Last Update: 1 September 2016



Project Fact SheetKaskaskia River Basin, IL, Restoration

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 6 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 FY 2012, the three projects had approximately 7.4M visitors, generated over \$167.2M 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 and if left unimpeded could reach the Lake Carlyle Dam by 2030. 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: The authorization allows the Corps to develop a Comprehensive Plan to improve fish and wildlife habitat, attenuate flood risk, reduce sedimentation, maintain navigation reliability, improve recreation and address water supply. The authorization also allows at least one critical project to carry into construction. The critical project(s) may involve implementing river engineering solutions to impede the destructive headcut.

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 16: Funding is being used to continue the ecosystem restoration feasibility study under the SMART Planning Process, including completing the scoping phase and developing an array of possible alternatives, in consultation with appropriate Federal agencies, the State of Illinois, and the Kaskaskia Watershed Association.

Acquisition Strategy: No contracts are scheduled for award during FY16.

Amount That Could Be Used in FY 17: \$50,000 will be used to continue the study; specifically, to identify the Tentatively Selected Plan. This is a reduced level of effort due to unprecedented State of Illinois budget impasse and sponsor's reduced contributions.

Project Sponsor/Customer: The National Great Rivers Research and Education Center (NGRREC)

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

	FY 16	FY 17	FY 17
Phase	Allocation	Budget	Total Capability
Investigations	\$500,000	\$600,000	\$50,000

KASKASKIA RIVER BASIN **INVESTIGATIONS** 24 Champaign Piatt Springfie 66 Samo" 36 Douglas 4 Moultrie Christian Coles Shelby LAKE SHELBYVILLE **67** Macoupin Montgomery 特ngham Effingham Fayette Bond Madison Marion 50 Clinton **CARLYLE LAKE** St Clair Washington Mt Vernon Jefferson Monroe Perry Randolph 086 ft **NAVIGATION PROJECT** MO Hills Farmington Carbondale KY 1069 ft S 20 USACE: St. Louis District, Geospatial Engineering Branch **Vicinity Map** Legend **Location in District** Kaskaskia Reaches Reach 1 Pump Station Reach 2 Reach 3 St Louis District Boundary MO Counties Navigation Project State Watershed Lines Kaskaskia River **KASKASKIA** PROJEC₁ **RIVER BASIN**