Requests for maps or information should be addressed to:

U.S. Army Engineer District, Kansas City
ATTN: Geospatial Data Section
601 East 12th Street
Kansas City, MO 64106
816-389-3669

Additional marine mapping products can be found at:

U.S. Army Topographic Engineering Center
7701 Telegraph Road
Alexandria, VA 22315-3864
703-428-6816
http://www.agc.army.mil/Missions/Echarts.aspx

NoAA (National Oceanic and Atmospheric Administration)
14th Street & Constitution Avenue, N.W.
Room 6217
Washington, D.C. 20230
202-482-6090
http://www.noaa.gov

Additional marine mapping products can be found at:

Additional marine mapping products can be found at:

COAST GUARD UNIT

Commander
Eighth Coast Guard District
Hale Boggs Federal Building
500 Poydras Street
New Orleans, Louisiana 70130
Commander 504-671-2020

U.S. Coast Guard, Cutters' Cheyenne & Gasconade
Foot of Arsenal St.
Bldg. 17
St. Louis, MO 63108
Call Sign - Coast Guard Cutter Cheyenne or Gasconade

SECTOR UPPER MISSISSIPPI RIVER (08-37390)
1222 SPRUCE ST, SUITE 7.103
ST LOUIS, MO 63103
Primary Phone: 314-269-2500
Emergency Phone: 866-360-3386
Fax Number: 314-269-2734
URL: http://www.uscg.mil/d8/sectUMR
Quick Link http://homeport.uscg.mil/umr

USCG Navigation Center (NAVcen)
7323 Telegraph Rd.
Alexandria, VA 22315
703-313-5900
http://www.navcen.uscg.gov
703-313-5900 (24 Hour Line)

REPORT OIL AND CHEMICAL SPILLS ANY TIME TO THE NATIONAL RESPONSE CENTER AT:
(TOLL FREE) 1-800-424-8802, (DIRECT) 202-267-2675, (ONLINE) http://www.nrc.uscg.mil

US ARMY CORPS OF ENGINEERS

Kansas City District Office
601 E. 12th Street
Kansas City, Missouri 64106-2896
Telephone: 816-389-3486

Missouri River Area Office
790 E. 224 Highway
Napoleon, Missouri 64074-7001
Telephone: 816-240-8131

Gasconade Harbor Facility
P.O. Box 410
Hermann, MO 65041
Telephone: 573-294-6411

Glasgow Project Office
P.O. Box 76
Glasgow, Missouri 65254
Telephone: 660-338-2278/3139

POINTS OF CONTACT
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These navigation charts were generated from field surveys conducted by the U.S. Army Corps of Engineers offices and from aerial photography taken. Information presented on these charts can change and, therefore, anyone navigating on the Missouri River must exercise caution and acknowledge the ever-present hazards of this natural resource. Mariners are urged to submit any condition found to differ from those shown on the charts to https://lenc-report.usace.army.mil/, or call 816-389-3669.

**PROCUREMENT OF NAVIGATION CHARTS**

Navigation charts for the Federal navigation projects on the Western Rivers of the United States are available for purchase from the US Army Corps of Engineers. Navigation charts for the Missouri River can be procured from the following sources:

- 732 North Capitol Street NW
- Washington, DC 20401-0001
- 202-512-1800

A list of locations for the purchase of navigation charts for other Corps’ projects can be obtained from the following internet address: http://bookstore.gpo.gov

Electronic navigation charts can be obtained from:

http://www.agc.army.mil/echarts/inlandnav

**NAVIGATION NOTICES**

Notices to Navigation Interests (Navigation Notice), containing data on channel conditions, location of dredges, etc., are issued by the Corps of Engineers as occasions warrant. Distribution of the Navigation notices for the Missouri River is by e-mail. Requests to be placed on the distribution list for the Missouri River need to contact:

U.S Army Corps of Engineers, Northwestern Division
Kansas City District
601 East 12th St.
Kansas City, Missouri 64106

**MILE POINTS**

River mileage, as shown along the navigation project’s sailing line, is measured from the mouth of the Missouri River and continues upstream to Rulo, Nebraska, river mile 498.4. The mile points do not represent actual distance along the sailing line. Generally, the mile points approximate a mile between the points; however, in areas where the alignment of the navigation channel has changed during its existence, the distance between mile points would tend to be greater or less than 1-mile in distance.

The Corps of Engineers has the responsibility under Congressional authorization for the construction, operation and maintenance of the Missouri River for navigation, flood reduction and related purposes, including flow regulation and bank protection. The navigation project extends from Sioux City, Iowa, to the mouth, a distance of 735 miles. The completed project provides a continuous navigation channel 9’ deep and 300’ wide, which is designed to flow along the concave side of the bends and through the crossing between bends. The Corps support of navigation is from normally lower March to November at Sioux City, and from the first of April to the first of December at the mouth. Ice conditions and low water may preclude navigation the rest of the year. Specific minimum flow rates are required during the navigation season to provide adequate depths and width. To meet this, insufficient natural flows are augmented by releases from upstream reservoirs. A flow of 30,000 to 35,000 cubic feet per second is generally maintained at Sioux City and Omaha, and 35,000 to 40,000 cubic feet per second at Kansas City. During the navigation season, river stages vary from a range of about one foot at Sioux City to around 15 feet at Hermann, Mo., and the velocity of the flow varies from 4 to 5 miles per hour.

**MISSOURI RIVER AUTHORIZED PROJECT**

Buoyed channels are maintained at a distance more or less than 1-mile in distance. The distance between buoys would tend to be greater or less than 1-mile in distance.

**MISSOURI RIVER AUTHORIZED PROJECT**

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THE LAW

Section 7 of the River and Harbor Act of August 8, 1917, provides as follows:

“That it shall be the duty of the Secretary of War to prescribe such regulations for the use, administration, and navigation of the navigable waters of the United States as in his judgment the public necessity may require for the protection of life and property, or of operations of the United States in channel improvement, covering all matters not specifically delegated by law to some other executive department. Such regulations shall be posted, in conspicuous and appropriate places, for the information of the public and every person and every corporation which shall violate such regulations shall be deemed guilty of a misdemeanor, and on conviction thereof in any district court of the United States within whose territorial jurisdiction such offense may have been committed, shall be punished by a fine not exceeding $500, or by imprisonment (in the case of a natural person) not exceeding six months, in the discretion of the court.”

In pursuance of the law above quoted, the following regulations were prescribed to govern the use, administration, and navigation of the Ohio River, Mississippi River above Cairo, Illinois, and their tributaries.

THE REGULATIONS

Sec. 205, 306 Ohio River, Mississippi River above Cairo, Ill., and their tributaries—use, administration, and navigation.

(a) Authority of Lockmasters.

The lockmaster shall be charged with the immediate control and management of the lock, and of the area set aside as the lock area, including the lock approach channels. He/she shall see that all laws, rules, and regulations for the use of the lock and lock area are duly complied with, to which end he/she is authorized to give all necessary orders and directions in accordance therewith, both to employees of the government and to any and every person

within the limits of the lock and lock area, whether navigating the lock or not. No one shall cause any movement of any vessel, boat, or other floating thing in the lock or approaches except by or under the direction of the lockmaster or his/her assistants. In the event of an emergency, the lockmaster may depart from these regulations as he deems necessary. The lockmasters shall also be charged with the control and management of federally constructed mooring facilities.

(b) Safety rules for vessels using navigation locks.

The following safety rules are hereby prescribed for vessels in the locking process, including the act of approaching or departing a lock:

1. **Tows with flammable or hazardous cargo barges, loaded or empty.**
   - Tows with flammable or hazardous cargo barges, loaded or empty, shall not enter the lock.
   - Tows with flammable or hazardous cargo barges, loaded or empty, shall be restricted to the towed barges and shall not include personnel.
   - Tows with flammable or hazardous cargo barges, loaded or empty, shall not enter the lock without the written permission of the lockmaster.

2. **All vessels.**
   - Vessels shall be restricted to the towed barges and shall not include personnel.
   - Vessels with flammable or hazardous cargo barges, loaded or empty, shall not enter the lock without the written permission of the lockmaster.

3. **Reporting of navigation incidents.**
   - In furtherance of increased safety on waterways the following safety rules are hereby prescribed for all navigation interests:
     - Any incident resulting in uncontrolled barge shall be immediately reported to the nearest lock. The report shall include information as to the number of loose barges, their cargo, and the time and location where they broke loose. The lockmaster or locks shall be kept informed of the progress being made in bringing the barges under control so that he can initiate whatever actions may be warranted.
     - Whenever barges are temporarily moored at other than commercial terminals or established fleeting areas, and their breaking away could endanger a lock, the nearest lock shall be so notified, preferably the downstream lock.
     - In the event of an oil spill, notify the nearest lock downstream, specifying the time and location of the incident, type of oil, a mount of spill, and what recovery or controlling measures are being employed.
Any other activity on the waterways that could conceivably endanger navigation or a navigation structure shall be reported to the nearest lock.

Whenever it is necessary to report an incident involving uncontrolled, sunken or sinking barges, the cargo in the barges shall be accurately identified.

Precaution at locks.

1. The vessel arriving first at a lock shall normally be first to lock through, but precaution shall be given to vessels belonging to the United States. Licensed commercial passenger vessels operating on a published schedule or regularly operating in the "for hire" trade shall have precedence over cargo tows and like craft. Commercial cargo tows shall have precedence over recreational craft, except as described in paragraph (1) of this section.

