Х	
EO 13122, Invasive Species		Х		The Project did not promote invasive species movement into new areas.
EO 13175, Consultation and				
Coordination with Indian Tribal	Χ			The District consulted with Interested tribes.
Governments				

EO 13186, Responsibilities of Federal Agencies to Protect Migratory Birds	Х		
Advisory Circular 150/5200-33A, Hazardous Wildlife Attractants on Near Airports		X	
EO 13807, Establishing Discipline and Accountability in the Environmental Review and Permitting Process for Infrastructure Projects, 15 August 2017.		Х	

6. ER 1105-2-100 Environmental Resources	Possible Project Effects	Reasons
Life	Completion of the Project reduced possible dangers to human life	Dredging prevented dangerous conditions on the river and may have prolonged future navigation delays and dredging impacts.
Health	No Effect	No impact to human health because of the action
Safety	Completion of the Project reduced possible dangers to human safety	Dredging prevented dangers to human safety
Long term productivity	Without the Project, commercial shipping in this location on the Mississippi River would have halted.	Dredging ensured the continued use of the navigation channel, avoiding economic impacts.
Energy requirements	No Effect	No change to energy requirements
Energy conservation	No Effect	No change to energy conservation

7. OTHER ENVIRONMENTAL COMPLIANCE REQUIREMENTS	Explanation
Relationship to Short-Term Uses and Long-Term Productivity (on all resources)	Long term productivity was not impacted. The dredging maintained the long-term economic productivity of the use of the Mississippi River Navigation Channel.
Irreversible and Irretrievable Commitment to Resources (on all resources)	Fuel, materials, and manpower are the only resources of the proposed actions considered irreversible or irretrievable.
Relationship to Land Use Plans and Master Plans	The Project did not change or conflicted with any land use plan.

Reasonably Foreseeable Effects (Previously "Indirect Effects" and "Cumulative Impacts" Sections)	The District's action included dredging and placement of material to maintain the existing Mississippi River 9-Foot Navigation Channel to its authorized 9-foot depth. Indirect impacts of the proposed action did not occur. Although this action alone did not cause significant impacts, multiple emergency dredging and placement actions cumulatively cause positive impacts to avoid channel closures but may further contribute to lack of placement sites for future use. Increased flood frequency and duration contributes to dredging needs, causing shoals in areas not recently required dredging.
Mitigation requirements	N/A
Risk and Uncertainty (how well will	This action removed river sediment (sand) the Lock and Dam 22 Lower Dredge Cut to avoid a closure of the Mississippi River Navigation Channel. While this one time action removed material to clear the channel, the length of effectiveness is unknown. Future dredging will likely occur at this
the action hold up?)	area, but the timing is uncertain.

Coordination	Agency, Stakeholder, Tribe, Other	Coordination Outcome				
	OSIT	The OSIT concurred the preferred alternative (thalweg placement and along Gilbert Island) was the most practicable and least environmentally damaging alternative (Appendix B, Enclosure 2)				
	IL SHPO	A No Historic Properties Effected determination was coordinated with the Illinois and Missouri State Historic Preservation Officers (SHPO) and appropriate tribal representatives. The Illinois SHPO and Missouri SHPO				
	MO SHPO	concurred with this determination (Appendix B, Enclosures 6 & 7). By letter dated September 11, 2020, the Miami Tribe of Oklahoma stated they do not				
	Tribes	have any objections to the project (Appendix B, Enclosure 10).				
Coordination	US Fish and Wildlife Service	Endangered species consultation (obtaining a list of threatened or endangered species in the Project area.				
	Public participation	Public participation took place for the, Section 404(b)(l) Evaluation, Maintenance Dredging of the 9-Foot Channel Navigation Project, Upper Mississippi River, River Miles 300.0-614.0, dated June 2014. The report was distributed for public and natural resource agency review beginning on November 6, 2014. The Joint Public Notice for this Project was distributed for an approximate 30-day review period ending December 6, 2014. The District is circulating this after the fact EA to allow the tribes, agencies, public, and interested parties the opportunity to review how we met our environmental compliance obligations.				

References

ER 500-1-1, Civil Emergency Management Program

EP 500-1-1, Emergency Employment of Army and Other Resources-Civil Emergency Management Program—Procedures

ER 200-2-2, Environmental Quality, Procedures for Implementing the National Environmental Policy Act

ER 1105-2-50, Environmental Resources

Public Law 84-99, as amended by Section 206 of the Flood Control Act of 1962

List of Preparers	Role	Contact Information	
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Appendices

- A: Maps and Project Site Information
- **B**: Pertinent Correspondence
- C: Distribution List

EMERGENCY DREDGING LOCK AND DAM 22 LOWER DREDGE CUT MISSISSIPPI RIVER, POOL 24 RIVER MILES 300.0 TO 301.0

ENVIRONMENTAL ASSESSMENT

FINDING OF NO SIGNIFICANT IMPACT

The U.S. Army Corps of Engineers, Rock Island District (District), conducted an environmental analysis in accordance with the National Environmental Policy Act of 1969, as amended. The final Environmental Assessment (EA) titled *Emergency Dredging, Lock and Dam 22 Lower Dredge Cut, Mississippi River, Pool 24, River Miles 300.0 to 301.0* dated May 2021, addresses emergency dredging and placement of dredged material for maintenance of the UMR 9-Foot Navigation Channel in Pool 24 between Illinois and Missouri.

The Final EA, incorporated herein by reference, evaluated various alternatives in the Project area.

Alternative 1, No Action. Under the No Action Alternative, the District would not have dredged the navigation channel at the Lower Lock 22 Dredge Cut. Due to the shoaling taking place in the navigation channel, commercial navigation through this area would halt. While the No Action Alternative was not viable due to the authorized requirement to maintain the navigation channel, the District used this alternative as a baseline condition to compare all the other alternatives

Alternative 2, Channel Border Placement, Illinois. Preferred Alternative. This alternative consists of placing dredged material in the channel border, adjacent to the dredge cut. Material would be placed channelward of the wing dams so as to avoid impacting habitat between the wing dams, or mussel beds along the Illinois bankline. Due to time constraints, this is the preferred alternative to avoid placing material on top of known mussel beds along the Illinois and Missouri shorelines.

Alternative 3, Lock and Dam 22 DMMP, Upland Site 8, Missouri. While the District placed at this location in the past (1940s–2014), recent mussel surveys indicate a rich mussel bed in this area. If placement would take place here, additional retention measures to keep placed material in place to avoid impacts to the mussel bed.

Alternative 4, Dredge and place material along the Illinois bankline adjacent to Cottel Island (or Brown's Island). This is a historic placement site (1960s, 1996). Recent mussel surveys along the Cottel Island bankline indicate a good assemblage of mussels.

Alternative 5, Dredge to the authorized depth and place at the Lock and Dam 22 DMMP, Upland Site 8. The District considered placing dredged material at upland at Site 8 identified in the 2004 Lock and Dam 22 Dredged Material Management Plan (DMMP) (Appendix A, Page A-5). This alternative would have avoided impacts to mussel resources near the dredge cut and historic placement sites. Although NEPA documentation was completed for this site and the Finding of No Significant Impact (FONSI) signed in 2004, the District never acquired the real estate rights for this site. While this is not an acceptable option given the time constraints, this

would be viable for future placement if real estate acquisition occurs as this dredge cut does not currently have sufficient upland placement options.

The Project's general description included:

- Creating a pilot channel using mechanical dredging and placing the material adjacent to Gilbert Island.
- Using the Dredge Potter to hydraulically dredge in the Lock and Dam 22 Lower Dredge Cut near Saverton, Missouri.
- Placed the material into the channel border area adjacent to the dredge cut to allow continued navigation in this reach of the Upper Mississippi River.

SUMMARY OF POTENTIAL EFFECTS

For all alternatives, the District evaluated the potential effects, as appropriate. Table 1 summarizes the Preferred Alternative's potential effects

The Preferred Alternative does not require compensatory mitigation.

The emergency and time constraints prevented the District to complete all the NEPA requirements prior to the accomplishment of emergency work to restore the channel to its authorized depth. Engineering Regulation 200-2-2, Paragraph 8, *Emergency Actions*, allows the District Commander to respond to emergency situations to prevent or reduce imminent risk of life, health, property, or severe economic losses without first preparing specific documentation.

Table 1: Summary of Potential Effects of the Recommended Plan

	Insignificant Effects	Insignificant Effects as a Result of Mitigation*	Resource Unaffected by Action	Positive Effects
Aesthetics	\boxtimes			
Air Quality			\boxtimes	
Aquatic Resources/Wetlands	\boxtimes			
Invasive Species	\boxtimes			
Fish And Wildlife Habitat	\boxtimes			
Threatened/Endangered Species/Critical Habitat	\boxtimes			
Historic Properties			\boxtimes	
Other Cultural Resources			\boxtimes	
Floodplains			\boxtimes	
Hazardous, Toxic & Radioactive Waste			\boxtimes	
Hydrology	×			
Land Use			\boxtimes	
Navigation				\boxtimes
Noise Levels	\boxtimes			
Public Infrastructure			\boxtimes	
Socio-Economics				\boxtimes
Environmental Justice			\boxtimes	
Soils			\boxtimes	

Tribal Trust Resources		\boxtimes	
Water Quality	×		
Climate Change			

All practicable and appropriate means to avoid or minimize adverse environmental effects were analyzed and incorporated into the recommended plan. Best Management Practices were implemented, to minimize impacts.

No compensatory mitigation is required as part of the recommended plan.

Public review of the draft IFR/EA and FONSI will/was be completed in June 2021.

ENDANGERED SPECIES ACT

Pursuant to Section 7 of the Endangered Species Act of 1973, as amended, the District determined the Preferred Alternative will have No Effect on federally-listed species of their designated critical habitat.

NATIONAL HISTORIC PRESERVATION ACT

Pursuant to Section 106 of the National Historic Preservation Act of 1966, as amended, the District determined the recommended plan has no effect on historic properties. The District coordinated this determination with the Illinois State Historic Preservation Office (SHPO), the Missouri SHPO and appropriate tribal representatives. The Illinois SHPO concurred with this determination on 8/17/2020 and concurrence from Missouri SHPO was assumed on 9/14/2020. No concerns or objections were received from any tribe.

CLEAN WATER ACT SECTION 404(B)(1) COMPLIANCE

Pursuant to the Clean Water Act of 1972, as amended, the discharge of dredged or fill material associated with the recommended plan has been found to be compliant with section 404(b)(1) Guidelines (40 CFR § 230). The Project complied with the Clean Water Act Section 404 via the Section 404(B)(1) Evaluation titled, Evaluation Maintenance Dredging of the 9-Foot Channel Navigation Project, Upper Mississippi River Miles 300.0-614.0, 2014.

CLEAN WATER ACT SECTION 401 COMPLIANCE

401 WATER QUALITY CERTIFICATION OBTAINED

The District obtained a water quality certification pursuant to section 401 of the Clean Water Act from Wisconsin, Iowa, Illinois, and Missouri through the Clean Water Act, Section 401 2014 Water Quality Certification for the Maintenance Dredging of the 9-Foot Channel Navigation Project, Upper Mississippi River Miles 300.0-614.0, 2014. All conditions of the water quality certification were implemented in order to document the absence of adverse impacts to water quality.

OTHER SIGNIFICANT ENVIRONMENTAL COMPLIANCE:

The District considered and coordinated all applicable environmental laws with the appropriate agencies and officials.

FINDING

Technical, environmental, and economic criteria used in the formulation of alternative plans were those specified in the Water Resources Council's 1983 *Economic and Environmental Principles and Guidelines for Water and Related Land Resources Implementation Studies*. All applicable laws, executive orders, regulations, and local government plans were considered in evaluation of alternatives. Based on this report, input from other Federal, State and local agencies, Tribes, and the public, and the review by my staff, it is my determination the Preferred Alternative would not cause significant adverse effects on the quality of the human environment; therefore, preparation of an Environmental Impact Statement is not required.

