

**DEPARTMENT OF THE ARMY PERMIT EVALUATION
AND DECISION DOCUMENT**

TABLE OF CONTENTS

- 1. Introduction**
 - 1.1. Authorities
 - 1.2. Permit Decision

- 2. Project Information (33 CFR Part 325.2)**
 - 2.1. Applicants
 - 2.2. Application Numbers and Project Locations
 - 2.3. Existing Conditions
 - 2.4. Project Description
 - 2.5. Jurisdiction
 - 2.6. Project Purpose
 - 2.7. Project Need

- 3. Public Notification (33 CFR Parts 320.3, 320.4 and 325.3)**
 - 3.1. Public Notice Date
 - 3.2. Respondents
 - 3.3. Substantive Issues and Corps Resolution
 - 3.4. Public Hearing Determination

- 4. Compliance with Other Laws**
 - 4.1. Section 7 of the Endangered Species Act
 - 4.2. Section 106 of the National Historic Preservation Act
 - 4.3. Section 401 Water Quality Certification
 - 4.4. Executive Orders
 - 4.4.1. Order 11990 Protection of Wetlands
 - 4.4.2. Order 11988 Flood Plain Management
 - 4.4.3. Order 11898 Environmental Justice

- 5. Alternatives (NEPA 33 CFR Part 320.4(a)(2))**

- 6. Impact Evaluation**

- 7. Special Conditions**
 - 7.1. Mandatory by Regulation/Policy
 - 7.2. Project Specific

- 8. Determinations**
 - 8.1. Clean Air Act Conformity
 - 8.2. Public Interest Review

9. Signatures/Approvals

10. Attachments/Enclosures Index

- 10.1. Public Notice
- 10.2. Public Notice (200600407)
- 10.3. Federal Agency Comments
- 10.4. State Agency Comments
- 10.5. Representative Chris Steineger's Comments
- 10.6. Water District No. 1 of Johnson County's Comments
- 10.7. Other Organizations Comments
- 10.8. Individuals Comments
- 10.9. Tribal Comments
- 10.10. Kansas City District Letter to FWS
- 10.11. FWS Response Letter
- 10.12. SHPO Letters

1. Introduction. This is a Department of the Army (DA) permit decision document for commercial dredging on the Kansas River. This document also addresses the requirements contained in the National Environmental Policy Act (NEPA) of 1969.

1.1. Authorities. This decision is issued under Section 10 of the Rivers and Harbors Act of 1899 (33 USC 403). This review was conducted in accordance with the procedures described at 33 CFR Part 320-330, including Appendices B and C.

1.2. Permit Decision. I have reviewed and evaluated the five commercial dredging DA permit applications, in light of the overall public interest, the environmental, social, engineering, and economic considerations, and in accordance with the laws, regulations and policy cited above. I have decided to issue five DA permit authorizations for the projects subject to special conditions described below.

2. Project Information.

2.1. Applicants: Kaw Valley Companies, Inc., Holliday Sand and Gravel Company, The Master's Dredging Company (formerly Kaw Sand Company), Penny's Concrete, Inc., and Victory Sand Mining & Dredging, L.L.C.

2.2. Application Numbers and Project Locations: The original public notice issued designated each site as a separate permit. To simplify the process, we are issuing one permit per company that includes each dredge site. The dredge sites by the following companies are located in the Kansas River at the following river miles.

Kaw Valley Companies, Inc.(200301770):

River Miles 9.4 – 10.4
River Miles 12.8 – 13.9
River Miles 15.4 – 16.9

Holliday Sand and Gravel Company (200301862):

River Miles 18.65 – 20.15
River Miles 20.55 – 20.6
River Miles 21.0 – 21.15

The Master's Dredging Company, Inc. (200200317):

River Miles 42.6 – 44.1
River Miles 47.1 – 48.0

Penny,s Concrete, Inc (200200319):

River Miles 45.2 – 46.7
River Miles 49.6 – 51.35

Victory Sand Mining & Dredging, L.L.C (200600407):

River Miles 77.1 – 78.6

The following sites were applied for, but due to unacceptable degradation, these applications will not be evaluated (see Section 3.3 for additional information on unacceptable degradation):

200301864, River Miles 22.9 – 24.4
200200337, River Miles 24.0 – 25.0
200200321, River Miles 26.1 – 27.6
200200323, River Miles 35.4 – 36.4
200301768, River Miles 84.5 – 85.8
200301863, River Miles 86.5 – 86.3
200301759, River Miles 90.1 – 91.6

- 2.3. Existing Conditions: Each dredge site discussed in this document is currently or has historically been dredged. The condition of the Kansas River at each dredge site differs to some extent; however, most sites are primarily located in industrial urban areas where dredging has occurred for many years. Commercial sand and gravel dredging activities on the Kansas River can be traced as far back as the early 1900s.
- 2.4. Project Description: Commercial sand and gravel dredging operations on the Kansas River utilize hydraulic pumps mounted on barges to convey a sand and gravel slurry to shore based facilities for processing. Excess water is drained from the sand and gravel and returned to the river. The permits are subject to the restrictions and monitoring requirements stipulated in the Regulatory Plan for Commercial Dredging Activities on the Kansas River (Plan). All dredge sites discussed in this decision document are existing sites or have been historically dredged for commercial sand and gravel. These permits are reviewed on a 5-year cycle.
- 2.5. Jurisdiction: The Kansas River is a navigable water of the U.S. These permits are issued under the authority of Section 10 of the Rivers and Harbors Act of 1899 (33 USC 403). Section 404 of the Clean Water Act does not apply to these activities as there is not a discharge of dredged or fill material into waters of the United States.
- 2.6. Project Purpose: The project purpose is to extract sand and gravel from the Kansas River for commercial purposes.
- 2.7. Project Need: The aggregate producers have demonstrated the need for sand and gravel extracted from the Kansas River. Kansas River sand is a major aggregate commonly used for Ready-Mix concrete sand, asphalt sand, masonry sand, fill material, and other applications throughout the region. The need for sand and gravel from the Kansas River is well documented in a series of reports and summarized in the Final Regulatory Report and Environmental Impact Statement for Commercial Dredging Activities on the Kansas River (EIS). The EIS and all related studies are part of the administrative record for these permits.

