

PUBLIC NOTICE



**US Army Corps
of Engineers
Kansas City and
Saint Louis Districts**

**Permit No. Missouri River Commercial Dredgers
Issue Date: March 13, 2015
Expiration Date: April 3, 2015**

21-Day Notice

This public notice is issued jointly with the Missouri Department of Natural Resources, Water Pollution Control Program and the Kansas Department of Health and Environment. The state Departments will use the comments to this notice in deciding whether to grant Section 401 water quality certification. Commenters are requested to furnish a copy of their comments to the Missouri Department of Natural Resources, P.O. Box 176, Jefferson City, Missouri 65102 and the Kansas Department of Health and Environment, Bureau of Water - - Watershed Management Section, 1000 SW Jackson Street, Suite 420, Topeka, Kansas 66612-1367.

APPLICANTS: Capital Sand Company, Inc. (NWK-2011-00361), Hermann Sand & Gravel, Inc. (NWK-2011-00362), Holliday Sand & Gravel Company (NWK-2011-00363), Con-Agg of Missouri, LLC. (NWK-2011-00364), Limited Leasing Company (MVS-2011-00177*), J.T.R., Inc. (MVS-2011-00178*), hereafter “Dredgers”.

*Denotes permits administered by the Regulatory Branch, U.S. Army Corps of Engineers (USACE), Saint Louis District. Remaining permits are administered by the Regulatory Branch, USACE, Kansas City District.

PROJECT LOCATIONS (As shown on the attached drawing): Applicants have proposed renewing permits for commercial sand and gravel dredging within five predefined segments of the Lower Missouri River.

- Capital Sand Company, Inc.: Waverly, Jefferson City, and St. Charles Segments
- Hermann Sand & Gravel, Inc.: Jefferson City and Waverly Segments
- Holliday Sand & Gravel Company: St. Joseph, Kansas City, and Waverly Segments
- Con-Agg of Missouri, LLC.: Jefferson City Segment
- Limited Leasing Company: St. Charles Segment
- J.T.R., Inc.: St. Charles Segment

AUTHORITY: Section 10 of the Rivers and Harbors Act of 1899 (33 USC 403) and Section 404 of the Clean Water Act (33 USC 1344).

NATIONAL ENVIRONMENTAL POLICY ACT (NEPA) COMPLIANCE: In 2011, the Corps of Engineers completed a Final Environmental Impact Statement (Final EIS) and issued a Record of Decision (ROD) for commercial dredging activities on the Missouri River; these documents disclosed environmental impacts associated with the 2011 permit decision and ongoing re-issuance of dredging permits. The selected alternative in the Final EIS and ROD contained certain tonnage and locale restrictions on dredging, in addition to, a monitoring

program and adaptive management framework to limit dredging-related impacts; these restrictions were presented as special conditions of the permits and are attached as an appendix to this public notice. The EIS and ROD can be downloaded at:

<http://www.nwk.usace.army.mil/Missions/RegulatoryBranch/MissouriRiverCommercialDredging.aspx>

EXISTING DREDGING ACTIVITIES: Six companies are currently authorized to dredge sand and gravel for commercial sale from five predefined segments on the Missouri River. All existing commercial dredging permits will expire on December 31, 2015. “Table 1” summarizes the current permitted dredging reaches in the Missouri River.

Table 1. Currently Authorized Missouri River Dredging Tonnages per Segment.