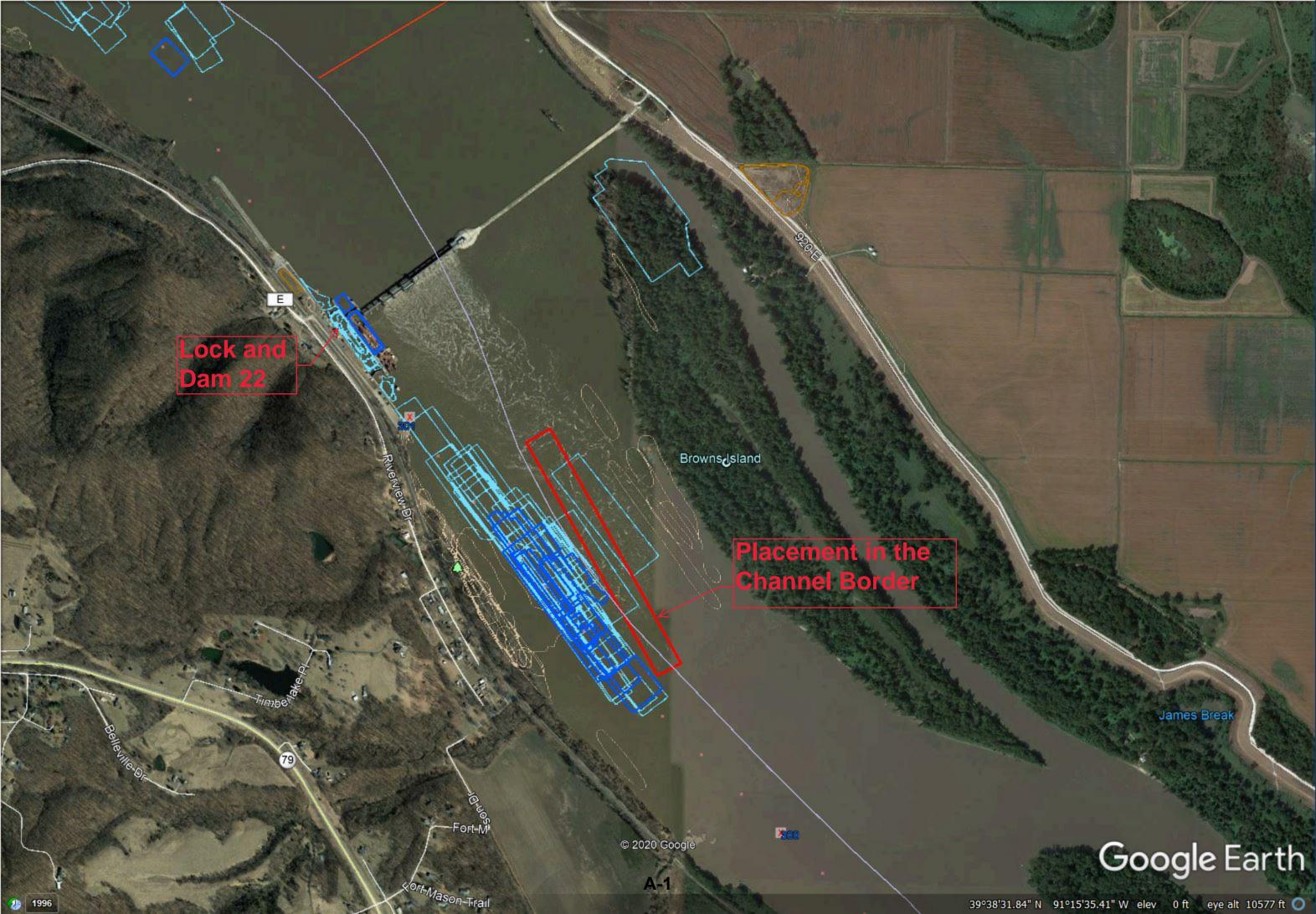
Date	Steven M. Sattinger, P.E
	Colonel, US Army
	Commander & District Engineer

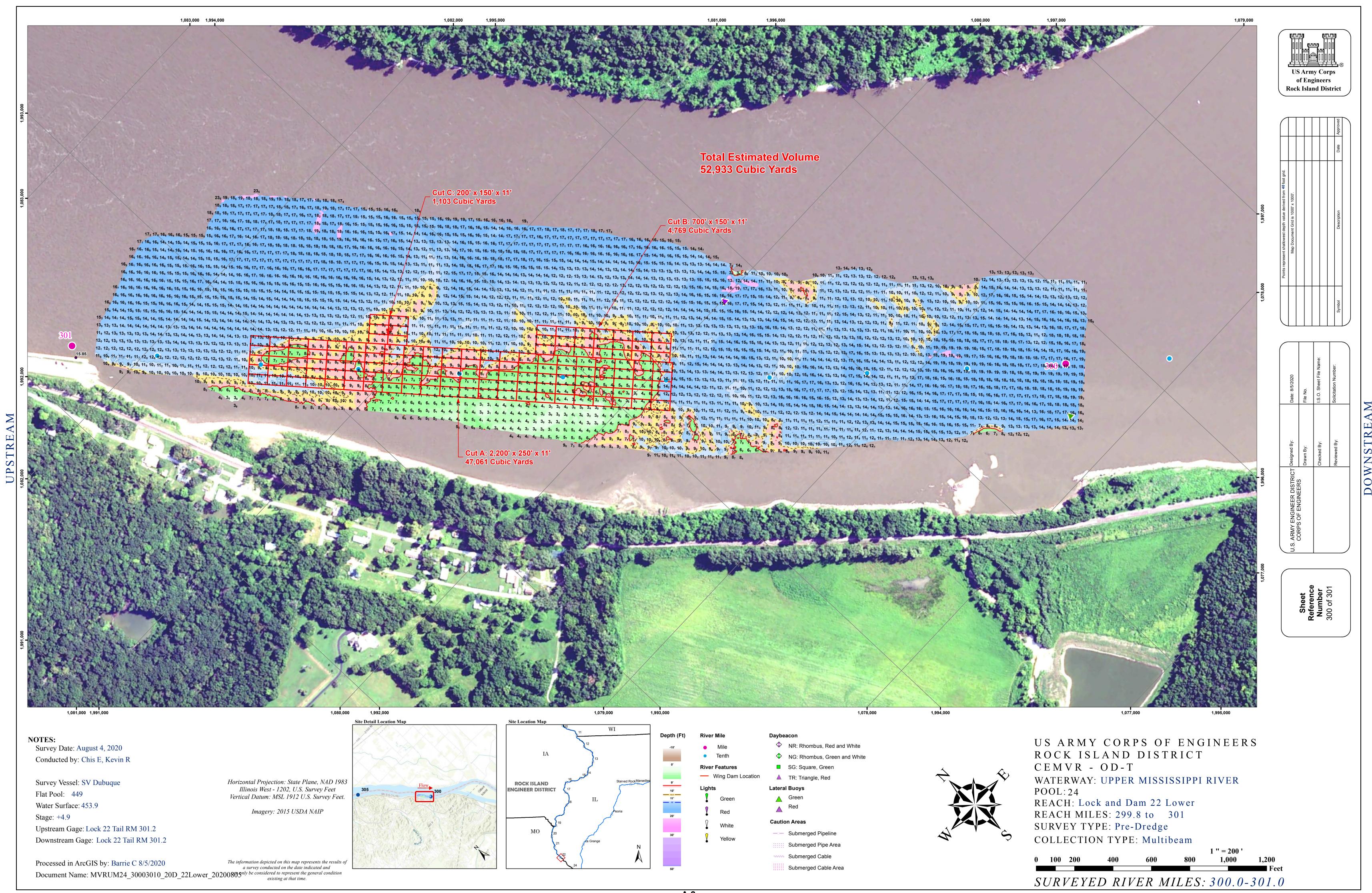
EMERGENCY DREDGING LOCK AND DAM 22 LOWER DREDGE CUT MISSISSIPPI RIVER, POOL 24 RIVER MILES 300.0 TO 301.0