3. Public Notification

3.1. Two public notices were issued. One for the majority of the applications and one for application number 200600407 by Victory Sand Mining & Dredging, L.L.C. Application number 200600407 is a relocation project in the Topeka area. We determined that a separate public notice should be issued for the new Topeka site based on the location of the proposed reach and the requirement to construct a new processing plant. The issues identified for both public notices were relatively similar. Site specific comments related to 200600407 and the Corps' resolution are discussed in section 3.3 below. The public notices were dated 8 August 2003 and 30 January 2006 (200600407). Expiration Dates: 7 September 2003 and 20 February 2006 (200600407). (Enclosures 12.1 and 12.2)

3.2. Respondents:

3.2.1. **Federal Agencies** (Enclosure 12.3): U.S. Environmental Protection Agency (EPA), U.S. Fish and Wildlife Service (FWS) (2 letters)

3.2.2. **State Agencies** (Enclosure 12.4): Kansas Department of Wildlife and Parks (KDWP), Kansas Natural Resource Sub-Cabinet, Kansas Biological Survey, Kansas-Lower Republican Basin Advisory Committee

3.2.3. **State Senate Representative** (Enclosure 12.5): Representative Chris Steineger

3.2.4. **Local Agencies** (Enclosure 12.6): Water District No. 1 of Johnson County

3.2.5. **Other Organizations** (Enclosure 12.7): Friends of the Kaw (5 letters), Jayhawk Audubon Society, Kansas Canoe Association, Kansas Wildlife Federation (2 letters), Kansas Natural Resource Council (2 letters), Arkansas River Coalition, Kansas Wildlife Federation, The Nature Conservancy, The Heavy Constructors Association

3.2.6. **Individuals** (Enclosure 12.8): 94 form letters version 1, 62 form letters version 2, 106 letters and emails from individuals, Mr. Dave Murphy letters (4 letters)

3.2.7. **Tribes** (Enclosure 12.9): 6 letters from various Tribes

3.3. Substantive Issues and Corps Resolution:

Section 404 of the Clean Water Act Concerns

Commenters responded that they believe dredging should be regulated under Section 404 of the Clean Water Act. EPA commented that it was their understanding that historically other dredging operations such as those on the Missouri River required a Section 404 permit and asked for an explanation of the differences between Missouri River dredging and Kansas River dredging for commercial purposes. We responded to EPA in a letter dated 1 March 2004 (Enclosure 12.10) and explained the difference between Kansas River dredging and Missouri River dredging. On the Kansas River,

dredges are mobile to a certain degree; however, suction dredges pump all material to an onshore processing facility via a floating pipe. A cutter head or ladder digs into the Kansas riverbed, then a suction pipe pumps the material to the processing facility where the material is processed and sorted. The water is then discharged to a siltation basin, where any remaining solids settle out. Finally the water is discharged back to the Kansas River. Prior to 1993, Kansas River dredging for commercial purposes was regulated only under Section 10 of the River and Harbors Act of 1899. The inception of the excavation rule in 1993 prompted the Corps of Engineers to regulate these activities under Section 404; however, in 1997 the U.S. District Court for the District of Columbia ruled the excavation rule invalid. Kansas River dredging has been regulated under Section 10 only from 1997 to the present. We considered the type of dredges used, extraction techniques, riverbed composition, the duration that the material was lifted by the dredge, the proximity of the release point, and visual observation to determine that material escaping the tip of the suction pipe is incidental fallback. This activity is not a discharge of fill material according to 33 CFR Part 323.2(3)(iii). We will continue to regulate this activity under Section 10 of the River and Harbors Act of 1899. According to 33 CFR Part 323.2(3)(i), discharges from the siltation basin pipe is regulated under Section 402 of the Clean Water Act.

Cumulative Impacts Assessment

Many respondents commented that the Corps lacks a cumulative impact assessment associated with commercial dredging on the Kansas River. We believe that the many studies and EIS adequately identified cumulative impacts associated with commercial dredging on the Kansas River. The expected impacts associated with commercial dredging have been well documented. When writing the EIS and assessing each dredging permit we considered past, present and reasonable foreseeable future impacts. The result was the regulatory Plan that includes restrictions and a monitoring component that each dredge operator must comply with. The area of cumulative effect assessment is not limited only to dredge sites, rather we assess the majority of the river that we believe dredging may impact through cross sectional data and we assess the entire river through aerial photography. This data helps us monitor the cumulative effects of the entire Kansas River system.

Total Extraction Limit Concern

One commenter was concerned that the Plan did not set total extraction limits for many reaches of the river. This concern is addressed within the Plan on page A-5 which sets extraction limits for the entire river.

Impacts to Federal and State Listed Species

A commenter was concerned that that dredging impacts Federal and state listed species in and along the Kansas River. Additional information on impacts to Federally listed species and the coordination with the FWS is discussed in Section 4.1 of this document. We contacted KDWP regarding the comments pertaining to state listed species to determine the extent of impacts commercial dredging has on state listed species. The KDWP is the authority to permit impacts to state listed species

and according to the KDWP, permits would be necessary if project related impacts occur to state listed species. The KDWP reviewed the dredging plan and determined that permits are not necessary for commercial dredging activities on the Kansas River. We believe additional oversight of state listed species would be redundant to KDWP regulations and is not necessary.

