

McClellan-Kerr Arkansas River Navigation System is the waterway's official name – so-named by an Act of Congress, 1/5/1971 (PL91-469).

▲ The MKARNS is 445-miles long and includes the Verdigris, Arkansas & White Rivers. A 9-ft. channel depth is maintained by the Corps of Engineers. A 12-ft. channel has been authorized.

▲ The MKARNS is a multi-beneficiary system: water supply, navigation, fish and wildlife, recreation, hydropower generation, and flood control (when considered as part of the Arkansas River Basin Project and its upstream reservoirs that control water flows).

▲ There are 18 locks and dams – 13 in Arkansas and 5 in Oklahoma; each lock chamber is 110' wide x 600' long and can handle an 8-barge tow.

▲ Federal cost of the System was \$1.3 billion. Add to that \$186.1 million for construction of Montgomery Point Lock & Dam (completed in 2004), for a total cost of \$1.49 billion. Total industrial investments along the waterway are valued at \$3.2 billion.

▲ The System has an elevation differential of 420 feet from its beginning at mile 600 on the Mississippi River to the head of navigation near Tulsa.

▲ The 2,500-acre Tulsa Port of Catoosa is one of the largest, most inland ice-free ports in the nation, with 60 industries employing over 3,000 workers.

▲ Port & dock facilities on the MKARNS in Oklahoma equal 85 industries, nearly \$3 billion in private investments, 5,000 jobs, and \$200 million in annual payroll.

▲ More than 2,000 semi-trucks **per day** travel into and out of Oklahoma's port & terminal facilities to load or offload products to/from barge.

▲ A 2001 study showed that moving freight by barge resulted in cost savings of \$68 million for Oklahoma farmers, manufacturers and consumers, compared to the cost of alternative overland modes.

▲ In 2011, **1.2 million people** visited the five Corps-operated projects on the system in **Oklahoma**. **4.2 million visitors** took advantage of the 12 Corps-operated projects in **Arkansas** (campgrounds, parks, boat ramps, reservoirs, hiking trails and picnicking areas).

▲ In 2011, **1,134 recreational vessels** locked through **Oklahoma's** 5 locks; **3,547** locked through **Arkansas'** 13 locks.

▲ In 2011, **196,494 pleasure boats** were registered in **Oklahoma**; **207,926** registered in **Arkansas**.

▲ **Flood damages** prevented by Arkansas River Basin projects under the jurisdiction of the Corps' **Tulsa District** totaled **\$115.5 million** in FY 2011. Cumulative damages prevented through 2011 equal more than **\$11.8 billion**.

▲ **Flood damages** prevented by Arkansas River Basin projects under the Corps' **Little Rock District** totaled **\$187.9 million** in FY 2011. Cumulative damages prevented through 2011 are **\$1.9 billion**.



Johnston's Port 33, Inc., Blueknight Energy and Consolidated Grain & Barge

Did you know . . .

..... that barge traffic on America's inland navigation system is equivalent to 58-million truck trips each year?

..... that if waterborne cargo were diverted to highways, two inches of asphalt would be needed to increase the pavement thickness of 126,000 land miles of intercity Interstate? The effects would be greater for highways parallel to waterways.

..... that one barge can carry the weight of 136 school buses, 750 pickup trucks, 12,000 refrigerators, or 200 elephants?

..... that President Richard M. Nixon dedicated the McClellan-Kerr Arkansas River Navigation System at a June 1971 ceremony at the Tulsa Port of Catoosa?

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101 E. Capitol, Suite 370
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Tulsa District – Navigation Office
U.S. Army Corps of Engineers
HC61 Box 238
Sallisaw, OK 74955
918.775.4475

Little Rock District
Navigation & Maintenance Section
U.S. Army Corps of Engineers
PO Box 867
Little Rock, AR 72203
501.324.5739

NAVIGATION CHARTS

To purchase or download navigation charts for the McClellan-Kerr Arkansas River Navigation System, please access the following

U.S. Army Corps of Engineers web sites:

Tulsa District: www.swt.usace.army.mil/

Little Rock District: www.swl.usace.army.mil/

Other Rivers/Districts: www.usace.army.mil/

Profiles of Ports & Terminals on the MKARNS

For a detailed description of ports & terminals on the MKARNS, please access the web site of the Arkansas-Oklahoma Port Operators Association

www.aopoa.net

STATS ON U.S. PORTS & WATERWAYS

For access to up-to-date statistics on U.S. ports and waterways for the latest complete statistical year:

www.iwr.usace.army.mil/ndc

Oklahoma Boating Laws Handbook

www.okboated.com

No person in the United States shall, on the grounds of race, color or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving federal financial assistance.

McClellan-Kerr Arkansas River Navigation System



2,500-acre Tulsa Port of Catoosa

2012 Inland Waterway Fact Sheet



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2011 Tonnage

2011 tonnage on the *entire* McClellan-Kerr Arkansas River Navigation System totaled 10.6 million tons, with a value of \$3.1 billion. The tonnage is equivalent to the carrying capacity of 7,054 barges, 105,808 railcars, or 423,230 semi trucks.

Oklahoma's 2011 waterborne commerce totaled over 4.9 million tons worth over \$1.8 billion. The tonnage is equivalent to the carrying capacity of 3,267 barges, 49,000 railcars, or 196,000 semi trucks.