2. Arrival posts or markers may be established above or below the locks. Vessels arriving at or opposite such posts or markers will be considered as having arrived at the locks within the meaning of this paragraph. Precedence may be established visually or by radio communication. The lockmaster may prescribe such departure from the normal order of precedence as in his judgment is warranted to achieve best lock utilization.

Unnecessary delay at locks.

Masters and pilots must use every precaution to prevent unnecessary delay in entering or leaving locks. Vessels failing to enter locks with reasonable promptness when signaled to do so shall lose their turn. Rearranging or switching of barges in the locks or in approaches is prohibited unless approved or directed by the lockmaster. This is not meant to curtail "jackknifing" or set-ups where normally practiced.

Lockage of recreational craft.

In order to fully utilize the capacity of the lock, the lockage of recreational craft shall be expedited by locking them through with commercial craft, provided that both parties agree to joint use of the chamber. When recreational craft are locked simultaneously with commercial tows, the lockmaster will direct, wherever practicable, that the recreational craft enter the lock and depart while the tow is secured in the lock. Recreational craft will not be locked through with vessels carrying volatile cargoes or other substances likely to emit toxic or explosive vapors. If the lockage of recreational craft cannot be accomplished within the time required for three other lockages, a separate lockage of recreational craft shall be made. Recreational craft operators are advised that many locks have a pull chain located at each short blast of the lock which signals the lockmaster that lockage is desired. Furthermore, many Mississippi River locks utilize a strobe light at the lock to signal recreational type vessels that the lock is ready for entry. Such lights are used exclusively to signal recreational craft.

| U.S. ARMY CORPS OF ENGINEERS |
| MISSOURI RIVER |
| NORTHEASTERN DIVISION |

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(ii) When the lock is ready for entrance, the lock will give the following signals:

(a) One long blast of the whistle indicates permission to enter the lock chamber in the case of a single lock or to enter the landward chamber in the case of twin locks.

(b) Two long blasts of the whistle indicates permission to enter the riverward chamber in the case of twin locks.

(iii) Permission to leave the locks will be indicated by the following signals given by the lock:

(a) One short blast of the whistle indicates permission to leave the lock chamber in the case of a single lock or to leave the landward chamber in the case of twin locks.

(b) Two short blasts of the whistle indicates permission to leave the riverward chamber in the case of twin locks.

(iv) Four or more short blasts of the lock whistle delivered in rapid succession will be used as a means of attracting attention, to indicate caution, and to signal danger. This signal will be used to attract the attention of the captain and crews of vessels using or approaching the lock or navigating in its vicinity and to indicate that something unusual involving danger or requiring special caution is happening or is about to take place. When this signal is given by the lock, the captains and crews of vessels in the vicinity shall immediately become on the alert to determine the reason for the signal and shall take the necessary steps to cope with the situation.

2. Lock signal lights. At locks where density of traffic or other local condition makes it advisable, the sound signals from the lock will be supplemented by signal lights. Flashing lights (showing a one-second flash followed by a twosecond eclipse) will be located on or near each end of the land wall to control use of a single lock or of the landward lock of double locks. In addition, at double locks, interrupted flashing lights showing a one-second flash, a one-second eclipse and a one-second flash, followed by a three-second eclipse) will be located on or near each end of the intermediate wall to control use of the riverward lock. Navigation will be governed as follows:

(i) Red light. Lock cannot be made ready immediately. Vessel shall stand clear.

(ii) Amber light. Lock is being made ready. Vessel may approach but under full control.

(iii) Green light. Lock is ready for entrance.

(iv) Green light. Lock is ready for entrance but gates cannot be recessed completely. Vessel may enter under full control and with extreme caution.

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(5) Any other activity on the waterways that could conceivably endanger navigation or a navigation structure shall be reported to the nearest lock.

(6) Whenever it is necessary to report an incident involving uncontrolled, sunken or sinking barges, the cargo in the barges shall be accurately identified.

(d) Precedence at locks.

1. The vessel arriving first at a lock shall normally be first to lock through, but precaution shall be given to vessels belonging to the United States. Licensed commercial passenger vessels operating on a published schedule or regularly operating in the "for hire" trade shall have precedence over cargo tows and like craft. Commercial cargo tows shall have precedence over recreational craft, except as described in paragraph (1) of this section.

2. Arrival posts or markers may be established above or below the locks. Vessels arriving at or opposite such posts or markers will be considered as having arrived at the locks within the meaning of this paragraph. Precedence may be established visually or by radio communication. The lockmaster may prescribe such departure from the normal order of precedence as in his judgment is warranted to achieve best lock utilization.

(e) Unnecessary delay at locks.

Masters and pilots must use every precaution to prevent unnecessary delay in entering or leaving locks. Vessels failing to enter locks with reasonable promptness when signaled to do so shall lose their turn. Rearranging or switching of barges in the locks or in approaches is prohibited unless approved or directed by the lockmaster. This is not meant to curtail "jackknifing" or set-ups where normally practiced.

(f) Lockage of recreational craft.

In order to fully utilize the capacity of the lock, the lockage of recreational craft shall be expedited by locking them through with commercial craft, provided that both parties agree to joint use of the chamber. When recreational craft are locked simultaneously with commercial tows, the lockmaster will direct, wherever practicable, that the recreational craft enter the lock and depart while the tow is secured in the lock. Recreational craft will not be locked through with vessels carrying volatile cargoes or other substances likely to emit toxic or explosive vapors. If the lockage of recreational craft cannot be accomplished within the time required for three other lockages, a separate lockage of recreational craft shall be made. Recreational craft operators are advised that many locks have a pull chain located at each short blast of the lock which signals the lockmaster that lockage is desired. Furthermore, many Mississippi River locks utilize a strobe light at the lock to signal recreational type vessels that the lock is ready for entry. Such lights are used exclusively to signal recreational craft.

(i) Sound signals by means of a whistle. These signals apply at either a single lock or twin locks.

(a) Vessels desiring lockage shall on approaching a lock give the following signals at a distance of not more than one mile from the lock:

(1) If a single lock is only required: One long blast.

(b) If a double lockage is required: One long blast of the whistle followed by two short blasts.
(i) Radio communications. VHF-FM radios, operating in the FCC authorized Maritime Band, have been installed at all operational locks (except those on the Kentucky River and Lock 5, Green River). Radio contact may be made by any vessel desiring passage. Commercial tows are especially requested to make contact at least one half hour before arrival in order that the pilot may be informed of current river and traffic conditions that may affect the safe passage of his tow. All locks monitor 156.8 MHz (Ch. 10) and 156.65 MHz (Ch. 13) and can work 156.6 MHz (Ch. 13) and 156.7 MHz (Ch. 14). Ch. 16 is the authorized call, reply and distress frequency, and locks are not permitted to work on this frequency except in an emergency involving the risk of immediate loss of life or property. Vessels may call and work Ch. 13, without switching, but are cautioned that vessel to lock traffic must not interrupt or delay Bridge to Bridge traffic which has priority at all times.

(ii) Rafts. Rafts to be locked through shall be moored in such manner as not to obstruct the entrance of the lock, and if to be locked in sections, shall be brought to the lock as directed by the lockmaster. After passing the lock, all sections shall be reassembled at such distance beyond the lock as not to interfere with other vessels.

(iii) Entrance to and exit from locks. In case two or more boats or tows are to enter for the same lockage, their order of entry shall be determined by the lockmaster. Except as directed by the lockmaster, no boat shall pass another in the lock. In no case will boats be permitted to enter or leave the locks until directed to do so by the lockmaster. The sides of all craft passing through any lock shall be free from projections of any kind which might injure the lock walls. All vessels shall be provided with suitable fenders, and shall be used to protect the lock and guide walls until it has cleared the lock and guide walls.

(iv) Mooring (1) At locks.

a) All vessels when in the locks shall be moored as directed by the lockmaster. Vessels shall be moored with bow and stern lines leading in opposite directions to prevent the vessel from “running” in the lock. All vessels will have one additional line available on the head of the tow for emergency use. The pilothouse shall be attended by qualified personnel during the entire locking procedure. When the vessel is securely moored, the pilot shall not cause movement of the propellers except in emergency or unless directed by the lockmaster. Tying to lock ladders is strictly prohibited.

b) Mooring of unattended or non-propelled vessels or small craft at the upper or lower channel approaches will not be permitted within 1200 feet of the lock.

c) Outside of locks.

No vessel or other craft shall regularly or permanently moor in any reach of a navigation channel. The approximate centerline of such channels are marked as the sailing line on Corps of Engineers’ navigation charts. Nor shall any floating craft, except in an emergency, moor in any narrow or hazardous section of the waterway. Furthermore, all vessels or other craft are prohibited from regularly or permanently mooring in any reach of navigable waterways which are congested with commercial facilities or traffic unless it is moored at facilities approved by the Secretary of the Army or his authorized representative. The limits of the congested areas shall be marked on Corps of Engineers’ navigation charts. However, the District Engineer may authorize in writing exceptions to any of the above if, in his judgment, such mooring would not adversely affect navigation and anchorage.

d) No vessel or other craft shall be moored to railroad tracks when such mooring threatens the safety of equipment using such tracks, to telephone poles or power poles, or to bridges or similar structures used by the public.

(iii) Except in case of great emergency, no vessel or craft shall anchor over revetted banks of the river, and no floating structures are permitted in the river. In no case shall craft land against banks protected by revetment except at regular commercial landings. In all cases, every precaution to avoid damage to the revetment works shall be exercised. The construction of log rafts along revetted banks or the tying up and landing of log rafts against such banks shall be performed in such a manner as to cause no damage to the revetment work or bank paving. Generally, mattress work extends out into the river 600 feet from the low water line.

