

From: [Phillips, Janelle \[KDA\]](#)
To: [Shively, Matthew S CIV USARMY CENWK \(USA\)](#)
Subject: [Non-DoD Source] NWK-2011-00363
Date: Friday, March 20, 2020 8:19:21 AM

Matthew –

All dredgers on the Missouri River must follow Kansas State Statute 70a-101 through 116 and any conditions of existing permits issued by the Kansas Department of Agriculture Division of Water Resources.

Janelle Phillips, P.E., CFM

Stream Obstruction Team Lead

Water Structures Program

Division of Water Resources

Kansas Department of Agriculture

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KSR&C No. 20-03-142
April 14, 2020

Matthew Shively
US Army Corps of Engineers
Via E-Mail

RE: Dredging Permit Renewal
Missouri River Commercial Dredgers
Doniphan, Atchison, Leavenworth, and Wyandotte Counties

In accordance with 36 CFR 800, the Kansas State Historic Preservation Office has reviewed the Missouri River dredging permit renewal request as submitted on March 20, 2020. As previously indicated in comments relating to similar projects on both the Kansas and Missouri Rivers, channel degradation and its associated impacts to cultural resources (primarily through tributary head cutting) is our main concern when dredging is under consideration. In this case, it is our understanding that channel degradation will not substantively change beyond those limits agreed to earlier. Our office therefore has no objection to the renewal of the dredging permits.

If you have questions or need additional information regarding these comments, please contact Tim Weston at 785-272-8681 (ext. 214) or Lauren Jones at 785-272-8681 (ext. 225).

Sincerely,

Jennie Chinn, Executive Director and
State Historic Preservation Officer



Patrick Zollner
Deputy SHPO

From: [Conger, Patricia](#)
To: [Shively, Matthew S CIV USARMY CENWK \(USA\)](#)
Cc: ["Trisha_Crabill@fws.gov"](#); ["Kaitlyn_Kelly@fws.gov"](#); ["Iwona_Kuczynska@fws.gov"](#); [USEPA Region 7](#); [Thorne, David](#); [Campbell-Allison, Jennifer](#); [Miller, Stuart](#); [Beres, Audrey](#); [Vitello, Matt](#); [Mitchell, Leigh](#); [Franklin, Dorothy](#); [Foott, Amber](#); [Spangler, Stacey](#); [Bryan Hopkins](#); [Horton, John](#); [Shulse, Christopher](#); [Lepper, Erin](#); [Hackett, Billy](#); [Irwin, Mike](#); [Bax, Stacia](#); [Son, Vicky](#); [Libbert, Danielle](#)
Subject: [Non-DoD Source] RE: Missouri River Commercial Dredgers
Date: Thursday, April 30, 2020 2:50:56 PM

RE: Capital Sand Company, Inc., 2011-00361/CEK006761/CES002561; Hermann Sand & Gravel, Inc., 2011-00362/CEK006763; Holliday Sand & Gravel Company, 2011-00363/CEK006762; Con-Agg of Missouri, LLC, 2011-00364/CEK006764; Limited Leasing Company, 2011-00177/P-2788/CES002563; J.T.R., Inc., 2011-00178/P-2789/CES002566

The Missouri Department of Natural Resources' Water Protection Program has reviewed the Public Notice for Capital Sand Company, Inc., 2011-00361; Hermann Sand & Gravel, Inc., 2011-00362; Holliday Sand & Gravel Company, 2011-00363; Con-Agg of Missouri, LLC, 2011-00364; Limited Leasing Company, 2011-00177; and J.T.R., Inc., 2011-00178 in which the applicants are proposing permit reauthorization for commercial sand and gravel dredging within five predefined segments of the Lower Missouri River between St. Louis, Missouri, and Rulo, Nebraska. If reauthorized the permits would authorize dredging for a period of five years.

The regulated activities consist of the hydraulic removal of sediment from the riverbed and the return discharge of processed material to the river. Capital Sand Company, Inc. is requesting an increase of authorized tonnage in the Jefferson City and the Waverly river segments. Hermann Sand and Gravel Company is requesting an increase of authorized tonnage in the St. Charles and the Jefferson City river segments. All other applicants are requesting a continuation of the previously authorized tonnages. The St. Charles, Jefferson City, and Waverly river segments will have an increase in annual tonnages if approved, and the Kansas City and St. Joseph river segments will have a continuation of the previously authorized tonnages. Table A shows the currently authorized tonnages per segment and the requested authorized tonnages per segment for each applicant and river segment.

The river segments locations are defined by the following River Miles (RM) on the Missouri River: St. Joseph Segment RM 391 - RM 498; Kansas City Segment RM 357 - RM 391; Waverly Segment RM 250 - RM 357; Jefferson City Segment RM 130 - RM 250; and St. Charles Segment RM 0 - RM 130.

Table A: MISSOURI RIVER COMMERCIAL DREDGING TONNAGE AND SEGMENTS

Application Number,

Applicant Name and Address

River Segment

2015 Annual Tons Authorized

2020 Annual Tons Requested

NWK 2011-00361

Capital Sand Company, Inc.

Post Office Box 104990

Jefferson City, MO 65110

St. Charles

140,000

140,000

Jefferson City

1,350,000

1,450,000

Waverly

2016 - 370,000

2017 - 452,500

2018 - 535,000

2019 - 617,500

2020 - 700,000

2021 - 782,500

2022 - 865,000

2023 - 947,500

2024 - 1,030,000

2025 - 1,112,000

NWK 2011-00362

Hermann Sand and Gravel; Inc.

Post Office Box 261

Hermann, MO 65041

St. Charles

120,000

144,000

Jefferson City

120,000

144,000

NWK 2011-00363

Holliday Sand and Gravel Co.

P.O. Box 23910

Overland Park, KS 66238

Waverly

2016 - 870,000

2017 - 950, 00

2018 - 1,020,000

2019 - 1,078,000

2020 - 1,078,000

1,078,000

Kansas City

540,000

540,000

St. Joseph

330,000

330,000

NWK 2011-00364

Con-Agg of MO, L.L.C.

2604 North Stadium Blvd.

Columbia, MO 65202

Jefferson City

160,000

160,000

MVS 2011-00177 (P-2788)

Limited Leasing Company

1777 Highway 79 South

Old Monroe, MO 63369

St. Charles

990,000

990,000

MVS 2011-00178 (P-2789)

J.T.R. Inc. (Jotori Dredging)

2320 Creve Coeur Mill Road

Maryland Heights, MO 63043

St. Charles

460,000

460,000

The Department offers the following comments:

1. Dredging activities should not cause the general or numeric criteria to be exceeded nor impair designated uses established in Missouri Water Quality Standards, 10 CSR 20-7.031.

2. Unwanted dredged material and river water extracted from only the Missouri River may be placed back into the Missouri River. The applicant should not dispose of waste materials, water, or garbage below the ordinary high water mark of any other water body, in a wetland area, or at any location where the materials could be introduced into the water body or an adjacent wetland as a result of runoff, flooding, wind, or other natural forces.

