

KASKASKIA RIVER NAVIGATION

POOL Compartment 12

UNIT 1 Kaskaskia Lock and Dam Lands – These lands are now being managed by the Carlyle Lake project office.

Sections 1-4 in this plan present Kaskaskia River Navigation Project information in detail. Please refer to those sections for more information regarding project authorizations, project purposes, project descriptions and history, land use, environmental stewardship and habitat descriptions.

Introduction:

Congress authorized the Kaskaskia River Navigation Project (KRNP) in 1962 under separate legislation (PL 87-874) from the Mississippi River Nine-Foot Channel Navigation Project. The project included construction of a lock and dam and maintenance of a nine-foot navigation channel from its mouth, upstream to Fayetteville, Illinois (36 miles), that shortened the natural river distance from Fayetteville to the river mouth by approximately 14 miles. The Corps purchased 433 acres in fee title, 2,465 acres for operational easements and 3,496 acres in flowage easements. This land was acquired by the IDOT and transferred to the Corps.

The Kaskaskia River Navigation Project was initially constructed for the purpose of transporting coal out of the area and secondarily as a way to move other barge-transported materials into and away from the area. Now, the prime cargo includes grain, steel, and farming chemicals. WRDA of 1996 authorized fish and wildlife conservation and habitat restoration as a full project purpose. Later, WRDA 2000 authorized recreation as a full project purpose.

The Kaskaskia River Navigation Project was operated as a separate lock and dam project until it was included under the management of the Rivers Project in 1988. As of 2000, the project was combined with the Carlyle Lake project office.

The State of Illinois owns approximately 17,000 acres adjacent to the navigation pool and therefore has complete control over the use and development of these lands. Primary responsibility for the management of these lands lies with the IDNR. Known as the Kaskaskia State Fish and Wildlife Management Area, these lands are managed for fish and wildlife management purposes, and economic development. The development of any facilities on these lands requires permits from the State of Illinois, the St. Louis District Corps of Engineers and the Kaskaskia Regional Port District.

The Kaskaskia Regional Port District provides shipping facilities and ports on the project and promotes navigation and economic development on the waterway. The St. Louis District maintains a 9-foot deep, 225-foot wide channel in the Kaskaskia River during the ice-free season. The lock and dam facility maintains the required channel depth on the Lower Kaskaskia by dredging.

The Kaskaskia River Navigation Project land and water offers a variety of recreational resources. The channelized portion of the river is used heavily for motor boating along with other water-oriented pursuits such as water-skiing, fishing and swimming. The oxbow portions of the river provide a good environment for fishing, hunting and nature studies. The smaller tributaries of the Kaskaskia (Nine Mile, Little Plum, Doza, Silver, Camp, Horse and Richland Creeks) have the potential for providing Rivers Project Master Plan

7 – 102 Section 7 – LAND AND WATER MANAGEMENT AREA PLANS

suitable canoeing waters. Fishing is the most popular activity on the Kaskaskia River with its 36 miles of channelized river plus additional oxbows, creeks, and floodplain lakes.

The existing project features including access sites, a marina, and river industry locations are shown on the plates. Boat launch ramps are provided on the Kaskaskia River at Fayetteville, New Athens, on Highway 154 west of Baldwin, at Evansville and at the Lock and Dam. Proposed navigational fleeting areas are also shown.

Weekends and holidays throughout the summer, the project experiences the most recreational boat use, and congestion and boater safety are a serious concern. The number of recreational vessels gives an indication of the volume of water-related recreational use. From 1995 to 1999, the average number of recreational vessels per year was 6,331. That was almost three times the five-year average number of recreational vessels at any St. Louis District Mississippi River navigation project (2,276) for the same time period. The recreational capacity of the project and how to best manage current use need to be addressed in any future plan.

A reconnaissance level 216 study is currently being prepared to identify problems and opportunities related to the recent authorization of fish and wildlife, habitat restoration and recreation as full project purposes. The conclusion of this study is expected to produce recommendations for project improvements, many of which may require cost-share sponsors to implement. As a result of this study, the State of Illinois and Corps Master Plans for the KRNP will most likely require updating in order to accurately reflect and authorize new developments or activities related to the new multi-purpose project designations.

A recreational public access plan is being developed as well. The access plan study will evaluate the demand and determine priorities for recreational facilities development including the number and locations of accesses to be maintained or developed. It may result in the State and Corps Master Plans being updated. Proposals based on this study may also include day-use recreation facilities such as shelters, potable water, picnic tables and grills, vault toilets, trails and comfort stations where justified. Approval to fund, build and O&M the required facilities will be obtained through the appropriate Master Plan and OMP prior to implementation.

