From: bill roush
To: Shively, Matthew S CIV USARMY CENWK (USA)
Subject: [Non-DoD Source] Please deny Sand dredging permits for the Kansas City Reach of the Missouri River
Date: Thursday, April 16, 2020 1:23:02 PM

Mr. Matt Shively,

I am writing to request that USACE act on the conclusions of the Mo River-Bed Degradation Technical Report, dated May 17th 2017 and eliminate sand dredging on the Kansas City reach of the river.

Sand dredging causes river bed degradation. Bed degradation negatively impacts water quality, habitat, wetlands, navigation structures, levees and floodwalls, bridges, water supply-intakes, and other infrastructure.

Results from the study estimate expenses (investments and repairs) in the amount of $269 million (fiscal year 2017 dollars) to adjust for degradation and low-water-surface elevations over a 50-year period.

The average annual estimated cost to public infrastructure would be $5.3 million.

I would think there are other places to get sand, like old river loops and oxbow curves with less damage and cost to the environment and our drinking water supply.

--

Best,
Bill Roush

From: Cathy Matlack
To: Shively, Matthew S CIV USARMY CENWK (USA)
Subject: [Non-DoD Source] Sand Dredging Permit renewal
Date: Monday, April 20, 2020 4:08:14 PM

Hello Mr. Shively,

I've recently learned that sand dredging permits for the Missouri river-bed are up for renewal and I'd like to urge the Army Corps of Engineers to take into serious consideration the feasibility study that concluded with a technical report issued in May of 2017.

The report concluded that sand dredging is responsible for the Missouri Riverbed degradation causing water quality, habitat, wetlands and infrastructure problems. It is always a challenge for public entities to balance the demands of economic and commercial advantages with the impacts of current and future environmental concerns. In addition to the above mentioned concerns, the river-bed degradation also impacts navigation structures, levees and floodwalls, bridges, water supply-intakes and other infrastructure. These are huge costs and concerns for the water quality and water needs for Kansas City now and for years to come.

Please add my voice to those encouraging the Army Corps of Engineers to not renew sand dredging permits on the Kansas City stretch of the Missouri River.

Thank you,

Cathy Matlack
7225 Brockway
Shawnee, KS

From: Joey Shondell
To: Shively, Matthew S CIV USARMY CENWK (USA)
Subject: [Non-DoD Source] Kansas City Sand dredging-MO River
Date: Tuesday, April 21, 2020 11:17:52 AM

Morning,

I want to submit a comment to request that USACE act on the conclusions of the Mo River bed degradation technical report dates May 17th 2017 and ban sand dredging on the Kansas City reach of the MO River.

As you know, sand dredging degrades vertebrate habitat, releases toxins and eliminates more land on the River banks.

Thank you,

Joey Shondell
--

Joey Shondell
West Campus Prairie Restoration
KU Environmental Studies/Journalism

From: Scott Perkins
To: Shively, Matthew S CIV USARMY CENWK (USA)
Subject: [Non-DoD Source] Permit Renewals for DREDGING on the lower Missouri River
Date: Saturday, April 25, 2020 7:18:46 AM

PUBLIC COMMENT:

I am a five time participant in the MR-340 paddle event from Kaw Point, KS to St. Charles, MO. I have paddled over 2,500 miles on the MO River in training and participation in the MR-340 events. I have directly observed the operation of dredges, barges and the associated mining and aggregate transport operations along the river bank. I have also directly observed the changes to the steam banks and associated infrastructure in the tributaries to the MO River.

Based upon my personal observations and the data presented, I support the findings in the Mo River-Bed Degradation Technical Report, dated May 17th 2017.

The alternative that would result in the greatest positive NED benefit is the reduction or elimination of commercial sand and gravel mining in the Kansas City reach of the MO River.

Scott Perkins
24614 W. 97th Ter.
Lenexa, KS 66227

Please acknowledge receipt of this public comment with an email reply.
Thank you
Scott Perkins

From: Fred Schoell
To: Shively, Matthew S CIV USARMY CENWK (USA)
Subject: [Non-DoD Source] Dredgers Permit Renewal, 2020
Date: Wednesday, April 29, 2020 7:25:17 PM

April 28th, 2020

VIA EMAIL AND U.S. MAIL

Matt Shively, Regulatory Project Manager matthew.s.shively@usace.army.mil
<mailto:matthew.s.shively@usace.army.mil>
U.S. Army Corps of Engineers
Kansas City Regulatory Office
601 East 12th Street
Kansas City, MO 64106

RE: Comments on Missouri River Commercial Dredgers Permit Renewal.

Ladies and Gentlemen:

On behalf of myself I am writing in response to the Public Notice dated March 18, 2020, concerning the renewal of permits for Missouri River Commercial Dredgers. I, C Fred Schoell requests the denial of the commercial dredging permit renewal for Holliday Sand & Gravel Company in the Kansas City reach of the River.

In 2009 a Reconnaissance Study was completed by the Kansas City District, Army Corps of Engineers (USACE) that determined through stream-gage and other physical data that there had been a lowering of the riverbed, affecting public infrastructure, such as water intakes and pipeline crossings; bank stability; and the potential to undermine dikes, revetments and levees designed to support navigation and to provide flood protection.

Thereafter local stakeholders contributed $2.3 Million to the Missouri Riverbed Feasibility Study. The Study resulted in a Technical Report in May of 2017 that concluded commercial sand and gravel mining was the dominant cause of riverbed degradation in Kansas City, dating back to 1994. The economic analysis of the Technical Report also concluded that continued bed degradation in the Kansas City Reach will result in $269 Million in expenses (2017 dollars for investment and repairs) to adjust for degradation and low water surface levels over 50 years. The average annual estimated cost to public infrastructure is $5.3 Million.

Considering the findings of the Technical Report the dredging permits should be denied in the Kansas City reach of the River. The cumulative cost to public infrastructure of continued dredging and resulting bed degradation is too significant when there are available alternatives to on river dredging. Holliday Sand & Gravel should move to off river pit mines or other reaches of the River that have not experienced degradation. The dredging industry should not be allowed to operate for free on the river, at the expense of the public in damage to infrastructure.

Balancing the interests on the Missouri River is a difficult task and the work of USACE is appreciated. We are respectfully requesting USACE follow the conclusion of the 2017 Technical Report and deny the permit renewal application of Holliday Sand & Gravel on the Missouri River in the Kansas City Reach.