(e) Draft of vessels. No vessel shall attempt to enter a lock unless its draft is at least three inches less than the least depth of water over the guard sill, or over the gate sill if there be no guard sill. Information concerning controlling depth over sills can be obtained from the lockmaster at each lock or by inquiry at the office of the district engineer of the district in which the lock is located.

(f) Handling machinery. No one but employees of the United States shall move any lock machinery except as directed by the lockmaster. Tampering or meddling with the machinery or other parts of the lock is strictly forbidden.

(g) Refuse in locks. Placing or discharging refuse of any description into the lock, on lock walls or esplanade, canal or canal bank is prohibited.

(h) Damage to locks or other work. To avoid damage to plant and structures connected with the construction or repair of locks and dams, vessels passing areas in the process of construction or repair shall reduce their speed and navigate with special caution while in the vicinity of such work. The restrictions and admonitions contained in these regulations shall not affect the liability of the owners and operators of floating craft for any damage to locks or other structures caused by the operation of such craft.

(i) Trespass of lock property. Trespass on locks or dams or other U.S. property pertaining to the locks or dams is strictly prohibited except in those areas specifically permitted. Parties committing any injury to the locks or dams or to any part thereof will be responsible therefor. Any person planting or thrilling a willful injury to any U.S. property will be prosecuted. No fishing will be permitted from lock walls, guide walls, or guard walls of any lock or from any dam, except in areas designated and posted by the responsible District Engineer as fishing areas. Personnel from commercial and recreational craft will be allowed on the lock structure for legitimate business reasons, e.g., crew changes, emergency phone calls, etc.

(j) Restricted areas at locks and dams. All waters immediately above and below each dam, as posted by the respective District Engineers, are hereby designated as restricted areas. No vessel or other floating craft shall enter any such restricted area at any time. The limits of the restricted areas at each dam will be determined by the responsible District Engineer and marked by signs and/or flashing red lights installed in conspicuous and appropriate places.

(k) [Reserved]

(l) Operations during high water and floods in designated vulnerable areas.
Vessels operating on these waters during periods when river stages exceed the level of "ordinary high water", as designated on Corps of Engineers' navigation charts, shall exercise reasonable care to minimize the effects of their bow waves and propeller washes on river banks; submerged or partially submerged structures or habitations; terrestrial growth such as trees and bushes; and man-made amenities that may be present. Vessels shall operate carefully when passing close to levees and other flood protection works, and shall observe minimum distances from banks which may be prescribed from time to time in Notices to Mariners. Pilots should exercise particular care not to direct propeller wash at river banks, levees, revetments, structures or other appurtenances subject to damage from wave action.

(c) Navigation lights for use at all locks.

(1) At locks at all fixed dams and at locks at all movable dams when the dams are up so that there is no navigable pass through the dam, the following navigation lights will be displayed during hours of darkness:

- Three red lights visible through an arc of 360 degrees arranged in a vertical line on the upstream end of the river (guard) wall unless the intermediate wall extends further upstream. In the latter case, the lights will be placed on the downstream end of the intermediate wall.

- Two green lights visible through an arc of 360 degrees arranged in a vertical line on the downstream end of the river (guard) wall unless the intermediate wall extends further downstream. In the latter case, the lights will be placed on the downstream end of the intermediate wall.

(2) At movable dams when the dam has been lowered or partly lowered so that there is an unobstructed navigable pass through the dam, the navigation lights indicated in the following paragraphs will be displayed during hours of darkness until lock walls and weir piers are awash.

- Three red lights visible through an arc of 360 degrees arranged in a vertical line on the upstream end of the river (guard) wall.

- Two red lights visible through an arc of 360 degrees arranged in a vertical line on the downstream end of the river (guard) wall.

- A single red light visible through an arc of 360 degrees on each end (upstream and downstream) of the land (guide) wall.

(3) After lock walls and weir piers are awash they will be marked as prescribed in paragraph (s) of this section.

REGULATIONS: RIVERS AND HARBORS ACT - 1917
CHAP. 425.—An Act Making appropriations for the construction, repair, and preservation of certain public works on rivers and harbors, and for other purposes.

* * * * *

SECTION 15

That it shall not be lawful to tie up or anchor vessels or other craft in navigable channels in such a manner as to prevent or obstruct the passage of other vessels or craft; or to sink, or permit or cause to be sunk, vessels or other craft in navigable channels; or to float loose timber and logs, or to float what is known as sack rafts of timber and logs in streams or channels actually navigated by steamboats in such manners as to obstruct, impede, or endanger navigation. And whenever a vessel, raft, or other craft is wrecked and sunk in a navigable channel, it shall be the duty of the owner, lessee, or operator of such sunken craft to immediately mark it with a buoy or beacon during the day and a lighted lantern at night, and to maintain such marks until the sunken craft is removed or abandoned, and the neglect or failure of the said owner, lessee, or operator so to do shall be unlawful: and it shall be the duty of the owner, lessee, or operator of such sunken craft to commence the immediate removal of the same, and prosecute such removal diligently, and failure to do so shall be considered as an abandonment of such craft and subject the same to removal by the United States as hereinafter provided for. (33 U.S.C. 409)

SECTION 16

That every person and every corporation that shall violate, or that shall knowingly aid, abet, authorize, or instigate a violation of the provisions of sections 13, 14, 15, 19, and 20 of this Act shall be guilty of a misdemeanor, and on conviction thereof shall be punished by a fine of up to $25,000 per day, or by imprisonment (in the case of a natural person) for not less than thirty days nor more than one year, or by both such fine and imprisonment, in the discretion of the court; one-half of said fine to be paid to the person or persons giving information which shall lead to conviction. And any and every master, pilot, and engineer, or person or persons acting in such capacity, respectively, on board of any boat or vessel who shall knowingly engage in towing any scow, boat, or vessel loaded with any material specified in section thirteen of this Act to any point or place of deposit or discharge in any harbor or navigable water, elsewhere than within the limits defined and permitted by the Secretary of War, or who shall willfully injure or destroy any work of the United States contemplated in section fourteen of this Act, or who shall willfully obstruct the channel of any waterway in the manner contemplated in section fifteen of this Act, shall be deemed guilty of a violation of this Act, and shall upon conviction be punished as hereinbefore provided in this section, and shall also have his license revoked or suspended for a term to be fixed by the judge before whom tried and convicted. And any boat, vessel, scow, raft, or other craft used or employed in violating any of the provisions of sections 13, 14, 15, 19, and 20 of this Act shall be liable for the pecuniary penalties specified in this section, and in addition thereto for the amount of the damages done by said boat, vessel, scow, raft, or other craft, which latter sum shall be placed to the credit of the appropriation for the improvement of the harbor or waterway in which the damage occurred, and said boat, vessel, scow, raft, or other craft may be proceeded against summarily by way of libel in any district court of the United States having jurisdiction thereof. (33 U.S.C. 411, 412)
Section 19

(a) That whenever the navigation of any river, lake, harbor, sound, bay, canal, or other navigable waters of the United States shall be obstructed or endangered by any sunken vessel, boat, water craft, raft, or other similar obstruction, and such obstruction has existed for a longer period than thirty days, or whenever the abandonment of such obstruction can be legally established in a less space of time, the sunken vessel, boat, water craft, raft, or other obstruction shall be subject to be broken up, removed, sold, or otherwise disposed of by the Secretary of War at his discretion, without liability for any damage to the owners of the same: Provided, That in his discretion, the Secretary of War may cause reasonable notice of such obstruction of not less than thirty days, unless the legal abandonment of the obstruction can be established in a less time, to be given by publication, addressed “To whom it may concern,” in a newspaper published nearest to the locality of the obstruction, requiring the removal thereof: And provided also, That the Secretary of War may, in his discretion, at or after the time of giving such notice, cause sealed proposals to be solicited by public advertisement, giving reasonable notice of not less than ten days, for the removal of such obstruction as soon as possible after the expiration of the above specified thirty days' notice, in case it has not in the meantime been so removed, these proposals and contracts, at his discretion, to be conditioned that such vessel, boat, water craft, raft, or other obstruction, and all cargo and property contained therein, shall become the property of the contractor, and the contract shall be awarded to the bidder making the proposition most advantageous to the United States: Provided, That such bidder shall give satisfactory security to execute the work: Provided further, That any money received from the sale of any such wreck, or from any contractor for the removal of wrecks, under this paragraph shall be covered into the Treasury of the United States.

(b) The owner, lessee, or operator of such vessel, boat, watercraft, raft, or other obstruction as described in this section shall be liable to the United States for the cost of removal or destruction and disposal as described which exceeds the costs recovered under subsection (a). Any amount recovered from the owner, lessee, or operator of such vessel pursuant to this subsection to recover costs in excess of the proceeds from the sale or disposition of such vessel shall be deposited in the general fund of the Treasury of the United States. (33 U.S.C. 414)

Section 20

(a) That under emergency, in the case of any vessel, boat, water craft, or raft, or other similar obstruction, sinking or grounding, or being unnecessarily delayed in any Government canal or lock, or in any navigable waters mentioned in section nineteen, in such manner as to stop, seriously interfere with, or specially endanger navigation, in the opinion of the Secretary of War, or any agent of the United States to whom the Secretary may delegate proper authority, the Secretary of War or any such agent shall have the right to take immediate possession of such boat, vessel, or other water craft, or raft, so far as to remove or to destroy it and to clear immediately the canal, lock, or navigable waters aforesaid of the obstruction thereby caused, using his best judgment to prevent any unnecessary injury, and no one shall interfere with or prevent such removal or destruction: Provided, That the officer or agent charged with the removal or destruction of an obstruction under this section may in his discretion give notice in writing to the owners of any such obstruction requiring them to remove it: And provided further, That the actual expense, including administrative expenses, of removing any such obstruction as aforesaid shall be a charge against such craft and cargo and if the owners thereof fail or refuse to reimburse the United States for such expense within thirty days after notification, then the officer or agent aforesaid may sell the craft or cargo, or any part thereof that may not have been destroyed in removal, and the proceeds of such sale shall be covered into the Treasury of the United States.