3. To reduce the likelihood of concentrating silt and sand within a single location in the Missouri River, materials shall be deposited as evenly as possible.

4. Operations in the Missouri River should be conducted in a manner that does not cause unreasonable interference to navigation or changes in approaches for other terminals. This includes the effects of displaced sediment caused by the operation.

5. Sand, gravel, or other dredged materials shall not be stockpiled within the channel, placed against the banks, or otherwise disposed of in a manner that will redirect erosive forces within the channel or threaten the stability of the channel or the bank lines.

6. No berms or other elevated structures shall be created by the excavated materials in the project location that would affect the connectivity of the river to its floodplain, except in those locations where existing structures may need repairs based on their pre-flood designs.
7. Dredging activities should not accelerate bed or bank erosion except where modeled and authorized. Streambed gradient and banks should not be adversely altered as part of this authorization.
8. The quality of downstream water supplies should not be adversely affected by this project. Any water supply intakes or other activities, which may be affected by suspended solids and turbidity increases caused by work in the watercourse, should be investigated and sufficient notice given to the owners to allow preparation for any changes in water quality. The Department's Water Protection Program's Public Drinking Water Branch may be contacted by phone at 573-526-0269 for the presence of such supplies.
9. Alternatives found in the National Environmental Policy Act documentation demonstrates compliance with Missouri Antidegradation requirements regarding alternatives. The Final Environmental Impact Statement and issued Record of Decision for commercial dredging activities on the Missouri River and the supplemental Environmental Assessment for the Waverly Segment document environmental impacts and contain certain tonnage and locale restrictions on dredging in addition to a monitoring program and adaptive management framework to limit dredging related impacts.
10. Antidegradation requirements dictate all appropriate and reasonable Best Management Practices (BMPs) related to erosion and sediment control and prevention of water quality degradation are applied and maintained; for example, good housekeeping practices and operational controls. BMPs should be properly installed prior to conducting authorized activities and maintained, repaired, and/or replaced as needed during all phases of the project to limit the amount of discharge of water contaminants to waters of the state. The project should not involve more than normal stormwater or incidental loading of sediment caused by project activities so as to comply with Missouri's general water quality criteria [10 CSR 20-7.031(4) on Page 15 at [Blockedhttp://www.sos.mo.gov/cmsimages/adrules/csr/current/10csr/10c20-7a.pdf](http://www.sos.mo.gov/cmsimages/adrules/csr/current/10csr/10c20-7a.pdf) <[Blockedhttp://www.sos.mo.gov/cmsimages/adrules/csr/current/10csr/10c20-7a.pdf](http://www.sos.mo.gov/cmsimages/adrules/csr/current/10csr/10c20-7a.pdf)>].
11. All precautions should be taken to avoid the release of wastes or fuel to streams and other adjacent waters as a result of this operation. Petroleum products spilled into any water or on the banks where the material may enter waters of the state should be immediately cleaned up and disposed of properly. Any such spills of petroleum should be reported as soon as possible, but no later than 24 hours after discovery to the Department's Environmental Emergency Response phone line at 573-634-2436 or website at [Blockedhttp://dnr.mo.gov/env/esp/esp-eer.htm](http://dnr.mo.gov/env/esp/esp-eer.htm) <[Blockedhttp://dnr.mo.gov/env/esp/esp-eer.htm](http://dnr.mo.gov/env/esp/esp-eer.htm)> .
12. The Department reserves the right to reopen review should cumulative impacts of more than one operation or impacts of any single operation on any water body have detrimental effects on water quality or aquatic habitat. This could include revocation of a WQC for any operation that has a detrimental effect on water quality.
13. Acquisition of a WQC should not be construed or interpreted to imply the requirements for other permits are

replaced or superseded, including Clean Water Act Section 402 National Pollutant Discharge Elimination System Permits. Permits or any other requirements should remain in effect. If the activity includes piling dredged material on land, the applicant may need a general permit for return water and stormwater from the dredged material. All terms for compliance with the general permit would be incorporated into the WQC. Information regarding permit requirements and applications may be directed to the Department's appropriate regional office. A map of regional offices can be found at [Blockedhttps://dnr.mo.gov/regions/](https://dnr.mo.gov/regions/).

14. Dredging should not adversely impact aquatic habitat and/or mussel beds, particularly breeding and rearing areas for endangered, rare, or threatened species. The proposed project could encounter sites of conservation concern, including those that have not been recorded or previously reported. If not already done, please visit the following to determine the potential for species of concern within or near a project:

* Missouri Department of Conservation's (MDC) "Natural Heritage Review" website at [Blockedhttp://mdcgis.mdc.mo.gov/heritage/newheritage/heritage.htm](http://mdcgis.mdc.mo.gov/heritage/newheritage/heritage.htm), and

* U.S. Fish and Wildlife Service's (USFWS) "Information, Planning and Conservation" website at [Blockedhttp://ecos.fws.gov/ipac/](http://ecos.fws.gov/ipac/).

If the proposed project encounters and will potentially affect a species of concern, please report it to MDC and USFWS.

15. All other commenting parties' comments and the applicant's response to those comments should be sent by email at wpsc401cert@dnr.mo.gov <<mailto:wpsc401cert@dnr.mo.gov>> or to the address below. Consideration for WQC cannot be made until all comments and responses have been received. If the applicants do not address concerns prior to May 18, 2020, with adequate time for the Department to review and make a decision on the request for certification, the Department will ask for an extension of its statutory review timeframe of 60 days.

Thank you for the opportunity to comment on the proposed project. You may send responses to comments and other requested information electronically to the Stormwater and Certification Unit's general email account at wpsc401cert@dnr.mo.gov <<mailto:wpsc401cert@dnr.mo.gov>> . If you have any questions, please contact Billy Hackett by phone at 573-526-3337, by email at billy.hackett@dnr.mo.gov <<mailto:mike.irwin@dnr.mo.gov>> , or by mail at Department of Natural Resources, Water Protection Program, P.O. Box 176, Jefferson City, MO 65102-0176. Thank you for working with the Department to protect our aquatic resources.

BH/pc

Missouri Department of Natural Resources
Water Protection Program

Operating Permits Section

P.O. Box 176
Jefferson City, MO 65102-0176
Phone (573) 522-4502 Fax (573) 522-9920
e-mail: wpsc401cert@dnr.mo.gov <<mailto:wpsc401cert@dnr.mo.gov>>
web site: [Blockedwww.dnr.mo.gov/env/wpp/401](http://www.dnr.mo.gov/env/wpp/401) <[Blockedhttp://www.dnr.mo.gov/env/wpp/401](http://www.dnr.mo.gov/env/wpp/401)>

We'd like your feedback on the service you received from the Missouri Department of Natural Resources. Please consider taking a few minutes to complete the department's Customer Satisfaction Survey at [Blockedhttps://www.surveymonkey.com/r/MoDNRsurvey](https://www.surveymonkey.com/r/MoDNRsurvey) . Thank you.