Water Quality Concerns

Many commenters are concerned that ongoing dredging has negative impacts on water quality within the Kansas River and suggest that dredging may re-suspend and concentrate chlorodane and other persistent bioaccumulative toxins downstream. The Fishery-Dredging Study by Dr. Cross in 1982 concluded that dredging had little or no demonstrable effect on the water quality of the Kansas River in the area of the dredges except locally where return flows re-entered the river. We have no new information that suggests dredging substantially degrades water quality. We have reviewed current dredging operations and determined that it is in the public interest to place additional requirements on the producers to minimize the potential for increased sediment loading from the return water after onshore processing. As a result, these permits will be conditioned to require all onshore processing plants to construct and maintain adequately sized sediment basins that meet or exceed the state's water quality standards. The following condition will be included in each permit:

"You must construct and maintain an adequately sized sediment basin to meet state water quality standards for all return water to pass through prior to reentering the Kansas River."

This condition should reduce the potential for increased turbidity and reduce the potential spread of persistent bioaccumulative toxins downstream. We believe it is appropriate to require the applicants meet state water quality standards since the effluent from the sediment basin is specifically regulated under Section 402 of the Clean Water Act as discussed above.

Compliance with Section IX of the Regulatory Plan

A few commenters noted section IX of the Plan on page A-16 concerning water quality. The commenters requested the siltation basins be adequately sized and that discharge waters be tested for toxins. The Plan says that siltation basins may be required on a case-by-case basis if conditions indicate that a potential water quality problem exists. As discussed above, the construction and maintenance of an adequately sized siltation basin will be required for each permit. The discharge from a pipe of a siltation basin associated with a land based commercial processing is regulated under Section 402 of the Clean Water Act. For this reason, we will defer the testing of the discharge waters to the appropriate jurisdiction.

Geomorphic Changes in Substrate Composition

A commenter was concerned that dredging causes a change in the substrate composition by increased deposition of silt and silt-sand near dredging operations. We are aware of this consequence of dredging as it is documented on page 117 in the Report on the Impacts of Commercial Dredging on the Fishery of the Lower Kansas River (a 1982 report written by the University of Kansas for the Kansas City District). The commenter's main concern with this impact appears to be related to impacts associated with changes to the aquatic habitat. The substrate does tend to become more silt based, however these impacts are local and the Plan ensures these impacts are minimized by restricting the location of dredges and quantities of material extracted. In addition, the condition discussed above that requires a sediment basin should further minimize this affect.

National River Inventory (NRI) Nomination

Several commenters noted that the Kansas River is on the NRI and that dredging impacts the potential for the river to be included in the National Wild and Scenic River System. The Kansas River was formally nominated in the NRI in 1982. The NRI is an inventory of rivers that may be eligible for inclusion in the National Wild and Scenic River System. This nomination requires all Federal agencies to consult with the National Park Service (NPS) on any activity that could effectively foreclose wild, scenic, or recreational status for rivers on the inventory. We contacted the NPS and they provided no additional comments on the dredging applications. No further consultation with the NPS is required.

Degradation Concerns

Many commenters expressed concern that dredging causes degradation within the Kansas River. Dredging does cause degradation of the river which was identified in the EIS and many other reports completed for the Kansas City District. We identified in the EIS that 2 feet of degradation is the threshold for acceptable degradation on the Kansas River. According to the Plan, if a reach of river approaches an average of 2 feet of degradation in any 5-mile reach then dredging operations that adversely affect bed elevations in that reach will be terminated. Due to this condition, dredgers have been removed from river miles 24.2 – 39.1 and river miles 83.0 - 91.1. These reaches have been closed to dredging; however, we continue to monitor degradation in these reaches. We believe the Plan ensures that dredging related degradation is minimized.

Impacts to Bridges and Other Infrastructure

Many commenters are opposed to commercial dredging based on the potential to damage bridges and other infrastructure. Dredging does cause degradation within the Kansas River and this degradation can cause impacts to bridges and other infrastructure as noted by the EIS. To mitigate these impacts the permittees are required to comply with the Plan. The Plan ensures that dredging related degradation is minimized by requiring comprehensive monitoring of the river and by restricting

dredging locations. Section VII on page A-6 of the Plan details the restrictions concerning manmade structures that include bridges and other infrastructure. As discussed above, the Plan addresses excessive degradation through termination of dredge operations in degraded reaches. We believe that these monitoring requirements and restrictions ensure impacts to bridges and other infrastructure are minimized.

Impacts to the Kansas River Fishery

Many commenters stated their opposition to commercial dredging because dredging degrades fish habitat and harms recreational fishing. Commenters also believe that dredging diminishes fish diversity and fish population due to siltation. We disagree that dredging diminishes fish diversity; in fact, studies have shown that fish diversity increases near dredge sites due to added diversity in river depth. We also see no correlation to a decrease in recreational fish population with commercial dredging. There are many factors that negatively influence the fishery of the Kansas River. We acknowledge dredging impacts the fisheries of the Kansas River by inducing more lake-like conditions. This condition impacts native fishes to the river; however, this also increases sport fish abundance which increases some recreational fishing opportunities on the Kansas River. It should also be noted that the Missouri River backwater effect and three structures, the Topeka Weir, the WaterOne Weir, and the Bowersock Dam, also create conditions typical of lakes. Water quality concerns including pesticides, herbicides, heavy metals, and other pollutants are also major influencers on the Kansas River fishery and are unrelated to dredging. For dredging related impacts, we believe that the restrictions in the Plan minimize impacts to the Kansas River fishery by limiting extraction tonnage and dredge locations.