(c) The owner, lessee, or operator of such vessel, boat, watercraft, raft, or other obstruction as described in this section shall be liable to the United States for the actual cost, including administrative costs, of removal or destruction and disposal as described which exceeds the costs recovered under subsection (a). Any amount recovered from the owner, lessee, or operator of such vessel pursuant to this subsection to recover costs in excess of the proceeds from the sale or disposition of such vessel shall be deposited in the general fund of the Treasury of the United States. (33 U.S.C. 415)
Boating & Safety on the Missouri River

This chart contains numerous safety tips and guidelines for boaters and other water recreationalists. Please use caution when boating on the river and keep safety in mind at all times.

When Lewis and Clark traveled the river in 1804 they left no trace of their passage. We hope that all river users will respect the environment and “Leave no trace”.

Before putting a boat on the Missouri River you should become familiar with the system of aids to navigation established by the U.S. Coast Guard. These aids to navigation (signs, markers, and buoys) mark a 300’ wide by 9’ deep navigation channel maintained by the U.S. Army Corps of Engineers.

By constraining the majority of the river’s flow between sets of rock dikes located on both sides of the river, the navigation channel generally maintains a minimal depth of 9’. The dikes extend nearly perpendicular into the river and may have a downstream “L-head” on the end. The dikes are often submerged just under the surface of the water and can be a significant hazard to watercraft.

Boating and Alcohol

The combination of boating and alcohol can prove to be deadly. Alcohol impairs judgment and reaction time and decreases your body’s ability to defend itself from hypothermia.

Alcohol greatly increases the risk of dehydration.

Bring along plenty of drinking water. The rule of thumb is one gallon of water per twenty-four hour period per person.

Planning Your Trip

First time Missouri River boaters should become informed of the hazards and challenges associated with boating in swift current.

When you plan your trip, note the area names and public lands along your route on the map. Then use the information on SHEET L to contact the agency and secure detailed maps, information and regulations.

Boaters should prepare a trip plan and inform another person of their travel plans including their destination and estimated time of arrival.

Take a boat safety course and get a free boat safety check from the Coast Guard Auxiliary or U.S. Power Squadron.

Inspect your boat to make sure you have all of the required boat safety equipment.
Planning Your Trip (cont’d)
Fuel is scarce on the lower Missouri River. Locate fuel sources before you begin your trip and plan accordingly. Upstream boaters should expect a 15-80 percent reduction in speed and corresponding increase in fuel consumption due to the 4-7 mph current of the river.

Swimming
Swimming and tubing on the Missouri is extremely dangerous and is strongly discouraged. A fast river current (normally 4-7 mph) can quickly exhaust even the strongest swimmer. Inner tubes should never be used on the river. There’s no way to control them in the current and they pose problems with boat and trailer, especially on holidays and weekends when recreational traffic peaks.

Never swim in floodwaters, the main river channel, around structures like wing dikes or around moored barges. Strong hidden currents, drop-offs, and hidden obstacles make these areas extremely hazardous to swimmers. Swimmers and waders should always wear a life jacket.

Equipment
"life jackets float ... you don’t." Life jackets (also referred to as Personal Floatation Devices or PFDs) do save lives and are the most important piece of safety equipment in your boat. Make sure you follow the boating rules for your state regarding life jackets. Be sure they fit snugly to avoid the PFD coming off if you should accidentally fall in the water. Frayed or damaged PFD’s should be replaced. Smaller children should wear PFD’s made for them. The U.S. Coast Guard label affixed to the PFD will aid in selecting the appropriate type and size.

Boats must be equipped with appropriate emergency equipment (i.e., first aid kit, oars and paddles, anchor, sound device, fire extinguisher, navigation lights, and 100 feet of line or rope).

If your boat capsizes, do not attempt to swim to shore. Stay with the craft until the boat can be safely beached. Remember, hypothermia is a possibility during most of the year. Life jackets help to minimize loss of body heat.

Avoid sunburn, wear a wide brimmed hat, long sleeved shirt, long trousers and use sunscreen. Sunscreen alone is not sufficient for long exposure to the sun.

Always carry a change of clothing in a waterproof container. Dry clothes could save your life by preventing hypothermia if the clothes you are wearing become wet. It does not have to be "cold" for hypothermia to strike.

Respect Private Property
Most land along the lower Missouri is privately owned. You’ll see by looking at the green shading on the map that public lands are very limited. Camping should be done only if you know who’s land you are on and have the landowners permission.

Be especially careful not to moor to drainage structures or to trees that might damage or imperil private levees.

Boating & Barges
It is not necessary to get off the river because a barge is approaching. You should move toward the off channel shore (the inside of a bend) and be alert for rock dikes which are located there. Move as far away from the barge as possible and position the bow of your boat perpendicular to the wake. Never turn your boat broadside to the wake created by barges and tugs, they can easily swamp a small boat. Remember, barges have the right-of-way.

Pilots of towboats have a blind spot in front of their vessels and it could take a barge and tow up to 1 ½ miles to stop. These barges also create extreme turbulence up to ½ mile behind the tow. The strong wake may lift your boat onto the rocks, dikes or other hazards. Hydraulics generated by barges can suck under objects including smaller craft so it’s best to give them a wide berth. Playing games with this kind of vessel can result in serious injury or even death.

Permits are required for regattas and special events on the river. The U.S. Coast Guard (314-269-2332) or Missouri Water Patrol (573-751-3333) should be contacted to obtain these permits.

Stewardship & Endangered Species
Human disturbance can disrupt bird nesting, fish spawning, and other wildlife activities. Avoid dragging your boat across gravel bars or through spawning areas. Launch and land only on designated sites. Keep pets under control.

Missouri River Safety Tips
Minimize campfire impacts and dispose of all waste property. Pack out all of your trash and pick up litter left by others.

If artifacts or fossils are found, leave them in place and undisturbed. Photograph or sketch rock art, but do not touch.

Check your boat and clean for zebra mussels before taking it from the Missouri River to any other body of water. Signs at launch ramps will provide further instruction.

Mooring & Anchoring
Never set an anchor in the fast flowing river channel. Current can pull you under and debris (e.g., logs) floating under the surface can hook your line and draw you under in an instant. It can also be difficult to unhook the anchor from submerged obstacles you can’t see. Be sure you can quickly cut or detach the anchor line on your boat if you need to.

If you do anchor in the river, pick your anchorage carefully out of the channel and current. Remember to use a bowline and keep your bow into the wind or current. This will minimize the risk of being swamped by water coming over the transom or back of the boat. The anchor line should be at least seven times as long as the depth of the water in which the boat is moored.

Never attempt to moor to stationary objects such as dikes and moored barges and never approach these objects from upstream. Swift water flowing over, under, and around these objects creates very strong turbulence and undertow currents that may overturn your boat and pull you under.

When stopping, make every attempt to turn your boat upstream into the current and cut the throttle to an idle. The throttle setting will vary with the speed of the current.

Always land your boat facing upstream and pull in parallel to the riverbank. If you try landing facing downstream or perpendicular to the bank, the current will pivot the boat to position the bow upstream and parallel to the bank. A two-point tie off should be used to keep the prop out of the rock and prevent its contact with the bank.
Camping at designated camping sites only, is the rule for most public lands. Contact the managing agency for regulations. If you choose to camp elsewhere along the river, you should have permission of the private land owner in advance.

Watch for biting insects, poisonous plants and snakes. They can ruin a trip. Have a first-aid kit on board.

**Weather**

Monitor the local weather forecast before you begin your journey and throughout your trip. In the Midwest, storms may emerge abruptly. These storms are often accompanied by strong winds that can easily capsize a small craft. Lightning, heavy rain or hail can turn a pleasant trip into disaster. Watch the sky and be aware of your surroundings for signs of inclement weather. Carry foul weather gear for unexpected storms.

High winds create very hazardous conditions and it is best to exit the river as soon as possible. Facing downstream in a crosswind can be dangerous. Always keep your boat straight into or away from the wind (parallel with the wind) as you head toward the shore.

Carry a portable radio or weather radio and tune it to the National Weather Service for up-to-date forecasts.

Beware of travel on a rising river which often results in large quantities of floating debris that can cause serious boat damage.

**Emergencies**

Emergency numbers for each county are listed on the following sheet, SHEET L, and county boundaries are designated on the charts. The county sheriff's office will contact the proper authorities to deal with the emergency.

File a float plan - let a reliable person know where you are going, when and where you plan on departing and arriving, your route and other pertinent information that will enable someone to find you. We never plan on accidents but they do happen. Filing and adhering to a float plan will help if emergency personnel need to locate you.

**Help Stop Zebra Mussels**

The zebra mussel poses a multibillion-dollar threat to North America's industrial, agricultural, and municipal water supplies. First discovered in 1988 in the Great Lakes, this invader has spread throughout the Mississippi and Ohio River basins in just 10 years. Public assistance in reporting zebra mussel sightings at new locations is essential in preventing its spread.