APPLICATION NUMBER	APPLICANT NAME AND ADDRESS	RIVER MILES AUTHORIZED FOR DREDGING BY 2011 PERMIT	ANNUAL TONS OF MATERIAL AUTHORIZED BY 2011 PERMIT
NWK 2011-00361	Capital Sand Company, Inc. (Capital Sand) Post Office Box 104990 Jefferson City, MO 65110-4990	(St. Charles Segment) 50.35-56.85, 62.00-75.00, 93.55-102.25, 102.75-103.00, 109.00-115.20, 115.95-118.40, 119.15-119.35, 119.85-124.35, 124.95-126.05, 126.90-127.50,	140,000
		(Jefferson City Segment) 130.20-157.00, 158.45-164.00, 172.00-176.40, 178.35-180.15, 180.65-184.75, 185.65-186.90, 188.20-192.00, 193.00-193.40, 195.75-202.10, 202.75-210.00, 220.00-226.95, 227.55-230.00, 245.00-249.65	1,350,000
		(Waverly Segment) 250.30-265.00, 283.00-297.90, 299.05-300.00, 301.05-303.00, 314.00-328.00, 340.00-340.35, 340.85-347.85, 353.00-355.00.	370,000
NWK 2011-00362	Hermann Sand and Gravel, Inc. (Hermann Sand) Post Office Box 261 Hermann, Missouri 65041	(St. Charles Segment) 56.00-56.85, 61.25-66.00, 70.00-80.00, 80.50-89.75, 93.55-101.70, 109.00-115.20, 115.95-118.40	120,000
		(Jefferson City Segment) 146.00-157.00, 158.45-164.00	120,000
NWK 2011-00363	Holliday Sand and Gravel Company (Holliday Sand) 9660 Legler Road Lenexa, Kansas 66219	(Waverly Segment) 320.00-330.90, 331.65-336.00, 338.00-339.15, 340.85-347.85, 350.00-356.30, 356.50-356.90	770,000
		(Kansas City Segment) 356.90-358.16, 358.36-359.24, 359.44-360.17, 360.37-361.20, 361.44-362.15, 362.35-364.25, 364.45-364.64, 364.84-365.43, 365.79-366.02, 366.30-367.00, 367.90-373.30, 374.20-375.10, 375.30-377.81, 378.90-379.70, 380.70-386.00	2011 - 1,200,000 2012 - 900,000 2013 - 850,000 2014 - 800,000* (* permit modification) 2015 - 540,000
		(St. Joseph Segment) 445.00-447.75, 448.25-456.75, 457.25-458.75	860,000
NWK 2011-00364	Con-Agg of MO, L.L.C. (Con-Agg) 2604 North Stadium Blvd. Columbia, Missouri 65202	(Jefferson City Segment) 178.35-184.75, 185.65-186.90, 188.20-192.00, 193.00-193.40, 195.75-196.50, 196.70-197.00, 198.50-199.15, 199.40-201.95	160,000

APPLICATION NUMBER	APPLICANT NAME AND ADDRESS	RIVER MILES AUTHORIZED FOR DREDGING BY 2011 PERMIT	ANNUAL TONS OF MATERIAL AUTHORIZED BY 2011 PERMIT
MVS 2011-00177	Limited Leasing Company 1777 Highway 79 South Old Monroe, MO 63369	(St. Charles Segment) 0.00-12.00, 20.00-35.00, 40.00-47.00	990,000
MVS 2011-00178	J.T.R. Inc. (Jotori Dredging) 2320 Creve Coeur Mill Road Maryland Heights, MO 63043	(St. Charles Segment) 1.00-4.00, 6.00 -12.00, 14.00-24.00, 30.00-35.00	460,000

Table 2. Cumulative Tons Extracted per Year versus Authorized Tonnages.

APPLICATION NUMBER	YEAR	ACTUAL TONNAGE EXTRACTED	ANNUAL TONS OF MATERIAL AUTHORIZED BY 2011 PERMIT
All Dredgers Combined	2011	3,523,022	6,540,000
	2012	3,169,239	6,240,000
	2013	3,627,531	6,190,000
	2014	4,104,187	6,140,000
	2015	-	5,880,000

PROPOSED DREDGING ACTIVITIES (As shown on the attached drawings): The applicants shown in “Table 3” have requested renewal of their Department of the Army (DA) authorizations to dredge sand and gravel for commercial purposes from the Missouri River in the states of Kansas and Missouri. If re-issued, the permits would authorize dredging for a period of five years. This notice is provided to outline details of the proposed work so that the Districts may consider all pertinent comments prior to determining if issuance of these permits would be in the public interest.

Table 3. Missouri River Dredging Tonnages and Segments as Proposed by the Applicants.

(*) Denotes a requested variance from 2011 authorized tonnage.