Aesthetic Impacts

Many commenters expressed concern that dredging impacts the aesthetics of the Kansas River. Dredging does have an impact on the aesthetics on the Kansas River though dredge sites on the Kansas River are mainly located in urban industrial areas where the Kansas River is not as aesthetically scenic or natural looking as rural locations due to development up to the river's edge in urban areas. In addition, there are approximately 12 river miles where dredging is authorized on the Kansas River while there are more than 170 river miles on the entire river. This means that dredges can be located on only 7% of the river. Due to the locations of the dredges and the

limited locations on the river we believe that dredging has a minor impact to the aesthetics of the Kansas River.

Digital Imagery

One commenter requested that the aerial photographs required by the Plan be submitted as digital imagery. We considered this comment and determined that we

can better assess and share this data if submitted in digital format. For those reasons we will condition the permits to include the following condition.

“For the years aerial photography is required according to Section V on page A-28 in the Regulatory Plan For Commercial Dredging Activities on the Kansas River, you must submit the aerial photography in digital format according to the specifications in the September 26, 2006 letter from GE Geospatial Solutions to the Kansas Aggregate Producer’s Association . In addition, the following are requirements of the data:

1. *The data must be submitted in the following projection parameters:*

*Projection ALBERS
Datum NAD83
Zunits NO
Units METERS
Spheroid GRS1980
Xshift 0.0000000000
Yshift 0.0000000000*

Parameters

29 30 0.000 / 1st standard parallel
45 30 0.000 /* 2nd standard parallel
-96 0 0.000 /* central meridian
23 0 0.000 /* latitude of projection's origin
0.00000 /* false easting (meters)
0.00000 /* false northing (meters)*

2. *A draft of the tiling scheme must be submitted prior to ortho photo production.*
3. *File formats must be .TIFF and .JPG with corresponding world files suitable for use in ESRI ArcView and ArcGIS and Bentley Microstation software products.*
4. *Each delivered geospatial data file (raster and vector) must include a corresponding populated FGDC-complaint metadata file readable by ESRI ArcGIS 9.2 or more current version.*
5. *Two copies of the deliverables must be provided on USB drives to be retained by the Corps.*
6. *A digital flight index must be submitted that consists of attributed shape file layers of:*
 - *flight lines*
 - *photo centroid points*

- *tif/jpg photo tiles as polygons.*
7. *Map testing procedures and any resulting claims of nonconformance to map accuracy standards must be completed within 90 days of delivery to the Corps.*

Updating the EIS

Many commenters requested that the Corps update the EIS and the Plan. We have reviewed the EIS and the Plan and determined that that EIS and majority of the Plan are sufficient. As discussed above we determined that it is appropriate to require the digital aerial photographs associated with the monitoring component. We reviewed the Forty Most Asked Questions guidance issued by the Council on Environmental Quality (CEQ) as it pertains to supplementing EISs and we reviewed Section 1502.9 in the CEQ - Regulations for Implementing NEPA and determined that a supplement to this EIS is not necessary since there are no substantial changes in the proposed permits that are relevant to environmental concerns, and there are no significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts.

Dredging Impairs Recreation and Navigation

Many commenters noted that dredging impairs recreation and navigation on the Kansas River. Many comments pertained to safety associated with canoeing or kayaking on the Kansas River. We agree that dredging may have an impact on recreational users of the river; however, we believe these impacts are minor as there are many reaches on the river that excludes dredging. For example, no dredging exists on the river between Topeka and Lawrence or upstream of Topeka. There are also many areas where people can recreate on the Kansas River in the Kansas City area where dredging does not exist that includes river miles 0 – 9.4. These are areas where recreational users can experience the river without dredging operations. We are aware that dredging operations present possible hazards to recreation users. We also believe that recreational users do have some responsibility to watch for hazards on the river. We believe that it is appropriate to retain the following condition from the previous permits:

“You must allow safe passage past dredge equipment to all boats, rafts, and other watercraft.”

The United States Coast Guard (USCG) is the regulatory authority for commercial navigation on navigable waterways. The permits for each dredge site will be conditioned to require coordination with the USCG to ensure safe operating standards and to help ease the conflict dredging has on recreation. The condition will read as follows:

“You must coordinate with the United States Coast Guard (USCG) to ensure safety standards for commercial operations on the Kansas River are met. You must begin coordination with the USCG no later than 30 days after issuance of the permit.”

We believe these conditions should help ease the conflict between recreational users of the river and the dredging operations.

The Corps Lacks Data to Support In-stream Dredging Upstream of Bonner Springs

We disagree. The EIS considered dredging operations that were ongoing upstream of Bonner Springs near Lawrence and near Topeka.

Opposition to Re-issuance of 10-year Permits

Many commenters expressed concern that the public notice proposed issuance of permits for a 10-year period. We evaluated these requests and determined that a 5-year period for permits is reasonable given the dynamic nature of the Kansas River. A 5-year permit period will give us added flexibility to address changes in to the Kansas River as it pertains to dredging.

Request for Corps to Issue Permits for 5-years Without Option to Renew

Two commenters requested that the Corps re-issue the dredging permits for a period of 5-years without the option to renew. We considered this request and determined that it is not reasonable to categorically deny permits after a 5-year period. We will evaluate all applications received after the 5-year permits expire.

Accuracy of Monitoring Data

One commenter is concerned that the cross sectional monitoring data is inaccurate. The cross sectional data is submitted to the Corps by an independent engineering firm hired by the dredgers. Once Kansas River surveyed cross-sections are received by the Corps from the Kansas River dredgers the data is processed and analyzed by a one of our hydraulic engineers. Upon conclusion of the analysis an internal memorandum, which includes mean bed profile plots, is written documenting the findings. This memorandum, along with the raw data and calculations, is then sent through a review process. A peer review is performed first by another engineer. Once the peer reviewer has completed their review, comments are submitted to the engineer who wrote the memorandum and each comment is addressed. A second revised memorandum is then forwarded to an independent technical reviewer, who is a licensed PE that reviews the document. Once the document has been reviewed and changes, if any, have been made the memorandum is then sent to the engineer's direct supervisor as well as the supervisor above him for review and signature. These measures ensure the final monitoring data is accurate.