Respectfully,
Fred Schoell

From: Kay Heley
To: Shively, Matthew S CIV USARMY CENWK (USA)
Subject: [Non-DoD Source] Public Comment Missouri River Sand Dredging Permits
Date: Wednesday, April 29, 2020 7:00:58 PM

Matt Shively, Regulatory Project Manager 29 April, 2020

US Army Corps of Engineers

RE: Public Comment on Renewal of Missouri River Commercial Dredgers Permit

Mr. Shively and members of the Army Corps of Engineers,

I am offering my Public Comment concerning the renewal of permits for the commercial sand dredgers on the Kansas City portion of the Missouri River. I listened to the Webinar/Public Hearing last week. I drink water from the Missouri River. I have many concerns. I strongly urge you to DENY the commercial dredging permit renewal for Holliday Sand & Gravel Company in the Kansas City reach of the River.

1). Request for Public Comment extension: I am concerned that the request for extending the Public Comment time was not honored because a) the pandemic b) the poor technical quality and limited public access to the only public hearing/webinar. The webinar was impossible for many to access who did not have Chrome and the audio was not working on the webinar itself. c) lack of critical information - 2019 riverbed analysis report, necessary and updated EIS, public access to the collaboration of the USACE with state entities concerning water quality impacts, etc. and d) when asked why it could not be extended, the answer was "it would not be fair to the dredgers." These are the dredgers that profit from free sand and are not financially responsible for any of the damage their operations cause.

2). Damage to the Riverbed: The history is clear. In 2009, the USACE found in its Reconnaissance Study that the river bed had degraded and that this had been occurring since 1994. Yet, the USACE only uses data from 2009 to measure the riverbed rather than from when the damage was first noted in 1994 eliminating many feet of pre-2009 degradation from consideration. Infrastructure largely paid for by taxpayers has been/is being damaged and has to be replaced, moved and/or upgraded by taxpayer money. Sadly, the Public Comment period will end before the release of the 2019 riverbed analysis by the Corps. I would have appreciated seeing those results and comparing them to 1994 levels before making my Public Comment. The long-term damage to the riverbed supports DENYING the permits.

3). Cost to Taxpayers: In 2017, a group of stakeholders (many taxpayer-financed) raised $2.3 million to pay for a Missouri Riverbed Feasibility Study thoroughly completed by your group, the USACE. The Technical Report (May, 2017) found that the commercial dredging of sand and gravel was the main cause of the degradation of the riverbed in the Kansas City part of the river resulting in hundreds of millions of dollars of damage to taxpayer-financed infrastructure along the river. The Technical Report cited a $5.3 million dollar average annual cost in investments and repairs borne largely by taxpayers. Commercial sand dredgers pay $100 every 5 years for a permit fee and a small amount in royalties to the State of Kansas (amount not noted in the Public Hearing) and are not billed for resulting damages. The conclusion of the 2017 Technical Report was that "The alternatives that would result in the greatest positive NED benefits are the reduction or elimination of commercial sand and gravel mining in the study reaches of the Missouri River."(p 91) This USACE analysis is new since the 2015 permit renewal process. This annual cost to taxpayers supports DENYING the permits.

3). Damage to the Environment and Water Quality: During the Webinar/Public hearing last week, questions were asked about environmental and water quality impacts. It was reported that there is no current EIS, that the EIS being used in the permit process is from 2011 with a Supplemental Study from 2016. It was reported that water quality during the dredging activity is not monitored by the Corps. There is no updated EIS that has accompanied past permit renewal processes yet was mentioned in the March 18, 2020 Public Notice. And since the 2015 permit process, the 2017 Technical Report notes, "In the 2011 Missouri River Commercial Dredging Final EIS (USACE, 2011a) it was determined that commercial sand and gravel mining cumulatively affected geomorphology, water quality, aquatic resources, threatened and endangered species, economics, cultural resources and infrastructure." (p

11) What is the current level of impact of the commercial sand dredging operations on the riverbed (benthic habitat) and shallow water habitats, the endangered species in or on the river and the water quality? We do not know the impact in 2020 yet we knew there was an impact 9 years ago. The lack of environmental impact information supports DENYING the permits.

4). Accountability of the Commercial Dredgers: From the Public hearing/Webinar last week, the Corps' audit of the amount of material removed from the river is based on dredgers' self-reports and GPS. When asked how GPS audits the amount of material removed, the answer was that GPS notes the location of the dredging but did not satisfactorily answer how GPS measures the amount of material removed. This lack of accountability supports DENYING the permits.

5). Possibilities for Alternative Sites for the Dredging: During the Public Hearing/Webinar, alternative sites for the commercial dredging options were mentioned by participants. These possibilities should be examined by the commercial operators and the USACE and support DENYING the permits.

6). Need for Commercial Operators to Pay for Damages: Commercial sand dredging operators should pay for the damages inflicted on infrastructure, water quality and the environment. Including this expense in the commercial dredging business model would spur exploration of alternative sites that would be less costly. This need for billing damage expenses supports DENYING the permits.

I respectfully acknowledge the USACE's efforts to balance commercial need with the public good. However, good decisions are based on current and solid information as well as the historical "costs." The data shows that the Missouri River and the public have been bearing all of the cost both economically and environmentally for decades. There has been no balance. Please DENY the commercial sand dredgers' permits in the Kansas City Reach of the Missouri River and allow the River and taxpayers time to achieve some balance.

Thank you for your consideration.

Sincerely,

Kay Heley RN

8214 W. 75th St. Overland Park, KS 66204

From: Tom Kessler
To: Shively, Matthew S CIV USARMY CENWK (USA)
Subject: [Non-DoD Source] Please delay permit renewal, and put an end to underpriced commercial dredging permits
Date: Wednesday, April 29, 2020 5:48:12 PM

Dear Mr. Shively,

I'm sorry I was unable to attend today's webinar, but I wanted to weigh in on commercial dredging. I am concerned that a common resource, with a great deal of value to our community, is being privatized at below-market rates, imposing external costs on consumers and the environment alike. This is 2020, not 1820 - we know the costs of dredging are *far* in excess of the permit prices paid by the dredgers. The economic case for allowing dredgers to mine this valuable public resource at below-market price has resulted in unsustainable overuse.

I call upon you to delay the renewal of dredging permits until we can implement a limited, auction-style pricing structure, with limits on removal that ensure the river bed is replenished as quickly as it is dredged - our primary goal should be sustainability.