Zebra mussels look like small clams with a yellowish or brownish "D" shaped shell. They usually have alternating dark and light stripes. Zebra mussels are relatively small, with adults ranging from 1/4 to 1 1/2 inches long. Zebra mussels usually grow in clusters. They are the only freshwater mollusk that can firmly attach to objects. They are commonly found on rocks, dock pilings, boat hulls, and water intake pipes.

Zebra mussel juveniles, called veligers, are microscopic and invisible to the naked eye. You can prevent the spread of zebra mussels by routinely decontaminating your boat and equipment by power washing with water heated to 140- degrees Fahrenheit or by allowing everything to completely dry before using in another body of water. Drain water from your motor, live well, bilge and transom wells before leaving the recreation area. Empty bait buckets in land based receptacles and do not take bait from one body of water to another.

If you find a zebra mussel, note the date and precise location where the mussel was found. Take the mussel with you and store in rubbing alcohol. Immediately contact the nearest state wildlife department.

For more information please visit these websites:
www.100thmeridian.org
www.protectyourwaters.net
www.anstaskforce.gov
Emergency Numbers

Missouri County Sheriff's Department
Andrew County...816-324-4114
Atchison County...660-744-6308
Boone County...573-875-1111
Buchanan County...816-271-5555
Callaway County...573-642-7291
Carroll County...660-542-2828
Chariton County...660-288-3277
Clay County...816-792-7614
Cole County...573-634-9160
Cooper County...660-882-2771
Franklin County...636-583-2560
Gasconade County...573-486-3880
Holt County...660-446-3305
Howard County...660-248-2477
Jackson County...816-524-4302
Lafayette County...660-259-3622
Monteagle County...573-796-2525
Montgomery County...573-564-3378
Osage County...573-897-3107
Platte County...816-858-2424
Ray County...816-776-2000
Saline County...660-886-5511
St. Charles County...636-949-0809
St. Louis County...314-615-4724
Warren County...636-456-4332

Kansas County Sheriff's Department
Atchison County...913-367-8202
Doniphan County...785-985-3711
Leavenworth County...913-682-5724
Wyandotte County...913-573-2861

Nebraska County Sheriff's Department
Nemaha County...402-274-3139
Otoe County...402-873-6691
Richardson County...402-245-2479

Illinois County Sheriff's Department
Madison County...618-692-4433
St. Clair County...618-277-3505

Iowa County Sheriff's Department
Fremont County...712-374-2673

Additional Information Links...

Kansas Department of Wildlife and Parks: www.kdwp.state.ks.us
Missouri Department of Conservation: www.mdc.mo.gov
Missouri Department of Natural Resources: www.dnr.mo.gov
Missouri River Communities Network: www.moriver.org
Missouri State Parks: www.mostateparks.com
Missouri Water Patrol: www.mswp.dps.mo.gov
Nebraska Game and Parks Commission: www.ngpc.state.ne.us
State of Illinois: www.enjoyillinois.com
State of Kansas: www.accesskansas.org or www.travelks.com
State of Missouri: www.missouritourism.com
State of Nebraska: www.visitnebraska.org or www.state.ne.us
U.S. Coast Guard: www.uscg.mil
Zebra Mussels and other Aquatic Nuisance Species: www.anstaskforce.gov
U.S. AIDS TO NAVIGATION SYSTEM
on the Western River System
AS SEEN ENTERING FROM SEAWARD

PREFERRED CHANNEL TO STARBOARD
TOPMOST BAND GREEN
PI (2+1) S

PREFERRED CHANNEL
TO PORT
TOPMOST BAND RED
PI (2+1) R

DAYBOARDS HAVING NO LATERAL SIGNIFICANCE
MAY BE LETTERED
WHITE LIGHT ONLY

PORT SIDE OR RIGHT DESCENDING BANK
MAY SHOW WHITE REFLECTOR OR LIGHT

STARBOARD SIDE OR LEFT DESCENDING BANK
MAY SHOW WHITE LIGHTS

MOORING BUOY
WHITE WITH BLUE BAND
MAY SHOW WHITE REFLECTOR OR LIGHT

STATE WATERS

SPECIAL MARKS - MAY BE LETTERED

Used to indicate an obstruction to navigation, extends from the nearest shore to the buoy. This means “do not pass between the buoy and the nearest shore.” This aid is replacing the red end and white striped buoy within the USWMS, but cannot be used until all red and white striped buoys on a waterway have been replaced.
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*Clearance above 2010 CRP Elevation is NAVD88
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<td>110.1 - 114.9</td>
<td>Tate Island</td>
</tr>
<tr>
<td>74</td>
<td>105.0 - 110.1</td>
<td>Boatright Chute</td>
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<td>75</td>
<td>100.0 - 105.0</td>
<td>Gasconade River</td>
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<tr>
<td>76</td>
<td>95.3 - 100.0</td>
<td>Hermann MO</td>
</tr>
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<td>77</td>
<td>89.8 - 95.3</td>
<td>Missoury City MO</td>
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<tr>
<td>78</td>
<td>85.1 - 89.8</td>
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<td>79</td>
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<td>68.9 - 74.4</td>
<td>St. John's Creek</td>
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<td>82</td>
<td>64.1 - 68.8</td>
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<td>83</td>
<td>59.2 - 64.1</td>
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<td>84</td>
<td>54.4 - 59.2</td>
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<td>85</td>
<td>48.9 - 54.3</td>
<td>Widwood MO</td>
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<td>86</td>
<td>43.7 - 49.2</td>
<td>Howell Island</td>
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<td>87</td>
<td>38.3 - 43.7</td>
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<td>32.4 - 38.5</td>
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<td>9.9 - 16.5</td>
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<td>93</td>
<td>5.1 - 9.9</td>
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<td>CHART NO.</td>
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<td>FEATURE</td>
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<tr>
<td>13</td>
<td>437.2</td>
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<td>26</td>
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<td>31</td>
<td>341.2</td>
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<td>337.2</td>
<td>Fort Osage Park</td>
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<td>328.6</td>
<td>Corps of Engineers (Open 7:30 to 4:00 weekdays)</td>
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<td>Mami</td>
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<td>49</td>
<td>239.1</td>
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<td>226.1</td>
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<td>195.2</td>
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<td>179.6</td>
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<td>62</td>
<td>170.5</td>
<td>Providence Access Ramp</td>
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<tr>
<td>62</td>
<td>170.2</td>
<td>Cooper's Landing (Fee)</td>
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<td>64</td>
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<td>158.0</td>
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<td>Bonnots Mill</td>
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<td>New Haven</td>
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<td>89</td>
<td>27.5</td>
<td>Blanchette Landing</td>
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<td>92</td>
<td>10.4</td>
<td>Sioux Passage Park</td>
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<td>94</td>
<td>3.6</td>
<td>Columbia Bottom</td>
</tr>
<tr>
<td>94</td>
<td>0.0</td>
<td>Lewis and Clark Park Ramp</td>
</tr>
</tbody>
</table>
Burlington Northern Railroad Bridge

River Mile: 498.1
CLEARANCES: Horizontal, channel spans, 365.0 feet; vertical, 71.2 feet above zero on W.B. gage at this mile.

CRP Stage at Rulo, Ne: 9.2
CRP Elevation: 846.7
CRP Clearance: 62.7

New Rulo Highway Bridge

River Mile: 498
CLEARANCES: Horizontal 400 feet; vertical 52.08 feet above 2% flowline elevation of 856.3 feet.

CRP Stage at Rulo, Ne: 9.2
CRP Elevation: 846.7
CRP Clearance: 62.7
Mill Creek Bend
Dallas Bend
Nodaway River
Nodaway Daybeacon
Dallas Lower Daybeacon
Dallas Daybeacon
Crawford Daybeacon

Kansas
Missouri
Doniphan
County
Andrew
County
Holt
County

94° 56' 00''
94° 58' 00''
95° 00' 00''
39° 54' 00''

J. & O. Hare
Missouri Department of Conservation

MRLS 476-L
MRLS 488-L
MRLS 482-R
MRLS 482-R

U.S. ARMY CORPS OF ENGINEERS
NORTHWESTERN DIVISION
MISSOURI RIVER

CHART NO. 7
CHART NO. 9

Missouri Department of Conservation

Tom Brown Access

CHART NO. 8
River Mile 459.8 to 465.5

REVISED FEB 2014
SCALE: 1" = 2000'
1. Union Pacific Railroad Drawbridge

River Mile: 448.2
CLEARANCES: Horizontal, two draw openings, each 200.0 feet; vertical, closed, 31.5 feet above zero on gage at this bridge. CALL SIGN: KTD 403, channels 14 and 16.

CRP Stage at St. Joseph, Mo: 8.5
CRP Elevation: 796.985
CRP Clearance: 23.915

2. Missouri Route 36 Bridge

River Mile: 447.9
CLEARANCES: Horizontal, 415.5 feet; vertical, 69.7 feet above gage at St. Joseph.

CRP Stage at St. Joseph, Mo: 8.5
CRP Elevation: 796.971
CRP Clearance: 64.629
1. Atchison Railroad Drawbridge

River Mile: 422.6
CLEARANCES: Horizontal, left descending drawspan, 155.0 feet; right descending drawspan, 156.5 feet; vertical, closed, 37.5 feet above zero on this gage. CALL SIGN: KTD 426, channels 14 and 16.

CRP Elevation: 774.108
CRP Clearance: 22.092

2. Amelia Earhart Memorial Bridge

River Mile: 422.45
CLEARANCES: Horizontal: 410.0 feet; vertical, 52 feet above 2% flowline elevation of 784 feet.

CRP Elevation: 773.92
CRP Clearance: 67.38
Leavenworth Highway Bridge

River Mile: 397.6
CLEARANCES: Horizontal, both channel span, 400.0 feet; vertical, 71.2 feet above zero on gage at Railway Bridge.