In 2000, the Kaskaskia Watershed including the KRNP was selected as a pilot project in the Federal Lakes Recreation Demonstration Laboratory Project. This program's purpose is to remove barriers placed in the way of efficient operations through removal of encumbrances established by agency policy and regulations except those established by law. It may result in greater participation in recreational development by the Corps and its partners.

Two major problems facing the project include the siltation of the channel between New Athens and Fayetteville and the head cutting or erosion of the bottom and riverbank that has occurred between Fayetteville and 14 miles upriver. Head cutting has occurred due to increased river speed and slope as a result of the shortening of the channel to create the project. It is causing erosion, siltation of the channel between Fayetteville and New Athens, and damage to the bottomland hardwood forest.

Reestablishment of the channel between New Athens and Fayetteville is necessary to allow development of a grain terminal at Fayetteville by the Port District and four farm cooperatives.

Structures needed to correct the head cutting problem will be located above Fayetteville in an area outside the original project limits. A Design

Deficiency Study was approved by MVD. When complete it will be
Section 7 – LAND AND WATER MANAGEMENT AREA PLANS 7 – 103
Rivers Project Master Plan

forwarded to Headquarters for review and approval. If approved, funds will be requested through the Construction General appropriation.

The cost to reestablish the channel between New Athens and Fayetteville is estimated at five million dollars. Currently, there are no Operation and Maintenance funds for the work. Should dredging occur prior to stopping the head cutting, the current grade control structure at Fayetteville will be monitored to assure another round of head cutting does not start up river at Fayetteville. If any problems are detected, emergency repairs will be made to the present grade control structure. The St. Louis District will perform environmental stewardship work within the operations easement and navigational servitude authority. A non-federal cost-share partner is required for all habitat restoration work that may be pursued. The opening of remnant side channels (meanders) that were cut off by the project's construction is one of the actions proposed to improve aquatic habitat.

**Kaskaskia River Project
Kaskaskia Lock Operations Area (K-O-1)
Corps of Engineers
Randolph County, IL
River Mile 0.8 R
Acres: 101
Plate K-1, S-12**

General Description: This area lies both upstream and downstream of the Lock on the right descending bank. Lands within this area lie low in the floodplain and are inundated on a routine basis. The western boundary of the area is formed by a mainline flood protection levee (Prairie DuRocher and Modoc Levee District) while the eastern boundary of this area is approximately at the centerline of the navigation channel. The area is comprised of developed land with a small (2-3 acre) bottomland forest component at the furthest upstream end. The area contains the Kaskaskia Lock, a Visitor Information Center at the lock, maintenance facilities, entrance road, trilateration stations, and service access areas upstream and downstream of the lock that are required for operations purposes. The operations service access downstream of the lock contains a boat ramp and turnaround offering direct access to the navigation channel, the downstream portion of the lock structure and the confluence with the Mississippi River.

This area is managed to directly provide for and support the navigation mission of the Corps. The lock is operated continuously. This structure and all others support structures are routinely maintained with major maintenance scheduled as indicated by periodic inspection. The entrance road and parking lot are maintained as required and resurfaced, at a minimum, every 10 years.

As the public visits the lock, they are directed to the Visitor Information Center where current brochures and passive displays are available. Lock and dam tours are offered to increase public satisfaction. In addition, the public is invited to use the non-restricted areas for fishing and boating on the main channel, bank fishing, bird watching, sightseeing, and picnicking. The downstream service access is also available for public use; however, it is restricted at certain times in order to conduct maintenance activities associated with the operation of the lock and dam.

Proposed Development: Proposed development will be addressed in the recreational plan. Any facilities needed in the interim will be handled through a supplement to this plan or in the Operational Management Plan.

Rivers Project Master Plan

7 – 104 Section 7 – LAND AND WATER MANAGEMENT AREA PLANS

The frequent flooding has led to the establishment of non-native grasses that require a significant amount of work to maintain in an aesthetically pleasing condition. Parts of these areas will be converted to native flood tolerant grasses and forbs.

Future Development: Challenge Cost-share agreements, or any other type of recognized cost-share agreements will be considered in order to provide amenities for the public. These could consist of expanded parking facilities, picnic shelters, vault-type restroom facilities, nature trails, nesting boxes, etc. All additional facilities of this type would have to be designed to withstand flooding or to be removable.