We should no longer let commercial interests create a Tragedy of the Commons. If the river cannot be dredged sustainably, we should stop dredging altogether, except and until it is needed for Army Corps river maintenance activities.

Dredgers must serve the public interest, if they are to profit from public resources. Their failure to pay an appropriate price and put the public interest first increases the price of our water and our infrastructure, and threatens to damage our river irreparably.

Please delay all permit renewals to slow or stop this destructive practice, and apply a price and dredging limitations that are consistent with the needs of the community, the river and the Corps, so that costs accrued to the public are borne by the dredgers, not our water utilities. Respectfully,

Tom Kessler

From:	Angie Schieferecke
To:	Shively, Matthew S CIV USARMY CENWK (USA)
Subject:	[Non-DoD Source] Dredging Permits
Date:	Thursday, April 30, 2020 12:29:05 AM

Requesting that you stop issuing new dredging permits because dredging is damaging our public water supplies. Thank you.

Sincerely,

Angela Schieferecke
4508 Tomahawk Road
Prairie Village, Kansas 66208

From: Billy Croan
To: Shively, Matthew S CIV USARMY CENWK (USA)
Subject: [Non-DoD Source] Deny dredging permit
Date: Thursday, April 30, 2020 9:26:33 AM

I urge you to deny the Missouri River dredging permit currently under discussion in Kansas City.

Regardless of environmental impact, It's clear that dredging is creating very expensive damage to the tax payers, and the company doing it doesn't have to pay for that currently, which is nuts.

That's not ok. Deny the permit please.

From: Heley, Logan
To: Shively, Matthew S CIV USARMY CENWK (USA)
Subject: [Non-DoD Source] Public Comment Missouri River Sand Dredging Permits
Date: Thursday, April 30, 2020 5:29:29 PM

Mr. Shively and members of the Army Corps of Engineers,

I am offering my Public Comment concerning the renewal of permits for the commercial sand dredgers on the Kansas City portion of the Missouri River. I drink water from the Missouri River. I have many concerns. I strongly urge you to DENY the commercial dredging permit renewal for Holliday Sand & Gravel Company in the Kansas City reach of the River.

Cost to Taxpayers: In 2017, a group of stakeholders (many taxpayer-financed) raised $2.3 million to pay for a Missouri Riverbed Feasibility Study thoroughly completed by your group, the USACE. The Technical Report (May, 2017) found that the commercial dredging of sand and gravel was the main cause of the degradation of the riverbed in the Kansas City part of the river resulting in hundreds of millions of dollars of damage to taxpayer-financed infrastructure along the river. The Technical Report cited a $5.3 million dollar average annual cost in investments and repairs borne largely by taxpayers. Commercial sand dredgers pay $100 every 5 years for a permit fee and a small amount in royalties to the State of Kansas (amount not noted in the Public Hearing) and are not billed for resulting damages. The conclusion of the 2017 Technical Report was that "The alternatives that would result in the greatest positive NED benefits are the reduction or elimination of commercial sand and gravel mining in the study reaches of the Missouri River."(p 91) This USACE analysis is new since the 2015 permit renewal process. This annual cost to taxpayers supports DENYING the permits.

Damage to the Environment and Water Quality: During the Webinar/Public hearing last week, questions were asked about environmental and water quality impacts. It was reported that there is no current EIS, that the EIS being used in the permit process is from 2011 with a Supplemental Study from 2016. It was reported that water quality during the dredging activity is not monitored by the Corps. There is no updated EIS that has accompanied past permit renewal processes yet was mentioned in the March 18, 2020 Public Notice. And since the 2015 permit process, the 2017 Technical Report notes, "In the 2011 Missouri River Commercial Dredging Final EIS (USACE, 2011a) it was determined that commercial sand and gravel mining cumulatively affected geomorphology, water quality, aquatic resources, threatened and endangered species, economics, cultural resources and infrastructure." (p 11) What is the current level of impact of the commercial sand dredging operations on the riverbed (benthic habitat) and shallow water habitats, the endangered species in or on the river and the water quality? We do not know the impact in 2020 yet we knew there was an impact 9 years ago. The lack of environmental impact information supports DENYING the permits.

I respectfully acknowledge the USACE's efforts to balance commercial need with the public good. However, good decisions are based on current and solid information as well as the historical "costs." The data shows that the Missouri River and the public have been bearing all of the cost both economically and environmentally for decades. There has been no balance. Please DENY the commercial sand dredgers' permits in the Kansas City Reach of the Missouri River and allow the River and taxpayers time to achieve some balance.

Thank you for your consideration.

Wishing you safety and health,

Logan

--

Logan Heley
Council Member, Ward 1

Pronouns: he, him, his

City of Overland Park
8500 Santa Fe Drive <Blockedhttps://maps.google.com/?q=8500+Santa+Fe+Drive+%0D+Overland+Park,+KS+66212&entry=gmail&source=g>
Overland Park, KS 66212

logan.heley@opkansas.org <mailto:logan.heley@opkansas.org> | Blockedwww.opkansas.org <Blockedhttp://www.opkansas.org/>

<Blockedhttps://www.opkansas.org/>
<Blockedhttp://forwardop.org/>

April 28th, 2020

Matt Shively, Regulatory Project Manager
U.S. Army Corps of Engineers
Kansas City Regulatory Office
601 East 12th Street
Kansas City, MO 64106

matthew.s.shively@usace.army.mil

RE: Please deny 2020 Missouri River Commercial Dredgers Permit Renewal

Dear Mr. Shively and the US Army Corps of Engineers,

I am writing in response to the Public Notice dated March 18, 2020, concerning the renewal of permits for Missouri River Commercial Dredgers. I recommend denial of the commercial dredging permit renewal for Holliday Sand & Gravel Company in the Kansas City reach of the River.

In 2009, a study was completed by the Kansas City District, Army Corps of Engineers (USACE) that determined through stream-gage and other physical data that there had been a lowering of the riverbed, affecting public infrastructure, such as water intakes and pipeline crossings; bank stability; and the potential to undermine dikes, revetments and levees designed to support navigation and to provide flood protection.