APPLICATION NUMBER	APPLICANT NAME AND ADDRESS	RIVER REACH REQUESTED	ANNUAL TONS REQUESTED
NWK 2011-00361	Capital Sand Company, Inc. (Capital Sand) Post Office Box 104990 Jefferson City, MO 65110-4990	(St. Charles Segment)	300,000*
		(Jefferson City Segment)	1,350,000
		(Waverly Segment)	370,000
NWK 2011-00362	Hermann Sand and Gravel, Inc. (Hermann Sand) Post Office Box 261 Hermann, Missouri 65041	(St. Charles Segment)	150,000*
		(Jefferson City Segment)	150,000*
NWK 2011-00363	Holliday Sand and Gravel Company (Holliday Sand) 9660 Legler Road Lenexa, Kansas 66219	(Waverly Segment)	2016 – 770,000 2017 – 847,000* 2018 – 924,000* 2019 - 1,001,000* 2020 – 1,078,000*
		(Kansas City Segment)	540,000

APPLICATION NUMBER	APPLICANT NAME AND ADDRESS	RIVER REACH REQUESTED	ANNUAL TONS REQUESTED
		(St. Joseph Segment)	860,000
NWK 2011-00364	Con-Agg of MO, L.L.C. (Con-Agg) 2604 North Stadium Blvd. Columbia, Missouri 65202	(Jefferson City Segment)	160,000
MVS 2011-00177	Limited Leasing Company 1777 Highway 79 South Old Monroe, MO 63369	(St. Charles Segment)	990,000
MVS 2011-00178	J.T.R. Inc. (Jotori Dredging) 2320 Creve Coeur Mill Road Maryland Heights, MO 63043	(St. Charles Segment)	460,000
TOTAL	2016 2017 2018 2019 2020		5,730,000 5,807,000 5,884,000 5,961,000 6,038,000

WETLANDS/AQUATIC HABITAT: No jurisdictional wetlands would be directly impacted by the proposed work. Indirect and cumulative impacts of the proposed and alternative actions on wetlands were discussed in Sections 3.9 and 4.7 and Chapter 5 of the Final EIS and Section 5.3 of the ROD. Potential actions to mitigate impacts on wetlands were discussed in Chapter 6 of the Final EIS and ROD. We will evaluate comments received in response to this public notice as we complete the Section 404(b)(1) analysis.

CULTURAL RESOURCES: The USACE will comply with the National Historic Preservation Act of 1966 and 36 CFR 800. The potential direct, indirect, and cumulative impacts of the proposed and alternative actions on cultural resources were discussed in Sections 3.15 and 4.13 and Chapter 5 of the EIS and in Sections 4.1 and 7.3 of the ROD. Potential actions to mitigate impacts on cultural resources were discussed in Chapter 6 of the EIS and ROD. The selected alternative, as discussed in the ROD, should result in only slight bed degradation in the studied reach of the Missouri River; this would prevent or minimize the direct and indirect effects on cultural resources associated with tributary head cutting. USACE permit conditions will include the requirement to notify the USACE and state agencies if unidentified cultural resources are discovered; a description of existing dredging exclusion zones to avoid and/or reduce the potential for adverse effects to historic properties; and the requirement to notify the USACE and state agencies if the Dredgers propose to expand dredging into areas not previously dredged. Therefore, no adverse effects to historic properties, therefore, are expected from the proposed action.

ENDANGERED SPECIES: All of the proposed dredging areas are within the historic geographic range of the endangered Indiana bat (*Myotis sodalis*), threatened piping plover (*Charadriusmelodus*), endangered least tern (*Sterna antillarum*), endangered pallid sturgeon (*Scaphirhynchus albus*) and threatened decurrent false aster (*Boltonia decurrens*). The potential direct, indirect and cumulative impacts of the proposed and alternative actions on federally listed

species were discussed in Sections 3.10 and 4.8 and Chapter 5 and Section 4.1 and 7.2 of the ROD. Potential actions to mitigate impacts on endangered species were discussed in Chapter 6 of the EIS and ROD. After reviewing the current status of the listed species, the environmental baseline for the Action Area and the effects of the Environmentally Preferred Alternative, the USACE concluded in a 2011 Biological Assessment (BA) that the Environmentally Preferred Alternative would either have no effect or was not likely to adversely affect federally listed species within the Action Area.

In order to complete our most current evaluation of potential effects to listed species from the proposed activities, comments are solicited from the U.S. Fish and Wildlife Service, interested agencies, and the public. The USACE will also re-initiate informal consultation with the U.S. Fish and Wildlife Service by submitting a preliminary effects determination to comply with interagency coordination policies outlined under Section 7 of the Endangered Species Act.