**Kaskaskia River Project
Kaskaskia Dam and Disposal Area (K-O-2)
Corps of Engineers
Randolph County, IL River Mile 0.8
Acres: 161
Plate K-1**

General Description: This area lies both upstream and downstream of the Lock on the left descending bank. Lands within this area lie low in the floodplain and are inundated on a routine basis. The west boundary of the area is approximately at the centerline of the navigation channel, the southern boundary at the downstream dredge containment levee, and the northern boundary at the old channel cut off. The eastern boundary follows the federal ownership line, which bisects the dredge disposal containment area.

The area is comprised of developed and non-developed lands and contains the dam and tainter gates, the old river channel cut off, a portion of the old river channel, and the dredge disposal containment area for the lower navigation channel and lower lock locations. Service access to the area is mainly by boat. A primitive dirt trail, which crosses private land, can be used to gain vehicular access to the dredge disposal site during favorable weather conditions.

This area is managed to directly provide for and support the navigation mission of the Corps. The dam, which sustains the appropriate water level for the navigation pool, is operated continuously. The old river channel cut off also serves to maintain the navigation pool by preventing the normal flows from entering the old river channel. In addition, this structure also acts as a spillway during flooding and allows excess flows to enter the old river channel bypassing the dam. Both of these structures are routinely maintained with major maintenance scheduled as indicated by periodic inspection. The navigation channel is maintained through dredging as indicated by hydrologic surveys. The dredge material is placed in the dredge disposal containment area. The dredge disposal containment area is maintained on a routine basis. At a minimum, heavy equipment is brought into the containment area every 4 years in order to remove woody growth, which reduces capacity and otherwise limits the usefulness of the containment area. The levees surrounding the containment area are critical and have had some structural type problems. In order to rectify these problems, the lower end of the levee will be monitored and rebuilt as the situation warrants. The dredge containment area is managed in cooperation with the Kaskaskia River Port District.

Although the access to the area is limited to boating and hiking, the public does visit the area. Popular pursuits include fishing and boating on the main channel, bank fishing, fishing and boating in the old river channel, sight seeing, bird watching, mushroom gathering, and hunting

**Section 7 – LAND AND WATER MANAGEMENT AREA PLANS 7 – 105
Rivers Project Master Plan**

in accordance with state regulations. Portions of this area may be restricted at times due to maintenance or operational type activities.

Proposed Development: Proposed development will be addressed in the recreational plan. Any facilities needed in the interim will be handled through a supplement to the Master Plan or in the Operational Management Plan.

Future Development: If a real estate easement can be obtained, the existing dirt access trail will be improved to a rock surface and

maintained. Challenge cost-share agreements or other suitable cost-share type agreements will be considered to add amenities for the public along this service road. Such amenities may include parking lots, hiking trails, boat launching areas, etc. All additional facilities will be designed to withstand flooding.

**Kaskaskia River Project
West Confluence
Vegetation Management Area (K-V-1)
Corps of Engineers
Randolph County, IL
River Mile 0.0 R
Acres: 77
Plate K-1**

General Description: This area is located downstream of the lock. It includes the west side of the confluence of the Kaskaskia River and the Mississippi River. The lands within this area lie low within the floodplain and are subject to frequent inundation. Both the Mississippi and the Kaskaskia Rivers play major roles in the hydrologic regime of this area. The land area is heavily forested with the primary species being cottonwood, maple and ash. The area contains approximately 3 acres of abandoned agricultural fields, which are fast returning to forested bottomland through natural succession. The topography is characteristic of a bottomland forest with an extensive well developed ridge and swale component. Some of the depressed areas hold water through mid-June without the necessity of significant rainfall. A service access trail is located along the Kaskaskia River bank and extends to the Mississippi River.

The public does visit the area. Main pursuits include fishing and boating on the Kaskaskia and Mississippi Rivers, bank fishing, bird watching, sight seeing, mushroom gathering, hiking, seasonal permitted primitive camping, and hunting.

Proposed Development: This area is managed to provide a healthy bottomland forest and to supply a diversity of high quality wildlife habitat. Additional management goals are to supply adequate ground cover in order to curtail the erosive effects of both rivers, to improve water quality by limiting sedimentation and to sustain adequate aquatic habitats. The forest will be maintained through planting and selective harvesting as indicated by inventory and routine inspection. The 1993 flood caused extensive mortality of the mature trees, particularly of the mature cottonwoods and the scattered pecan trees along the ridges. Plantings will seek to reinforce the most producing species while maintaining adequate stocking densities of major bottomland species. The service trail will be maintained and repaired as required and the primitive camping will be consolidated to a designated area. Nesting structures will be placed and monitored under a volunteer agreement.