Local stakeholders contributed $2.3 Million to the Missouri Riverbed Feasibility Study. The Study resulted in a Technical Report in May 2017 that concluded **commercial sand and gravel mining was the dominant cause of riverbed degradation in Kansas City, dating back to 1994**. The economic analysis of the Technical Report also concluded that **continued bed degradation in the Kansas City Reach will result in $269 Million in expenses** (2017 dollars for investment and repairs) to adjust for degradation and low water surface levels over 50 years. **The average annual estimated cost to public infrastructure is $5.3 Million!** While the cost to Holliday Sand and Gravel is only $100.00 for the 5 year permit.

Considering the findings of the Technical Report the dredging permits should be denied in the Kansas City reach of the River. **The cumulative cost to public infrastructure of continued dredging and resulting bed degradation is too significant when there are available alternatives to river dredging.** Holliday Sand & Gravel should move to off river pit mines or other reaches of the River that have not experienced degradation. The dredging industry should not be allowed to operate for free on the river, at the expense of the public in damage to infrastructure.

Balancing the interests on the Missouri River is a difficult task and the work of USACE is appreciated, however, **I am respectfully requesting USACE follow the conclusion of the 2017 Technical Report and deny the 5 year permit renewal application of Holliday Sand & Gravel on the Missouri River in the Kansas City Reach.** Considering the risk to the environment and taxpayers, it seems unconscionable to do otherwise. Please contact me should you have any questions.

Sincerely,

Melanie S. Kraft. MD, MBA, MRO, AME, FAAFP

From: David Mitchell
To: Shively, Matthew S CIV USARMY CENWK (USA)
Subject: [Non-DoD Source] Commercial Sand Dredging Request to Extend Permit beyond 2020
Date: Friday, May 1, 2020 2:19:28 PM

To: Mr. Matthew Shively,

I am writing to register a comment about the Commercial Sand Dredging Industry request to continue sand dredging on the Kansas City

reach of the Missouri River, with this permit expiring in Dec. 2020.

As I understand it, the May 17, 2017 Missouri River Bed Technical Report indicates that continued sand dredging of the K.C. reach area will lead to

ongoing bed degradation, thereby negatively impacting habitat, wetlands, water quality, levees and floodwalls, bridges, and water

intakes. The estimated costs to this ongoing dredging to public infrastructure is $5.3 million annually.

Actions which preserve habitat and wetlands are particularly important, from the standpoint that humanity has initiated the mass extinction of species, and it is

extremely important that all levels of society take actions to preserve and protect all possible natural areas. Obviously, this would include protecting the natural habitat

in the Kansas City reach of the Missouri River.

It is encumbent upon the U.S. Army Corps of Engineers to join in those myriad of actions needed to attempt to preserve as much of the natural world as possible, and I urge the denial of the

permit to the Commercial Sand Dredging industry to engage in sand dredging in the K.C. reach area.

Sincerely,

Dave Mitchell
Kansas City, Mo.

From: Linda Hornbuckle
To: Shively, Matthew S CIV USARMY CENWK (USA)
Subject: [Non-DoD Source] Sand Dredging
Date: Friday, May 1, 2020 5:55:29 PM

I am against the commercial sand dredging in KC area of MO river. Studies have shown it is not best for the ecological health of that area.

I am convinced the private contractors wanting permits can find their product in more suitable places. The health of our rivers should be handled and guarded over by the Core of Engineers or a like government entity.

In earnest,
Linda Hornbuckle
Kansas resident

Sent from my iPhone

From: Les Lampe
To: Shively, Matthew S CIV USARMY CENWK (USA)
Subject: [Non-DoD Source] Public Comment on Missouri River Sand Dredging Permits
Date: Friday, May 1, 2020 2:25:16 PM

Mr. Shively,

I am offering my public comment on the proposed dredging permits for companies operating in and adjacent to the mainstem of the Missouri River. Although only brief comments are offered on several broad categories relating to approval or denial of the proposed permits, the combined impact of my comments results in my recommendation that the proposed permits be denied.

History

The Missouri River is undoubtedly a major environmental, economic, cultural, and recreational resource for much of the United States. There is a long history of navigation on the river predating major Federal efforts to construct facilities to control the river. Construction of major reservoirs on the river was generally carried out through the period of the 1930s through the 1960s and resulted in the present-day mainstem Fort Peck, Garrison, Oahe, Big Bend, Fort Randall, and Gavins Point Dams. The impoundments behind Fort Peck Dam, Garrison Dam, and Oahe Dam are among the largest in the United States, with only Lake Powell and Lake Mead on the Colorado River of comparable size. Much of the construction was the result of the Pick-Sloan Plan proposed to promote flood control, hydropower, navigation, and irrigation. Elements of the Sloan portion of the plan for irrigation have been largely unrealized.

Sediment Transport and Channel Degradation

Previous proposals have suggested the need for the development of a sediment transport budget for the river. With the construction of upstream reservoirs, sediment has been trapped behind the dams and the flows released from the dams are “hungry” to satisfy the sediment transport carrying capacity. This alone results in accelerated erosion of the streambanks and bed. This effect is accentuated by the channelization required to maintain a navigation channel on the river. The channelization is accomplished by maintaining a channel that is narrower and deeper, thereby increasing flow velocities and increasing the sediment carrying capacity of the river and accelerating erosion. The net impact of the construction of the upstream reservoirs, dredging, and maintaining a navigation channel has been significant degradation of the riverbed. This bed degradation has lowered river levels during low flows to such an extent that water intakes along the river, such as that operated by Kansas City Water Services, become almost inoperable.

Economics

The operation of the Missouri River has many economic aspects. Recent challenges in balancing flood control and recreational purposes have been well documented. The use of the river for navigation and transport primarily of agricultural products has been far below earlier economic projections and leads to questions concerning the economic viability of continuing to spend considerable economic resources for a negligible benefit. The economics of the sand and gravel dredging are based on the relative ease of access to the materials, the proximity to markets for the materials, and the quality of the materials particularly as a source of aggregate for concrete. One report by the USACE indicates that riverbed degradation in the Kansas City region has resulted in hundreds of millions of dollars of damages and that much of these damages are associated with dredging activities. It would seem reasonable that the permit fees paid by the dredgers be commensurate with the damages they are causing. This would prompt the dredgers to explore use of alternative sources such as ancestral river channels that might be more cost-effective.

Environmental

Numerous studies have been carried out on the ecology of the Missouri River. There is no doubt that the historic ecosystem marked by meandering channels and extensive floodplains has been extensively altered, if not essentially destroyed by the various control structures and operations on the river. Of particular concern related to dredging

activities is the health of the benthic community. For almost any riverine system, the foundation of the ecosystem is the viability of organisms, particularly macroinvertebrates, living in the river benthos. Dredging of the riverbed would not be merely detrimental, but would be entirely destructive, of the benthic habitat.