FLOODPLAINS: This activity is being reviewed in accordance with Executive Order 11988, Floodplain Management, which discourages direct or indirect support of floodplain development whenever there is a practicable alternative. By this public notice, comments are requested from individuals and agencies that believe the described work will adversely impact the floodplain.

WATER QUALITY CERTIFICATION: Section 401 of the Clean Water Act (33 USC 1341) requires that all discharges of dredged or fill material must be certified by the appropriate state agency as complying with applicable effluent limitations and water quality standards. The potential direct, indirect, and cumulative impacts of the proposed and alternative actions on water quality were discussed in Sections 3.7 and 4.5 and Chapter 5 of the Final EIS and Chapter 5 and Section 7.5 of the ROD. Potential actions to mitigate impacts on water quality were discussed in Chapter 6 of the Final EIS and ROD. This public notice serves as an application to the state in which the discharge site is located for certification of the discharge. The discharge must be certified before a Department of the Army permit can be issued. Certification, if issued, expresses the state's opinion that the discharge will not violate applicable water quality standards.

PUBLIC INTEREST REVIEW: The decision to issue the permits will be based on an evaluation of the probable impacts including the cumulative impacts of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefits which reasonably may be expected to accrue from the proposal must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered including the cumulative effects thereof; among those are conservation, economics, esthetics, general environmental concerns, wetlands, cultural values, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs and, in general, the needs and welfare of the people. The evaluation of the impact of the activity on the public interest will include application of the guidelines promulgated by the Administrator, Environmental Protection Agency under authority of Section 404(b) of the Clean Water Act (33 USC 1344). The Corps of Engineers is soliciting comments from the public; Federal, state, and local agencies and officials; Indian Tribes; and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps of Engineers to determine whether to issue, modify, condition or deny a permit for these permit renewal requests. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public

interest factors listed above. Comments will be used in preparation of an Environmental Assessment (EA), pursuant to the National Environmental Policy Act, and for this permit cycle the EA will be tiered off the 2011 EIS. Comments will also be used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

COMMENTS: This notice is provided to outline details of the above-described activity so this District may consider all pertinent comments prior to determining if issuance of a permit would be in the public interest. Any interested party is invited to submit to this office written facts or objections relative to the activity on or before the public notice expiration date. Comments both favorable and unfavorable will be accepted and made a part of the record and will receive full consideration in determining whether it would be in the public interest to issue the Department of the Army permit. Copies of all comments, including names and addresses of commenters, may be provided to the applicant. Comments should be mailed to the address shown under the “ADDITIONAL INFORMATION” heading on page six of this public notice.

PUBLIC HEARING: Any person may request, in writing, prior to the expiration date of this public notice, that a public hearing be held to consider this application. Such requests shall state, with particularity, the reasons for holding a public hearing.

ADDITIONAL INFORMATION: Additional information about these applications may be obtained by contacting Mr. Matthew Sailor, Regulatory Project Manager at the U.S. Army Corps of Engineers, Kansas City Regulatory Office, 601 East 12th Street, Room 402, Kansas City, Missouri 64106-2896, by telephone at 816-389-3739 (FAX 816-389-2032), or via email at matthew.c.sailor@usace.army.mil OR Mr. Charles Frerker, Regulatory Project Manager, U.S. Army Corps of Engineers, St. Louis District, 1222 Spruce Street, Saint Louis, Missouri, 63103 by telephone (334) 331-8583, (FAX 314-331-8741) or via email at charles.f.freker@usace.army.mil.

