



US Army Corps
of Engineers
St. Louis District

Information Paper

Kaskaskia River Basin Feasibility Study, IL

Section 5073 of Water Resources Development Act 2007

Investigations (ENR)

Location: The Kaskaskia River Basin (Basin), Illinois, from the headwaters at Champaign, Illinois, to the confluence of the Mississippi River, its backwaters, side channels, and all tributaries, including their watersheds, draining into the Kaskaskia River.

Description: The Basin has six functional Corps business lines and contains three authorized Corps projects—Lake Shelbyville, Carlyle Lake, and the Kaskaskia Navigation Project. These projects are major economic and environmental drivers within the nation. In FY19, the three projects had approximately 5M visitors and generated over \$171.5M in visitor spending. The total population served by public water supply systems in 22 counties is 557,837 persons (2005 data). The navigation project located on the lower 36 miles of the river ties directly into the upper Mississippi River, serves as a major transportation corridor for southern Illinois, and is one of the few navigation projects of any size with increasing tonnage trends. During the drought of 2012, the reservoirs were used to mitigate record low flows on the Mississippi River to keep river traffic and commerce moving. Three power plants use water from the basin for cooling purposes, with one being in the top five power producing plants in the world. The purpose of the study is to identify the threats that pose significant ecosystem degradation in the basin and opportunities for restoration.

Issues: The Kaskaskia Navigation Project design (1961) failed to consider plan and profile degradation by reducing the rivers length 31% and width 80%. The profile change resulted in a destructive headcut that travels at a rate of 1-mile per year. Damages induced by headcutting have resulted in increased dredging, loss of private property, significant ecosystem degradation to the riverine environment and impacts to the largest contiguous stand of bottomland hardwood forest in the State of Illinois.

Importance: Landscape changes and river modifications have affected the hydrology and hydraulics in the Kaskaskia River watershed, resulting in headcutting, streambank erosion, widening of the stream, and loss of riparian floodplain and aquatic habitats. As a consequence, the species diversity and richness of both aquatic and terrestrial wildlife have and continue to decline.

Risk: The Basin faces a number of threats including significant ecosystem degradation to the mainstem river, backwaters, side channels, creeks, tributaries and the State's largest bottomland hardwood forest. Population increase and power generation in the basin indicate that additional water demands could increase from 13 to 84 percent.

Consequence: Headcutting poses a challenge to management of the navigation channel due to increase sedimentation. The watershed faces serious threats and challenges including headcuts, nutrient loads, and water supply.



Activities for FY 22: Received sponsor letter of intent from Illinois Department of Natural Resources is January 2021, submitted resumption package for approval.

Acquisition Strategy: No contracts are scheduled for award during FY22.

Activities after FY22: Due to its Inactive Status, no activities are currently scheduled. Approximately \$154,000 of Federal funds are available but are subject to re-programming.

Project Partner: Illinois Department of Natural Resources

Congressional Interest: Senate: Durbin (IL), Duckworth (IL); House: Bost (IL-12), Miller (IL-15).

| Phase | FY 22 Allocation |
|----------------|------------------|
| Investigations | \$0 |