Impacts to Wetlands

One commenter is concerned with the impacts dredging has on wetlands due to an anticipated lowering of the water table and decreased frequency of overbank flows. We believe that the primary cause in decrease in overbank flows is not commercial

dredging related. The Kansas River has many flood control lakes that are designed to reduce overbank flooding. Commercial dredging may contribute to a decrease in flooding in the Kansas River valley, though we believe this would be minor. We believe that dredging related degradation may lower the water table and reduce frequency of overbank flows and that the Plan adequately minimizes these impacts. As discussed above the Plan has and will continue to minimize impacts that dredging related degradation causes to any adjacent wetlands. It also should be noted that wetlands are not abundant in the Kansas River floodplain as it consists of sandy soils that generally do not support wetlands.

Weir Construction

One commenter is concerned that dredging related degradation will cause additional weirs to be constructed on the river. It is difficult to anticipate future applications for weirs on the Kansas River; however we believe that the Plan minimizes dredging related degradation that would prompt an application for a weir on the Kansas River.

Economic Damages since the Inception of the Regulatory Plan

One commenter suggests that the Plan is not working due to the economic damages to infrastructure since the inception of the Regulatory Plan. The infrastructure damaged includes the WaterOne Weir, the Topeka and Santa Fe Railroad Bridge, the Cedar Creek Access, the Sunflower Ammunition Depot Intake, and the Bowersock Dam. The commenter also notes the project completed by the Corps to protect the Eudora Bridge as a significant expense due to dredging. Each structure is discussed below.

The WaterOne Weir is currently being replaced with a geocellular cofferdam type weir similar to the weir in Topeka. An independent study conducted by WaterOne determined that the failure of the weir was primarily associated with degradation of the Missouri River and not commercial dredging on the Kansas River. We believe that dredging related impacts to this structure are minimized by the Plan.

Degradation played a role in the failure of the Topeka and Santa Fe Railroad Bridge; however, age and construction materials also played a role. The Topeka and Santa Fe Railroad Bridge was designed in 1938 and constructed with timber pile. In addition, this bridge was determined to be endangered in 1986 according to The Atchison, Topeka, and Santa Fe Railway Company. In 1986 dredging was relatively unregulated on the Kansas River. Since then the bridge has failed; however, monitoring has shown that the river has not degraded at this location. We believe that the Plan has effectively slowed degradation at this site since its inception.

The Bowersock Dam was originally constructed in 1872. The Plan specifically identifies the dam and provides protections to ensure dredging related degradation at this site is minimized. Monitoring confirms that the Plan is working at this site. We reviewed the data downstream of the dam since the inception of the Plan and the average degradation from 1992 to 2005 from four cross sections immediately downstream (river miles 50.6, 50.9, 51.2, and 51.5) is 0.7 feet of degradation. The Bowersock Dam has been repaired many times primarily due to the age of the

structure. We spoke with Mr. Stephen Hill of the Bowersock Mills and Power Company and he also believes any repairs to the Bowersock Dam are primarily due to the age of the structure rather than degradation within the Kansas River. Since inception of the Plan localized degradation has been minimized. We believe that it is unlikely the repairs to this structure were related to current dredging operations.

The Sunflower Ammunition Depot Intake was constructed in 1940 and has not been operational for many years. The intake was deficient prior to inception of the Plan as it was determined to be unable to meet water needs during low flows on the river at the time that the EIS was published. The intake structure is located on a reach of river that experienced degradation which surpassed the 2-foot threshold. To mitigate these impacts the Plan removed dredging operations within this reach. This reach, river miles 24.2 – 39.1, is particularly difficult to understand since the degradation occurred almost immediately after the 1992 Mean Bed Baseline Elevation was determined and relative little dredging had occurred in the reach. We continue to monitor the river in all closed reaches and degradation of this reach does not appear to be accelerating. It should be noted that the 1993 flood may have played a major role in the degradation of this reach as well. We believe that the Plan adequately addresses these impacts through cessation of dredging in this reach.

The Cedar Creek Boat Ramp is located at river mile 26.5 and reportedly is unusable during low flows on the Kansas River. River mile 26.5 is located in a reach of river that has been closed to dredging due to unacceptable degradation. Inspection of the boat ramp does show that during low flows, launching of a motor boat would be difficult; however most comments received from the public indicate that canoeing is the primary recreational boating interest on the river and a canoe can easily be launched from this boat ramp at low river stages. The boat ramp should still be usable during normal flows for all watercraft. No additional dredging related impacts should occur to the boat ramp because of cessation of dredging in this reach.

The bank stabilization project near the Eudora Bridge resulted from severe lateral bank migration that began prior to inception of the Plan. This bend had been eroding as early as the 1950s and 1960s and work to ease lateral bank migration began at this time. The lateral bank migration increased following the 1993 flood. It is unlikely that dredging caused the lateral bank migration due to the history of the bend.

Alternatives

Many commenters stated that there are alternatives available to dredging the Kansas River for commercial purposes. Alternatives to dredging are discussed in the EIS. We reviewed the alternatives to in-stream dredging discussed in the EIS and the alternatives discussed remain valid today with the exception of the Missouri River alternative for aggregate. Degradation is occurring in the Missouri River and it is foreseeable that additional restriction may be placed on these operations that will limit the amount of aggregate extracted from the river. Additional information on alternatives to in-stream mining can be found in the EIS.