Conclusion

As stated at the outset of my comments, my recommendation is that the dredging permits, at least in the reach for Kansas City and St. Joseph, be denied.

Thank you for the opportunity to comment.

Dr. Les K. Lampe

6402 Warwick Street

Shawnee, Kansas 66218

From: Martha Gershun
To: Shively, Matthew S CIV USARMY CENWK (USA)
Subject: [Non-DoD Source] Public Comment Missouri River Sand Dredging Permits
Date: Friday, May 1, 2020 9:29:03 AM

Matt Shively, Regulatory Project Manager

May 1, 2020

US Army Corps of Engineers

RE: Public Comment on Renewal of Missouri River Commercial Dredgers Permit

Mr. Shively and members of the Army Corps of Engineers,

I am offering my Public Comment concerning the renewal of permits for the commercial sand dredgers on the Kansas City portion of the Missouri River. I have deep concerns. I strongly urge you to DENY the commercial dredging permit renewal for Holliday Sand & Gravel Company in the Kansas City reach of the River.

We acquire our community's water from the Missouri River and its tributary, the Kaw (Kansas) River. The erosion of our Missouri River beds results in lower water levels and disturbed sediment, posing critical challenges for WaterOne's water-supply intake equipment and our water quality. WaterOne partnered with MARC, other municipalities, and private companies to fund the 2014 Feasibility Study <Blockedhttp://www.marc.org/Environment/Water-Resources/pdfs/MoBedDeg/MOBedDeg_PublicMeetingPPT.aspx> to learn more about this important issue.

The follow-up Army Corps Technical Report <Blockedhttp://www.marc2.org/assets/environment/mobeddeg/MoRiverBedDegStudy2017.pdf> , issued inMay, 2017, reviewed many options. While floods, dams and navigation structures can cause degradation, the report cites commercial sand and gravel mining as "the dominant driver of projected bed degradation over the next 50 years." Appropriately restricting commercial sand and gravel mining appears to be the most economically viable solution to river bed degradation.

We need to find a solution that balances our community's need for construction sand and the interests of businesses and private land owners with our need to protect the long-term viability of our river. Friends of the Kaw <Blockedhttp://sites.google.com/site/friendsofthekaw/dredging> promotes switching commercial mining processes from river dredging to carefully-selected pit mines, noting the success of a local pit mine that became a lake.

We must collaborate with the private companies and landowners who rely on the river. We need to implement creative ways to limit river sand mining. Continued dredging is not the answer. We need more collaborative solutions. Together we can stabilize our Missouri River beds to protect our water's future.

Martha Gershun

5710 Lockton Lane

Fairway, KS 66205

martha@mgconsulting.com <mailto:martha@mgconsulting.com>

Blockedwww.marthagershun.com <Blockedhttp://www.marthagershun.com/>

she/her

Care & Custody

Available on Amazon <Blockedhttps://www.amazon.com/Care-Custody-Novel-Three-Children/dp/1943995648/ref=tmm_pap_swatch_0?_encoding=UTF8&qid=1528722367&sr=8-1>

From: Sierra Herndon
To: Shively, Matthew S CIV USARMY CENWK (USA)
Subject: [Non-DoD Source]
Date: Friday, May 1, 2020 1:09:25 PM

Mr. Shively and the USACE,

I'm writing to express that the cost to the public infrastructure of the continued dredging and resulting river bed degradation is too significant when there are such viable, alternative options to archaic river dredging. This should not be allowed to happen, for free to companies, at the cost of the environment and the public. I respectfully ask that you follow the 2017 findings of the technical report and deny such egregious measures to occur on public lands and with public funds. Anything else would be unconscionable. I stand with Dr. Kraft, with the public, and with the environment.

Sincerely,

Sierra Herndon

From: Claire M Reagan
To: Shively, Matthew S CIV USARMY CENWK (USA)
Subject: [Non-DoD Source] MO River Commercial Dredgers Permit Renewal
Date: Saturday, May 2, 2020 11:28:59 AM

To whom it may concern,

My name is Claire Reagan. I'm a 10+ year resident of Johnson County, KS, who grew up in the Omaha Metro area. While I'm not expert in the field of commercial dredging, I did grow up with a civil engineer who worked for the Army Corps of Engineers for decades. My late father, Paul Iwai, served in an emergency management capacity. He taught me that we must make decisions based on facts, especially when making decisions about our waterways.

The facts determined and interpreted by the Technical Report strongly indicate that dredging permits should be denied. Riverbed degradation is a problem that deserves the utmost attention and mitigation -- keeping at top of mind recent record-breaking flooding and a critical need to preserve safe, sustainable drinking water. The overall cost of continued dredging is not worth any immediate benefit seen from continuing in this practice.

While I recognize that the interests of the Missouri River are a difficult balancing act, this decision must be informed by the data that has been collected and analyzed by experts with a wide-angle view for the future of the river and its health.

I so appreciate your important work and hope that you will decide to deny the permits in question.

Thank you,
Claire Reagan
Olathe, KS

From: Ethan Corson
To: Shively, Matthew S CIV USARMY CENWK (USA)
Subject: [Non-DoD Source] Comments on Missouri River Commercial Dredgers Permit Renewal
Date: Saturday, May 2, 2020 9:18:40 PM

Ladies and Gentlemen:

I am writing in response to the Public Notice dated March 18, 2020, concerning the renewal of permits for Missouri River Commercial Dredgers. Please send me a reply verifying receipt of this email.

I ask that you deny the commercial dredging permit renewal for Holliday Sand & Gravel Company in the Kansas City Reach of the River.

In 2009, a Reconnaissance Study was completed by the Kansas City District, Army Corps of Engineers (USACE) that determined through stream-gage and other physical data that there had been a lowering of the riverbed, affecting public infrastructure, such as water intakes and pipeline crossings; bank stability; and the potential to undermine dikes, revetments and levees designed to support navigation and to provide flood protection.

Thereafter local stakeholders contributed $2.3 Million to the Missouri Riverbed Feasibility Study. The Study resulted in a Technical Report in May of 2017 that concluded commercial sand and gravel mining was the dominant cause of riverbed degradation in Kansas City, dating back to 1994. The economic analysis of the Technical Report also concluded that continued bed degradation in the Kansas City Reach will result in $269 million in expenses (2017 dollars for investment and repairs) to adjust for degradation and low water surface levels over 50 years. The average annual estimated cost to public infrastructure is $5.3 Million.