1 May 2020

Track: **20200281**

Matthew Shively
U.S. Army Corps of Engineers
Kansas City Regulatory Office
601 E 12th St.
Kansas City, MO 64106
Matthew.S.Shively@usace.army.mil

Dear Mr. Shively:

We have reviewed the proposed re-issuance of commercial dredging permits on the Lower Missouri River. Two portions of the proposed segments for commercial dredging flow along the northeast border of Kansas. While our regulatory nexus is limited to these areas, we provide these comments with the understanding that the Missouri River is a connected, dynamic system where changes in one area of the river could affect upstream and downstream areas.

We have several concerns with the issuance of these permits and with the process for which these permits have been evaluated. Physical, chemical, and biological impacts to rivers from sand and gravel dredging are well-documented, and unsustainable dredging has been identified as the primary cause of bed degradation in the Missouri River. Additionally, bed degradation from dredging could impact existing and future habitat restoration efforts in the Missouri River. While dredging is not the only impact occurring in the Missouri River and its watershed, its negative effects on aquatic habitat are additive. Monitoring efforts required by the proposed permits focus largely on physical characteristics of the river and does not address potential impacts to water quality or biological communities. Results of the most recent Missouri River bed surveys have not been provided to the public, precluding the ability to make fully-informed comments. These points are discussed in greater detail below. Ultimately, we do not support the re-issuance of dredging permits as proposed and encourage exploration of alternatives that reduce or isolate impacts to natural resources of Kansas.

Potential impacts from river dredging

Removal of sediment from the channel disturbs the natural relationship between sediment supply and sediment transport capacity of a river (Kondolf 1997), leading to multiple physical impacts upstream and downstream of the dredging site such as: areas of riverbed degradation or aggradation, bank erosion, channel widening, channel deepening, reduction in water table, reduction in riparian zone, increased sediment loads, change in flow velocities, increased water temperatures, and decrease in quality of aquatic organism habitat. These impacts often extend well beyond the dredging sites. Dredge pits create nick points in the river bed, which can migrate upstream in the form of headcuts (Kondolf 1997, Meador and Layher 1998). Channel erosion from headcuts caused by dredging operations can reduce recreational, fishing, and wildlife values and contribute to extirpation of stream fauna (Hartfield 1993). Headcutting has been

documented more than 1 km upstream from an instream mine (Kondolf 1997). The process of headcutting is not isolated to the mainstem river and can affect tributaries as well. Channel incision of 3-6m has been documented throughout 11km of a river that was actively mined for sediment (Kondolf 1997). The 2017 Missouri River Bed Degradation Feasibility study identifies commercial sand and gravel mining as the primary cause of bed degradation, which is additionally supported by a graph produced by the U.S. Army Corps of Engineers (see Attachment 1). Such incision greatly changes the geomorphic profile of a river by decreasing the width/depth ratio and limiting the ability of a riparian area to become established. Riparian areas are extremely important to river systems, as they provide habitat for wildlife and natural services of bank stability and erosion and sediment input reduction. Riparian zones are further impacted by the local activity of dredging operations. Bank stability is compromised without riparian areas, which can lead to increased erosion and sediment input into the river. Additionally, in-stream dredging has been implicated in the homogenization of physical habitat and reduction of sand and gravel bars within rivers (Eitzmann & Paukert 2009, Wyzga et al. 2009). When sediment is removed from the river and pits are created, it is possible that material normally deposited as sandbars is transported to replace this lost sediment. Disruption of sandbar creation could affect available nesting habitat for Least Tern and Piping Plover. Lastly, all of these impacts have the potential to undermine the integrity of structures such as road bridges, pipelines and boat ramps, which could subsequently require rehabilitation or reconstruction, creating additional disturbances to the aquatic system. Chemical impacts to the river due to dredging can include increased sedimentation and turbidity (Meador & Layher 1998).

The 2011 Final Environmental Impact Study and the 2017 Missouri River Bed Degradation Feasibility Study consistently cite river geomorphology as the primary cumulatively affected resource. Any physical impacts to the river also represent an impact to fish and wildlife habitat and have been implicated in part for the decline in native fishes (Cross et al. 1982, Sanders et al. 1993, Quist et al. 1999). Because headcuts can migrate considerable distances upstream, it is possible that habitat in tributaries could be affected as well. These shifts in geomorphic profile threaten existing and future efforts to restore habitat. Increases in turbidity have also been documented to decrease the prey consumption of several cyprinid species (Bonner & Wilde 2002). There have been notable declines in native fish species in the Missouri River leading the Pallid Sturgeon, Shoal Chub, Silver Chub, Sturgeon Chub, Sicklefin Chub, Flathead Chub, Western Silvery Minnow, and Plains Minnow to be protected by the Kansas Nongame and Endangered Species Act. Additionally, Sicklefin Chub and Sturgeon Chub are currently under review for federal listing under the Endangered Species Act. From studies in the nearby Kansas River system, Cross et al. (1982) and Paukert et al. (2008) reported that dredging sites had greater depths and lower velocities representing reservoir-like habitat leading to fish communities composed of more lentic-adapted species. Fischer et al. (2012) reported no differences in the fish community between dredged sites and control sites, but the study was relatively limited in scope and scale (19 river kilometers) given the large scale at which the commercial dredgers are operating. Many of the previously mentioned fish species use various forms of pelagic broadcast spawning, where semi-buoyant eggs and larvae depend on flowing water to drift downstream as they develop. Reduced velocities could cause eggs and larvae to drop out of suspension, resulting in death. Research by Perkin and Gido (2011) modeled minimum river fragment lengths required to support populations of pelagic spawning fishes. These models suggest that Plains Minnow requires fragment lengths of 115 km, Shoal Chub

require 103 km, Silver Chub require 203 km, and Sturgeon Chub require 297 km. While Perkin and Gido (2011) did not specifically address reduced velocity as a barrier to downstream movement, it is possible that these drifting eggs and larvae encounter reduced velocities at dredging sites based on the large scale that dredging is occurring in the Missouri River. Furthermore, hydraulic dredges have the potential to entrain aquatic organisms. Mortality of eggs due to entrainment by suction dredges has been documented to range from 29-100% in trout, with sac-fry mortality exceeding 80% (Griffith and Andrews 1981). While research from other geographic areas is more prevalent, research on the effects of river dredging on declining species in Kansas is lacking. Our department would gladly collaborate with the U.S. Army Corps of Engineers and permit applicants to address this lack of information. Ultimately, this would reduce uncertainty in regulatory decisions regarding river dredging. It is unlikely that in-stream dredging is the sole factor in the decline of these imperiled species. However, these activities and their cumulative impacts compounded with land use changes, urbanization, and channel alterations in the Missouri River must be considered.

