



**STOP in-river sand dredging on the Kaw  
STAND UP for appropriate siting of off-river pit mines**

**DREDGING THE KAW RIVER CHANNEL FOR SAND IS A BAD IDEA** for many environmental, economic, and scientific reasons. The Army Corps of Engineers must deny permits to continue this **damaging, high-impact practice**. Dredging companies can **affordably mine equal or higher-quality sand off-river** at appropriately sited pit mines.

**IN-RIVER DREDGING COSTS KANSANS BY....**

- *Endangering water quality.* Dredging increases sand and dirt particles suspended in the water. This silt kills aquatic life and is expensive to remove from drinking water.
- *Increasing pollution.* Dredging churns up old industrial pollutants - like PCBs and heavy metals - that have settled to the river bottom, and adding to the river's contamination levels.
- *Threatening key infrastructure.* Dredging damages and destabilizes the river channel and endangers expensive, valuable infrastructure such as bridges, flood control structures, intake pipes for public water supplies, power plants and manufacturing, etc.
- *Jeopardizing riparian property rights.* The river automatically seeks to fill the holes that dredging creates – and it does so by carving dirt away from the riverbanks, leading to loss of some of nation's most valuable farmland.
- *Causing hazardous conditions for recreational boaters.* Dredging cables that attach the rigs to the banks are often hidden underwater, and are dangerous for recreational river users.

**STUDIES HAVE ALREADY SHOWN** that dredging has caused significant damage to the Kaw's riverbed, to habitat in and along the river, and to water quality. As a result, the Corps has already closed some stretches of the river to further dredging.

**DREDGING CAUSES EXTENSIVE ENVIRONMENTAL IMPACTS**

- Dredging changes the physical channel of the river. These changes erode the riverbanks, and erosion endangers the riparian ecosystem.
- Dredging alters the physical habitat needed by native fishes. Nineteen threatened and endangered fish species have been collected in the Kaw, six since 2006.

**MAJOR RIVER CHANNEL STUDY DUE IN 2011**

K-State and the Kansas Department of Wildlife and Parks are funding a major study on riverbed degradation due out in late 2011. Currently, the Army Corps of Engineers has to base their permit decisions on comparatively little scientific evidence regarding impacts to the river.

***When the stakes are so high  
- damage to water quality, taxpayer-funded infrastructure, the river ecosystem -  
the prudent course is to delay permit decisions until there is adequate scientific data.***

**FOR MORE INFORMATION** on active permits and open public comment processes, please visit the **TAKE ACTION** page on our website - <http://www.kansasriver.org/dredging/fok-and-dredging>



**FRIENDS OF THE KAW SUPPORTS APPROPRIATELY SITED OFF-RIVER PIT MINES** as a sustainable, superior alternative to in-river sand dredging. Off-river sand mines reduce the negative environmental impacts of sand dredging in the river, and provide an economically affordable source of high quality sand.

#### **OFF-RIVER SAND PIT MINES MAKE ECONOMIC AND ENVIRONMENTAL SENSE**

*For consumers.*

- Our research shows there is no difference in price or quality for sand obtained from in-river dredging, versus that obtained from pit mines.
- Compared to in-river sand dredging, appropriately sited pit mines protect against drinking water pollution, channel and bank erosion, habitat destruction, and stability threats to valuable infrastructure such as bridges, flood control measures, and water intakes for public water supplies and power plants.
- Off-river pit mines should present no dangers to recreational boaters.

*For producers.*

- Sand production from in-river dredging is vulnerable to interruption from high water and floods, while pit mines are a more reliable source of supply.
- As of August 2010, the two sand producers surveyed by FOK reported no cost difference between production or transport costs for mined sand and dredged sand.

#### **STANDARDS FOR SITING OFF-RIVER MINES**

*Environmental criteria.* The following includes a few of the factors that should be considered.

- The permit application should include a clear siting plan, and the company and local government should also negotiate a quality, practical restoration plan for when the mine ends production.
- Avoid siting pit mines in the one hundred year flood plain. If the river “captures,” or floods a poorly sited mine during high water events, the mine will then release excess pollution back into the river.
- Siting should minimize impact to the river channel. For example, pit mines should not endanger the riparian ecosystem or risk destabilizing river bends. Do not remove trees in the riparian zone, and leave substantial setbacks between the mine and the river.
- Siting should consider the history of the river channel at that site – for example, pit mines should not be sited in locations that are historically unstable.
- If fill is dumped into the pit, then the fill should be clean so that no groundwater contamination takes place, and regular monitoring should occur.

*Other standards.* FOK respects community and local government involvement in assessing other issues associated with sand pit mines. For example:

- Truck traffic to haul outgoing sand and gravel needs to be carefully planned to minimize impact on community and infrastructure. A location with a short, direct access to a major highway is best.
- Using electric dredging equipment minimizes noise and the possibility of fuel spills and contamination.

#### **SUCCESS STORY: HOLLIDAY SAND & GRAVEL PIT MINE**

In 2007 Holliday Sand reaped the fruits of years of detailed planning and negotiating with local government – they received a permit for a new pit mine in Shawnee.

After the mine closes, the land – including a 115 acre lake - will be donated to the Cities of Bonner Springs and Shawnee.

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