CRP Elevation: 748.578
CRP Clearance: 68.122
I-435 Highway Bridge

River Mile: 383.3
CLEARANCES: Horizontal, 415.0 feet;
vertical, 84.39 feet for mid-365 feet of channel span, above zero on Kansas City W.B. gage at mile 366.1.

CRP Elevation: 732.538
CRP Clearance: 73.262
I-635 Highway Bridge

River Mile: 374.1
CLEARANCES: Horizontal, 412.0 feet; vertical, 73.9 feet above zero on Kansas City W.B. gage at mile 366.1.

CRP Elevation: 722.872
CRP Clearance: 80.328
Fairfax Dual Bridge

River Mile: 372.6
CLEARANCES: Horizontal, channel spans, left, 463.0 feet, right, 406.0 feet; vertical, 73.0 feet above zero on W.B. Gage at Kansas City.

CRP Stage at Kansas City, Mo: 10
CRP Elevation: 721.703
CRP Clearance: 74.597
1. **Broadway Avenue Highway Bridge**
   - River Mile: 366.2
   - CLEARANCES: Horizontal, channel span, 500.0 feet; vertical, 86.2 feet above zero on W.B. gage at Kansas City.
   - CRP Stage at Kansas City, Mo: 10
   - CRP Elevation: 716.7
   - CRP Clearance: 88.7

2. **Hannibal Railroad Drawbridge (swing)**
   - River Mile: 366.1
   - CLEARANCES: Horizontal, two draw openings, each 200.0 feet; vertical, closed, 56.0 feet above zero on W.B. gage at this bridge (Kansas City Gage).
   - CALL SIGN: KQU 500, channels 14 and 16.
   - CRP Stage at Kansas City, Mo: 10
   - CRP Elevation: 716.622
   - CRP Clearance: 48.078

3. **A.S.B. Highway and Railroad Drawbridge**
   - River Mile: 365.6
   - CLEARANCES: Horizontal, channel span, 395.0 feet; vertical, lift up, 98.8 feet, lift down, 49.7 feet above zero on Kansas City gage.
   - Contact Hannibal Railroad Bridge on channels 14 or 16 to open A.S.B. Bridge.
   - CRP Stage at Kansas City, Mo: 10
   - CRP Elevation: 716.29
   - CRP Clearance: 39.81

4. **Heart of America Bridge**
   - River Mile: 365.5
   - CLEARANCES: Horizontal, 350.0 feet; vertical, 52.0 feet above 2% flowline elevation 733.1 feet MSL.
   - CRP Stage at Kansas City, Mo: 10
   - CRP Elevation: 716.224
   - CRP Clearance: 76.176
Christopher S. Bond Bridge

River Mile: 364.8
CLEARANCES: Horizontal, channel span, 454.0 feet, vertical, 79.5 feet, above zero on W.B. gauge at Kansas City.

CRP Stage at Kansas City, Mo: 10
CRP Elevation: 715.76
CRP Clearance: 72.74
Chouteau Bridge
River Mile: 362.3
CLEARANCES: Horizontal, 423.8 feet; vertical, 52.9 feet at 2 percent flowline; 76.7 feet at zero on the Kansas City Gauge.
CRP Stage at Kansas City, Mo: 10
CRP Elevation: 714.1
CRP Clearance: 70.3

Harry S Truman Railroad Drawbridge
River Mile: 359.3
CLEARANCES: Horizontal, 403.0 feet; vertical, open, 84.7 feet; closed, 51.3 feet, above zero on W.B. gage at Kansas City.
CALL SIGN: KVY 575, channels 13 and 16.
CRP Stage at Kansas City, Mo: 10
CRP Elevation: 712.107
CRP Clearance: 41.293

I-435 Bridge
River Mile: 360.3
CLEARANCES (Main span): Horizontal, 400.0 feet; vertical, 74.8 feet for mid-300.0 feet of span.
CLEARANCES (Auxiliary span): Horizontal, 300.0 feet; vertical, 73.6 feet for mid-200.0 feet of span.
Clearances all above zero on Kansas City W.B. gage.
CRP Stage at Kansas City, Mo: 10
CRP Elevation: 712.77
CRP Clearance: 70.43
Liberty Bend Bridge

River Mile: **352.7**
CLEARANCES: Horizontal, 407.0 feet; vertical, 70.6 feet above zero on gage at this bridge.

CRP Elevation: 707.742
CRP Clearance: 70.558
Atchison Topeka and Santa Fe Railroad Bridge

River Mile: 336.2
CLEARANCES: Horizontal, channel spans, 383.0 feet; vertical, 88.5 feet above zero on W.B. gage at this mile.

CRP Elevation: 694.702
CRP Clearance: 78.998
LEXINGTON BRIDGE

River Mile: 314.9
CLEARANCES: Horizontal, 465.3 feet; vertical, 48.8 feet above 2% flowline elevation 686.0 feet.

CRP Elevation: 675.416
CRP Clearance: 67.684
1. Waverly Bridge

River Mile: 293.2
CLEARANCES: Horizontal, channel spans, 400.0 feet; vertical, right span, 73.0 feet, left span, 57.6 feet, above zero on W.B. gauge at this bridge.

CRP Stage at Waverly, Mo: 11.1
CRP Elevation: 657.228
CRP Clearance: 65.372
Miami Bend, Upper
Wakenda Creek
Harris Daybeacon
Scarlett Light
Wrights Daybeacon
Thomas Bend Daybeacon

Carroll County
Saline County

39° 20' 00''
93° 12' 00''
93° 16' 00''
39° 22' 00''
93° 14' 00''
39° 16' 00''
93° 15' 00''

Van Meter State Park

1,000 0 1,000 2,000 3,000 Feet
River Mile 260.1 to 265.2
Miami Bridge

River Mile: 262.6
CLEARANCES: Horizontal, right span, 404.0 feet; vertical, right span, 78.8 feet above zero on gage at this bridge.

CRP Elevation: 629.628
CRP Clearance: 73.472
Glasgow Highway Bridge

River Mile: 226.3
CLEARANCES: Horizontal, center main channel span, 330.0 feet, left span, 170.0 feet, right span, 292.0 feet; vertical, 78.8 feet above zero on W.B. gage at this mile.

CRP Stage at Glasgow, Mo: 12.8
CRP Elevation: 599.295
CRP Clearance: 66.105

Glasgow Railroad Bridge

River Mile: 226.31
CLEARANCES: Horizontal, center main channel span, 328.0 feet, left span, 170.0 feet, right span, 298.0 feet; vertical, 74.4 feet above zero on W.B. gage at this mile.

CRP Stage at Glasgow, Mo: 12.8
CRP Elevation: 599.295
CRP Clearance: 62.305
1. **M-K-T Railroad Drawbridge**

   River Mile: 197.1
   CLEARANCES: Horizontal, channel spans, 400.0 feet; vertical, open, 75.3 feet, closed,
   45.3 feet above zero on W.B. gage at this bridge. No radiotelephone. Bridge maintained in open position.

   CRP Stage at Boonville, Mo: 8.1
   CRP Elevation: 573.595
   CRP Clearance: 67.105

2. **Boonville Highway Bridge**

   River Mile: 196.6
   CLEARANCES: Horizontal, both channel spans 417.0 feet;
   vertical clearance left span 59.5 feet above 2 percent flowline elevation 587.5 feet m.s.l.,
   vertical clearance right span 59.9 feet above 2 percent flowline elevation.

   CRP Stage at Boonville, Mo: 8.1
   CRP Elevation: 573.217
   CRP Clearance: 76.183
Rocheport Highway Bridge

River Mile 185
CLEARANCES: Horizontal, both spans, 533.0 feet; vertical, 73.0 feet above zero on W.B. gage at Boonville.

CRP Elevation: 564.538
CRP Clearance: 67.662
Jefferson City Dual Bridge

River Mile: 143.9
CLEARANCES: Horizontal, both bridges, right span, 400.0 feet; vertical, both bridges, right span, 86.4 feet above zero on W.B. gage at this bridge.

CRP Stage at Jefferson City, Mo: 8.2
CRP Elevation: 528.465
CRP Clearance: 78.135
Christopher S. Bond Bridge

River Mile: 97.9
CLEARANCES: Horizontal, channel spans, 452.0 feet; vertical, 52.0 feet above 2% flowline elevation 505.2 feet MSL.

CRP Stage at Hermann, Mo: 7.1
CRP Elevation: 488.608
CRP Clearance: 70.892
U.S. ARMY CORPS OF ENGINEERS

MISSOURI RIVER

NORTHWESTERN DIVISION

River Mile 85.1 to 89.8

SCALE: 1" = 2000'
Washington Bridge

River Mile: 67.6
CLEARANCES: Horizontal, left span, 462.0 feet, right span, 463.0 feet; vertical, left span, 74.7 feet, right span, 83.1 feet above zero on W.B. gage at this bridge.

CRP Stage at Washington, Mo: 3.3
CRP Elevation: 460.603
CRP Clearance: 83.697
Daniel Boone Bridge (Dual)

River Mile: 44
CLEARANCES: Horizontal, 447.0 feet; vertical, 52.0 feet above 2% flowline elevation 455.2 feet MSL.

CRP Elevation: 438.139
CRP Clearance: 76.861
**Veterans Memorial Bridge**

River Mile: **32.6**

CLEARANCES: Horizontal, 602.0 feet; vertical, 62.2 feet above 2% flowline elevation 444.7 feet.