Monitoring efforts should include physical, chemical, and biological factors in the Missouri River at broad scales

To date, monitoring has mainly focused on bed degradation by monitoring cross sections of the Missouri River. While bed degradation is extremely important to monitor, it is not the only physical factor subject to impacts by in-stream dredging. If permits are issued to continue sand extraction in the Missouri River, efforts should be included that monitor channel incision, bank stability and erosion, headcuts in the mainstem river and tributaries, reduction in riparian zones, and turbidity. Additionally, the biological community of a river is the ultimate manifestation of physical and chemical impacts even when those impacts are not readily detectable. As such, biological monitoring should be conducted if dredging continues. Physical, chemical, and biological monitoring can also inform the adaptive management framework.

Less environmentally damaging practicable alternatives should be explored

Cumulative impacts associated with river dredging are numerous and difficult to address given the dynamic nature of the Missouri River. The Alternatives Analysis in the Final Environmental Impact Study does not adequately detail why alternate sources are impracticable. Alternative practices with considerably less cumulative impacts have been successful in Kansas and other locations. We

Off-channel sand extraction in the river valley

Off-channel sand extraction is possible and has been successfully completed by some sand producers in Kansas, with examples from operations in Shawnee and Wyandotte counties. The Alternatives Analysis of the Final Environmental Impact Study places more weight on impacts created by development of new sources compared to impacts created by river dredging. The cumulative impacts associated with off-channel sand extraction in the river valley are substantially less when compared to in-channel dredging, as they are largely isolated to the site whereas multiple impacts from river dredging have been documented miles from active sites. While local community support is necessary for off-channel sand extraction, some communities could benefit from off-channel pits if they are reclaimed to public fishing areas or used for recreational watersports.

Extraction of sediment from reservoirs

Although much of what is deposited in reservoirs is fine sediment and largely unusable for construction material, areas closer to the inlet deltas should be examined for potential sand extraction. Sediments entering reservoirs are sorted by deposition, with coarse materials (sand) falling out of suspension earlier than fine materials. This alternative would serve the additional purpose of increasing reservoir capacity, a growing concern in Kansas. This practice has been successfully completed in Rollins Reservoir on the Bear River in California, and reservoirs in Israel and Taiwan (Kondolf et al. 2001). This alternative was not explored in the 2011 Final Environmental Impact Study.

Reduced limit alternative with shift to alternate sources

We would be in favor of an alternative that allows reissuance of the permits for 5 years at a limit reduced below potential risk of bed degradation, with the understanding that operators would use that time to transition to the alternative sources (e.g. floodplain) and that in-channel dredging permits would not be re-issued. This represents an alternative that is less environmentally damaging in the long-term compared to the Proposed Action and is reasonable and practicable by allowing dredging operators to meet production demands in the interim.

Recent Missouri River bed survey results not publicly available or represented in Public Notice

Results from Missouri River bed survey efforts between the previous permitting cycle and the current cycle were not made available for public review and results were not presented or discussed in the Public Notice issued 18 March 2020. These results are necessary to develop informed decisions on reasonable sand mining limits and the potential effects those extraction rates may have. Of concern to our Department is the risk of damage or degradation to habitat improvement efforts for Pallid Sturgeon in the Missouri River and public recreation infrastructure. Failure to include all available data in the process brings into question the validity of the regulatory decision and places unnecessary risk on other beneficial uses of the river. We recommend those data be analyzed and released publicly prior to issuance of permits to determine potential impacts to the Missouri River system.

Given the potential impacts from river dredging to aquatic habitat and species, and the lack of adequate monitoring to allow for corrective measures and response, we do not support the re-issuance of the Lower Missouri River commercial dredging permits as proposed. We encourage the use of alternatives to minimize or isolate environmental impacts and would gladly coordinate with applicants in identifying such alternatives and locations. Thank you for the opportunity to review the proposed issuance of commercial dredging permits on the Lower Missouri River. If you have any questions, please feel free to contact Jordan Hofmeier (jordan.hofmeier@ks.gov ; 620-672-5911) of my staff.

Sincerely,



Brad Loveless, Secretary
Kansas Department of Wildlife, Parks, & Tourism

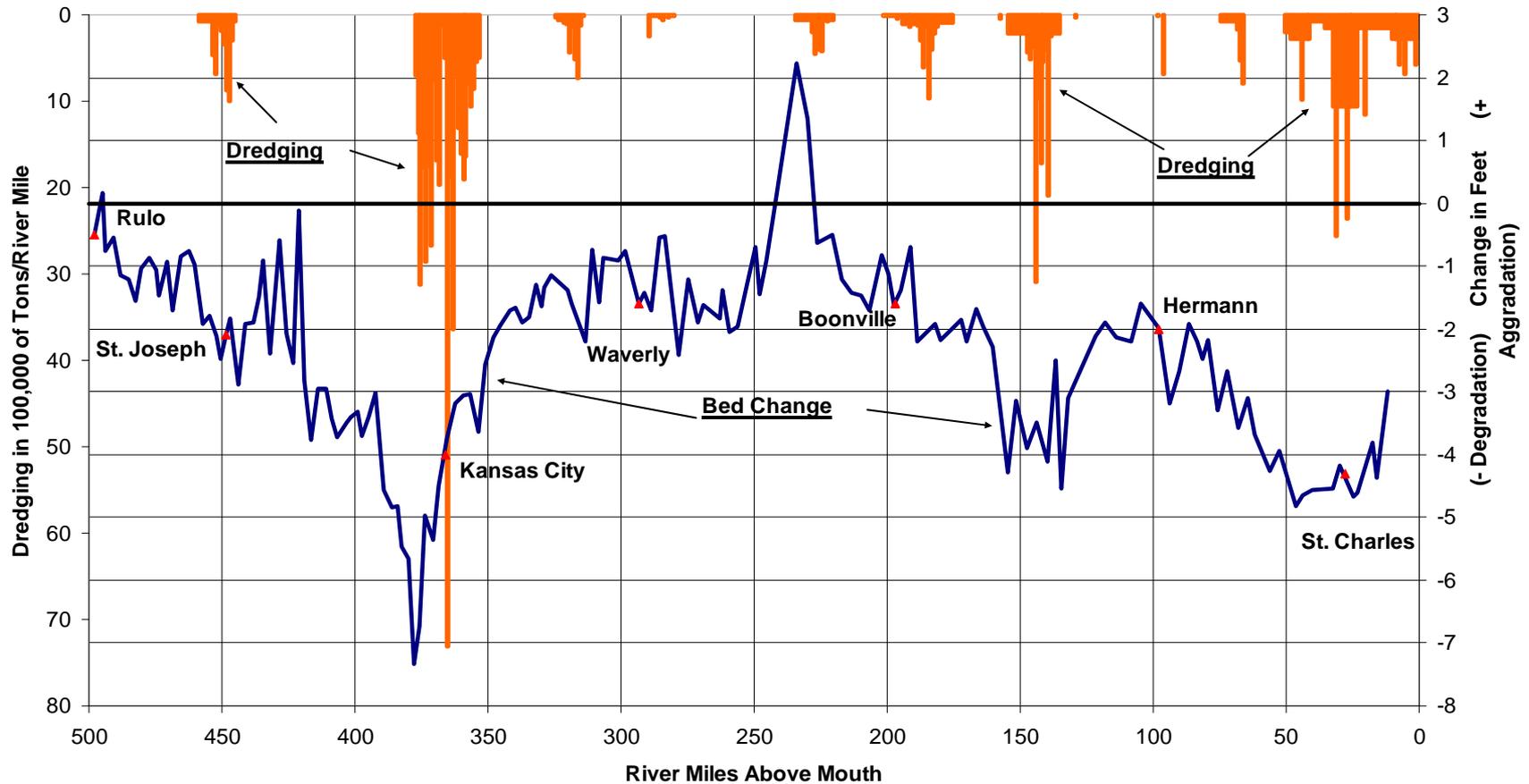
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US Army Corps of Engineers