Future Development: The standing water component of the bottomland habitat will be increased through the use of passive water control
Rivers Project Master Plan

7 – 106 Section 7 – LAND AND WATER MANAGEMENT AREA PLANS
structures and reopening some of the interior drains to reconnect the naturally occurring low areas to the river. Seedlings/saplings of desirable most producing species will be individually planted in appropriate areas to increase and improve habitat diversity.

As the public use increases, the Corps will entertain Challenge Cost Share Agreements, or other suitable agreements to provide amenities. Such amenities could include a designated group camp area, designated hardened primitive campsites, improved parking areas, hiking trails, etc. All additional facilities will be designed to withstand flooding.

**Kaskaskia River Project
Old River Confluence
Vegetation Management Area (K-V-2)
Corps of Engineers
Randolph County, IL
River Mile 0.0 L
Acres: 23
Plate K-1**

General Description: This area is located downstream of the dam. It includes the east side of the confluence of the Kaskaskia and Mississippi Rivers and the mouth of the old Kaskaskia River Channel. The lands within this area lie low within the floodplain and are subject to frequent inundation. Both the Mississippi and Kaskaskia Rivers play major roles in the hydrologic regime of this area. The land area is heavily forested with the primary species being cottonwood, maple and ash. The topography is indicative of a bottomland delta type forest with minor ridge and swale development.

The public does visit the area. Main pursuits include fishing and boating on the Mississippi and Kaskaskia Rivers, bank fishing, fishing and boating in the old Kaskaskia River channel, bird watching, sight seeing, and hiking.

Proposed Development: This area is managed to provide a healthy bottomland forest and to supply a diversity of high quality wildlife habitat. Additional management goals are to supply adequate ground cover in order to curtail the erosive effects of both rivers, to improve water quality by limiting sedimentation and to sustain adequate aquatic habitats. The forest will be maintained through natural regeneration, which is supplemented with planting as indicated by forest inventory and routine inspection. In order to maintain adequate aquatic habitat, the silt plug at the mouth of the old river channel will be removed. This will promote free exchange of water with the river and will provide over wintering and nursery habitat for fish.

Future Development: No further development contemplated at this time.

**Kaskaskia River Project
Old River North Cut Off
Vegetation Management Area (K-V-3)**

Corps of Engineers

River Mile: 1.0 L

Acres: 71

Plate K-1

General Description: This area is located upstream of the dam on the left descending bank. The extreme northern portion of the old channel cutoff is included within this area. The lands within this area lie low within the floodplain and are subject to frequent inundation. The area is heavily forested with willow, cottonwood, and maple being the primary species. The area does contain approximately 10 acres of abandoned agricultural fields, which are fast returning to forested bottomland through natural succession. The topography is typical of a bottomland forest with ridge and swale characteristics intermingled with a portion of remnant river channel and sloughs. The sloughs have been exaggerated by the raising of the navigation pool and have resulted in increased wet and semi-emergent habitat. Primary access to the area is by boat, however, a dirt trail can be used at certain times of the year to access this area. The trail crosses private land prior to accessing government land.

Section 7 – LAND AND WATER MANAGEMENT AREA PLANS 7 – 107

Rivers Project Master Plan

The public does visit the area. Main pursuits include fishing and boating in the remnant channel and sloughs, bank fishing, hiking and hunting.

Proposed Development: This area is managed to provide a healthy bottomland forest and to supply a diversity of high quality wildlife habitat. Additional management goals are to supply adequate ground cover to limit the erosive effects of the Kaskaskia River at flood stage, to supply adequate stability to the northern end of the old channel cut off to maintain navigation pool, to improve water quality by limiting sedimentation, and to sustain high quality aquatic habitats in the main river channel, the remnant channel area and associated sloughs. The forest will be maintained through natural regeneration, which is supplemented with plantings as indicated by forest inventory. A portion of the area will be maintained in old field habitat. This is accomplished by succession mowing and/or selective timber harvest (patch cuts). In order to maintain the aquatic habitat, a silt plug will be removed at the mouth of the slough complex. This will promote free exchange of water and provide of over wintering and nursery habitat for fish.