Biological Monitoring Component

Many commenters requested the Corps require a biological monitoring component to the permits. Studies have been conducted on the biological impacts that dredging has on the Kansas River. These studies were considered when writing the Plan. We believe the Plan minimizes impacts to the Kansas River's biological communities by restricting the amount of material available for removal from the river and minimizing locations available for dredging to ensure spawning habitat is not impacted. It should be noted that water quality concerns including pesticides, herbicides, heavy metals, and other pollutants are major influencers on the biological integrity of the Kansas River and are unrelated to dredging. We assessed the impacts dredging has on the biological ecosystem of the Kansas River and developed the Plan to reduce these impacts. For these reasons we determined that it is not reasonable to place additional biological monitoring components in the Plan.

Mitigation and Restoration Plan

Many commenters requested that permittees be required to restore dredge sites that are no longer operational and be required to mitigate for dredging related impacts. Mitigation in the form of avoidance and minimization is achieved through permitting according to the Plan. Dredge sites that are no longer operational are required to remove dredges and dredge related equipment from the Kansas River, which is the extent of our jurisdiction. The plant sites are not typically sited on large tracts of land and in some instances are tied to other business interests. We believe that it is unreasonable to require additional restoration to the upland locations where the processing plants are sited because this is not within our jurisdiction.

Concerns from the State of Kansas

Comments were received from the Governor's Natural Resources Sub-cabinet which is comprised of the KDWP, Kansas Department of Agriculture, Kansas Department of Health and Environment, the State Conservation Commission, and the Kansas Water Office. The state raised issues discussed within this decision document and also requested the Corps participate in a task force to examine the impacts of dredging on the Kansas River and alternative sources of aggregate available. As a result, we are actively participating in the task force. The initial scope of the task force was to study dredging on the Kansas River; however, the state determined that the underlying issue is degradation on the Kansas River and directed the task force to study degradation on the Kansas River with dredging being a component. As a result of the task force, the state will begin monitoring degradation on the Kansas River by acquiring cross sectional bed data similar to the ongoing monitoring of the Plan. The state will collect data from reaches within the river that are not dredged and have no cross sectional data. The state also plans to do a biological study of the river pending funds. Any additional information supplied by the state will be reviewed in future permitting.

Comments Specific to River Miles 77.1 – 78.6 (200600407)

Many commenters were concerned that the upper limit of this site lies in a “no dredge zone” according to the Plan. Sharp river bends are provided additional protections within the Plan and river miles 78.0 – 79.3 is documented in the Plan as being a sharp river bend. According to the Plan, no dredging will be allowed within 200 feet of the ordinary high water mark elevation of any riverbank on a sharp river bend. The permittee will be required to adhere to the terms and conditions of the permit which will not allow the permittee to dredge within 200 feet of the ordinary high water mark elevation from river miles 78.0 – 78.6. The standard no dredge zone of 100 feet from the ordinary high water mark will apply to the rest of the permitted reach.

Two commenters requested that cross sectional data be collected downstream to river mile 70. We determined that cross sectional data would be necessary downstream of the site to ensure compliance with the Plan. For this reason we will require the applicant to provide data 5-miles downstream of the permitted reach.

Commenters are concerned that dredging in this location would have adverse impacts to the Seward boat ramp which is located at river mile 76.5. As discussed above we will require that the applicant monitor for bed degradation 5-miles downstream of the permitted reach. We will monitor impacts to this reach and if necessary make additional restrictions to ensure dredging related impacts to the boat ramp are minimal.

Discussion Related to Degraded Reaches of the Kansas River

The following applications were applied for, but due to unacceptable degradation, these applications will not be evaluated:

200301759, River Miles 90.1 – 91.6
200301864, River Miles 22.9 – 24.4
200301768, River Miles 84.5 – 85.8
200301863, River Miles 22.9 – 24.4
200200321, River Miles 26.1 – 27.6
200200323, River Miles 35.4 – 36.4
200200337, River Miles 23.0 – 24.0

According to Plan on page A-3, the maximum allowable reduction in the surface elevations of the riverbed is 2 feet for all reaches of the river. If riverbed elevations in a 5-mile-long reach of river approach 2 feet of degradation, dredging activities which adversely affect bed elevations in that reach will be altered or terminated. Monitoring data showed that these permits fall in reaches where degradation surpassed the 2 feet threshold. Once the monitoring data showed the degradation the dredgers were notified that they must cease dredging operations on the river. These applications will not be reviewed unless riverbed elevations were to aggrade in these reaches.

3.4. Public Hearing Determination (33CFR Part 327): A public hearing was requested for both public notices that were issued. We received over 200 requests for a public hearing. Public hearings have been held for Kansas River dredging permits both for the scoping meeting for the EIS and for reissuance of the permits in the last permitting cycle. We determined in a memorandum dated 3 August 2005, that there is not a valid reason to hold a public hearing for the following reasons:

(1) Most of the issues raised by requesters have been discussed in previous reports and in an Environmental Impact Statement (EIS) prepared by the Kansas City District in 1990, to address commercial dredging activities on the river. Fourteen studies were prepared prior to completion of the EIS to evaluate commercial dredging activities and other factors potentially affecting the morphology and ecology of the river. The Selected Alternative for the EIS is a comprehensive regulatory plan, which has been implemented by the Kansas City District to limit environmental impacts associated with commercial dredging activities on the river.

(2) Holding a Public Hearing would not serve the purposes identified in our regulations or our Standard Operating Procedures. A Public Hearing would not provide substantial project-related information that is not already available to the Kansas City District.