Dredging Quantity Per Mile and Change in Low Water Profile Between 1990 and 2005



May 1, 2020

Matt Shively
Regulatory Project Manager
U.S. Army Corps of Engineers
Kansas City Regulatory Office
matthew.s.shively@usace.army.mil

Re: Public notice concerning the proposed reissuance of commercial dredging permits on the Lower Missouri River

Mr. Matt Shively:

The Kansas Water Authority (KWA) appreciates the opportunity to comment on the current public notice concerning the proposed reissuance of commercial dredging permits on the Lower Missouri River, as well as the concurrent Section 408 process ongoing to evaluate the cumulative impacts of these proposed activities, prior to a decision on permit reissuance. Established in 1981 by the Kansas Legislature, the KWA is responsible for advising the Governor, Legislature and Director of the Kansas Water Office on water policy issues and for approving the Kansas Water Plan, federal contracts, administration regulations and proposed legislation.

The KWA recognizes that the opportunity for the general public, agencies, groups and organizations to comment on projects which impact the water and natural resources of Kansas is key to evaluating how the public at large would be served by a particular project, policy or rule. In order to make informed decisions regarding the potential impact of any proposed project, a complete set of information and data must be in place and accessible for all to make individual or collective decisions on the merits of any proposal.

The Kansas Water Authority respectfully requests that the process to decide whether to renew dredging permits on the Missouri River should not proceed forward, nor should a record of decision on a Section 408 be issued, until after the results of the 2019 hydrographic survey are made publicly available and adequate time is provided following the release of this information for public comments to be submitted. If the permit renewal and concurrent Section 408 process is allowed to proceed, the Kansas Water Authority believes that new or renewed permits for dredging within the Kansas City Reach of the Lower Missouri River should not be issued for reasons highlighted within this letter. It is also the opinion of the KWA that any Section 408 record of decision should be complete and accounted for prior to any final determination taking place regarding the proposed reissuance of the commercial dredging permits. Moreover, the KWA requests the Corps of Engineers allow adequate time to submit public comments after the Section 408 record of decision is issued and before a decision is made on the request to renew the dredging permits. Of particular concern is the need for adequate time to evaluate and comment on current and additional degradation impacts to the Kansas City Reach to ensure that both the Section 408 and National Environmental Policy Act (NEPA) processes are being complied with. In the potential

Section 408 analysis, as verbally described by the U.S. Army Corps of Engineers during their webinar on April 21, 2020, it was noted that prevention of any additional degradation would be necessary to prevent impacts to the Bank Stabilization & Navigation Project (BSNP) and the Missouri River Recovery Program (MRRP) federal projects.

The following information provides additional context regarding the concerns of the permit renewal process advancing before a Section 408 record of decision has been issued:

Current Degradation Quantification

During the webinar hosted by the U.S. Army Corps of Engineers, Kansas City District on April 21, 2020, Corps representatives presented information regarding both the proposed permit renewals as well as the Section 408 process which is concurrently ongoing during this current public comment period. The Corps representatives also presented information during this webinar on the degradation thresholds identified specifically within the Kansas City Reach, as well as all other reaches of the Lower Missouri River for Section 408 purposes (Attachment 1, Figure 1). Corps representatives also mentioned during this same webinar that preliminary 408 technical analyses indicate likely impacts to federal projects if degradation exceeds identified thresholds, but results of the 2019 hydrographic surveys are not yet fully analyzed (Attachment 1, Figure 2). Until it is fully known whether or not additional degradation has taken place within the Kansas City Reach of the Lower Missouri River, it is the opinion of the Kansas Water Authority that a final decision on the proposed permit modifications and concurrent Section 408 process should not take place.

Section 408 Cumulative Impacts

According to information presented during the April online session, the Corps noted the current Section 408 permit evaluation process will use a 2009 baseline period for degradation comparison purposes. However, during that same session, it was shown that prior Corps documentation established a relevant period of record for hydrographic survey data for the Lower Missouri River prior to the noted 2009 baseline period (Attachment 1, Figures 3 and 4). Within this data there is verification of degradation within the Lower Missouri River and Kansas City Reach prior to 2009. Indeed, the Missouri River Bed Degradation Feasibility Study Technical Report (May 2017), in finding dredging operations contributed to river bed degradation, based its analysis on the period 1990 through 2009. The Kansas Water Authority questions the basis for establishing 2009 as the beginning of the baseline period for determining degradation within the Lower Missouri River and how the more extensive history of degradation is accounted for when evaluating cumulative short and long-term impacts within a Section 408 process.

Economic Impacts of Missouri River Degradation

Information presented by the U.S. Army Corps of Engineers, Kansas City District in the past has also shown that continued degradation within the Lower Missouri River could lead to \$800 million or more in damages or negative impacts to public infrastructure (Attachment 1, Figure 5). These impacts to infrastructure include public water supply intakes within the Kansas City Reach of the Lower Missouri River. Also of note would be the potential economic impacts to the BSNP and MRRP federal projects should damages occur as degradation thresholds are met or exceeded. This study predated the May 2017 technical report. Without the 2019 hydrographic bed survey in final form, the more current impacts of dredging are not yet known. Yet, this information is critically relevant to whether or not continued (or increased) dredging would lead to even harsher public infrastructure costs. Because the 408 process requires consideration of the public infrastructure costs, which could be \$800 million based on older information linking dredging to degradation in the Lower Missouri River, it would be premature for the Corps to take a position in favor of permit reissuance and continued dredging operations until the 2019 hydrographic bed survey is completed.