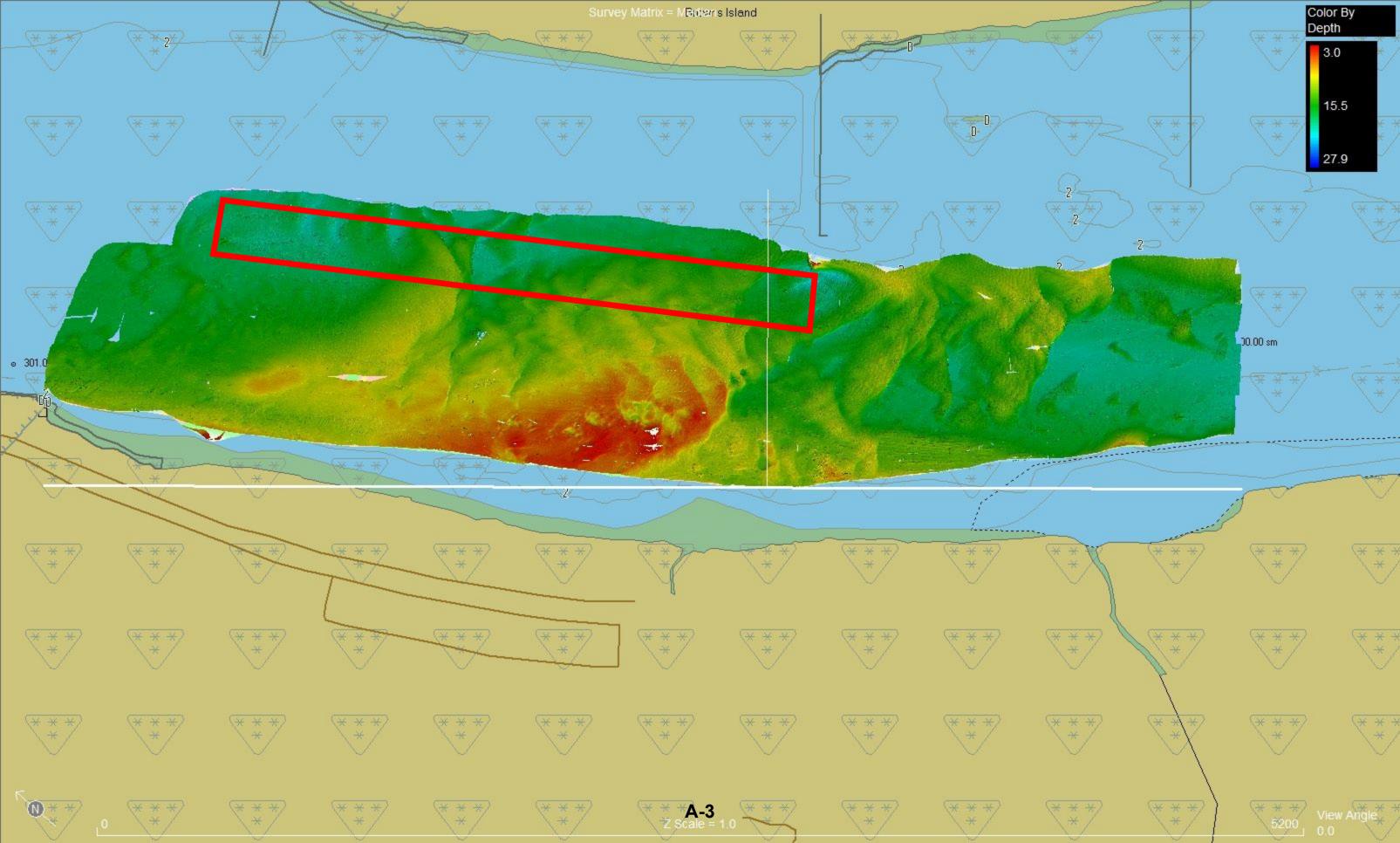
ENVIRONMENTAL ASSESSMENT

APPENDIX A

MAPS AND PROJECT SITE INFORMATION







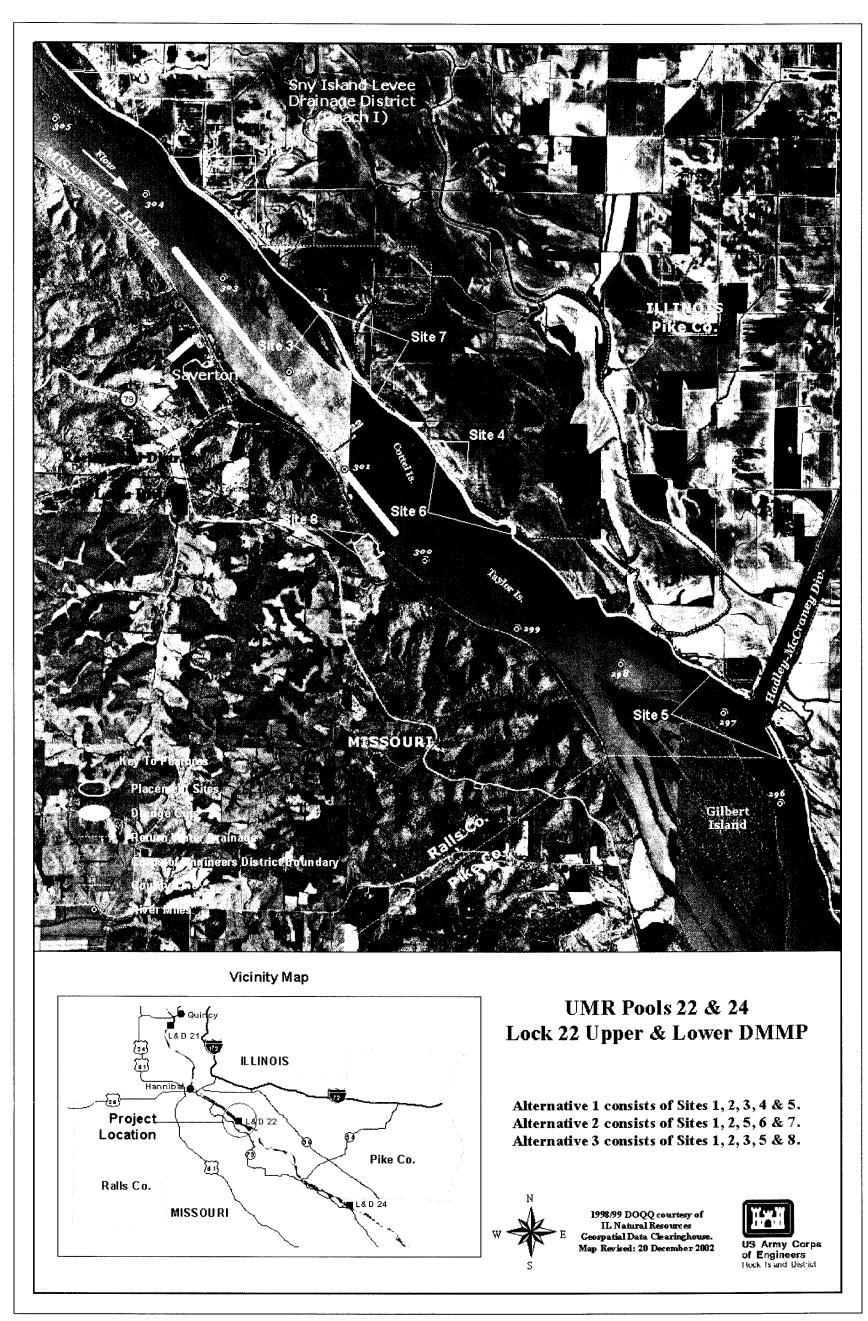
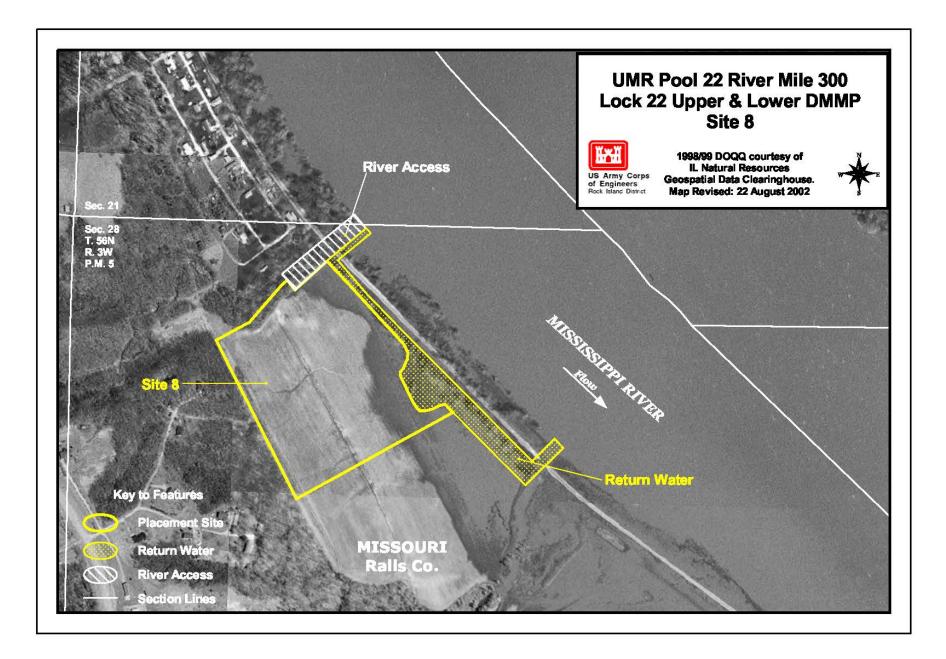


Plate EA-1. Vicinity Map



L00 22 Mississippi River ReDredge Sangling

31 May 20

Keller, Bierl, Lakusso

Weather: 56°F, 100% clouds, auch wind from South

Notes:

Sediment grab samples collected with a 5 ft long, 2" wide, plastic lined, stainless steel core sampler.

handheld Garmin GPS. In-situ river conditions gathered

Coords gathered with a

with a handheld YSI ProPlus.

River Conditions:

Nater temp-16.5° pH- 809 DO-8.00 spcond-451.7

Rite in the Rain.

MS 300.55R

MS 300.78

Coords - 39.60843N, -91.2423DW Depth - 13.3'

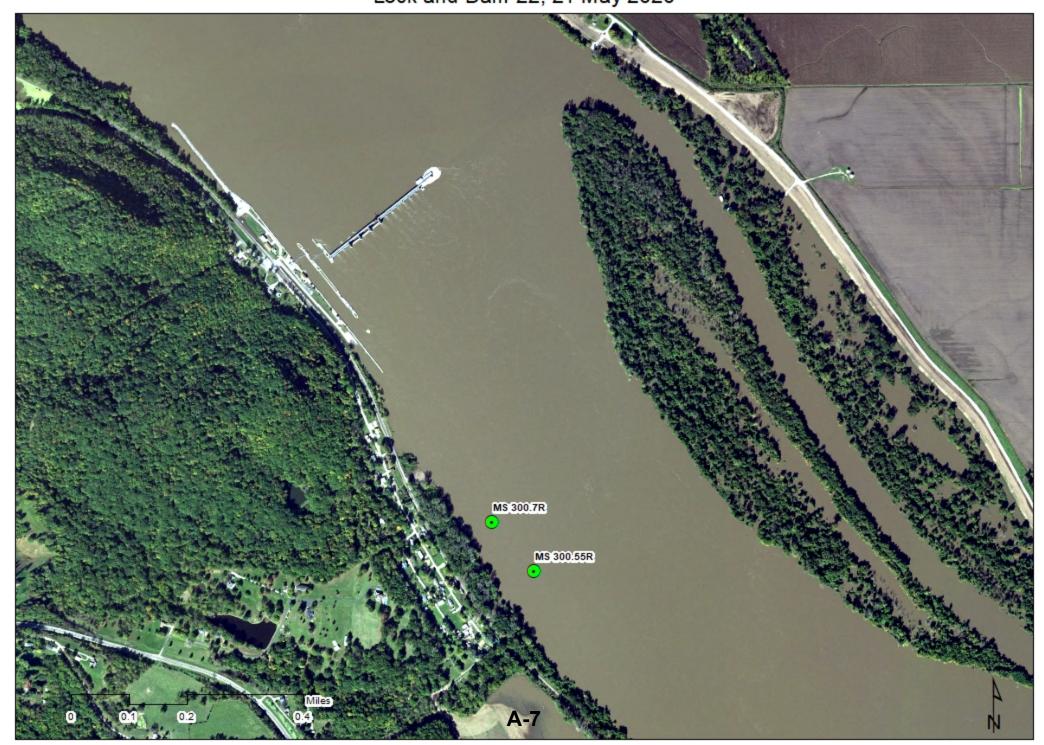
Sample - 2' med grain brown sand

Courds - 39.62967N, -91.24363W Depth-14.3'

Sample - 1.5' med grain brown sand

ale: 1 square =

Mississippi River Pre-Dredge Sediment Sampling Lock and Dam 22, 21 May 2020



	Year	Dredging	Dredging		Placement
Dredge Cut	Dredged	Amount (yd3)	Site	Placement Site	Type
300.3-301.0	1944	70,970	300.9-301.2	300.9-301.0L	
Lock #22 Lower	1948	2,520	300.4	-	
1	1961	30,014	300.5-300.9	300.5-300.7R	
	1962	39,823	300.5-300.8	300.5-300.7R	
	1965	45,156	300.4-300.8	300.5-300.7R	
	1966	36,432	300.5-300.9	300.2-300.4R, 300.5R, 300.4L, 300.5-300.6L	
	1966	13,067	300.5-300.7	300.5-300.8R	
	1967	54,776	300.4-300.8	300.5-300.8L	
	1969	56,374	300.3-300.7	300.4-300.7L	
	1980	30,829	300.5-300.8	300.5-300.8R	
	1980	33,741	300.5-300.8	300.4-30.7R (Dredge Dubuque)	Beach
	1981	46,578	300.3-300.7	300.6-300.8R, 300.8R	Beach
	1990	26,311	300.4-300.6	300.7-300.9R	Beach
	1994	59,295	300.6-300.7	300.7-300.85R	Beach
	1996	75,271	300.5-301.0	300.5-300.7L (Cottel Island)	Beach
	1997	148,656	300.4-301.0	300.8-301.4L, less 301.0-301.2 land side Sny levee	Upland
	1997	70,179	300.5-300.9	300.6-300.9L land side Sny levee	Upland
	1998	40,065	300.4-300.7	300.7-300.8L land side Sny levee	Upland
	1998	25,957	300.3-300.6	300.6-300.7L behimd Sny (Total behind levee to date, 294,280)	Upland
	1999	16,326	300.4-300.65	300.8L behind Sny levee (stockpile)	Upland
	2000	31,611	300.4-300.8	300.6L behind Sny leve (342,217 cy placed in stockpile to date)	Upland
	2001	7,576	300.2-300.7	296.7L (Hadley-McCraney DMMP) Mech behind levee	Upland
	2003	8,085	300.0-300.1	302.5R - mech aux, Saverton inland	Inland
	2003	4,862	300.4-300.7	296.5L (Hadley-McCraney DMMP site)behind levee Mech	Upland
	2004	11,757	300.4-300.7	296.5L (Hadley-McCraney DMMP site)behind levee Mech	Upland
	2005	20,530	300.4-300.7	296.5R (Gilbert Island)-mechanical	Bankline
	2005	8,493	300.4-300.7	296.5R (Gilbert Island)-mechanical	Bankline
	2006	4,854	300.4-300.7	296.5R (Gilbert Island)-mechanical	Bankline
	2006	17,040	300.4-300.7	296.5R (Gilbert Island)-mechanical	Bankline
	2007	20,187	300.4-300.7	296.5R (Gilbert Island)-mechanical	Bankline
	2008	28,150	300.2-300.4	297.5-297.8R (Gilbert Island)-mechanical	Bankline
	2008	1,447	301.1-301.2	302.5R DMMP site (Lwr Aux Mechanical)	Inland
	2014	1,528	301.1-301.2	302.5-302.6R DMMP site Mechanical	Inland
	•	1,088,460 33	Events Average:	32,984	