Iron & Steel

1,625,600 tons \$ 1,267,968,000

Chemical Fertilizer

1,960,976 tons \$ 707,912,000

Other Chemicals

155,249 tons \$ 52,785,000

Petroleum Products

613,907 tons \$ 229,601,000

Coal & Coke

731,966 tons \$ 69,537,000

Sand, gravel & rock

2,706,368 tons \$ 27,064,000

Soybeans

985,768 tons \$ 325,303,000

Wheat

684,581 tons \$ 109,533,000

Other Grains

663,613 tons \$ 84,279,000

Miscellaneous

17,722 tons \$ 3,544,000

Forest Products/Minerals

398,700 tons \$ 53,027,000

Project Cargo; mfg. equip/machines

36,304 tons \$ 181,520,000

▲ Studies have shown that without barge competition, agricultural shippers pay higher rail and highway transportation costs the farther they are from an inland waterway.

▲ **42 countries** have traded commerce with the Arkansas River Basin Region via the MKARNS.

▲ One 225-railcar unit is 2.75 miles long; 870 semi-trucks - bumper to bumper - are 11.5 miles long. A 15-barge tow is .25 miles long. The Tulsa Port of Catoosa averages 900 trucks per day at its complex.

▲ The number of miles one gallon of fuel will carry one ton: **Barge** - 576 miles; **Railcar** - 413 miles; **Semi-truck** - 155 miles.

▲ According to the EPA, towboats emit 35 to 60% fewer pollutants than locomotives or trucks. The use of one barge eliminates the potential exhaust from 60 semitrailer trucks or the power used to move 15 railcars.

▲ River transportation creates almost ZERO noise pollution; not so with trains or trucks.

▲ There are three designated **Foreign Trade Zones** on the MKARNS at the Ports of Little Rock, Muskogee and Tulsa.

▲ Towboat operators pay a **20-cent per gallon diesel fuel tax** that goes into the Inland Waterways Trust Fund, and a **4.3-cent tax** earmarked for deficit reduction.

▲ Investments in infrastructure are investments in the long-term strength and security of the nation.

▲ The United States exports approximately one-quarter of the grain it produces. On average, this includes nearly 45% of U.S.-grown wheat, 35% of U.S.-grown soybeans, and 20% of U.S.-grown corn.

▲ Over 58% of grain inspected for export departed from the U.S. Gulf in CY 2011, more than 2.5 billion bushels.

▲ Hydropower facilities, built and maintained by the Corps, produce nearly a third of the nation's total hydropower output, powering nearly 10 million households.

Marine Highways & the McClellan-Kerr System

In August 2010, the Maritime Administration designated the McClellan-Kerr Arkansas River Navigation System as a Marine Highway Connector for the M-40 Marine Highway Corridor (Mississippi River).

The corridors identify routes where water transportation presents an opportunity to offer relief to landside corridors that suffer from traffic congestion, excessive air emissions or other environmental concerns. Corridors are generally longer, multi-

state routes, whereas Connectors represent shorter routes that serve as feeders to the larger corridors.

Inland Waterway Channels: Draft/Width Challenges

▲ Exporters, importers and domestic shippers depend on authorized port & waterway depths and widths, and locks and dams infrastructure.

▲ Inadequate channel depths & widths can lead to higher transportation costs. Barges and vessels may be loaded to less than capacity, barges and vessels may be required to ship the same amount of commodities, and one-way, or daytime-only traffic restrictions may be imposed.

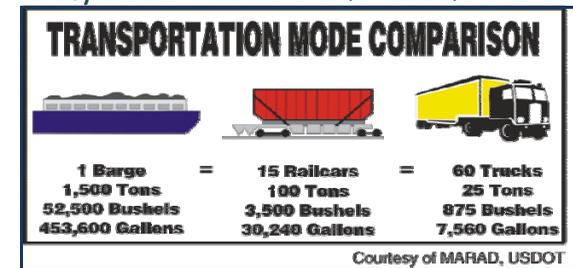
▲ In recent years, there have been extended periods where low river levels and reduced channel widths impeded grain barge movements. When river levels are low, barges must be loaded lighter than normal and the number of barges in a tow may be reduced to the available channel width.

▲ The same is true for high river levels due to heavy rains and flooding. Flooding causes sediment buildup downstream and barges have to be loaded lighter or tow widths reduced.

▲ At a 9-ft draft, a barge has 1,500 short tons of capacity; for each foot of reduced draft, the barge loses about 200 short tons of capacity.

▲ Temporary closures and restrictions on traffic in channels due to low and high water conditions, sedimentation, groundings, natural disasters, man-made disasters, strikes and lockouts can lead to delays, spoilage, diversion to other modes and ports, higher transportation costs, and lost sales.

Comparisons between a 9-ft & 12-ft channel



▲ Originally authorized at a 9-ft draft, Congress approved a 12-ft channel on the MKARNS, but Oklahoma and Arkansas waterway interests are finding it difficult to get funded.

▲ With a 12-ft channel on the MKARNS, a tank barge would be able to carry 1.2 million gallons of gasoline, enough to fuel nearly 2,500 automobiles for a year.

▲ With a 12-ft channel on the MKARNS, a barge could carry 2,000 tons, the equivalent of 20 railcars or 80 semi-trucks.

PORT OF MUSKOGEE



www.threeforksharbor.org

www.muskogeeport.com



Three Forks Harbor & Marina - Muskogee

Teachers & Students

Tour the Arkansas River Historical Society Museum at the Tulsa Port of Catoosa - where there are tours of the museum & port complex. Also, visit the Oklahoma Maritime



Educational Center and see the Port's first towboat, the M/V
Charley Border. To schedule a classroom excursion, contact:

918.266.2291

museum@tulsaport.com

www.tulsaport.com www.arkansasriver.org