CRP Elevation: 426.401
CRP Clearance: 83.499
I-70 Dual Bridges

River Mile: 29.6
CLEARANCES: Horizontal, 417.0 feet, both bridges;
vertical, 81.5 feet above zero on St. Charles W.B. gage at mile 28.2.

CRP Elevation: 424.602
CRP Clearance: 74.998
**Wabash Railroad Bridge**

River Mile: 27.1  
CLEARANCES: Horizontal, center span, 600.0 feet, right span, 408.0 feet; vertical, 81.0 feet above zero on W.B. gage at St. Charles.

CRP Stage at St. Charles, Mo: 10.1  
CRP Elevation: 422.954  
CRP Clearance: 71.246

**Discovery Bridge**

River Mile: 27  
CLEARANCES: Horizontal 617.0 feet; vertical, 70.4 feet above standard low water.

CRP Stage at St. Charles, Mo: 10.1  
CRP Elevation: 422.879  
CRP Clearance: 70.721
1. Burlington Northern Bridge

   River Mile: 8.2
   CLEARANCES: Horizontal, channel spans, 430.0 feet; vertical, 76.8 feet above zero at Lewis Bridge.

   CRP Elevation: 407.236
   CRP Clearance: 68.554

2. Lewis Bridge (U.S. Hwy 67)

   River Mile: 8.1
   CLEARANCES: Horizontal, 431.0 feet; vertical, 55.5 feet above 2% flowline elevation 422.2 feet.

   CRP Elevation: 407.152
   CRP Clearance: 77.648
Cora Island Bend
Amazon Bend
Cahokia Creek
Mississippi River
Cora Lower Daybeacon
Cora Daybeacon
Illinois
Missouri
St. Charles County
St. Louis County
Edward "Ted" and Pat Jones-Confluence State Park
Missouri Department of Natural Resources
Lewis & Clark State Memorial
Spanish Lake County Park
Kuhs Levee
Consolidated North County Levee
Columbia Bottoms Levee
Columbia Bottoms
Missouri Department of Conservation

CHART NO. 93

River Mile 0 to 5.2
SCALE: 1" = 2000'
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<tr>
<th>Bridge Name</th>
<th>River Mile</th>
<th>Light List Vertical Clearance</th>
<th>Light List Horizontal Clearance</th>
<th>Light List Horizontal Clearance Left Descending Bank</th>
<th>Light List Horizontal Clearance Right Descending Bank</th>
<th>2 Percent Flowline Clearance</th>
<th>Gauge Clearance</th>
<th>Gauge Reference</th>
<th>Low Steel Elevation</th>
<th>Standard Low Water Clearance</th>
<th>Reference Elevation</th>
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<td>413.6</td>
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<td>Wabash Railroad Bridge</td>
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<td>81.0</td>
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<td>494.7**</td>
<td>413.6</td>
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<td>I-70 Dual Bridges</td>
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<td>494.7**</td>
<td>413.6</td>
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<td>62.2</td>
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<td>510.0**</td>
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<td>447.0</td>
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<td>52.0</td>
<td>NA</td>
<td>515.2**</td>
<td>455.2</td>
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<td>74.80</td>
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<td>463.0</td>
<td>74.7</td>
<td>Zero at this bridge (Washington Bridge)</td>
<td>514.5**</td>
<td>457.2</td>
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<td>NA</td>
<td>559.4**</td>
<td>505.2</td>
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<td>Zero at this bridge (J efferson Bridge)</td>
<td>606.5**</td>
<td>520.1</td>
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<td>Rocheport Highway Bridge</td>
<td>185.0</td>
<td>73.00</td>
<td>533.0</td>
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<td>73.0</td>
<td>Zero at Boonville Bridge</td>
<td>632.1**</td>
<td>565.4</td>
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<tr>
<td>Boonville Highway Bridge</td>
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<td>417.0</td>
<td>417.0</td>
<td>59.5</td>
<td>Zero at this bridge (Boonville Bridge)</td>
<td>649.3**</td>
<td>587.5</td>
<td>**</td>
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<td>M-K-T Railroad Drawbridge</td>
<td>197.1</td>
<td>45.90</td>
<td>400.0</td>
<td>400.0</td>
<td>45.3</td>
<td>Zero at M-K-T RR Bridge</td>
<td>660.4**</td>
<td>595.4</td>
<td>**</td>
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<tr>
<td>Glasgow Railroad Bridge</td>
<td>226.3</td>
<td>74.40</td>
<td>328.0</td>
<td>170.0</td>
<td>74.4</td>
<td>Zero at Gauge at this mile</td>
<td>665.3**</td>
<td>586.5</td>
<td>**</td>
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<td>Glasgow Highway Bridge</td>
<td>226.3</td>
<td>78.80</td>
<td>330.0</td>
<td>170.0</td>
<td>78.8</td>
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<td>665.3**</td>
<td>586.5</td>
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<td>Waverly Bridge</td>
<td>262.6</td>
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<td>78.8</td>
<td>Zero at St. Charles Westbound</td>
<td>703.2**</td>
<td>621.4</td>
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<td>722.3**</td>
<td>672.3</td>
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<td>Atchison Topeka and Santa Fe Railroad Bridge</td>
<td>314.9</td>
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<td>463.5</td>
<td>NA</td>
<td>48.8</td>
<td>NA</td>
<td>742.8**</td>
<td>686.0</td>
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<td>Liberty Bend Bridge</td>
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<td>383.0</td>
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<td>Zero at Gauge at this mile</td>
<td>773.4**</td>
<td>683.9</td>
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<td>Harry S Truman Railroad Drawbridge</td>
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<td>51.30</td>
<td>403.0</td>
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<td>51.3</td>
<td>Zero at Kansas City</td>
<td>753.1**</td>
<td>706.4</td>
<td>**</td>
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<td>I-435 Bridge</td>
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<td>74.80</td>
<td>400.0</td>
<td>300.0</td>
<td>74.8</td>
<td>Zero at Kansas City</td>
<td>781.1**</td>
<td>706.4</td>
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<td>Chouteau Bridge</td>
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<td>423.8</td>
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<td>76.7</td>
<td>Zero at Missouri River</td>
<td>784.1**</td>
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<td>Christopher S. Bond Bridge</td>
<td>364.8</td>
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<td>454.0</td>
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<td>Zero at Kansas City</td>
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<td>Heart of America Bridge</td>
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<td>350.0</td>
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<td>NA</td>
<td>787.2**</td>
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<td>A.S.B. Highway and Railroad Drawbridge</td>
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<td>395.0</td>
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<td>49.7</td>
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<td>Hannibal Railroad Drawbridge (Swing)</td>
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<td>764.4**</td>
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<td>500.0</td>
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<td>Fairfax Dual Bridge</td>
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<td>406.0</td>
<td>73.0</td>
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<td>796.0**</td>
<td>706.4</td>
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<td>H635 Highway Bridge</td>
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<td>412.0</td>
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<td>73.9</td>
<td>NA</td>
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<td>805.4**</td>
<td>706.4</td>
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<td>71.2</td>
<td>NA</td>
<td>816.4**</td>
<td>742.2</td>
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<td>Amelia Earhart Memorial Bridge</td>
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<td>52.0*</td>
<td>410.0*</td>
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<td>52.0</td>
<td>NA</td>
<td>839.82*</td>
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<td>37.5</td>
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<td>Missouri Route 36 Bridge</td>
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<td>69.7</td>
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<td>801.3**</td>
<td>788.2</td>
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<td>Union Pacific Railroad Drawbridge (closed)</td>
<td>448.2</td>
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<td>200.0</td>
<td>NA</td>
<td>31.5</td>
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<td>820.6**</td>
<td>788.2</td>
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<td>Rulo Highway Bridge</td>
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<td>52.08*</td>
<td>400.0*</td>
<td>NA</td>
<td>52.1</td>
<td>NA</td>
<td>909.25**</td>
<td>856.3</td>
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<td>Burlington Northern Railroad Bridge</td>
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<td>365.0</td>
<td>NA</td>
<td>71.2</td>
<td>NA</td>
<td>909.2**</td>
<td>837.3</td>
<td>**</td>
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</table>

* Data from permit Drawings approved by the USCG.
** Low Steel values from 2012 survey.
### Missouri River Commercial Terminals and Facilities Kansas City District