EMERGENCY DREDGING LOCK AND DAM 22 LOWER DREDGE CUT MISSISSIPPI RIVER, POOL 24 RIVER MILES 300.0 TO 301.0

ENVIRONMENTAL ASSESSMENT

APPENDIX B

PERTINENT CORRESPONDENCE



DEPARTMENT OF THE ARMY

ROCK ISLAND DISTRICT, CORPS OF ENGINEERS CLOCK TOWER BUILDING - P.O. BOX 2004 ROCK ISLAND, ILLINOIS 61204-2004

CEMVR-PD 3 August 2020

MEMORANDUM FOR RECORD

SUBJECT: Environmental Compliance for 2020 Emergency Dredging

- 1. The purpose of this memorandum is to document the need to perform critical dredging at 3 dredge cuts on the Upper Mississippi River prior to completing all environmental documentation. Dredging is required in order to maintain the Upper Mississippi River 9-Foot Navigation Channel Project
- 2. BACKGROUND: USACE procedures associated with implementing emergency actions prior to completion of environmental coordination are addressed in 33 Code of Federal Regulations (CFR) § 337.7 (discharge of dredged or fill material in waters of the U.S.) and 33 CFR § 230.8 (National Environmental Policy Act).
- 3. JUSTIFICATION: A high water event on the Mississippi River has caused significant shoaling within the 9-Foot Navigation Channel in the District's AOR. Water levels are falling, and actual depths within the District are at or below nine feet. Water levels are projected to continue to fall over the next several weeks and shoaling continues at these sites. The District has identified 25 remaining dredging locations. The number of dredging locations and cumulative volume of material is significantly greater than historical amounts. Of those 25 locations, all but three have adequate existing placement sites. The remaining three dredging locations have existing placement sites that have either been fully utilized by other area dredging or are inadequate for other reasons to support the necessary dredging required. With water levels continuing to fall, the District anticipates these areas are likely to result in channel closure without channel maintenance dredging.
- 4. Following is a description of the three dredge cuts which need new placement sites to perform the necessary dredging at to maintain the 9-Foot Navigation Channel Project. The District has initiated environmental coordination with Federal and State agencies but has not completed all environmental compliance requirements for these sites. The District intends to satisfy as many requirements before dredging as possible, but channel conditions may require some requirements be met after-the-fact.
- a. LOCK 22 LOWER DREDGE CUT, POOL 24, RIVER MILE 300.6: The District has identified approximately 66,100 cubic yards to be removed at the Lock and Dam 22 Lower in Pool 24. The shoal has developed downstream of the lock approach. As water levels continue to recede, it will make the approach challenging, if not impassable. This cut has averaged about 8,300 cubic yards per job over the past 20 years. No dredging has been required at this location since 2014. The On-Site Inspection Team (OSIT) had a phone-call on 10 July 2020 to discuss the use of historic placement sites adjacent to

SUBJECT: Environmental Compliance for 2020 Emergency Dredging

the cut, one each along the Illinois and Missouri banklines. The OSIT consists of federal and state agencies members that have regulatory or management responsibilities within the action area. The OSIT identified significant mussel resources at both of these sites that do not allow for further use of these placement sites. Coordination with the OSIT is ongoing to identify an acceptable placement site.

- b. DEADMAN'S LIGHT DREDGE CUT, POOL 12 RIVER MILE 568.4 and 567.8: The District has identified 38,600 cubic yards to be removed at the Deadman's Light Dredge Cut in Pool 12. No dredging has been required at this location since 1969. The OSIT provided a recommended placement location, although this placement site does not have current environmental clearances.
- c. DUCK CREEK DREDGE CUT, POOL 13 RIVER MILE 554.4: The District has identified 12,600 cubic yards to be removed at Duck Creek Dredge Cut in Pool 13. No dredging has been required at this location since 1962. The OSIT provided a recommended placement location, although this placement site does not have current environmental clearances.
- 5. DETERMINATION: Based on the information detailed above, I have determined the Rock Island District Dredging Emergency Response on the Mississippi River identified in this Memorandum to be an emergency situation pursuant to 33 CFR 337.7 and 33 CFR 230.8 as immediate work necessary to prevent and reduce the imminent risk. The District intends to satisfy as many necessary environmental compliance requirements as possible prior to dredging. The District will prepare any remaining required environmental coordination after the emergency dredging action has been completed. This Memorandum shall be kept in project files.

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L.1164506939 Date: 2020.08.03
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STEVEN M. SATTINGER COL, EN Commanding

CF:

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CEMVR-DP

CEMVR-XO

CEMVR-EC

CEMVR-OD

CEMVR-RE

CEMVR-OC

LD 22 Lower Hydraulic Dredge Event

OSIT Coordination Call July 10, 2020 (1-2pm CT)

Attendees:

Travis Moore (MDC)
Matt Vitello (MDC)
Ross Dames (MDC)
Brad Hayes (IL DNR)
Matt O'Hara (IL DNR)

Tyler Porter (FWS)
Sara Schmuecker (FWS)
Matt Afflerbaugh (USACE)
Matt Mangan (FWS)
Matt Martin (USACE)

See attachments

Discussion:

- Background
 - Dredging need identified at LD 22 Lower: 66,000 cy (17 June 220 survey), see
 - Small mechanical events earlier in the season to maintain pilot channel have taken material downstream to Gilbert Island (RM 298). To continue mechanical dredging for the full volume would require a dedicated mechanical crew for 60-90 days.
 - The Potter hydraulic dredge is expected to be available for the LD 22 Lower dredge cut following completion at Cave Hollow. It is expected the Potter could arrive as early as the end of July/beginning of August.
 - The Potter has 2,400 feet of flex pipe or 1,200 feet of rigid pipe available. There are two
 historic placement sites located adjacent to the cut, one along each the Missouri and
 Illinois banklines. Significant mussel resources are known from both sites.
- Assessment of Historic Bankline Placement Options
 - The Corps is currently reviewing NEPA options.
 - Illinois historic bankline
 - IL Natural Area along Brown's Island. A 2004 dive survey collected 286 mussel individuals of 15 live species. Current conditions of the site are unknown, but unlikely the OSIT could pollywog due to steep slopes/deep water.
 - The IL Natural Area site begins approximately 3300 ft downstream from the lock and continues an additional 1,500 feet downstream (middle portion of island).
 See attachment.
 - Missouri historic bankline
 - Travis completed brail assessment on 7 July 2020. Brailed 20 and 40 yrds off shore along Robert Thompson Conservation Area from below boat ramp to mouth of unnamed creek. Found a few mussels scattered throughout. Started picking up mussels downstream of delta. See attachment.
 - The Fools Creek mussel bed extends up and downstream of Fool's Creek. Has been surveyed a lot over the years. Section below Fool's Creek is a relatively new portion of the bed. Approximately 15-20 years ago, the substrate was almost solid bedrock with mussels laying on top, pretty much forming the

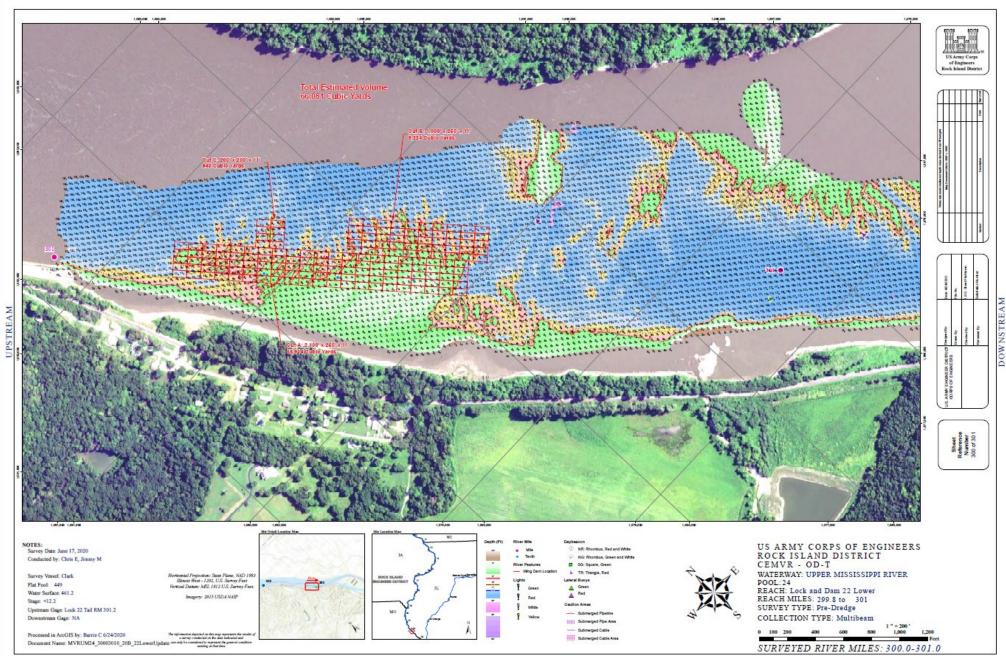
substrate. Diver estimated 60 mussels per square meter. Want to make sure we protect this mussel resource – Efforts date back to proposal for lock expansion and staging area. Coordination resulted in an agreement that removed substrate would be stockpiled and if the mussels didn't recolonize the bed on their own, the substrate would be replaced and propagated.

- Previous measures agreed upon as part of the proposed lock expansion project planning process and disturbance to this bed include:
 - Site will be surveyed and mussels will be moved to other locations within the bed.
 - Substrate will be dredged up and stored on land. It CANNOT be used for roads or for any other purpose.
 - When the project is done, the area needs to be resurveyed. If it has repopulated on its own, to pre-project levels, then nothing more needs to be done.
 - But, if the area has not naturally recovered, the stored substrate will be returned to the site.
 - USACE will pay for mussel propagation of all species to return the area to pre-project levels.
 - USACE will pay for 10 years of monitoring to determine if rebuilding and restocking the site was successful.
- We could consider placement along the upstream portion of the historic bankline (below the boat ramp), but stabilization measures need to be integrated to ensure the material doesn't migrate onto the downstream mussel bed. Potential natural containments may include:
 - coconut fiber or overseeding for capping,
 - silt fencing or other form of containment structure,
 - containment berm to allow material to settle with cap to hold material in place,
 - others?
- In past have also placed material upland, extending into the trees at higher stage on property owned by the State. This option is a possibility with coordination from the State, but likely couldn't support the full capacity.
- Additional Placement Options
 - Potential for emergency declaration
 - Would necessitate NEPA documentation after-the-fact. Could potentially result in the ability to discuss less environmentally impactful options.
 - Thalweg placement
 - Currently no approved NEPA
 - Thalweg depths are primarily in the upper teens (ft).
 - Combination of placement locations
 - A portion of the material could be placed along the upper end of the MO bankline (near boat ramp, if material can be stabilized) and a portion in the thalweg.

 A portion of the material hydraulically placed in thalweg or MO bankline (near boat ramp, if material can be stabilized) and a portion mechanically placed at Gilbert Island.

Moving Forward

- o The States will provide outlines of the mussel resource boundaries (see attachments).
- Corps will continue internal coordination (thalweg, material stabilization for MO bankline, etc.) and continue coordination with the OSIT.
- This reach has historically been a challenging area. If future dredging is anticipated in this reach, we need to begin thinking about and planning for a longer-term solution.
 - Central Stone Property: A big open field is located to the west of the cut in Missouri. This site was considered for use as a staging area for the lock expansion proposal. The Corps could consider purchasing this site for future use. This site has been looked at under previous plans, but unsure why it wasn't pursued.
 - A similar site is also present on the Illinois side.
- o Overall, thalweg is currently the preferred option.



Travis Moore (MDC), 7 July 2020

Missouri Bankline Braille Survey

Yesterday, we braille-surveyed for freshwater mussels, approximately 20 and 40 yards from the Missouri shoreline, along the entire reach of **Robert Thompson Conservation** Area. This MDC-owned property lies between the Lock and Dam 22 parking lot and boat ramp, extending downstream to the noname creek that enters the Mississippi River. The eastern boundary of the property is the Mississippi River, the western boundary is a set of railroad tracks. The historic dredge material placement site is on and adjacent to this conservation area.

The uppermost survey began immediately downstream of the rocked shoreline (approximately 60 yards from the boat ramp), adjacent to the main historic disposal material site. Subsequent 20-yards-from-shore surveys extended downstream of the first survey. Braille runs that produced molluscs were:

- Adjacent to the main disposal site - one pink papershell mussel and one pointed Campelloma snail.
- Between the uppermost timber gap, downstream to the third timber gap one mapleleaf mussel and one threehorn wartyback mussel.
- Between the third timber gap and the no-name creek delta one yellow sandshell.

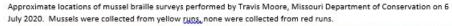
No mussels were collected from surveys conducted 40 yards from shore, along Thompson CA.

We also surveyed at 20, 40, and 70 yards from shore, between the no-name creek delta, downstream to the rockpile on shore. Mussels collected were:

- 20 yards one threeridge, one threehorn wartyback
- 40 yards five threeridge, four mapleleaf, two threehorn wartyback, one washboard, one hickorynut.
- 70 yards no mussels collected.