The KWA would also like clarification from U.S. Army Corps of Engineers, Kansas City District staff regarding the mitigation requirements associated with in-channel dredging operations. It is our understanding that in-channel dredging operations have no mitigation requirements associated with operations while off-channel pit operations do have associated mitigation requirements. Thus, in-channel dredging operators, such as those who seek permit renewal here, would be absolved of mitigation responsibilities while causing the financial burden for mitigation to be borne by other entities, especially those responsible for public infrastructure.

In closing, based on the information discussed above, the Kansas Water Authority respectfully requests that the U.S. Army Corps of Engineers, Kansas City District Commander and District Engineer Col. William Hannan, Jr. and District staff consider the following proposed actions:

- Corps of Engineers issue a record of decision (ROD) on Section 408 process before decisions be made on proposed permit renewals;
- Prior to issuing a Record of Decision on the Section 408 permit and prior to issuing a decision on the applications for renewal of dredging permits on the Lower Missouri River, the Corps complete the 2019 hydrographic survey and notify the public of availability of the results of that survey, and allow adequate opportunity for public comment on said survey, so that the Corps and the public will be able to use the most current information to resolve both permitting decisions.
- Provide adequate opportunity for public comment on the Record of Decision for the Section 408 permit prior to the Corps' decision on the dredging permit renewal applications.
- In the absence of information contained in the 2019 hydrographic bed survey, or elsewhere, that substantially counters the findings of the May 2017 report, the Corps deny permits for new or renewed dredging operations within the Kansas City Reach of the Lower Missouri River.

Thank you for your consideration of our comments and please feel free to contact me at Connie.Owen.KWA@kwo.ks.gov should you or members of your staff have any questions or informational needs regarding the above-mentioned feedback provided on behalf of the Kansas Water Authority.

Sincerely,



Connie Owen
Chair, Kansas Water Authority

cc: Col. William Hannan, Jr., USACE, KC District
Senator Jerry Moran
Senator Pat Roberts
Representative Sharice Davids
Representative Ron Estes
Representative Roger Marshall
Representative Steve Watkins

ATTACHMENT 1

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DEGRADATION THRESHOLDS

Results of analyses indicate that degradation thresholds similar to those identified in the EIS are needed to prevent impact to the federal projects

- Identified Thresholds
 - Any degradation in Kansas City Reach
 - 2 feet of degradation all other reaches
- Relative to 2009 baseline
- Mirrors current regulatory constraints
- Accounts for currently degraded state of Kansas City Reach



Figure 1. Section 408 degradation thresholds, 4/21/2020 webinar.

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PRELIMINARY RESULTS

- 408 technical analyses indicate likely impacts to federal projects if degradation exceeds identified thresholds
- 2019 Hydrographic survey data will be evaluated to determine areas that have degraded below thresholds since 2009
- Areas degraded below threshold will be considered when evaluating new dredge permit requests



Figure 2. Section 408 preliminary results discussion, 4/21/2020 webinar.

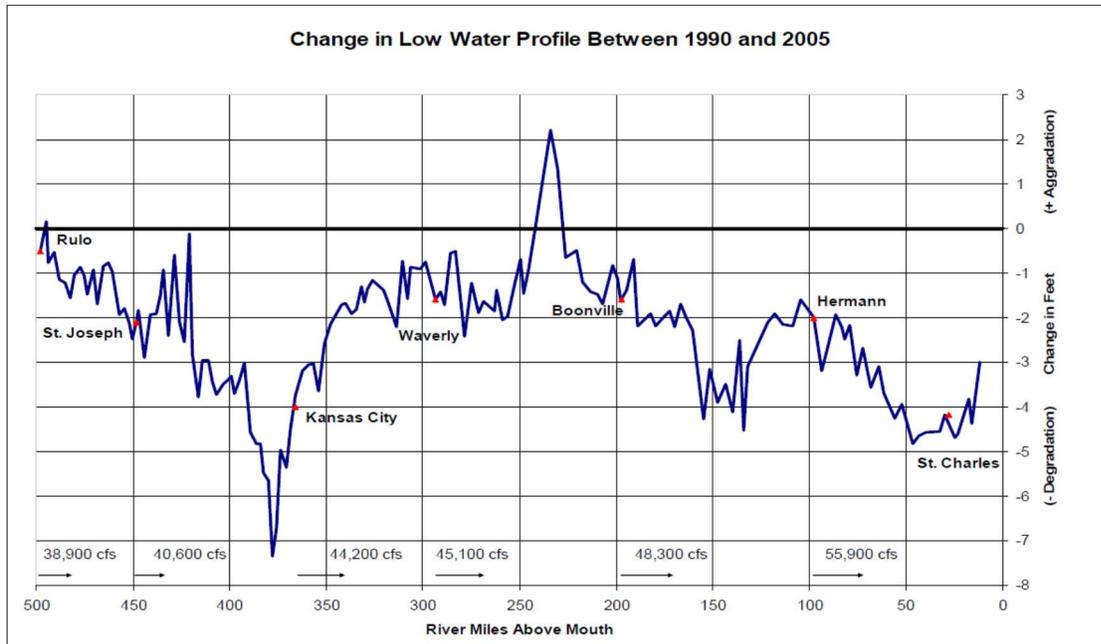


Figure 3. Change in low water profile between 1990 and 2005, Greater Kansas City Post Industry Day Education & Training Workshop, January 28, 2009.

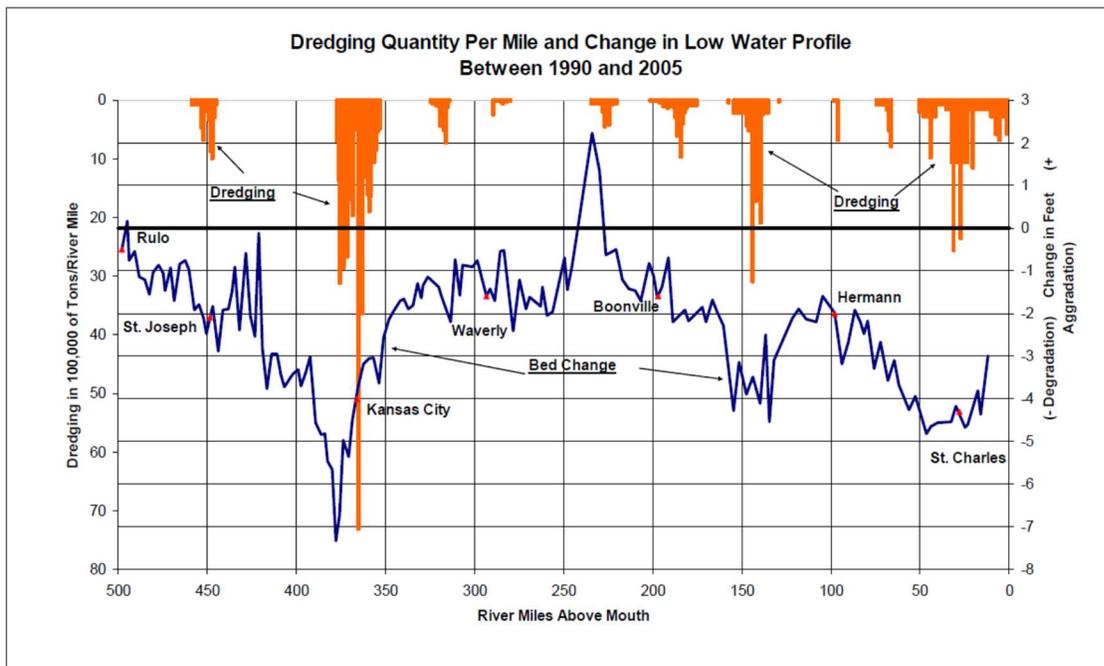


Figure 4. Dredging quantity per mile and change in low water profile between 1990 and 2005, Greater Kansas City Post Industry Day Education & Training Workshop, January 28, 2009.