<table>
<thead>
<tr>
<th>Terminal</th>
<th>Facility</th>
<th>Town</th>
<th>River Mile</th>
<th>Bank</th>
<th>Contact</th>
<th>Address</th>
<th>Zip Code</th>
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<tbody>
<tr>
<td>Central Stone Co., Fort Belle Quarry Dock</td>
<td>Receipt of sand/shipment of stone</td>
<td>Ft. Bellefontaine, MO</td>
<td>7.8</td>
<td>Right</td>
<td>Randy Barke</td>
<td>14201 Lewis and Clark Road</td>
<td>63034 (314) 830-9000</td>
</tr>
<tr>
<td>Central Stone Co., North Quarry Docks</td>
<td>Receipt of sand/shipment of stone</td>
<td>Ft. Bellefontaine, MO</td>
<td>8.5</td>
<td>Right</td>
<td>Randy Barke</td>
<td>14200 Lewis and Clark Road</td>
<td>63034 (314) 830-9000</td>
</tr>
<tr>
<td>Leuke Hauling, Riverview Quarry Florissant Dock</td>
<td>Receipt of sand</td>
<td>Florissant, MO</td>
<td>16.8</td>
<td>Right</td>
<td>Brian Hachmeister</td>
<td>3009 Douglas Rd</td>
<td>63034 (314) 837-1700</td>
</tr>
<tr>
<td>LaFarge/ St. Charles Sand Co.</td>
<td>Sand unloading</td>
<td>St. Charles, MO</td>
<td>27.8</td>
<td>Right</td>
<td>Dave Viehmann</td>
<td>14562 Missouri Bottom Rd, Bridgeton, MO</td>
<td>63044 (314) 739-0169</td>
</tr>
<tr>
<td>LaFarge/ St. Charles Sand Co.</td>
<td>Sand unloading</td>
<td>St. Charles, MO</td>
<td>28.1</td>
<td>Right</td>
<td>Dave Viehmann</td>
<td>14561 Missouri Bottom Rd, Bridgeton, MO</td>
<td>63044 (314) 739-0169</td>
</tr>
<tr>
<td>City of St. Charles, Excursion Dock</td>
<td>Dock</td>
<td>St. Charles, MO</td>
<td>28.8</td>
<td>Left</td>
<td>Scott Sharp</td>
<td>200 N Second Street, St. Charles, MO</td>
<td>63031 (636) 949-3549</td>
</tr>
<tr>
<td>LaFarge Corp., St. Charles, Dock</td>
<td>Receipt of sand</td>
<td>St. Charles, MO</td>
<td>31.5</td>
<td>Left</td>
<td>David Viehmann</td>
<td>14560 Missouri Bottom Rd, Bridgeton, MO</td>
<td>63044 (314) 393-9452</td>
</tr>
<tr>
<td>LaFarge/ St. Charles Sand Co.</td>
<td>Sand unloading</td>
<td>Gumbo, MO</td>
<td>43.9</td>
<td>Right</td>
<td>Dave Viehmann</td>
<td>14568 Missouri Bottom Rd, Bridgeton, MO</td>
<td>63044 (314) 739-0169</td>
</tr>
<tr>
<td>U.S. Army Corps of Engineers</td>
<td>Sand and gravel unloading</td>
<td>Rocheport, MO</td>
<td>186.3</td>
<td>Left</td>
<td>Ray Bohlen</td>
<td>P.O. Box 10940, Jefferson City, MO</td>
<td>63049 (573) 634-3020</td>
</tr>
<tr>
<td>Hermann Sand and Gravel, Inc.</td>
<td>Sand unloading</td>
<td>Rocheport, MO</td>
<td>197.0</td>
<td>Right</td>
<td>Ray Bohlen</td>
<td>P.O. Box 10940, Jefferson City, MO</td>
<td>63049 (573) 634-3020</td>
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<tr>
<td>Capital Sand Co.</td>
<td>Sand and gravel unloading</td>
<td>Carrolton, MO</td>
<td>286.9</td>
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<td>Ray Bohlen</td>
<td>P.O. Box 10940, Jefferson City, MO</td>
<td>63049 (573) 634-3020</td>
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<tr>
<td>Capital Sand Co.</td>
<td>Sand and gravel unloading</td>
<td>Carrolton, MO</td>
<td>317.1</td>
<td>Left</td>
<td>Ray Bohlen</td>
<td>P.O. Box 10940, Jefferson City, MO</td>
<td>63049 (573) 634-3020</td>
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<tr>
<td>MFA INC.</td>
<td>Grain Loading dock</td>
<td>Lexington, MO</td>
<td>318.2</td>
<td>Right</td>
<td>Owner</td>
<td>2350 Monroe St. P.O. BOX 308 Lexington, MO</td>
<td>64067 (660) 259-2261</td>
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<tr>
<td>U.S. Army Corps of Engineers</td>
<td>Government materials dock</td>
<td>Napoleon, MO</td>
<td>326.8</td>
<td>Right</td>
<td>Owner</td>
<td>300 E. 224 Highway Napoleon, MO</td>
<td>64074 (816) 240-8131</td>
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<tr>
<td>LaFarge Corp.</td>
<td>Cement loading dock</td>
<td>Sugar Creek, MO</td>
<td>354.8</td>
<td>Right</td>
<td>Terry VanWinkle</td>
<td>4201 N. River Road, Sugar Creek, MO</td>
<td>64054 (816) 257-5178</td>
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<tr>
<td>Holliday Sand and Gravel Co.</td>
<td>Sand and gravel loading dock</td>
<td>Leavenworth, KS</td>
<td>367.3</td>
<td>Right</td>
<td>U.S. Coast Guard</td>
<td>P.O. Box 250, Leavenworth, KS</td>
<td>66049 (913) 524-7511</td>
</tr>
<tr>
<td>Brennan Mid south</td>
<td>Asphalt unloading dock</td>
<td>Kansas City, MO</td>
<td>360.6</td>
<td>Left</td>
<td>Brian Bridgeham</td>
<td>601 NE Birmingham Road, Kansas City, MO</td>
<td>64117 (816) 454-8244</td>
</tr>
<tr>
<td>Bartlett and Company, Inc. (KCT)</td>
<td>Grain Loading Dock</td>
<td>Randolph, MO</td>
<td>361.0</td>
<td>Left</td>
<td>Rodney Schatter</td>
<td>5801 N Merchandise Road, K.C., MO</td>
<td>64116 (816) 452-3122</td>
</tr>
<tr>
<td>Bartlett and Company, Inc. (RiverRail)</td>
<td>Grain Loading Dock</td>
<td>Kansas City, KS</td>
<td>367.7</td>
<td>Right</td>
<td>Rodney Schatter</td>
<td>1310 Fairway Trafficway</td>
<td>66115 (816) 452-3122</td>
</tr>
<tr>
<td>Holiday Sand and Gravel Co.</td>
<td>Sand and gravel unloading dock</td>
<td>Riverside, MO</td>
<td>371.8</td>
<td>Left</td>
<td>Ken Millsap</td>
<td>3501 Zeke Rd., Riverside, MO</td>
<td>64150 (816) 741-6466</td>
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<tr>
<td>Intercon</td>
<td>Loading and unloading dock</td>
<td>Riverside, MO</td>
<td>375.5</td>
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<td>Intercon</td>
<td>P.O. Box 9055, Kansas City, KS</td>
<td>64168 (816) 741-0700</td>
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<td>Massman Construction Co.</td>
<td>Materials/rock loading dock</td>
<td>Parkville, MO</td>
<td>385.0</td>
<td>Left</td>
<td>Mark Dickerson</td>
<td>8901 State Line, K.C., MO</td>
<td>64114 (816) 523-1000</td>
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<tr>
<td>Ergon Wolcott</td>
<td>Asphalt unloading</td>
<td>Kansas City, KS</td>
<td>386.4</td>
<td>Right</td>
<td>Owner</td>
<td>10520 Wolcott Dr., Kansas City, KS</td>
<td>66103 (913) 299-4335</td>
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<tr>
<td>U.S. Coast Guard (Leavenworth)</td>
<td>Government materials dock</td>
<td>Leavenworth, KS</td>
<td>397.3</td>
<td>Right</td>
<td>U.S. Coast Guard</td>
<td>P.O. Box 250, Leavenworth, KS</td>
<td>66049 (913) 524-7511</td>
</tr>
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<td>Holiday Sand and Gravel Co.</td>
<td>Sand and gravel unloading dock</td>
<td>St. Joseph, MO</td>
<td>447.6</td>
<td>Left</td>
<td>Doris Stobauch</td>
<td>3003 Frederick Ave, St. Joseph, MO</td>
<td>64506 (816) 364-4110</td>
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<tr>
<td>St. Joseph Regional Port Authority</td>
<td>General Cargo Dock</td>
<td>St. Joseph, MO</td>
<td>448.0</td>
<td>Left</td>
<td>Brad Lau</td>
<td>3003 Frederick Ave, St. Joseph, MO</td>
<td>64506 (816) 364-4110</td>
</tr>
<tr>
<td>White Cloud Grain</td>
<td>Grain &amp; fertilizer loading dock</td>
<td>White Cloud, KS</td>
<td>488.0</td>
<td>Right</td>
<td>Joe Kramer</td>
<td>604 Nemaha St., Seneca, KS</td>
<td>66538 (785) 336-2148</td>
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<td>Gauge Name</td>
<td>River Mile</td>
<td>Gauge Zero</td>
<td>Gauge Datum</td>
<td>Gauge Website</td>
<td>Gauge Code</td>
<td>X Coordinate</td>
<td>Y Coordinate</td>
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<td>St. Charles</td>
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<td><a href="http://water.weather.gov/ahps2/hydrograph.php?wfo=lsx&amp;gage=sclm7">http://water.weather.gov/ahps2/hydrograph.php?wfo=lsx&amp;gage=sclm7</a></td>
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<td>Washington</td>
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<td>NAVD88</td>
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<td>Gasconade</td>
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<td>Chamois</td>
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<td>502.50</td>
<td>Other</td>
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<td><a href="http://water.weather.gov/ahps2/hydrograph.php?wfo=eax&amp;gage=wwym7">http://water.weather.gov/ahps2/hydrograph.php?wfo=eax&amp;gage=wwym7</a></td>
<td>WVM7</td>
<td>-93.515</td>
<td>39.214</td>
</tr>
<tr>
<td>Rulo</td>
<td>498.00</td>
<td>837.23</td>
<td>NGVD 29</td>
<td><a href="http://water.weather.gov/ahps2/hydrograph.php?wfo=eax&amp;gage=ruln1">http://water.weather.gov/ahps2/hydrograph.php?wfo=eax&amp;gage=ruln1</a></td>
<td>RULN1</td>
<td>-95.422</td>
<td>40.054</td>
</tr>
</tbody>
</table>

*CRP Stage at gauge reflects 2010 CRP Values.