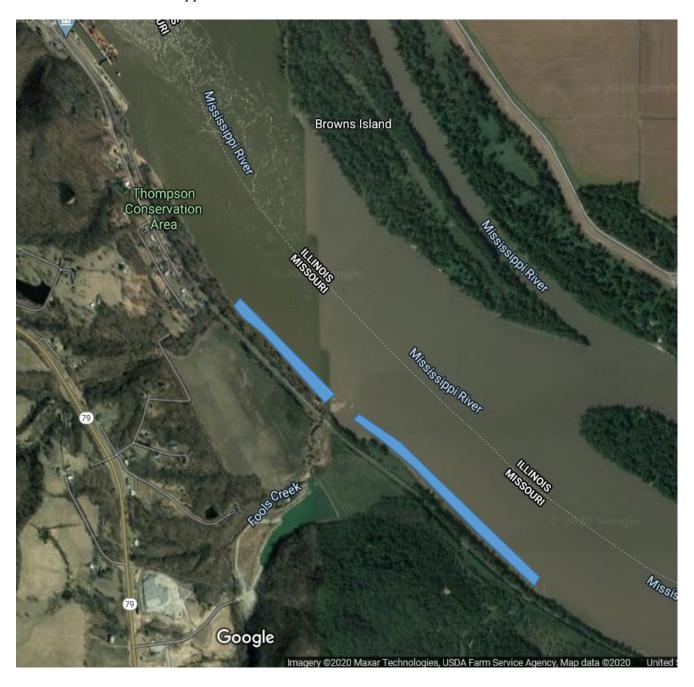
At current river stages, there is a sizeable eddy that extends from the first timber gap, upstream to the boat ramp.

Downstream GPS points for each braille run were recorded.





Provided by Travis Moore, 13 July 2020 Fools Creek Mussel Bed approximate boundaries



The main portion of the bed didn't extend channelward, much beyond the tips of the deltas, or about 50 yards from shore. Water velocities were faster there and there was significant scouring, particularly near the edges of the deltas. But, as time as has passed, the delta's have extended channelward, particularly at the unnamed creek at the uppermost part of the reach.

The downstream extent of the bed is unknown beyond the delta of the small unnamed creek.

Provided by Brad Hayes (IL DNR), 13 July 2020 Lower Cottel Island Mussel Bed and Illinois Natural Area approximate boundaries:



2004 Survey: 286 individuals of 15 live species of mussels observed during dive survey: Ligumia recta, Quadrula nodulata, Q. quadrula, Q. pustulosa, Amblema plicata, Fusconaia flava, Lampsilis cardium, Obliquaria reflexa, Obovaria olivaria, Leptodea fragilis, Pyganodon grandis, Truncilla truncata, Lampsiis teres, Potamilus alatus, P. ohiensis



United States Department of the Interior

FISH AND WILDLIFE SERVICE

Illinois-Iowa Ecological Services Field Office Illinois & Iowa Ecological Services Field Office 1511 47th Ave Moline, IL 61265-7022

Phone: (309) 757-5800 Fax: (309) 757-5807



July 28, 2020

In Reply Refer To:

Consultation Code: 03E18000-2020-SLI-2308

Event Code: 03E18000-2020-E-05487

Project Name: Lock and Dam 22 Lower Dredging

Subject: List of threatened and endangered species that may occur in your proposed project

location, and/or may be affected by your proposed project

To Whom It May Concern:

The attached species list identifies any federally threatened, endangered, proposed and candidate species that may occur within the boundary of your proposed project or may be affected by your proposed project. The list also includes designated critical habitat if present within your proposed project area or affected by your project. This list is provided to you as the initial step of the consultation process required under section 7(c) of the Endangered Species Act, also referred to as Section 7 Consultation.

Section 7 of the Endangered Species Act of 1973 requires that actions authorized, funded, or carried out by Federal agencies not jeopardize federally threatened or endangered species or adversely modify designated critical habitat. To fulfill this mandate, Federal agencies (or their designated non-federal representative) must consult with the Service if they determine their project "may affect" listed species or critical habitat.

Under 50 CFR 402.12(e) (the regulations that implement Section 7 of the Endangered Species Act) the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally. You may verify the list by visiting the ECOS-IPaC website http://ecos.fws.gov/ipac/ at regular intervals during project planning and implementation and completing the same process you used to receive the attached list. As an alternative, you may contact this Ecological Services Field Office for updates.

Please use the species list provided and visit the U.S. Fish and Wildlife Service's Region 3 Section 7 Technical Assistance website at - http://www.fws.gov/midwest/endangered/section7/s7process/index.html. This website contains step-by-step instructions which will help you

determine if your project will have an adverse effect on listed species and will help lead you through the Section 7 process.

For all wind energy projects, please contact this field office directly for assistance, even if no federally listed plants, animals or critical habitat are present within your proposed project or may be affected by your proposed project.

Although no longer protected under the Endangered Species Act, be aware that bald eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 et seq.) and Migratory Bird Treaty Act (16 U.S.C. 703 et seq), as are golden eagles. Projects affecting these species may require measures to avoid harming eagles or may require a permit. If your project is near an eagle nest or winter roost area, see our Eagle Permits website at http://www.fws.gov/midwest/midwestbird/EaglePermits/index.html to help you determine if you can avoid impacting eagles or if a permit may be necessary.

We appreciate your concern for threatened and endangered species. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List
- USFWS National Wildlife Refuges and Fish Hatcheries
- Wetlands

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Illinois-Iowa Ecological Services Field Office

Illinois & Iowa Ecological Services Field Office 1511 47th Ave Moline, IL 61265-7022 (309) 757-5800

This project's location is within the jurisdiction of multiple offices. Expect additional species list documents from the following office, and expect that the species and critical habitats in each document reflect only those that fall in the office's jurisdiction:

Missouri Ecological Services Field Office

101 Park Deville Drive Suite A Columbia, MO 65203-0057 (573) 234-2132

Project Summary

Consultation Code: 03E18000-2020-SLI-2308

Event Code: 03E18000-2020-E-05487

Project Name: Lock and Dam 22 Lower Dredging

Project Type: DREDGE / EXCAVATION

Project Description: Rock Island District is required to dredge the Lock 22 lower dredge cut to

avoid an emergency channel closure of the Mississippi River.

Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/place/39.636711700440074N91.24604159774296W



Counties: Pike, IL | Ralls, MO

Endangered Species Act Species

There is a total of 8 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

1. <u>NOAA Fisheries</u>, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Mammals

NAME	STATUS
Gray Bat <i>Myotis grisescens</i>	Endangered
No critical habitat has been designated for this species.	
Species profile: https://ecos.fws.gov/ecp/species/6329	
Indiana Bat Myotis sodalis	Endangered
There is final critical habitat for this species. Your location is outside the critical habitat.	_
Species profile: https://ecos.fws.gov/ecp/species/5949	
Northern Long-eared Bat <i>Myotis septentrionalis</i>	Threatened
No critical habitat has been designated for this species.	
Species profile: https://ecos.fws.gov/ecp/species/9045	

07/28/2020

Endangered

Endangered

Endangered

Threatened

Threatened

Clams

NAME STATUS

Higgins Eye (pearlymussel) *Lampsilis higginsii*

No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/5428

Sheepnose Mussel Plethobasus cyphyus

No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/6903

Spectaclecase (mussel) Cumberlandia monodonta

No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/7867

Flowering Plants

NAME

Decurrent False Aster Boltonia decurrens

No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/7705

Eastern Prairie Fringed Orchid Platanthera leucophaea

No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/601

No critical habitat has been designated for this species.

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

USFWS National Wildlife Refuge Lands And Fish Hatcheries

Any activity proposed on lands managed by the <u>National Wildlife Refuge</u> system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS OR FISH HATCHERIES WITHIN YOUR PROJECT AREA.

Wetlands

Impacts to <u>NWI wetlands</u> and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local <u>U.S. Army Corps of</u> Engineers District.

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

FRESHWATER EMERGENT WETLAND

• <u>PEM1C</u>

FRESHWATER FORESTED/SHRUB WETLAND

PFO1Ah

LAKE

• L1UBHh



United States Department of the Interior

FISH AND WILDLIFE SERVICE

Missouri Ecological Services Field Office 101 Park Deville Drive Suite A

Columbia, MO 65203-0057 Phone: (573) 234-2132 Fax: (573) 234-2181



July 28, 2020

In Reply Refer To:

Consultation Code: 03E14000-2020-SLI-2963

Event Code: 03E14000-2020-E-07456

Project Name: Lock and Dam 22 Lower Dredging

Subject: List of threatened and endangered species that may occur in your proposed project

location, and/or may be affected by your proposed project

To Whom It May Concern:

This response has been generated by the Information, Planning, and Conservation (IPaC) system to provide information on natural resources that could be affected by your project. The U.S. Fish and Wildlife Service (Service) provides this response under the authority of the Endangered Species Act of 1973 (16 U.S.C. 1531-1543), the Bald and Golden Eagle Protection Act (16 U.S.C. 668-668d), the Migratory Bird Treaty Act (16 U.S.C. 703-712), and the Fish and Wildlife Coordination Act (16 U.S.C. 661 et seq.).

Threatened and Endangered Species

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and may be affected by your proposed project. The species list fulfills the requirement for obtaining a Technical Assistance Letter from the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

Consultation Technical Assistance

Refer to the Midwest Region <u>S7 Technical Assistance</u> website for step-by-step instructions for making species determinations and for specific guidance on the following types of projects: projects in developed areas, HUD, pipelines, buried utilities, telecommunications, and requests for a Conditional Letter of Map Revision (CLOMR) from FEMA.

Federally Listed Bat Species

Indiana bats, gray bats, and northern long-eared bats occur throughout Missouri and the information below may help in determining if your project may affect these species.

Gray bats - Gray bats roost in caves or mines year-round and use water features and forested riparian corridors for foraging and travel. If your project will impact caves, mines, associated riparian areas, or will involve tree removal around these features particularly within stream corridors, riparian areas, or associated upland woodlots gray bats could be affected.

Indiana and northern long-eared bats - These species hibernate in caves or mines only during the winter. In Missouri the hibernation season is considered to be November 1 to March 31. During the active season in Missouri (April 1 to October 31) they roost in forest and woodland habitats. Suitable summer habitat for Indiana bats and northern long-eared bats consists of a wide variety of forested/wooded habitats where they roost, forage, and travel and may also include some adjacent and interspersed non-forested habitats such as emergent wetlands and adjacent edges of agricultural fields, old fields and pastures. This includes forests and woodlots containing potential roosts (i.e., live trees and/or snags 5 inches diameter at breast height (dbh) for Indiana bat, and 3 inches dbh for northern long-eared bat, that have exfoliating bark, cracks, crevices, and/or hollows), as well as linear features such as fencerows, riparian forests, and other wooded corridors. These wooded areas may be dense or loose aggregates of trees with variable amounts of canopy closure. Tree species often include, but are not limited to, shellbark or shagbark hickory, white oak, cottonwood, and maple. Individual trees may be considered suitable habitat when they exhibit the characteristics of a potential roost tree and are located within 1,000 feet (305 meters) of other forested/wooded habitat. Northern long-eared bats have also been observed roosting in human-made structures, such as buildings, barns, bridges, and bat houses; therefore, these structures should also be considered potential summer habitat and evaluated for use by bats. If your project will impact caves or mines or will involve clearing forest or woodland habitat containing suitable roosting habitat, Indiana bats or northern long-eared bats could be affected.

Examples of <u>unsuitable</u> habitat include:

- Individual trees that are greater than 1,000 feet from forested or wooded areas;
- Trees found in highly-developed urban areas (e.g., street trees, downtown areas);
- A pure stand of less than 3-inch dbh trees that are not mixed with larger trees; and
- A stand of eastern red cedar shrubby vegetation with no potential roost trees.