NOTE: This public notice is posted on the Kansas City and Saint Louis Districts’ Regulatory web pages and can be viewed at the following addresses:

<http://www.nwk.usace.army.mil/Media/PublicNotices.aspx>

<http://www.mvs.usace.army.mil/Missions/Regulatory/PublicNotices.aspx>

APPENDIX 1: PAST PERMIT SPECIAL CONDITIONS

- a. You understand and agree that, if future operations by the United States require the removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, you will be required, upon due notice from the U.S. Army Corps of Engineers (USACE), to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration.
- b. You must implement a Dredge Monitoring Plan (DMP) approved by the Regulatory Branch of the Kansas City District, USACE. If a DMP has not been previously approved by the Regulatory Branch, USACE, Kansas City District, you must provide within 30 days of execution of the permit a DMP for each individual dredge plant to the Regulatory Branch of the USACE, Kansas City District for approval. The DMP must show how you will monitor, record, and report the cutter-head position, cutter-head operating status, extraction tonnage, and the presence of any hard substrates, mussel shells, or unusual concentration of gravel in an impartial, unbiased, reliable, and accurate manner. The DMP must include the specifications of the process and the Dredge Monitoring System (DMS) including sensors, hardware, software, communications devices the permittee will use to: gather data; perform quality control on those data; calibrate, test, and repair sensors when they fail; and transfer the data to the Regulatory Branch of the Kansas City District, USACE. The DMS must include automated differential Global Positioning System (DGPS) equipment (or other comparable system) operating with a minimum accuracy level of 1-3 meters horizontal Circular Error Probable with horizontal positions tied into the UTM Zone 15 NAD 83 (feet) coordinate system recorded to the nearest foot. The DMS must always be on, recording cutter-head position and operating status every 5 minutes, 24-hours a day, 365 days a year, even when the dredge is not operating. The data logged each month must be submitted by email to cody.s.wheeler@usace.army.mil at the Regulatory Branch of the Kansas City District, USACE by the 7th day of the following month. If you do not receive an email confirmation that the report was received, you must contact the Regulatory Branch of the Kansas City District, USACE at 816-389-3990 for revised instructions for filing the monthly report. The extracted material must be measured by one of the methods described in the attached Standard Operating Procedure for Hydrographic Surveying and Dredge Monitoring. If the tonnage is measured by scale at the off-loading facility, the DMP should also describe how the operation will record the date, time, river mile, coordinates, and approximate tonnage of each barge loaded in one location. If a barge is partially filled at one anchor setting then completed at a new anchor setting, the tonnage should be estimated separately for each location. This information must be provided monthly by email on the attached Missouri River Commercial Dredging Location/Volume Report spreadsheet to cody.s.wheeler@usace.army.mil at the Regulatory Branch of the Kansas City District, USACE by the 7th day of the following month. If you do not receive an email confirmation that the report was received, you must contact the Regulatory Branch of the Kansas City District, USACE at 816-389-3990 for revised instructions for filing the monthly report. Faulty sensors or other components identified in the DMP must be repaired within 96 hours. The DMS must not be inoperable more than 5 percent of the time. You must install an approved DMS and have it inspected by the Regulatory Branch of the Kansas City District, USACE within 120 days of execution of the permit or you must cease dredging operations until it is installed and inspected or you submit a justification of the delay and an installation schedule and get an extension of this deadline in writing from the Regulatory Branch of the Kansas City District, USACE.