(3) The Regulatory Program's Standard Operating Procedures (SOP) states, "Public hearings are held at the discretion of the district commander only where a hearing would provide additional information not otherwise available which would enable a thorough evaluation of pertinent issues." The SOP encourages Districts to consider public meetings or workshops in lieu of Public Hearings, which can be targeted to a particular group of objectors and/or issues. The SOP states that these informal forums are much less expensive and provide a higher interaction with a smaller segment of the concerned public. We are currently participating as a Technical Advisory Committee member for a Kansas Water Office study to evaluate the causes of channel degradation in the Kansas River. The committee's evaluation includes a review of the subject commercial dredging activities. The committee includes members of the public and provides an informal forum to address concerns relating to dredging activities on the river.

4. Compliance with Other Laws.

4.1. Section 7 of the Endangered Species Act: The proposed activity is located within the range of the Federally listed as threatened bald eagle (*Haliaeetus leucocephalus*) and piping plover (*Charadrius melodus*), and Federally listed as endangered least tern (*Sterna antillarum*) and pallid sturgeon (*Scaphirhynchus albus*). In response to the public notices, the FWS requested an analysis to determine what effect, if any, commercial sand and gravel dredging may have on the habitats of the listed species. We determined that with a special condition added to the permits, dredging activities should not likely adversely affect Federally listed species and responded to the FWS in a letter dated 20 March 2006 (Enclosure 12.11). FWS responded in a letter (Enclosure 12.12) that they concur with our determination that commercial sand dredging is not likely to

adversely affect the Federally listed species provided the permits are conditioned accordingly:

*“This permit does not authorize you to take a threatened or endangered species, particularly the piping plover (*Charadrius melodus*), least turn (*Sterna Antillarum*), or the bald eagle (*Haliaeetus leucocephalus*). You must not remove mature trees suitable for bald eagle perches without written approval from the Kansas City District. If at any time a pair of least terns or piping plovers nest within three river miles of a dredge site or a pair of bald eagles nest within one river mile of a dredge site, additional consultation with the United States Fish and Wildlife Service will be required. Additional measures may be taken that would cause dredge operations to be suspended, revoked, or conditioned to protect the species.”*

- 4.2. Section 106 of the National Historic Preservation Act: National Historic Preservation Act. The National Register of Historic Places and the Federal Register have been checked to determine if any properties listed or proposed for listing in the National Register would be impacted by the project. In addition, the State Historic Preservation Officer has been contacted to determine if any properties eligible or potentially eligible for listing in the National Register would be impacted by the work.

In response to the Kansas City District's inquiries, the Kansas State Historical Society provided the District with written responses (2 letters, Enclosure 12.13), which states that the proposed project would have no effect on any property listed on the National Register of Historic Places nor any historic or archeological site listed in the state inventory. The Kansas City District's evaluation of potential impacts to historic properties indicates that the project would not impact any properties listed, proposed for listing, eligible for listing, or potentially eligible for listing in the National Register of Historic Places. No reconnaissance survey, to identify historic properties, has been conducted by the Kansas City District or the applicant.

Based on the District's findings no survey will be required since no recorded properties exist in the affected area and since the permit area has been extensively modified by previous work. The District presumes that any historic properties which may have existed within the permit area at one time have been lost due to extensive modification of the site and the lack of any information which indicates the presence of such properties (see 33 CFR 325, Appendix C, paragraph 3b(1)).

4.3. Executive Orders:

- 4.3.1. Order 11990 Protection of Wetlands: The decision described in this document is consistent with this executive order.
- 4.3.2. Order 11988 Flood Plain Management: The decision described in this document is consistent with this executive order.
- 4.3.3. Order 11898 Environmental Justice: The decision described in this document is consistent with this executive order.

5. **Alternatives (NEPA):** Alternatives pertaining to commercial dredging on the Kansas River are discussed in the EIS and these alternatives remain valid with the exception of the Missouri River dredging alternative. We presumed that limiting extractable sand quantities on the Kansas River would result in additional pressures on the Missouri River. This assumption was correct and sand production on the Missouri River increased. New data shows that the Missouri River is actively degrading in many reaches where sand mining occurs. Quantity restrictions are being considered for the Missouri River and it is anticipated that a cap will be placed on Missouri River dredging, though this cap has not yet been determined. For this reason we anticipate increased pressures on aggregate demand in Kansas City and the surrounding areas.

6. **Impact Evaluation:** In 1990 an EIS was completed for commercial dredging on the Kansas River. This section reiterates findings of the EIS and Plan to ensure these permits result in no significant impact to the environment. The potential environmental consequences, both individually and cumulatively, of the authorized project on the human environment, are discussed below. Alternatives considered in this evaluation are identified in this document and in the EIS.

7. Special Conditions

7.1. Mandatory by Regulation/Policy: The following special conditions, with any exceptions noted after the condition, will be included in all individual DA permit authorizations as required by national policy guidance and/or regulations.

- a. The permittee understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration.
- b. This permit does not authorize you to take a threatened or endangered species, particularly the piping plover (*Charadrius melodus*), least turn (*Sterna Antillarum*), or the bald eagle (*Haliaeetus leucocephalus*). You must not remove mature trees suitable for bald eagle perches without written approval from the Kansas City District. If at any time a pair of least terns or piping plovers nest within three river miles of a dredge site or a pair of bald eagles nest within one river mile of a dredge site, additional consultation with the United States Fish and Wildlife Service will be required. Additional measures may be taken that would cause dredge operations to be suspended, revoked, or conditioned to protect the species.

7.2. Project Specific:

- c. Your work is subject to all of the limitations and requirements of the “Regulatory Plan for Commercial Dredging Activities on the Kansas River,” (Plan) except as directed by special conditions of this permit or as directed in writing by the Kansas City District. The following are the annual extraction limits according to the Plan:

Kaw Valley Companies, Inc.(200301770): Maximum of 400,000 tons cumulatively for all permitted reaches on the Kansas River below river mile 21.2.