Considering the findings of the Technical Report, the dredging permits should be denied in the Kansas City reach of the River. The cumulative cost to public infrastructure of continued dredging and resulting bed degradation is too significant when there are available alternatives to on river dredging. Holliday Sand & Gravel should move to off river pit mines or other reaches of the River that have not experienced degradation. The dredging industry should not be allowed to operate for free on the river, at the expense of the public in damage to infrastructure.

Balancing the interests on the Missouri River is a difficult task and the work of USACE is appreciated. I respectfully request that the USACE follow the conclusion of the 2017 Technical Report and deny the permit renewal application of Holliday Sand & Gravel on the Missouri River in the Kansas City Reach.

Sincerely,
Ethan Corson

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Ethan Corson

ethancorson@gmail.com <mailto:ethancorson@gmail.com>

From: Barb Hall
To: Shively, Matthew S CIV USARMY CENWK (USA)
Subject: [Non-DoD Source] Public comment re: Missouri River dredging
Date: Sunday, May 3, 2020 11:16:30 AM

RE:Comments on Missouri River Commercial Dredgers Permit Renewal.

Ladies and Gentlemen:

I am writing in response to the Public Notice dated March 18, 2020, concerning the renewal of permits for Missouri River Commercial Dredgers. I request the denial of the commercial dredging permit renewal for Holliday Sand & Gravel Company in the Kansas City reach of the River.

In 2009 a Reconassaince Study was completed by the Kansas City District, Army Corps of Engineers (USACE) that determined through stream-gage and other physical data that there had been a lowering of the riverbed, affecting public infrastructure, such as water intakes and pipeline crossings; bank stability; and the potential to undermine dikes, revetments and levees designed to support navigation and to provide flood protection.

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Considering the findings of the Technical Report the dredging permits should be denied in the Kansas City reach of the River. The cumulative cost to public infrastructure of continued dredging and resulting bed degradation is too significant when there are available alternatives to on river dredging. Holliday Sand & Gravel should move to off river pit mines or other reaches of the River that have not experienced degradation. The dredging industry should not be allowed to operate for free on the river, at the expense of the public in damage to infrastructure.

Balancing the interests on the Missouri River is a difficult task and the work of USACE is appreciated. I respectfully request USACE follow the conclusion of the 2017 Technical Report and deny the permit renewal application of Holliday Sand & Gravel on the Missouri River in the Kansas City Reach.

thank you
Barbara Hall
6006 Mcgee St
Kansas City, MO 64113

From: Deborah Reiman
To: Shively, Matthew S CIV USARMY CENWK (USA)
Subject: [Non-DoD Source] Public Comment on Renewal of Missouri River Commercial Dredgers Permit
Date: Sunday, May 3, 2020 4:34:12 AM

Mr. Shively and members of the Army Corps of Engineers,

I am concerned about the renewal of permits for the commercial sand dredgers on the Kansas City portion of the Missouri River. I live in Missouri close to the river, and I drink water from the Missouri River. I am writing to request USACE to act on the conclusions of the Missouri River-Bed Degradation Technical Report, dated May 17th 2017 and eliminate sand dredging on the Kansas City portion of the river.

I was unable to listen to the Public Hearing due to technical difficulties. Due to issues in these odd times of Covid-19, as well as apparent technical issues with the webinar, it seems that the time for public comment should be extended. Also, when will the 2019 riverbed analysis be available – could public comment be open until we get a chance to see these results?

The long-term damage to the riverbed implies that the dredging permits should be denied.

Thank you for your attention to this important matter.

Sincerely,

Deborah Reiman

210 W 5th St, Kansas City, MO 64105
DeborahReiman@gmail.com <mailto:DeborahReiman@gmail.com>

From: Rich G
To: Shively, Matthew S CIV USARMY CENWK (USA)
Subject: [Non-DoD Source] Comments on dredging applications on Missouri River
Date: Thursday, April 30, 2020 10:46:57 AM
Attachments: Graphs of Q S Missouri River.docx

Matt:
I have attached my comments on the permitting process of dredging on the Missouri River. I have addressed my comments to the Kansas City reach.

By way of disclosure, earlier work that I did on degradation of the Missouri River was partially funded by Holliday Sand and Grave (HSG). However, that research was preliminary in that my thoughts and understanding of degradation in Kansas City were not fully developed while I was being compensated by HSG. I have moved far beyond the research that was partially funded by HSG.

At this time, I am writing a paper that has four parts that I will submit for publication in a peer reviewed journal. The attached Word document contains two graphs that I attempt to explain. These graphs will be presented in my paper and they show how erosion and deposition become obvious as measured at the Kansas City gage.

My conclusion is that the driving force of channel bed degradation is discharge or rather the hydrographs that pass through the Kansas City reach.

I hope my explanation makes sense, but if you have any questions or comments please let me know.

Regards,
Rich
Richard F. Geekie, P.E., M.ASCE
6509 Barton Cir. Apt. 202
Shawnee, KS 66203-5530
rfgeekie@gmail.com <mailto:rfgeekie@gmail.com>

April 29, 2020

Matt Shively, Regulatory Project Manager matthew.s.shively@usace.army.mil
U.S. Army Corps of Engineers
Kansas City Regulatory Office
601 East 12th Street
Kansas City, MO 64106

Reference: WaterOne template letter

From Richard F. Geekie, P.E., M.ASCE

Contrary to the feasibility Technical Report (USACE,May 2017), the evidience does not support the contention that dredging was the cause of bed degradation in the Kansas City Reach after 1993. The following analysis shows a correlation between hydrographs of discharge, Q, and erosion and depostion in the channel bed in the Kansas City Reach. This analysis will be part of a paper submitted to the ASCE's *Journal of Hydraulic Engineering*.

I have developed a method to measure deposition and erosion from measured stage, S, and discharge, Q. The ratio (Measured S/ Measured Q)*1000 cfs is a measure of deposition and erosion. An increase in this ratio is deposition while a decrease is erosion. Multiplying (S/Q) by 1,000 is a scaling factor to make the ratio greater than one.