- c. The USACE periodically surveys the river as part of the management and operation of the Bank Stabilization and Navigation Project. If, for any reason, the USACE has not surveyed the river in the fourth year (2014) of the five-year permit cycle, the authorized dredging companies must have the lower 498 miles of the LOMR surveyed during the summer months in accordance with the Standard Operating Procedures for Hydrographic Surveying and Dredge Monitoring. The survey shall be completed between June and September of 2014 and submitted to the Regulatory Branch of the Kansas City District, USACE by November 1, 2014.
- d. If any part of the authorized work is performed by a contractor, before starting work you must discuss the terms and conditions of this permit with the contractor and must give a copy of this entire permit to the contractor. After the initial 120 days of this permit, any contracted dredges or barges must also be equipped with and operate in accordance with an approved DMP as required in Special Condition "b". The DMP and system must be approved by the Regulatory Branch of the Kansas City District, USACE prior to starting work.
- e. Until the dredges and barges are equipped with the DMS required by Special Condition "b", you must, for each dredge operated, record Global Positioning System (GPS) coordinates, tons of material removed, and the presence of any hard substrates or unusual concentration of gravel daily. If the dredge moves more than 100 feet in any one day then the amount of material removed from each location must be recorded separately. The operators may use hand-held GPS devices or automatically recording devices, but with which ever system used, must identify the device make/model and recording location. This information must be recorded on the attached Missouri River Commercial Dredging Location/Volume Report in an electronic spreadsheet. You must furnish a copy of the completed monthly report by email to cody.s.wheeler@usace.army.mil at the Regulatory Branch of the Kansas City District, USACE by the 7th day of the following month. If you do not receive an email confirmation that the report was received, you must contact the Regulatory Branch of the Kansas City District, USACE at 816-389-3990 for revised instructions for filing the monthly report.
- f. No more than 300,000 tons of material shall be extracted within one year from each five-mile reach of the Missouri River between river miles 15 to 20, 25 to 35, 90 to 100, 140 to 150, 355 to 395, and 445 to 455. When the dredge report database of the Regulatory Branch of the Kansas City District, USACE indicates that extraction in a five-mile reach has reached 300,000 tons, all dredgers authorized to operate within that reach will be notified that it is closed to further dredging for the remainder of the calendar year unless a waiver is requested and received in writing from the Regulatory Branch of the Kansas City District, USACE.
- g. Up to 10% of your authorized annual tonnage for each segment may be carried over each year to be extracted within that segment the following year. Annual tonnage with carryover may never exceed 110% of annual authorized tonnage of each segment. At the end of each year you must notify the Regulatory Branch of the Kansas City District, USACE in your annual tonnage report of any unextracted tonnage that you intend to carryover.
- h. In permit conditions that specify a linear distance exclusion zone adjacent to a river feature, "dredging" refers to the operation of hydraulic cutter-head suction dredging. The exclusion zone distances will apply to and be measured from the end of the cutter head, rather than from a general point on the dredge.
- i. You must confine dredging to between the Rectified Channel Lines (RCL) with the following restrictions. Dredging must be conducted in such a manner to preserve the

structural integrity of the landmass landward of the RCL. This must be accomplished by maintaining an adequate "no dredging or discharging" zone riverward of the RCL so that material will stabilize into the dredging area at its natural angle of repose. This slope will vary depending upon river location and the type of material being dredged, but it is your responsibility to ensure that this shallow water interface landward of the RCL be maintained.

- j.** You must not dredge within 500 feet of any levee centerline, pipeline or submerged utility crossing, bridge pier or abutment; nor within 200 feet of any dike, revetment, or other structure built or authorized by the U.S. Government; nor within 100 feet of any normal bank line or island, without special authorization. When dredging is performed adjacent to river stabilization structures, the dredging may be conducted only in the present streambed of the river at the authorized locations. This condition represents only the minimum distances away from structures and natural features that you can conduct dredging and does not relieve you from liability for damage arising from dredging. You must be satisfied that dredging to these limits will not cause damage to public and private property.
- k.** You must not conduct dredging operations in a zone extending 4,000 feet upstream and 500 feet downstream from any municipal drinking water intake structures located along either bank of the river unless you obtain an exemption to this condition in writing from the Regulatory Branch of the Kansas City District, USACE.
- l.** You must not conduct dredging operations in a zone extending 1,000 feet upstream and 1,000 feet downstream from any municipal drinking water horizontal collector wells located along either bank of the river unless you obtain an exemption to this condition in writing from the Regulatory Branch of the Kansas City District, USACE.
- m.** You must not conduct dredging operations in a zone extending 500 feet upstream and 500 feet downstream from any other water intake structures other than those used for municipal drinking water unless you obtain an exemption to this condition in writing from the Regulatory Branch of the Kansas City District, USACE.
- n.** You may discharge back into the Missouri River material spilled off the conveyer belts and unusable material separated out in the on-shore sand washing and handling facility. To subtract that tonnage from your annual extraction limit, you must follow a plan approved in writing by the Regulatory Branch of the Kansas City District, USACE. This plan must show where and how the material will be discharged and how the amount of dredged material discharged back into the river will be measured and reported to the Regulatory Branch of the Kansas City District, USACE. The total extraction tonnage will equal the tonnage extracted and barged to shore minus that amount intentionally returned to the Missouri River.
- o.** You may return unwanted dredged material and river water (but not garbage) extracted from the Missouri River back to the Missouri River. You must 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.
- p.** You must comply with all U.S. Coast Guard, State of Missouri, State of Kansas (river mile 367 to 490), and USACE regulations concerning the prevention of navigation obstructions in navigable waters of the United States.
- q.** You must conduct operations in the Missouri River such that there will be no unreasonable interference with navigation by the existence or use of the activity authorized herein.
- r.** To avoid impacting endangered species and cultural resources, you must confine dredging to the specified reaches listed on page 1 of the permit document. If you desire to expand or