River Miles 9.4 – 10.4: individually no more than 300,000 tons
River Miles 12.8 – 13.9: individually no more than 300,000 tons
River Miles 15.4 – 16.9: individually no more than 300,000 tons

Holliday Sand and Gravel Company (200301862): Maximum of 600,000 tons cumulatively for all permitted reaches on the Kansas River below river mile 21.2.

River Miles 18.65 – 20.15: individually no more than 300,000 tons
River Miles 20.55 – 20.6: individually no more than 300,000 tons
River Miles 21.0 – 21.15: individually no more than 300,000 tons

The Master’s Dredging Company, Inc. (200200317): Maximum of 450,000 tons cumulatively for the following permitted reaches on the Kansas River.

River Miles 42.6 – 44.1: individually no more than 300,000 tons
River Miles 47.1 – 48.0: individually no more than 300,000 tons

Penny’s Concrete, Inc (200200319):

River Miles 45.2 – 46.7: individually no more than 300,000 tons
River Miles 49.6 – 51.35: individually no more than 150,000 tons

Victory Sand Mining & Dredging, L.L.C (200600407):

River Miles 77.1 – 78.6: individually no more than 300,000 tons

The allocations may change to previously permitted allocations if the Kansas River aggrades in closed reaches and the Kansas City District authorizes those dredging operations previously closed to resume.

This condition is necessary to ensure that dredging related impacts are minimized.

- d. You must construct and maintain an adequately sized sediment basin to meet state water quality standards for all return water to pass through prior to reentering the Kansas River.

This condition is necessary to insure adverse effects to water quality are minimized.

- e. You must coordinate with the United States Coast Guard (USCG) to ensure safety standards for commercial operations on the Kansas River are met. You must begin coordination with the USCG no later than 30 days after issuance of the permit.

This condition is necessary to ensure that commercial navigation safety standards are met.

- f. You must allow safe passage past dredge equipment to all boats, rafts, and other watercraft.

This condition is necessary to ensure that impacts to recreational boating and safety are minimized.

- g. For the years aerial photography is required according to section V on page A-28 in the Regulatory Plan for Commercial Dredging Activities on the Kansas River, you must submit the aerial photography in digital format according to the specifications in the September 26, 2006 letter from GE Geospatial Solutions to the Kansas Aggregate Producer's Association. In addition, the following are requirements of the data:

1. The data must be submitted in the following projection parameters:

Projection: ALBERS
Datum: NAD83
Zunits: NO
Units: METERS
Spheroid: GRS1980
Xshift: 0.0000000000
Yshift: 0.0000000000

Parameters

29 30 0.000 /* 1st standard parallel
45 30 0.000 /* 2nd standard parallel
-96 0 0.000 /* central meridian
23 0 0.000 /* latitude of projection's origin
0.00000 /* false easting (meters)
0.00000 /* false northing (meters)

2. A draft of the tiling scheme must be submitted prior to ortho photo production.

3. File formats must be .TIFF and .JPG with corresponding world files suitable for use in ESRI ArcView and ArcGIS and Bentley Microstation software products.
4. Each delivered geospatial data file (raster and vector) must include a corresponding populated FGDC-complaint metadata file readable by ESRI ArcGIS 9.2 or more current version.
5. Two copies of the deliverables must be provided on USB drives to be retained by the Corps.
6. A digital flight index must be submitted that consists of attributed shape file layers of:
 - flight lines
 - photo centroid points
 - tif/jpg photo tiles as polygons.
7. Map testing procedures and any resulting claims of nonconformance to map accuracy standards must be completed within 90 days of delivery to the Corps.

This condition is a practicable measure that updates the monitoring component to current standards and allows us to easier assess impacts to the Kansas River.

8. Determinations.

- 8.1. Clean Air Act Conformity: Section 176(c) of the Clean Air Act. The project has been analyzed for conformity applicability pursuant to regulations implementing Section 176(c) of the Clean Air Act. It has been determined that the activity proposed under this permit will not exceed de minimis levels of direct emissions of a criteria pollutant or its precursors and are exempted by 40 CFR Part 93.153. Any later indirect emissions are generally not within the Corps' continuing program responsibility and generally cannot be practicably controlled by the Corps. For these reasons, a conformity determination is not required for this project.
- 8.2. Public Interest Review: I find that issuance of these Department of the Army permits as prescribed by regulations published in 33 CFR 320-330, is based on a thorough analysis and evaluation of the various factors enumerated above; that there are no reasonable alternatives available to the applicant that will achieve the purposes for which the work is being constructed; that the work is in accordance with the overall desires of the public as reflected in the comments of state and local agencies and the general public; that the work is deemed to comply with established state and local laws, regulations, and codes; that there have been no identified, significant, adverse environmental effects related to the work; that the issuance of these permits are consonant with national policy, statutes, and administrative directives; and that on balance the total public interest should best be served by the issuance of these Department of the Army permits.

9. Signatures/Approvals.

Prepared by: Joshua A. Marx

Title: Regulatory Project Manager

Reviewed by: Mark D. Frazier

Title: Regulatory Program Manager

11 Encls (see attached list)

20 JUL 07

Date



ROGER A. WILSON, JR.

Colonel, EN

Commanding

10. Attachments/Enclosures Index

- 10.1. Public Notice
- 10.2. Public Notice (200600407)
- 10.3. Federal Agency Comments
- 10.4. State Agency Comments
- 10.5. Representative Chris Steineger's Comments
- 10.6. Water District No. 1 of Johnson County's Comments
- 10.7. Other Organizations Comments
- 10.8. Individuals Comments
- 10.9. Tribal Comments
- 10.10. Kansas City District Letter to FWS
- 10.11. FWS Response Letter
- 10.12. SHPO Letters