For example, suppose that the stage is 15 feet for 60,000 cubic feet per second (ft^3/s). If erosion in the channel erodes, the channel can convey more discharge and the stage might declince to 13 feet. In the first case, (S/Q)*1000 is (15/60000)*1000 = 0.25. in the second case, (S/Q)*1000 is (13/60000)*1000 = 0.22. Suppose deposition resulted in an increase of two feet in stage, that is, 16 feet. (16/60000)*1000 = 0.26. The ratio may be thought of as 0.26 feet per 1000 ft^3/s.

Similary reasoning can be seen if different discharges show the same stage. For example, (15/45000)*1000 = 0.33 feet per 1000 ft^3/s. (15/55000)*1000 = 0.27 feet per 1000 ft^3/s. This example represents erosion because the same stage, 15 feet, can convey more discharge.

Figures 1 and 2 are data from the Kansas City gage. Referring to figures 1 and 2, Q peaks correspond with troughs of (S/Q) of the Kansas City. Interestingly, after the 1993 and 2011 floods, depostion occurred, that is, an increase in the ration (S/Q). After the 2011 flood, the many-peak discharges decline accompanyed by deposition (increase in the (S/Q) until the hydrogrpah in 2013. The increasing peaks of Q after 2011 correspond the declince of (S/Q) after 2011. The increase in Q in 2018 corresponds to change in decrease in the (S/Q).

The ratio at Kansas City has tended to move toward 0.2. A drought occurred between 2002 and 2007 with a reccord low in suspended sand at the KC gage. The trend of (S/Q) was declining during 2002 and 2007.