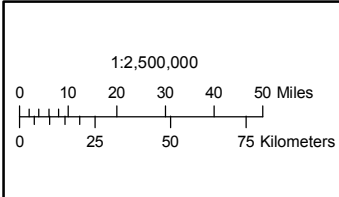
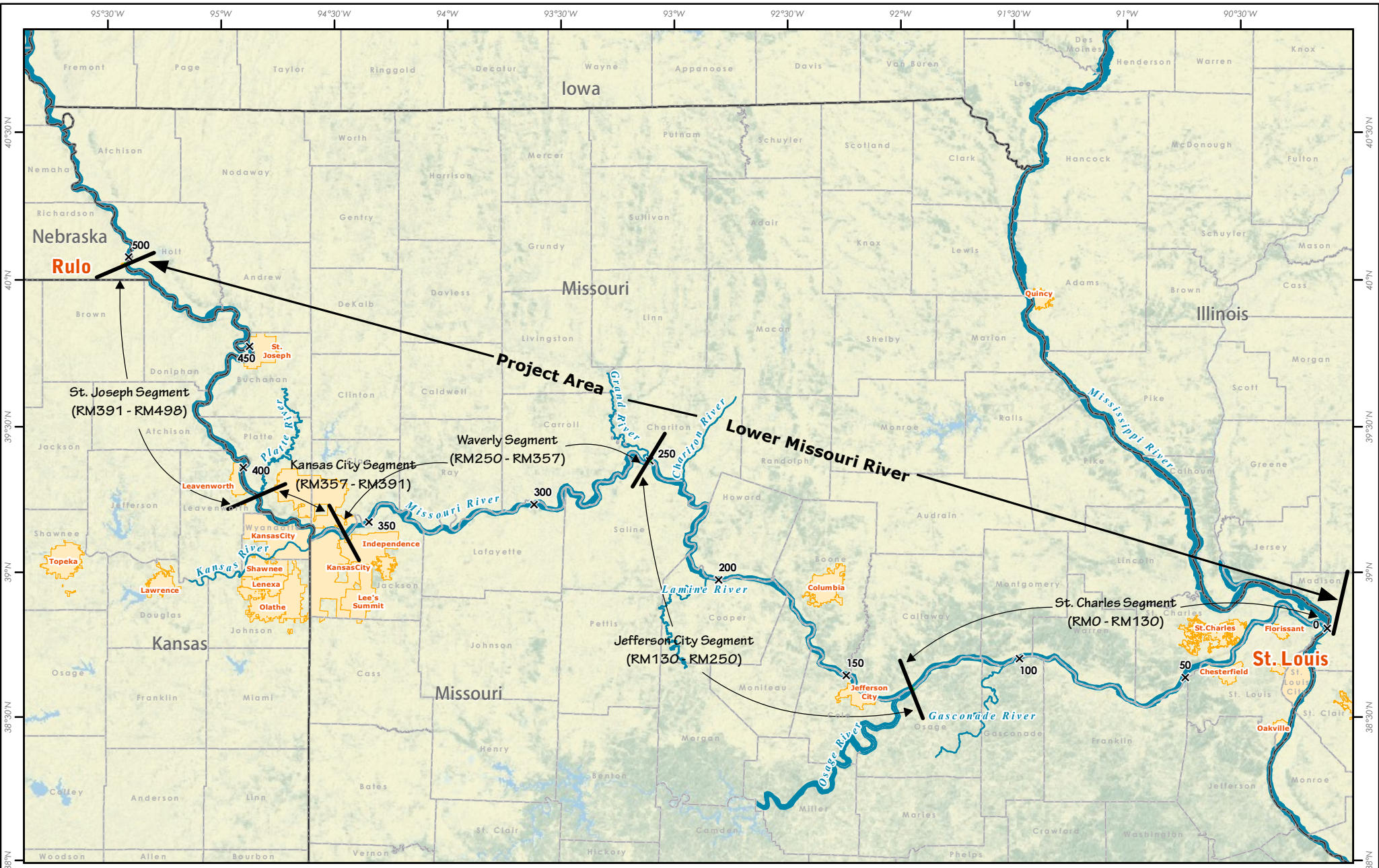
relocate your dredging operation outside the specified reaches, you must submit a request to the Regulatory Branch of the Kansas City District, USACE identifying the proposed new limits, in river miles and the location of the unloading facility to be employed. Approval of the requests, if granted, will be provided in writing with modified reaches identified on the Missouri River Hydrographic Survey. Copies of the relocation requests must be furnished to the following agencies:

1. U.S. Fish and Wildlife Service, Columbia Field Office
 2. Missouri Department of Natural Resources, Water Pollution Control Program
 3. Missouri Department of Natural Resources, State Historic Preservation Office
 4. Kansas Department of Health and Environment, Bureau of Water (for operations extending upstream of river mile 367)
 5. Kansas State Historical Society, State Historic Preservation Office (for operations extending upstream of river mile 367)
 6. Corps of Engineers, Kansas City District, Hydrologic Engineering Branch
- s. You must not conduct dredging operations within the reaches identified in the following table as Pallid Sturgeon habitat features.

Missouri River Miles (including 0.25 mile buffer)		Pallid Sturgeon Habitat Feature
Downstream	Upstream	
44.25	44.85	RDB Centaur Chute
49.15	50.05	RDB Centaur Chute
56.85	59.05	LDB Chute/Island
58.55	61.25	RDB Chute/Island
89.75	91.10	RDB Island
89.90	91.45	LDB Loutre Slough
91.20	93.55	LDB Lunch Island
103.00	104.95	Both Gasconade Confluence and Dike Field
105.20	106.25	RDB Dike Field
115.20	115.95	RDB Island
118.40	119.15	RDB Dike Field
119.35	119.85	RDB St. Aubert Island/Chute
124.35	124.95	RDB St. Aubert Island/Chute
126.05	126.90	LDB Dike Field
127.50	130.20	Both Osage River Confluence and Dike Field
157.00	158.45	LDB Island
176.40	178.35	LDB Island/RDB Tadpole Island Chute
180.15	180.65	RDB Tadpole Island Chute
184.75	185.65	RDB Chute
186.90	188.20	RDB Chute and Dike Field
193.40	195.75	RDB Dike Field/Island
202.10	202.75	RDB Lamine River Confluence
210.00	219.65	Lisbon/Jameson Complex
226.95	227.55	LDB Little Chariton Confluence
238.40	239.10	LDB Chariton River Confluence
249.65	250.30	LDB Grand River Confluence
269.85	271.35	RDB Shallow/Island
280.40	282.05	RDB Island
297.90	299.05	RDB Island
300.00	301.05	LDB Island

367.00	367.75	RDB Kansas River Confluence
390.85	391.45	LDB Platte River Confluence
456.75	457.25	LDB Worthwine Chute
458.75	459.25	LDB Worthwine Chute
462.65	463.25	LDB Nodaway River Confluence
478.55	479.15	RDB Wolf Creek Confluence
494.55	495.20	RDB Big Nemaha River Confluence

- t.** You must discharge only suitable dredged material that is free from toxic pollutants in other than trace quantities.
- u.** You must investigate for water supply intakes or other activities which may be affected by suspended solids and turbidity increases caused by work in the watercourse and give sufficient notice to the owners of affected activities to allow preparation for any changes in water quality. You must furnish the Regulatory Branch of the Kansas City District, USACE with a copy of any written notification provided in accordance with this condition.
- v.** You must employ measures to prevent dredged materials stored or disposed of on shore from running off or eroding into wetlands or tributaries to the Missouri River.
- w.** You must employ measures to prevent or control spilled fuels or lubricants from entering the waters of the United States.
- x.** You must store all construction materials, equipment, and/or petroleum products that are part of the on-shore operation, when not in use, above anticipated high water levels.



- Legend**
- ✕ River Mile
 - ~ River
 - Lake/Reservoir
 - Metropolitan Area (pop. >35,000)
 - County Boundary
 - State Boundary

Project Overview

Lower Missouri River Segments - Figure 1



February 2011