Structure Type	Capital Costs
Auxiliary Intake Equipment	\$23,400,000
New Intake Construction	\$244,800,000
Alternative Water Supply Sources	\$135,600,000
Alternative Cooling Systems	\$342,000,000
Bridge Repairs	\$20,800,000
Levees and Floodwalls	\$18,300,000
Total Structure Capital Costs	\$785,500,000
Increased Annual O&M Costs – Utilities	\$29,000,000

Figure 5. Potential future municipal infrastructure costs due to bed degradation (in FY 17 dollars), May 2017 Technical Report.

From: [Conger, Patricia](#)
To: [Shively, Matthew S CIV USARMY CENWK \(USA\)](#)
Cc: ["Trisha_Crabill@fws.gov"](#); ["Kaitlyn_Kelly@fws.gov"](#); ["Iwona_Kuczynska@fws.gov"](#); [USEPA Region 7](#); [Thorne, David](#); [Campbell-Allison, Jennifer](#); [Miller, Stuart](#); [Beres, Audrey](#); [Vitello, Matt](#); [Mitchell, Leigh](#); [Franklin, Dorothy](#); [Foott, Amber](#); [Spangler, Stacey](#); [Bryan Hopkins](#); [Horton, John](#); [Shulse, Christopher](#); [Lepper, Erin](#); [Hackett, Billy](#); [Irwin, Mike](#); [Bax, Stacia](#); [Son, Vicky](#); [Libbert, Danielle](#)
Subject: [Non-DoD Source] RE: Missouri River Commercial Dredgers
Date: Thursday, April 30, 2020 2:50:56 PM

RE: Capital Sand Company, Inc., 2011-00361/CEK006761/CES002561; Hermann Sand & Gravel, Inc., 2011-00362/CEK006763; Holliday Sand & Gravel Company, 2011-00363/CEK006762; Con-Agg of Missouri, LLC, 2011-00364/CEK006764; Limited Leasing Company, 2011-00177/P-2788/CES002563; J.T.R., Inc., 2011-00178/P-2789/CES002566

The Missouri Department of Natural Resources' Water Protection Program has reviewed the Public Notice for Capital Sand Company, Inc., 2011-00361; Hermann Sand & Gravel, Inc., 2011-00362; Holliday Sand & Gravel Company, 2011-00363; Con-Agg of Missouri, LLC, 2011-00364; Limited Leasing Company, 2011-00177; and J.T.R., Inc., 2011-00178 in which the applicants are proposing permit reauthorization for commercial sand and gravel dredging within five predefined segments of the Lower Missouri River between St. Louis, Missouri, and Rulo, Nebraska. If reauthorized the permits would authorize dredging for a period of five years.

The regulated activities consist of the hydraulic removal of sediment from the riverbed and the return discharge of processed material to the river. Capital Sand Company, Inc. is requesting an increase of authorized tonnage in the Jefferson City and the Waverly river segments. Hermann Sand and Gravel Company is requesting an increase of authorized tonnage in the St. Charles and the Jefferson City river segments. All other applicants are requesting a continuation of the previously authorized tonnages. The St. Charles, Jefferson City, and Waverly river segments will have an increase in annual tonnages if approved, and the Kansas City and St. Joseph river segments will have a continuation of the previously authorized tonnages. Table A shows the currently authorized tonnages per segment and the requested authorized tonnages per segment for each applicant and river segment.

The river segments locations are defined by the following River Miles (RM) on the Missouri River: St. Joseph Segment RM 391 - RM 498; Kansas City Segment RM 357 - RM 391; Waverly Segment RM 250 - RM 357; Jefferson City Segment RM 130 - RM 250; and St. Charles Segment RM 0 - RM 130.

Table A: MISSOURI RIVER COMMERCIAL DREDGING TONNAGE AND SEGMENTS

Application Number,

Applicant Name and Address

River Segment

2015 Annual Tons Authorized

2020 Annual Tons Requested

NWK 2011-00361

Capital Sand Company, Inc.

Post Office Box 104990

Jefferson City, MO 65110

St. Charles

140,000

140,000

Jefferson City

1,350,000

1,450,000

Waverly

2016 - 370,000

2017 - 452,500

2018 - 535,000

2019 - 617,500

2020 - 700,000

2021 - 782,500

2022 - 865,000

2023 - 947,500

2024 - 1,030,000

2025 - 1,112,000

NWK 2011-00362

Hermann Sand and Gravel; Inc.

Post Office Box 261

Hermann, MO 65041

St. Charles

120,000

144,000

Jefferson City

120,000

144,000

NWK 2011-00363

Holliday Sand and Gravel Co.

P.O. Box 23910

Overland Park, KS 66238

Waverly

2016 - 870,000

2017 - 950, 00

2018 - 1,020,000

2019 - 1,078,000

2020 - 1,078,000

1,078,000

Kansas City

540,000

540,000

St. Joseph

330,000

330,000

NWK 2011-00364

Con-Agg of MO, L.L.C.

2604 North Stadium Blvd.

Columbia, MO 65202

Jefferson City

160,000

160,000

MVS 2011-00177 (P-2788)

Limited Leasing Company

1777 Highway 79 South

Old Monroe, MO 63369

St. Charles

990,000

990,000

MVS 2011-00178 (P-2789)

J.T.R. Inc. (Jotori Dredging)

2320 Creve Coeur Mill Road

Maryland Heights, MO 63043

St. Charles

460,000

460,000

The Department offers the following comments:

1. Dredging activities should not cause the general or numeric criteria to be exceeded nor impair designated uses established in Missouri Water Quality Standards, 10 CSR 20-7.031.

2. Unwanted dredged material and river water extracted from only the Missouri River may be placed back into the Missouri River. The applicant should not dispose of waste materials, water, or garbage below the ordinary high water mark of any other water body, in a wetland area, or at any location where the materials could be introduced into the water body or an adjacent wetland as a result of runoff, flooding, wind, or other natural forces.

3. To reduce the likelihood of concentrating silt and sand within a single location in the Missouri River, materials shall be deposited as evenly as possible.