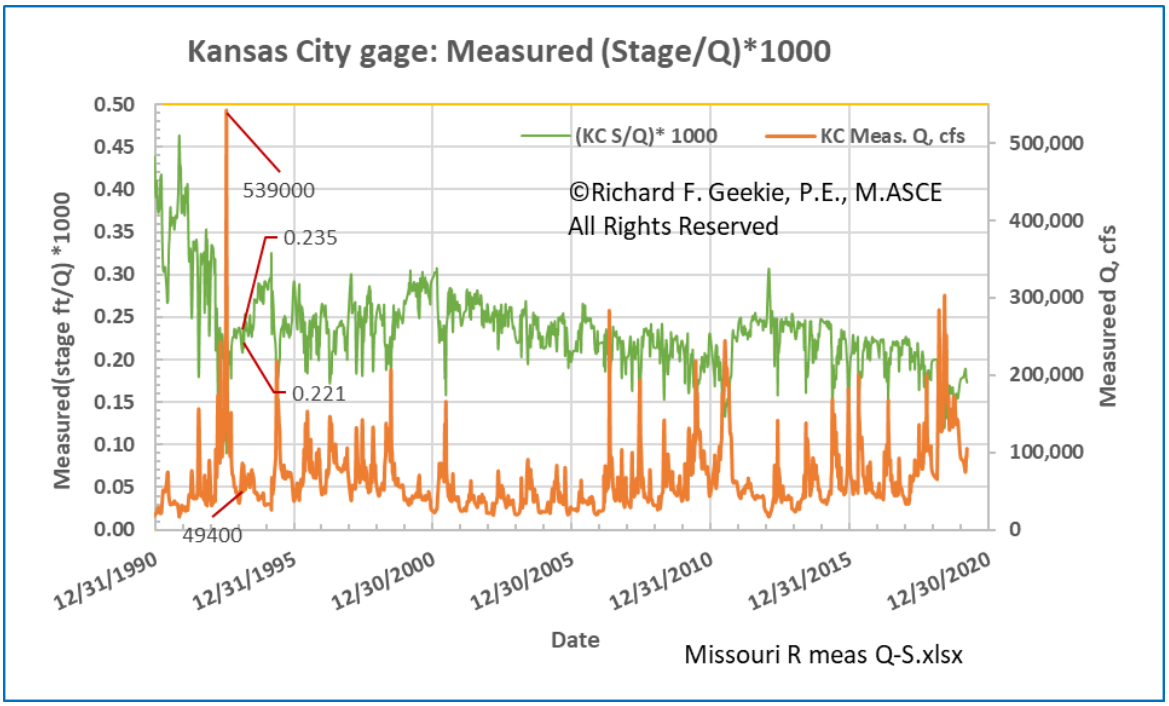

Figure 1. (Stage/Q)*1000 and Discharge Q: Data Source: USGS

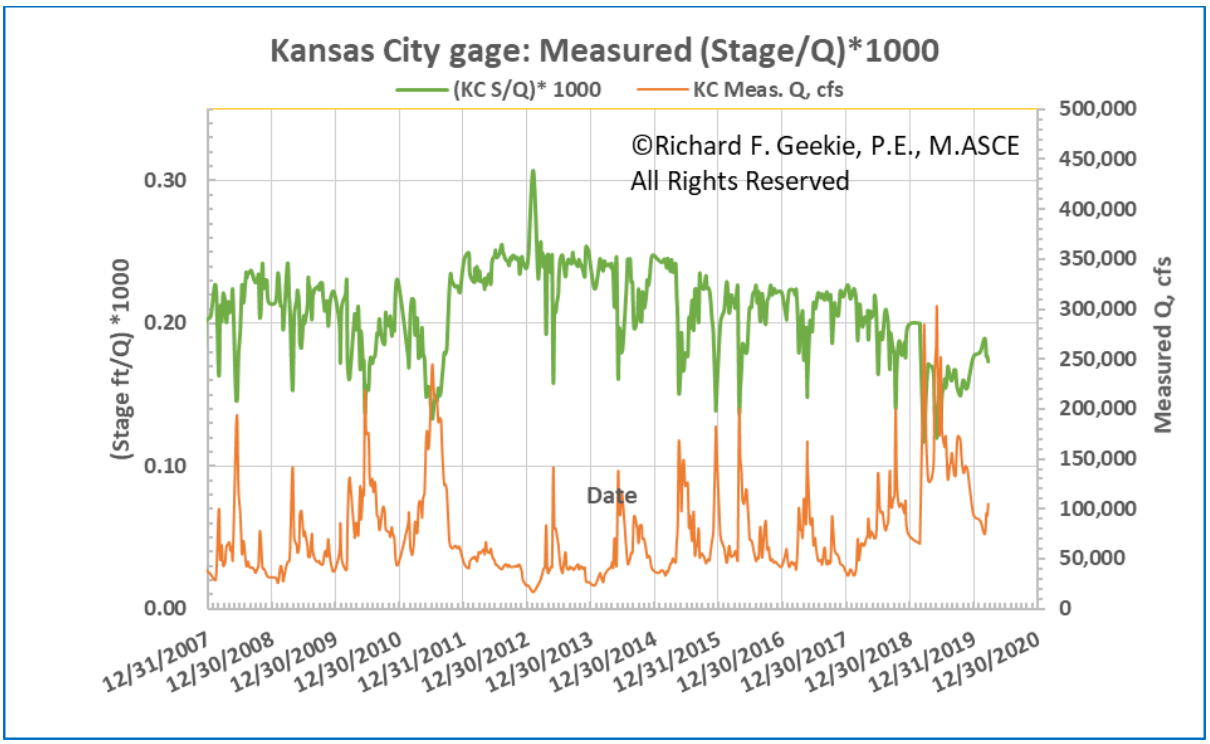

Figure 2. (Stage/Q)*1000 and Discharge Q: Data Source: USGS

From: Rich G
To: Shively, Matthew S CIV USARMY CENWK (USA); Tom Jacobs
Subject: [Non-DoD Source] A last letter to clarify comments of April 30, 2020 from Richard Geekie
Date: Friday, May 1, 2020 10:51:47 AM
Attachments: Reference to figures of Apr 30 2020.docx
Stream Restoration what works what doesn"t.pdf

Matt and Tom:

Here is a letter to clarify any confusion over the two figures included in that letter. I have also attached a PDF document from a ASCE continuing education course that I recently completed. The PDF document is not needed for public comments, but for your information. This PDF document might be of interest to the stakeholders.

Tom, could you forward this email to the stakeholders? Thanks.

Regards,

Rich
Richard F. Geekie, P.E., M.ASCE
6509 Barton Circ., Apt 202
Shawnee, KS 66216-5530

rfgeekie@gmail.com <mailto:rfgeekie@gmail.com>

May 1, 2020

Matt Shively, Regulatory Project Manager matthew.s.shively@usace.army.mil
U.S. Army Corps of Engineers
Kansas City Regulatory Office
601 East 12th Street
Kansas City, MO 64106

Reference: Richard F. Geekie letter, dated April 30, 2020

From Richard F. Geekie, P.E., M.ASCE

My letter of April 30, 2020 presents two graphs derived from the stage and discharge data of the Missouri River gage, RM 366.2.

To clarify my conclusions, I did not imply that dredging in the Kansas City reach does not have detrimental effects on the Missouri River or its channel bed. The following text comes from an earlier report of mine (that needs some revision).

Dredging in RM 354-382 contributes to degradation at some distance downstream of this reach, or any dredging reach, but how far downstream is difficult to measure. The stage trends at the Kansas City gage measure of downstream degradation but only a limited distance.

If dredging is in an area of the bed where bed forms (dunes) are developing, the effects of dredging will be to destroy the dunes that are a source of suspended bed material. Bed material that would have become suspended would instead be extracted during dredging. This loss of suspended bed material reduces the amount suspended sand that would have been deposited downstream. Dredging holes intercept bed load that would have been transported downstream.

Eliminating dredging would add to the supply of sand downstream that would be available for downstream development of emergent sand bars. The central topic of the Missouri River Recovery Management Plan & Environmental Impact Statement (USACE, August 2018, 4 volumes) was the development of emergent sand bars for habitat. The effect of increasing the available sand supply for habitat development has not been investigated by anyone known to the author.

All dredging sites reduce downstream deposition of suspended sand load in addition of bed load. The loss of dredged sand contributes over time to the loss sand of the Louisiana Barrier Islands. https://pubs.usgs.gov/fs/barrier-islands/

A problem with using the figures in the referenced letter is that a loss of bed load, suspended sand load also would increase degradation.

1) The sediment sampling program that was discontinued after 2004 of the Corps for the three gages, St. Joseph, Kansas City, and Herman This sediment program included the following:

   Suspended sediment sampling across the river, bed material, velocity measurements, discharge measurements and stage. Bed shear stress can be estimated from velocity profile.

2) From the above, the suspended sand load could be estimated in terms of tons per day.
3) Changes in gradation curves of the top 2.5 inches of the bed are a result of recent flow events or floods. For example, convergent flow over a reach should produce some armoring and a change is bed slope. Bed load would be expected to change in such a reach.

The bed material sampling from at least RM 500 to the mouth should be re-established. The sampling was every five miles, with three samples across the river at each sampling location. Does the variation of the gradation curves (grain-size distributions) change at dredging sites and downstream of dredging or after large flood events? What grain size distributions are needed for stable emergent sand bar?

These are some of my thoughts on both dredging effects and the need to have a better collection of data, including velocity measurements and sediment data. Some of this is speculation that requires further thought and more recent sediment and velocity data.

What effects does dredging have on the other biota?

Richard F. Geekie, P.E., M.ASCE

Shawnee, KS

rfgeekie@gmail.com

April 21, 2020

VIA EMAIL AND U.S. MAIL

Matt Shively, Regulatory Project Manager
U.S. Army Corps of Engineers
Kansas City Regulatory Office
601 East 12th Street
Kansas City, MO 64106

matthew.s.shively@usace.army.mil

Re: Missouri River Commercial Sand Dredging Permits

Gentlemen:

This letter is in response to your Public Notice dated March 18, 2020, regarding permits requested by Capital Sand Company, Inc.; Hermann Sand & Gravel, Inc.; Holliday Sand & Gravel Company; Con-Agg of Missouri, LLC; Limited Leasing Company; and J.T.R., Inc.; hereinafter "Dredgers."

Commercial sand dredgers provide most of sand material for the construction industry. The sand goes into concrete that provides our roads, bridges, sidewalks, homes, driveways, etc. in the State of Missouri and parts of Kansas. Missouri River sand is of high quality and important to the construction trades.

Dredging has taken place on the Missouri River long before the Corps developed the Bank Stabilization and Navigation Project. The dredging interests have complied with permit requirements previously issued by the Corps of Engineers in previous permits.

The permits provide for an accommodation of the endangered pallid sturgeon. The Dredgers present no other impacts to any other endangered or threatened species on the River.

The Dredgers provide a source of employment and pay taxes in their respective communities. They participate in their local communities, providing donations and other contributions to civic betterment.

The undersigned supports the Corps re-issuing permits for commercial sand dredging on the Missouri River.

Very truly yours,

cc: Missouri Department of Natural Resources
PO Box 176