Using the IPaC Official Species List to Make No Effect and May Affect Determinations for Listed Species

- 1. If IPaC returns a result of "There are no listed species found within the vicinity of the project," then project proponents can conclude the proposed activities will have **no effect** on any federally listed species under Service jurisdiction. Concurrence from the Service is not required for **No Effect** determinations. No further consultation or coordination is required. Attach this letter to the dated IPaC species list report for your records. An example "No Effect" document also can be found on the S7 Technical Assistance website.
- 2. If IPaC returns one or more federally listed, proposed, or candidate species as potentially present in the action area of the proposed project other than bats (see #3 below) then project proponents can conclude the proposed activities **may affect** those species. For assistance in determining if suitable habitat for listed, candidate, or proposed species occurs within your project area or if species may be affected by project activities, you can obtain Life History Information for Listed and Candidate Species through the S7 Technical Assistance website.
- 3. If IPac returns a result that one or more federally listed bat species (Indiana bat, northern long-eared bat, or gray bat) are potentially present in the action area of the proposed project, project proponents can conclude the proposed activities **may affect** these bat species **IF** one or more of the following activities are proposed:
 - a. Clearing or disturbing suitable roosting habitat, as defined above, at any time of year;
 - b. Any activity in or near the entrance to a cave or mine;
 - c. Mining, deep excavation, or underground work within 0.25 miles of a cave or mine;
 - d. Construction of one or more wind turbines: or
 - e. Demolition or reconstruction of human-made structures that are known to be used by bats based on observations of roosting bats, bats emerging at dusk, or guano deposits or stains.

If none of the above activities are proposed, project proponents can conclude the proposed activities will have **no effect** on listed bat species. Concurrence from the Service is not required for **No Effect** determinations. No further consultation or coordination is required. Attach this letter to the dated IPaC species list report for your records. An example "No Effect" document also can be found on the S7 Technical Assistance website.

If any of the above activities are proposed in areas where one or more bat species may be present, project proponents can conclude the proposed activities **may affect** one or more bat species. We recommend coordinating with the Service as early as possible during project planning. If your project will involve removal of over 5 acres of <u>suitable</u> forest or woodland habitat, we recommend you complete a Summer Habitat Assessment prior to contacting our office to expedite the consultation process. The Summer Habitat Assessment Form is available in Appendix A of the most recent version of the <u>Range-wide Indiana Bat Summer Survey</u> Guidelines.

Other Trust Resources and Activities

Bald and Golden Eagles - Although the bald eagle has been removed from the endangered species list, this species and the golden eagle are protected by the Bald and Golden Eagle Act and the Migratory Bird Treaty Act. Should bald or golden eagles occur within or near the project area please contact our office for further coordination. For communication and wind energy projects, please refer to additional guidelines below.

Migratory Birds - The Migratory Bird Treaty Act (MBTA) prohibits the taking, killing, possession, transportation, and importation of migratory birds, their eggs, parts, and nests, except when specifically authorized by the Service. The Service has the responsibility under the MBTA to proactively prevent the mortality of migratory birds whenever possible and we encourage implementation of recommendations that minimize potential impacts to migratory birds. Such measures include clearing forested habitat outside the nesting season (generally March 1 to August 31) or conducting nest surveys prior to clearing to avoid injury to eggs or nestlings.

Communication Towers - Construction of new communications towers (including radio, television, cellular, and microwave) creates a potentially significant impact on migratory birds, especially some 350 species of night-migrating birds. However, the Service has developed voluntary guidelines for minimizing impacts.

Transmission Lines - Migratory birds, especially large species with long wingspans, heavy bodies, and poor maneuverability can also collide with power lines. In addition, mortality can occur when birds, particularly hawks, eagles, kites, falcons, and owls, attempt to perch on uninsulated or unguarded power poles. To minimize these risks, please refer to guidelines developed by the Avian Power Line Interaction Committee and the Service. Implementation of these measures is especially important along sections of lines adjacent to wetlands or other areas that support large numbers of raptors and migratory birds.

Wind Energy - To minimize impacts to migratory birds and bats, wind energy projects should follow the Service's <u>Wind Energy Guidelines</u>. In addition, please refer to the Service's <u>Eagle Conservation Plan Guidance</u>, which provides guidance for conserving bald and golden eagles in the course of siting, constructing, and operating wind energy facilities.

Next Steps

Should you determine that project activities **may affect** any federally listed species or trust resources described herein, please contact our office for further coordination. Letters with requests for consultation or correspondence about your project should include the Consultation Tracking Number in the header. Electronic submission is preferred.

If you have not already done so, please contact the Missouri Department of Conservation (Policy Coordination, P. O. Box 180, Jefferson City, MO 65102) for information concerning Missouri Natural Communities and Species of Conservation Concern.

We appreciate your concern for threatened and endangered species. Please feel free to contact our office with questions or for additional information.

Karen Herrington

Attachment(s):

- Official Species List
- USFWS National Wildlife Refuges and Fish Hatcheries
- Wetlands

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Missouri Ecological Services Field Office

101 Park Deville Drive Suite A Columbia, MO 65203-0057 (573) 234-2132

This project's location is within the jurisdiction of multiple offices. Expect additional species list documents from the following office, and expect that the species and critical habitats in each document reflect only those that fall in the office's jurisdiction:

Illinois-Iowa Ecological Services Field Office

Illinois & Iowa Ecological Services Field Office 1511 47th Ave Moline, IL 61265-7022 (309) 757-5800

Project Summary

Consultation Code: 03E14000-2020-SLI-2963

Event Code: 03E14000-2020-E-07456

Project Name: Lock and Dam 22 Lower Dredging

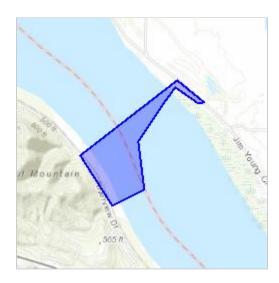
Project Type: DREDGE / EXCAVATION

Project Description: Rock Island District is required to dredge the Lock 22 lower dredge cut to

avoid an emergency channel closure of the Mississippi River.

Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/place/39.636711700440074N91.24604159774296W



Counties: Pike, IL | Ralls, MO

Endangered Species Act Species

Species profile: https://ecos.fws.gov/ecp/species/7162

There is a total of 7 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

1. <u>NOAA Fisheries</u>, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Mammals

NAME	STATUS
Gray Bat <i>Myotis grisescens</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/6329	Endangered
Indiana Bat <i>Myotis sodalis</i> There is final critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/5949	Endangered
Northern Long-eared Bat <i>Myotis septentrionalis</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9045	Threatened
Fishes	
NAME	STATUS
Pallid Sturgeon <i>Scaphirhynchus albus</i> No critical habitat has been designated for this species.	Endangered

07/28/2020 Event Code: 03E14000-2020-E-07456 4

Clams

NAME **STATUS** Endangered

Higgins Eye (pearlymussel) *Lampsilis higginsii*

No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/5428

Sheepnose Mussel *Plethobasus cyphyus* Endangered

No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/6903

Endangered Spectaclecase (mussel) Cumberlandia monodonta

No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/7867

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

USFWS National Wildlife Refuge Lands And Fish Hatcheries

Any activity proposed on lands managed by the <u>National Wildlife Refuge</u> system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS OR FISH HATCHERIES WITHIN YOUR PROJECT AREA.

Wetlands

Impacts to <u>NWI wetlands</u> and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local <u>U.S. Army Corps of Engineers District</u>.

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

LAKE

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DEPARTMENT OF THE ARMY

ROCK ISLAND DISTRICT, U.S. ARMY CORPS OF ENGINEERS CLOCK TOWER BUILDING - PO BOX 2004 ROCK ISLAND, ILLINOIS 61204-2004

August 14, 2020

Regional Planning and Environmental Division North (RPEDN)

SUBJECT: Coordination regarding emergency dredging and dredge material placement at Lock and Dam No. 22 Lower Dredge Cut, Pike County, Illinois, and Ralls County, Missouri (Mississippi River Mile 300-301; Pool 24).

SEE DISTRIBUTION LIST

The U.S. Army Corps of Engineers, Rock Island District (District), has completed emergency dredging (Missouri) and dredge material placement (Illinois) at Lock and Dam No. 22 Lower Dredge Cut. The emergency situation and time constraints prevented timely coordination prior to the emergency Project efforts (Enclosure 1).

An extended high water event on the Mississippi River caused significant shoaling within the 9-Foot Navigation Channel between Mississippi River Mile 300-301. Dredging is required to maintain the Upper Mississippi River 9-Foot Navigation Channel Project. The District identified 66,000 cubic yards to be removed at the Lock and Dam 22 Lower Dredge Cut in Pool 24 (Enclosure 2). It was determined that a thalweg placement would be preferred over use of the historic bankline placement to avoid impacts to biological resources. The dredged material will be placed in open water on the channel border immediately adjacent to the dredge cut, but channelward of the bankline.

Federal Undertaking

Pursuant to the National Historic Preservation Act (NHPA) of 1966, as amended, and its implementing regulations, 36 CFR Part 800, the District has determined that work at Lock and Dam 22 Lower Dredge Cut has potential to cause effects to a historic property [36 CFR 800.3(a)(1)] and as a consequence will require a determination of effect within the Area of Potential Effect (APE).

Area of Potential Effect

The Area of Potential Effect (APE) is located in Township 5S, Range 7W, Sections 17 and 18, west of New Canton, in Pike County, Illinois, and in Township 56N, Range 3W, Section 21 in Ralls County, Missouri (Enclosure 2). The APE encompasses 35 acres within the Mississippi River between river miles 300-301, downstream of Lock and Dam No. 22. The APE includes a dredge area of 15 acres on the Missouri side of the river and a dredge material placement area of 20 acres on the Illinois side of the river (Enclosure 2). The dredge and dredge material placement

locations are approximate and are based upon the dredge cut survey and the dredge's level of accuracy during Project activities.

Consulting Parties

The District finds the organizations identified on the Distribution List (Enclosure 3) are entitled to be consulting parties, as set out in 36 CFR 800.2, and invites them by copy of this letter to participate in the Section 106 process. The District invites the consulting parties to:

- identify any other consulting parties as per 36 CFR 800.3(f);
- comment as per 36 CFR 800.2(d)(3) on the District' plan to involve the public by utilizing the District' normal procedures for public involvement under the National Environmental Policy Act (NEPA); and,
- comment on or contribute to identification efforts including definition of the APE, all as per 36 CFR 800.4(a-b).

Historic Properties Identification

The District conducted an archival search for historic properties following the Policy and Procedures for the Conduct of Underwater Historic Resource Surveys for Maintenance Dredging and Corps Activities (DGL-89-01, March 1989). The District queried the most updated Illinois and Missouri Geographic Information Systems site file database and reviewed the report entitled *An Investigation of the Submerged Historic Properties in the Upper Mississippi River and Illinois Waterway*, dated October 1997 (Contract Number DACW25-93-D-0-012, Order No. 27). No submerged historic properties were identified in the dredge cut or dredge material placement locations for this Project.

Lock and Dam No. 22 Historic District, approximately 150m north of the APE, is listed on the National Register of Historic Places (Enclosure 2). No work will be completed within the historic district. There will be no direct or indirect effects on the Lock and Dam No. 22 Historic District as the work adjacent to the historic district is temporary.

Determination of Effect

The project involves dredging and dredge material placement to avoid closure of the 9-Foot Navigation Channel within the Mississippi River. The dredging and dredge material placement activities are within the open water of the Mississippi River. No historic properties (including submerged resources) are located within the APE. These activities will have no effect on historic properties, including Lock and Dam No. 22 Historic District. The District has determined that the Project will have no effect on historic properties within the APE, in accordance with 36 CFR 800.4(d)(1).