4. Operations in the Missouri River should be conducted in a manner that does not cause unreasonable interference to navigation or changes in approaches for other terminals. This includes the effects of displaced sediment caused by the operation.

5. Sand, gravel, or other dredged materials shall not be stockpiled within the channel, placed against the banks, or otherwise disposed of in a manner that will redirect erosive forces within the channel or threaten the stability of the channel or the bank lines.

6. No berms or other elevated structures shall be created by the excavated materials in the project location that would affect the connectivity of the river to its floodplain, except in those locations where existing structures may need repairs based on their pre-flood designs.
7. Dredging activities should not accelerate bed or bank erosion except where modeled and authorized. Streambed gradient and banks should not be adversely altered as part of this authorization.
8. The quality of downstream water supplies should not be adversely affected by this project. Any water supply intakes or other activities, which may be affected by suspended solids and turbidity increases caused by work in the watercourse, should be investigated and sufficient notice given to the owners to allow preparation for any changes in water quality. The Department's Water Protection Program's Public Drinking Water Branch may be contacted by phone at 573-526-0269 for the presence of such supplies.
9. Alternatives found in the National Environmental Policy Act documentation demonstrates compliance with Missouri Antidegradation requirements regarding alternatives. The Final Environmental Impact Statement and issued Record of Decision for commercial dredging activities on the Missouri River and the supplemental Environmental Assessment for the Waverly Segment document environmental impacts and contain certain tonnage and locale restrictions on dredging in addition to a monitoring program and adaptive management framework to limit dredging related impacts.
10. Antidegradation requirements dictate all appropriate and reasonable Best Management Practices (BMPs) related to erosion and sediment control and prevention of water quality degradation are applied and maintained; for example, good housekeeping practices and operational controls. BMPs should be properly installed prior to conducting authorized activities and maintained, repaired, and/or replaced as needed during all phases of the project to limit the amount of discharge of water contaminants to waters of the state. The project should not involve more than normal stormwater or incidental loading of sediment caused by project activities so as to comply with Missouri's general water quality criteria [10 CSR 20-7.031(4) on Page 15 at [Blockedhttp://www.sos.mo.gov/cmsimages/adrules/csr/current/10csr/10c20-7a.pdf](http://www.sos.mo.gov/cmsimages/adrules/csr/current/10csr/10c20-7a.pdf) <[Blockedhttp://www.sos.mo.gov/cmsimages/adrules/csr/current/10csr/10c20-7a.pdf](http://www.sos.mo.gov/cmsimages/adrules/csr/current/10csr/10c20-7a.pdf)>].
11. All precautions should be taken to avoid the release of wastes or fuel to streams and other adjacent waters as a result of this operation. Petroleum products spilled into any water or on the banks where the material may enter waters of the state should be immediately cleaned up and disposed of properly. Any such spills of petroleum should be reported as soon as possible, but no later than 24 hours after discovery to the Department's Environmental Emergency Response phone line at 573-634-2436 or website at [Blockedhttp://dnr.mo.gov/env/esp/esp-eer.htm](http://dnr.mo.gov/env/esp/esp-eer.htm) <[Blockedhttp://dnr.mo.gov/env/esp/esp-eer.htm](http://dnr.mo.gov/env/esp/esp-eer.htm)> .
12. The Department reserves the right to reopen review should cumulative impacts of more than one operation or impacts of any single operation on any water body have detrimental effects on water quality or aquatic habitat. This could include revocation of a WQC for any operation that has a detrimental effect on water quality.
13. Acquisition of a WQC should not be construed or interpreted to imply the requirements for other permits are

replaced or superseded, including Clean Water Act Section 402 National Pollutant Discharge Elimination System Permits. Permits or any other requirements should remain in effect. If the activity includes piling dredged material on land, the applicant may need a general permit for return water and stormwater from the dredged material. All terms for compliance with the general permit would be incorporated into the WQC. Information regarding permit requirements and applications may be directed to the Department's appropriate regional office. A map of regional offices can be found at [Blockedhttps://dnr.mo.gov/regions/](https://dnr.mo.gov/regions/).

14. Dredging should not adversely impact aquatic habitat and/or mussel beds, particularly breeding and rearing areas for endangered, rare, or threatened species. The proposed project could encounter sites of conservation concern, including those that have not been recorded or previously reported. If not already done, please visit the following to determine the potential for species of concern within or near a project:

* Missouri Department of Conservation's (MDC) "Natural Heritage Review" website at [Blockedhttp://mdcgis.mdc.mo.gov/heritage/newheritage/heritage.htm](http://mdcgis.mdc.mo.gov/heritage/newheritage/heritage.htm), and

* U.S. Fish and Wildlife Service's (USFWS) "Information, Planning and Conservation" website at [Blockedhttp://ecos.fws.gov/ipac/](http://ecos.fws.gov/ipac/).

If the proposed project encounters and will potentially affect a species of concern, please report it to MDC and USFWS.

15. All other commenting parties' comments and the applicant's response to those comments should be sent by email at wpsc401cert@dnr.mo.gov <<mailto:wpsc401cert@dnr.mo.gov>> or to the address below. Consideration for WQC cannot be made until all comments and responses have been received. If the applicants do not address concerns prior to May 18, 2020, with adequate time for the Department to review and make a decision on the request for certification, the Department will ask for an extension of its statutory review timeframe of 60 days.

Thank you for the opportunity to comment on the proposed project. You may send responses to comments and other requested information electronically to the Stormwater and Certification Unit's general email account at wpsc401cert@dnr.mo.gov <<mailto:wpsc401cert@dnr.mo.gov>> . If you have any questions, please contact Billy Hackett by phone at 573-526-3337, by email at billy.hackett@dnr.mo.gov <<mailto:mike.irwin@dnr.mo.gov>> , or by mail at Department of Natural Resources, Water Protection Program, P.O. Box 176, Jefferson City, MO 65102-0176. Thank you for working with the Department to protect our aquatic resources.

BH/pc

Missouri Department of Natural Resources
Water Protection Program

Operating Permits Section

P.O. Box 176
Jefferson City, MO 65102-0176
Phone (573) 522-4502 Fax (573) 522-9920
e-mail: wpsc401cert@dnr.mo.gov <<mailto:wpsc401cert@dnr.mo.gov>>
web site: [Blockedwww.dnr.mo.gov/env/wpp/401](http://www.dnr.mo.gov/env/wpp/401) <[Blockedhttp://www.dnr.mo.gov/env/wpp/401](http://www.dnr.mo.gov/env/wpp/401)>

We'd like your feedback on the service you received from the Missouri Department of Natural Resources. Please consider taking a few minutes to complete the department's Customer Satisfaction Survey at [Blockedhttps://www.surveymonkey.com/r/MoDNRsurvey](https://www.surveymonkey.com/r/MoDNRsurvey) . Thank you.