Future Development: Before any development of this area could occur, it will be necessary to obtain an access easement for the dirt trail. Challenge cost-share agreements or other suitable cost-share type agreements will be entertained to add amenities for the public along this service road. Such amenities may include parking lots, hiking trails, display boards, etc. All additional facilities will be designed to withstand flooding.

Rivers Project Master Plan

7 – 108 Section 7 – LAND AND WATER MANAGEMENT AREA PLANS

UNIT 2 Operations Easement Lands

**Kaskaskia River Project
Operations Easement Area
Vegetative Management (K-E-1)
Corps of Engineers/
Illinois Department of Natural Resources
Randolph, Monroe, and St. Clair Counties, IL
River Miles 1.2 to 55.9
Acres: 2,465
Plates K-1 – K-4**

General Description: This area contains the navigation canal, which shortened the distance from Fayetteville to the river mouth by 14.3 miles. As the canal was built, 26 of the river bends were sliced off leaving remnant channel segments. Most of these original channel meanders were closed off on the upstream end in order to minimize sediment introduction. The lower ends were left open, thus creating a significant backwater system. The lower ends of the remnant channels are experiencing significant siltation, causing the backwaters to become isolated from the river system. The lands associated with this area lie low within the floodplain and are inundated on a routine basis. The public does visit the area. Main pursuits include fishing, boating, hunting, picnicking, and bird watching.

Proposed Development: This area is managed to support the navigation mission, sustain and improve aquatic habitats, to provide a healthy bottomland forest and to supply a diversity of high quality wildlife habitat. Additional management goals are to supply adequate ground cover in order to curtail erosion and to improve water quality by limiting sedimentation. The forest will be maintained through natural regeneration, planting and selective harvesting as indicated by inventory and routine inspection. The 1993 flood caused extensive mortality of the mature trees, particularly of the mature maples and scattered mast producing trees. In order to reconnect the backwater areas, the sedimentation at the mouths of the remnant channels will be addressed. These silt plugs will be removed. Various engineering solutions will be investigated and, if warranted, appropriate river regulation structures will be placed in order to limit future sediment deposition in these critical areas. Baseline inventories, in cooperation with IDNR, will be accomplished and maintained for the aquatic, wildlife and vegetative resources of the area. Management will be based on a Habitat Needs Assessment, which is founded on the inventory data. Designated dredge disposal sites will be subject to periodic site disturbance in order to assure continued availability. This activity will be in accordance with specific management goals developed in cooperation with IDNR.

Future Development: The Lower Kaskaskia River Stakeholders, Inc. will function as the major stimulus for future development of this area. Depending upon their recommendations and the partnerships that would result from implementation, the Corps will actively pursue opportunities under the various CAP authorities (1135, 204, 206, Section 14, etc), Challenge Cost Share agreements, volunteer agreements, and Memoranda of Agreement and Memoranda of Understanding.

**Kaskaskia River Project
Kaskaskia River Flowage Easement Area (K-E-2)
Corps of Engineers
Randolph, Monroe, and St. Clair Counties, IL
River Mile
Acres: 3,496
Plates K-1 – K4**

General Description: These lands and waters are located immediately adjacent to the navigation channel described in the Operation Easement Area and other backwaters and tributaries of the Kaskaskia River. The lands lay low within the floodplain and are indicative of primary to secondary bottomland sites. The forest areas are typical bottomland with maple, ash, and cottonwood being the primary species with mast producers increasing in numbers in the secondary bottoms. The area also contains open agricultural fields, developed industrial areas operated by the Kaskaskia River Port District (KRPD) and other businesses, and recreational development consisting of boat ramps, boat docks, cottage sites, camp grounds, and day use areas operated primarily by the IDNR.

The area is heavily used by the public. Pursuits include boating, sightseeing, fishing, hunting, bird watching, camping, and picnicking.

The IDNR manages the area under the precepts of multiple use. Wildlife management techniques include agricultural leasing, food plots and water level manipulations on created wetland areas. In addition, the IDNR manages the fishery through adjusting open seasons and creel limits on selected species and provides campgrounds, picnic areas, boat ramps and parking lots for the visiting public.

Proposed Development: Currently the only authority the Corps has in this area is to occasionally flood the area during times of high water. There is a possibility, through the various CAPS programs, for joint projects with IDNR to assist in the environmental restoration of selected backwater areas.

Future Development: No future development is planned.

Rivers Project Master Plan