DEPARTMENT OF THE ARMY

ROCK ISLAND DISTRICT, CORPS OF ENGINEERS CLOCK TOWER BUILDING - P.O. BOX 2004 ROCK ISLAND, ILLINOIS 61204-2004

CEMVR-PD 3 August 2020

MEMORANDUM FOR RECORD

SUBJECT: Environmental Compliance for 2020 Emergency Dredging

- 1. The purpose of this memorandum is to document the need to perform critical dredging at 3 dredge cuts on the Upper Mississippi River prior to completing all environmental documentation. Dredging is required in order to maintain the Upper Mississippi River 9-Foot Navigation Channel Project
- 2. BACKGROUND: USACE procedures associated with implementing emergency actions prior to completion of environmental coordination are addressed in 33 Code of Federal Regulations (CFR) § 337.7 (discharge of dredged or fill material in waters of the U.S.) and 33 CFR § 230.8 (National Environmental Policy Act).
- 3. JUSTIFICATION: A high water event on the Mississippi River has caused significant shoaling within the 9-Foot Navigation Channel in the District's AOR. Water levels are falling, and actual depths within the District are at or below nine feet. Water levels are projected to continue to fall over the next several weeks and shoaling continues at these sites. The District has identified 25 remaining dredging locations. The number of dredging locations and cumulative volume of material is significantly greater than historical amounts. Of those 25 locations, all but three have adequate existing placement sites. The remaining three dredging locations have existing placement sites that have either been fully utilized by other area dredging or are inadequate for other reasons to support the necessary dredging required. With water levels continuing to fall, the District anticipates these areas are likely to result in channel closure without channel maintenance dredging.
- 4. Following is a description of the three dredge cuts which need new placement sites to perform the necessary dredging at to maintain the 9-Foot Navigation Channel Project. The District has initiated environmental coordination with Federal and State agencies but has not completed all environmental compliance requirements for these sites. The District intends to satisfy as many requirements before dredging as possible, but channel conditions may require some requirements be met after-the-fact.
- a. LOCK 22 LOWER DREDGE CUT, POOL 24, RIVER MILE 300.6: The District has identified approximately 66,100 cubic yards to be removed at the Lock and Dam 22 Lower in Pool 24. The shoal has developed downstream of the lock approach. As water levels continue to recede, it will make the approach challenging, if not impassable. This cut has averaged about 8,300 cubic yards per job over the past 20 years. No dredging has been required at this location since 2014. The On-Site Inspection Team (OSIT) had a phone-call on 10 July 2020 to discuss the use of historic placement sites adjacent to

SUBJECT: Environmental Compliance for 2020 Emergency Dredging

the cut, one each along the Illinois and Missouri banklines. The OSIT consists of federal and state agencies members that have regulatory or management responsibilities within the action area. The OSIT identified significant mussel resources at both of these sites that do not allow for further use of these placement sites. Coordination with the OSIT is ongoing to identify an acceptable placement site.

- b. DEADMAN'S LIGHT DREDGE CUT, POOL 12 RIVER MILE 568.4 and 567.8: The District has identified 38,600 cubic yards to be removed at the Deadman's Light Dredge Cut in Pool 12. No dredging has been required at this location since 1969. The OSIT provided a recommended placement location, although this placement site does not have current environmental clearances.
- c. DUCK CREEK DREDGE CUT, POOL 13 RIVER MILE 554.4: The District has identified 12,600 cubic yards to be removed at Duck Creek Dredge Cut in Pool 13. No dredging has been required at this location since 1962. The OSIT provided a recommended placement location, although this placement site does not have current environmental clearances.
- 5. DETERMINATION: Based on the information detailed above, I have determined the Rock Island District Dredging Emergency Response on the Mississippi River identified in this Memorandum to be an emergency situation pursuant to 33 CFR 337.7 and 33 CFR 230.8 as immediate work necessary to prevent and reduce the imminent risk. The District intends to satisfy as many necessary environmental compliance requirements as possible prior to dredging. The District will prepare any remaining required environmental coordination after the emergency dredging action has been completed. This Memorandum shall be kept in project files.

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L.1164506939 Date: 2020.08.03
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STEVEN M. SATTINGER COL, EN Commanding

CF:

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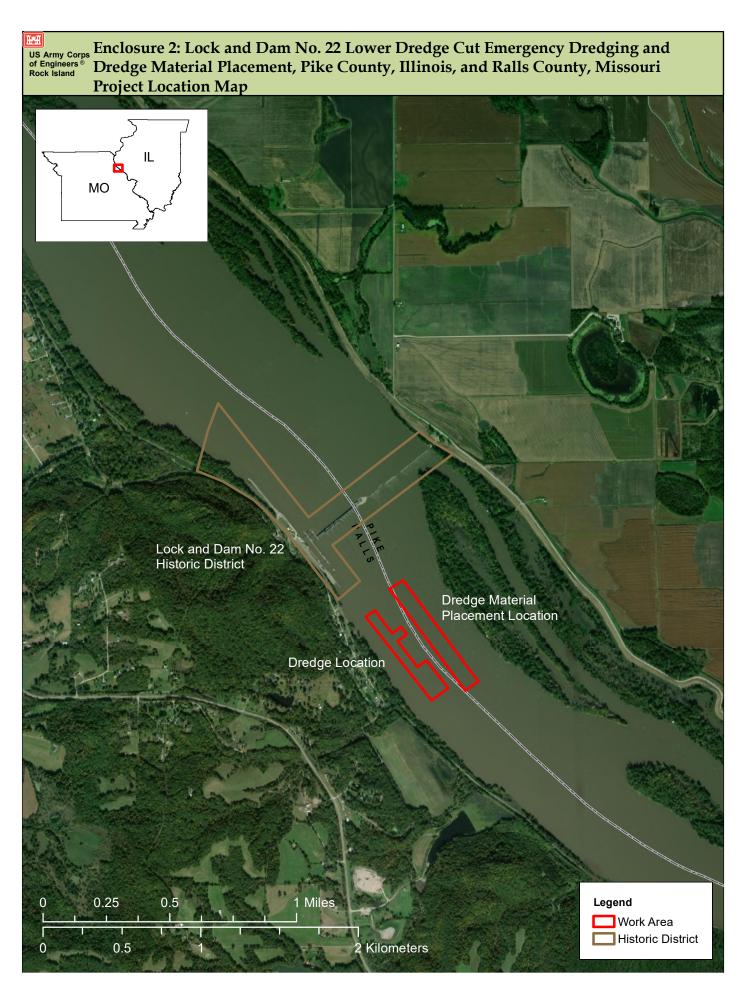
CEMVR-XO

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CEMVR-OD

CEMVR-RE

CEMVR-OC



ENCLOSURE 5b

Enclosure 3

Distribution List

Citizen Potawatomi Nation

Dr. Kelli Mosteller, THPO 1601 S Gordon Cooper Drive Shawnee OK 74801

Forest County Potawatomi Community

Mr. Michael LaRonge, THPO 5320 Wensaut Ln. P.O. Box 340 Crandon, WI 54520

Ho-Chunk Nation

Mr. Bill Quackenbush, THPO PO Box 667 Black River Falls, WI 54615

Iowa Tribe of Kansas and Nebraska

Mr. Lance Foster, THPO 3345 B Thrasher Rd. White Cloud, KS 66094

Iowa Tribe of Oklahoma

Mr. Eagle McClellan, Cultural Preservation Director 335588 E. 750 Rd. Perkins, OK 74059

Kaw Nation

Ms. Crystal Douglas, THPO Drawer 50 Kaw City, OK 74641

Kickapoo Tribe in Kansas

Mr. Curtis Simon, NAGPRA Director 1107 Goldfinch Rd Horton, KS 66439

Kickapoo Tribe of Oklahoma

Mr. Kent Collier, NAGPRA Coordinator PO Box 70 Mcloud, OK 74851

Menominee Indian Tribe of Wisconsin

Mr. David J. Grignon, THPO W2908 Tribal Office Loop Road P.O. Box 910 Keshena, WI 54135-0910

Meskwaki Nation

Mr. Johnathan Buffalo Director, Historic Preservation Department 303 Meskwaki Road Tama, IA 52339

Miami Tribe of Oklahoma

Ms. Diane Hunter, THPO P.O. Box 1326 Miami, OK 74355

Omaha Tribe of Nebraska

Mr. Thomas Parker, THPO PO Box 368 Macy, NE 68039

Osage Nation

Ms. Colleen Bell, Archaeologist 627 Grandview Pawhuska, OK 74056

Otoe-Missouria Tribe

Ms. Elsie Whitehorn, THPO 8151 Hwy 177 Red Rock OK 74651

Peoria Tribe of Indians of Oklahoma

Mr. Logan Pappenfort, THPO P.O. Box 1527 Miami, OK 74355

Ponca Nation

Ms. Halona Cabe, THPO 20 White Eagle Dr. Ponca City, OK 74601

Ponca Tribe of Nebraska

Mr. Nick Mauro, THPO PO Box 288 Niobrara, NE 68760

Prairie Band Potawatomi Nation

Ms. Hattie Mitchell, NAGPRA Representative 16281 Q Road Mayetta, KS 66509

Prairie Island Indian Community

Mr. Noah White, THPO 5636 Sturgeon Lake Road Welch, MN 55089

Sac & Fox Nation of Missouri in Kansas & Nebraska

The Honorable Tiauna Carnes, Chairperson 305 North Main Street Reserve, KS 66434

Sac and Fox Nation of Oklahoma

Chris Boyd, NAGPRA Coordinator 920883 S Hwy 99, Admin Bldg A Stroud, OK 74079

Upper Sioux Community, Minnesota

Ms. Samantha Odegard, THPO P.O. Box 147 Granite Falls, MN

Illinois State Historic Preservation Officer

Old State Capitol Building One Old State Capitol Plaza Springfield, Illinois 62701

Missouri State Historic Preservation Officer

Dr. Toni Prawl P.O. Box 176 Jefferson City, MO 65102



Illinois Department of **Natural Resources**

JB Pritzker, Governor

Colleen Callahan, Director

www.dnr.illinois.gov

Mailing address: State Historic Preservation Office, 1 Old State Capitol Plaza, Springfield, IL 62701

Pike County

PLEASE REFER TO:

SHPO LOG #001081720

New Canton

Mississippi River mile 300-301, Pool 24

Section:17-Township:5S-Range:7W, Section:18-Township:5S-Range:7W

COERI

Emergency dredging & dredge material placement - Lock and Dam No. 22

August 17, 2020

Christine Nycz
Department of the Army
Corps of Engineers, Rock Island District
Clock Tower Building
P.O. Box 2004
Rock Island, IL 61204-2004

Dear Ms. Nycz:

We have reviewed the documentation submitted for the referenced project(s) in accordance with 36 CFR Part 800.4. Based upon the information provided, no historic properties are affected. We, therefore, have no objection to the undertaking proceeding as planned.

Please retain this letter in your files as evidence of compliance with section 106 of the National Historic Preservation Act of 1966, as amended. This clearance remains in effect for two (2) years from date of issuance. It does not pertain to any discovery during construction, nor is it a clearance for purposes of the Illinois Human Skeletal Remains Protection Act (20 ILCS 3440).

If you are an applicant, please submit a copy of this letter to the state or federal agency from which you obtain any permit, license, grant, or other assistance. If further assistance is needed contact Jeff Kruchten, Chief Archaeologist at 217/785-1279 or Jeffery.kruchten@illinois.gov.

Sincerely,

Robert F. Appleman Deputy State Historic

Preservation Officer

Bout J. appl

CULTURAL RESOURCE ASSESSMENT Section 106 Review

CONTACT PE	RSON/ADDRESS:	C:		
Attn: Steven M	uilding – Post Office Box 2004			
PROJECT:				
2020 Emergency Dredging and Placement of Material at Lock and Dam no. 22				
FEDERAL AG		COUNTY:		
USACE - Roc	k Island District	Ralls		
The State Historic Preservation Office has reviewed the information submitted on the above referenced project. Based on this review, we have made the following determination:				
X	Adequate documentation has been provided as outlined in the initial submission, the project area has no known historist the occurrence of cultural resources. We concur Properties Affected.	pric properties present and a low potential		
	An adequate cultural resource survey of the project therefore, SHPO concurs with your determination of No I	area has been previously conducted; listoric Properties Affected.		
	An adequate cultural resource survey has been conducted for this project titled, , by . Based on this survey and its negative findings, SHPO concurs with your determination of No Historic Properties Affected.			
For the above checked reason, the State Historic Preservation Office has no objection to the initiation of project activities. PLEASE BE ADVISED THAT, IF THE CURRENT PROJECT AREA OR SCOPE OF WORK CHANGES, A BORROW AREA IS INCLUDED IN THE PROJECT, OR CULTURAL MATERIALS ARE ENCOUNTERED DURING CONSTRUCTION, APPROPRIATE INFORMATION MUST BE PROVIDED TO THIS OFFICE FOR FURTHER REVIEW AND COMMENT. Please retain this documentation as evidence of compliance with Section 106 of the National Historic Preservation Act, as amended.				
By: 16	the for	September 14, 2020		

MISSOURI DEPARTMENT OF NATURAL RESOURCES
STATE HISTORIC PRESERVATION OFFICE
P.O. Box 176, Jefferson City, Missouri 65102
For additional information, please contact Amy Rubingh, (573) 751-4589.

Please be sure to refer to the project number: 013-RA-20

Toni M. Prawl, Ph.D., Deputy State Historic Preservation Officer

Date

From: Hoster, Bethany E CIV USARMY CEMVP (USA)

To: <u>kraig mcpeel</u>

Cc: <u>Travis.Moore</u>; <u>Schmuecker, Sara 1</u>;

Creswell, Jodi K CIV USARMY CEMVP (US)

Subject: Lock and Dam 22 Lower Emergency Dredging
Date: Tuesday, August 11, 2020 4:33:00 PM
Attachments: FW OSIT Cottel Island INAL.msg

Illinois Species List.pdf

LD 22 Lower Proposed Placement.JPG PlacementSiteDepthProfile.PDF DredgeCutDepthProfile.pdf

2020 07-10 LD 22 Lower Hydraulic Dredge Event OSIT Conf Call.pdf

MVR Emergency Declaration 03Aug2020.pdf

Kraig,

FYSA

Rock Island District will begin emergency dredging at the Lock and Dam 22 Lower Dredge Cut in Pool 24 the week of 10 August 2020 to avoid a channel closure. This action is part of an emergency signed by the Rock Island District Commander on 3 August 2020 (see attached Emergency Declaration). On 10 July 2020, the OSIT determined a thalweg placement option would be preferred over use of historic bankline placement sites to avoid impacts to mussel resources.

- 1. An extended high water event on the Mississippi River caused significant shoaling within the 9-Foot Navigation Channel in Rock Island District's AOR. Dredging is required in order to maintain the Upper Mississippi River 9-Foot Navigation Channel Project. The District identified 66,000 cubic yards to be removed at the Lock and Dam 22 Lower Dredge Cut in Pool 24, between RM 300-301 (see attached map). The historic placement sites for this dredge cut is not feasible due to known mussel resources. Due to limitations of the Dredge Potter, a standard thalweg placement is also not feasible. The preferred placement location is the channel border area immediately adjacent to the dredge cut, but channelward of the bankline (see attached map).
- 2. The emergency situation and time constraints prevent completion of NEPA documentation prior to accomplishment of the emergency work. Engineering Regulation 200-2-2, Environmental Quality, Procedures for Implementing the National Environmental Policy Act (NEPA), provides in paragraph 8 (Emergency Actions), for District Commanders to respond to emergency situations to prevent or reduce imminent risk of life, health, property, or severe economic losses without first preparing specific documentation. While Rock Island District worked to satisfy as many environmental compliance requirements as possible before dredging, any remaining NEPA documentation for this emergency action will be accomplished after the completion of emergency work, as appropriate.
- 3. On 6 August 2020, the Illinois Department of Natural Resources visited the Lock and Dam 22 Lower Dredge Cut to assess mussel resources at two potential dredged material placement locations. Due to limitations with the Dredge Potter, the preferred placement location is the channel border area immediately adjacent to the dredge cut, but channelward of the bankline. Illinois DNR conducted a dive survey at this location and did not find any mussels at the placement site. Illinois DNR also conducted a pollywog survey along the bankline of Browns Island. 58 total mussels comprising 8 species were collected and no federal or state listed species were collected.

- 4. Endangered Species Act. The Official Species List can be found attached. Illinois DNR did not collect any mussels at the preferred dredged material placement location. Illinois DNR noted that strong currents and deep water in the area did not provide suitable habitat for mussels. Due to lack of suitable habitat in the project area for all listed species, the District determined there would be no effect to threatened or endangered species. These determinations will be further documented in the Environmental Assessment. While the USFWS is under no obligation to respond to this email, we welcome any comments, concerns, or new information that may change our determination.
- 5. Coordination will remain ongoing as Rock Island District works to prepare all necessary NEPA documentation for this emergency work.
- 6. Please let me know if you have any comments or concerns relative to the ESA or FWCA.

Thank you,

Bethany

Bethany Hoster
Biologist
Environmental Compliance
USACE-RPEDN- Rock Island

309-794-5256

From: McPeek, Kraig

To: Hoster, Bethany E CIV USARMY CEMVP (USA)

Cc: ; Schmuecker, Sara J; Creswell, Jodi K

CIV USARMY CEMVP (US)

Subject: [Non-DoD Source] Re: [EXTERNAL] Lock and Dam 22 Lower Emergency Dredging

Date: Thursday, August 13, 2020 12:53:20 PM

Hey Bethany,

Thank you for your continued coordination. The FWS has no objection to the project as proposed. Thanks

Kraig McPeek Project Leader Illinois & Iowa ES Field Office 309-757-5800 x202

US FWS 1511 47th Avenue Moline, IL 61265

One thorn of experience is worth a whole wilderness of warning- James Russell Lowell $<2/,\}\}\}\}\}=<\{$ $<2/,\}\}\}\}\}=<\{$

From: Hoster, Bethany E CIV USARMY CEMVP (USA)

Sent: Tuesday, August 11, 2020 4:35 PM

To: McPeek, Kraig

Cc: Bradley.Hayes
Schmuecker, Sara J
; Creswell, Jodi K CIV USARMY CEMVP (US)

Subject: [EXTERNAL] Lock and Dam 22 Lower Emergency Dredging

This email has been received from outside of DOI - Use caution before clicking on links, opening attachments, or responding.

Kraig,

FYSA

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Bethany

Bethany Hoster Biologist Environmental Compliance USACE-RPEDN- Rock Island

309-794-5256



Miami Tribe of Oklahoma

3410 P St. NW, Miami, OK 74354 ● P.O. Box 1326, Miami, OK 74355 Ph: (918) 541-1300 ● Fax: (918) 542-7260 www.miamination.com



Via email: christine.a.nycz@usace.army.mil

September 11, 2020

Christine Nycz, Environmental Compliance U.S. Army Corps of Engineers Rock Island District Clock Tower Building P.O. Box 2004 Rock Island, IL 61204

Re: Emergency dredging and dredge material placement at Lock and Dam No. 22 Lower Dredge Cut, Pike County, Illinois, and Ralls County, Missouri – Comments of the Miami Tribe of Oklahoma

Dear Ms. Nycz:

Aya, kikwehsitoole – I show you respect. The Miami Tribe of Oklahoma, a federally recognized Indian tribe with a Constitution ratified in 1939 under the Oklahoma Indian Welfare Act of 1936, respectfully submits the following comments regarding emergency dredging and dredge material placement at Lock and Dam No. 22 Lower Dredge Cut in Pike County, Illinois, and Ralls County, Missouri.

The Miami Tribe offers no objection to the above-referenced project at this time, as we are not currently aware of existing documentation directly linking a specific Miami cultural or historic site to the project site. However, given the Miami Tribe's deep and enduring relationship to its historic lands and cultural property within present-day Missouri and Illinois, if any human remains or Native American cultural items falling under the Native American Graves Protection and Repatriation Act (NAGPRA) or archaeological evidence is discovered during any phase of this project, the Miami Tribe requests immediate consultation with the entity of jurisdiction for the location of discovery. In such a case, please contact me at to initiate consultation.

The Miami Tribe accepts the invitation to serve as a consulting party to the proposed project. In my capacity as Tribal Historic Preservation Officer I am the point of contact for consultation.

Respectfully,

Diane Hunter

Diano Hunter

Tribal Historic Preservation Officer

EMERGENCY DREDGING LOCK AND DAM 22 LOWER DREDGE CUT MISSISSIPPI RIVER, POOL 24 RIVER MILES 300.0 TO 301.0

ENVIRONMENTAL ASSESSMENT

APPENDIX C

DISTRIBUTION LIST

LEGISLATIVE

Federal

Josh Hawley US Senator for Missouri Roy Blunt US Senator for Missouri

Sam Graves US Representative, Missouri 2nd District

Tammy Duckworth US Senator for Illinois Richard Durbin US Senator for Illinois

Darrin LaHood US Representative, Illinois 18th District

Missouri

Mike Parson Governor of the State of Missouri
Cindy O'Laughlin Senator Missouri Senate District 18

Chad Perkins Representative District 40

Illinois

J. B. Pritzker Governor of the State of Illinois
Steve McClure Senator Illinois Senate District 50
C.D. Davidsmeyer Representative District 100

SHPO/TRIBAL

Dr. Kelli Mosteller THPO Citizen Potawatomi Nation

Mr. Michael LaRonge THPO Forest County Potawatomi Community

Mr. Bill Quackenbush THPO Ho-Chunk Nation

Mr. Lance Foster THPO Iowa Tribe of Kansas and Nebraska

Mr. Eagle McClellan Cultural Preservation Director Iowa Tribe of Oklahoma

Mr. Curtis Simon NAGPRA Director, Kickapoo Tribe in Kansas

Ms. Crystal Douglas THPO, Kaw Nation

Mr. Lester Randall Chairman, Kickapoo Tribe in Kansas

Mr. Kent Collier NAGPRA Coordinator Kickapoo Tribe of Oklahoma Mr. David J. Grignon THPO, Menominee Indian Tribe of Wisconsin

Mr. Johnathan Buffalo Director, Historic Preservation Department Meskwaki Nation

Ms. Diane Hunter

Mr. Thomas Parker

Ms. Colleen Bell

Mr. Jess Hendrix

THPO Miami Tribe of Oklahoma

THPO Omaha Tribe of Nebraska

Archaeologist, Osage Nation

Archaeologist, Osage Nation

Ms. Courtney Neff Historic Preservation, Osage Nation

Ms. Elsie Whitehorn THPO Otoe-Missouria Tribe

Mr. Logan Pappenfort THPO Peoria Tribe of Indians of Oklahoma

Ms. Liana Hesler THPO, Ponca Nation

Mr. Nicholas Mauro THPO Ponca Tribe of Nebraska

Ms. Hattie Mitchell NAGPRA Representative Prairie Band Potawatomi Nation

Mr. Noah White THPO Prairie Island Indian Community

The Honorable Tiauna Carnes Chairperson, Sac & Fox Nation of Missouri in Kansas

Mr. Chris Boyd NAGPRA Coordinator, Sac and Fox Nation of Oklahoma

Ms. Samantha Odegard THPO Upper Sioux Community, Minnesota

Dr. Toni Prawl Mr. Jeff Kruchten Missouri State Historic Preservation Office Illinois State Historic Preservation Officer

FEDERAL AGENCIES

Kathy Fields Regional Director, Acting, FEMA. Reg VII

Supervisor US Coast Guard, Marine Safety Detachment, Quad Cities

Mr. Kenneth Westlake U.S. EPA, Region 5

Kathy Kowal NEPA Implementation Section USEPA Region 5 NEPA Implementation Section USEPA Region 7 Joe Summerlin NEPA Implementation Section USEPA Region 7 Joshua Tapp Kraig McPeek Project Director Illinois Iowa Field Office, USFWS

Sara Schmuecker On-Site Inspection Team Co-Chair Tyler Porter Illinois Iowa Field Office, USFWS

Matt Mangan Marion, Illinois Ecological Services Office, USFWS Branden Leay Villalona

Director, Inland Waterways, United States Department of

Transportation, Maritime Administration

US Army Corps of Engineers, St. Louis District Lance Engle

STATE AGENCIES

Missouri

Travis Moore Missouri Department of Conservation Missouri Department of Conservation Matt Vitello Missouri Department of Conservation Ross Dames Dru Buntun Missouri Department of Conservation

Illinois

Colleen Callahan Director Illinois Department of Natural Resources

Chief Floodplains, Illinois Department of Natural Resources Steve Altman, P.E. Chief State-listed species, Illinois Department of Natural Keith Shank

Al Keller IL EPA Manager, Permit Sect. 15 (401), Il Dept. of Nat.

Resources

Resources

Kevin Irons Illinois Department of Natural Resources Kevin Oller Illinois Department of Natural Resources Rob Maher Illinois Department of Natural Resources Tim Krumwiede Illinois Department of Natural Resources Illinois Department of Natural Resources Nathan Grider

Brad Hayes Office of Realty and Env Planning Illinois Dept of Nat

Resources

Rob Hilsabeck Illinois Department of Natural Resources Illinois Department of Natural Resources Matt O'Hara William Milner Illinois Department of Natural Resources Darren Gove Facility Evaluation Unit Illinois EPA

lowa

Kirk Hansen Iowa Department of Natural Resources

COUNTIES

Ralls County Missouri

Eric Murfin Emergency Management Ralls County

Pike County, Illinois

Jim Sheppard County Board Chairman, Pike County

Chris Johnson County Engineer, Pike County

Joshua Martin Emergency Management Pike County

INTERESTED PARTIES

Kirsten Wallace Executive Director Upper Mississippi River Basin Association

Gretchen Benjamin The Nature Conservancy

Casey Herschler River Industry Action Committee

MEDIA OUTLETS