

CEMVS-PM-E

February 17, 2009

MEMORANDUM THRU

CEMVS-OD-AK *for 2/26/09*  
CEMVS-OD-T *AMB 3/13/09*  
CEMVS OD-X *RR 3-16-09*  
CEMVS-OD (O'Bryan) *PO*  
CEMVS-RE (Kosch) *3.24.09*  
CEMVS-OC (Levins)  
CEMVS-EC (Busse) *for 3/27*  
CEMVS-DP (Keller) *OK*  
CEMVS-DX (Ziino)  
CEMVS-DD (Bayham) *RJB*

FOR Commander, St. Louis District

SUBJECT: Supplement No. 1, Kaskaskia River Navigation Project Master Plan,  
Kaskaskia River, Illinois

1. The attached Kaskaskia River Navigation Project Master Plan Supplement is submitted for review and approval (Enclosure 1).
2. This supplement proposes a variety of recreational features based on the use patterns of project visitors and recommendations of the Kaskaskia and Carlyle project staff.
3. The technical review has been completed and the checklist and certification are attached (Enclosure 2).
4. It is requested that approval be granted to provide the facilities and complete the actions described in the attached supplement. The general cost estimate for the proposed actions is \$164,454 including contingencies.
5. In accordance with ER 1130-2-550, paragraph 3-2 h., approval of this supplement by the District Commander is requested. Please return the attached approval memorandum after signing (Enclosure 3).
6. P.O.C. for this effort is Francis Walton, x8487.



THOMAS KEEVIN  
Chief, Environmental Branch

Encls

CEMVS-PM-E

MEMORANDUM FOR FILE

SUBJECT: Supplement No. 1, Kaskaskia River Navigation Project Master Plan,  
Kaskaskia River, Illinois

1. References:

- a. Rivers Project Master Plan, Design Memorandum No. 3, approved 2001. This plan includes the current Kaskaskia River Navigation Project Master Plan.
- b. ER 1130-2-550, Project Master Plans and Operational Master Plans: Chapter 3, 15 August 2002. This ER addresses general master planning requirements.
- c. EM 1110-1-400, Engineering and Design, Recreation Planning and Design Criteria, November 2004. This EM addresses the standards for recreation facilities. All recreation facilities proposed in this supplement will meet the standards described in EM 1110-1-400.
- d. ER 1110-2-400, Design of Recreation Sites, Areas and Facilities, May 1988. This ER includes general concepts on recreation planning.
- e. EM 1110-2-410, Design of Recreation Areas and Facilities, Access and Circulation, December 1982. This EM addresses road and trail planning.
- f. ER 1130-2-500, Partners and Support, December 1996. This ER addresses funding considerations.
- g. EP 310-1-6a, EP 310-1-6b, Sign Standards Manual, Vols. 1&2.

2. Purpose of Supplement: The purpose of this supplement is to provide facilities that meet public health and safety requirements and reflect current recreation trends and demand while reducing costs or increasing revenue. Proposed facilities include electric service for boats stopping for safe harbor at the lock, new campsites, extension of camping pads, electric service to campsites, a picnic shelter, floodproof vault comfort stations and a boat storage shed. A prairie will also be restored.

3. Project Description: As shown on Plate 1, the project area includes the lands upstream and downstream of the lock on the right descending bank of the Kaskaskia River, which are designated as the Operations Area (O-1) and the Vegetative Management Area (V-1). O-1 includes the lock and dam area, a primitive camping area, a mowed grass area, and service boat accesses above and below the lock. The operations service access downstream of the lock contains a boat ramp and turnaround providing direct access to the navigation channel, the downstream portion of the lock structure and the confluence with the Mississippi River. The immediate lock and dam facility area includes a visitor information center at the lock, maintenance facilities, an entrance road and trilateration stations. The service access above the lock includes a parking lot, picnic sites with grills and a boat ramp. V-1 is a wooded bottomland area downstream of the lock that includes a service road to the confluence point.

The visitor information center provides current brochures and passive displays for the visiting public. Lock and dam tours are offered to increase public awareness and appreciation. In addition, the public is invited to use the non-restricted areas for fishing, boating, bird watching, sightseeing, camping and picnicking. The downstream service access is also available for public use; however, it is restricted infrequently in order to conduct maintenance activities associated with the operation of the lock and dam.

All proposed facilities susceptible to flooding will be designed to withstand flooding or be removable. The proposed actions are described in detail in the following sections:

a. Lock and Dam: (Plate 2)

Existing Conditions: Boaters in transit on the Mississippi River stop overnight at the lock guidewall. The lock guidewall provides a safe location for those boaters who otherwise would have to moor in the open river. Shore power is currently being supplied by extension cords. No fees are charged for this service; however, demand for overnight docking is expected to increase.

Proposed Actions: Five shore power type receptacles will be installed along the top of the guidewall to provide electric for boaters that dock there. A \$10 fee will be charged per night. Estimated annual revenues are \$2,250 and average annual costs are \$460. The BCR is 4.9 to 1.

A 40'x 45' boat storage building will be constructed on an existing concrete slab within the maintenance compound. The building will protect the patrol and maintenance boats, trailer and equipment from the wind and weather. Estimated cost of the building is \$40,000 with contingencies.

b. Camping Area: (Plate 2)

Existing Conditions: A nine-site primitive camping area has been established in the lock operations area (O-1) in accordance with the current master plan and operational management plan. Campsites include a camp pad, picnic table and a grill. No electric, water or sewer is provided in the campground and the camp pads are not of adequate length for modern campers and visitor vehicles.

Proposed Actions: Proposed actions include adding 50 amp electric and extending the camp pads at 9 campsites to accommodate the length of current camper trailers. Sufficient electric service is an amenity that campers have come to expect, such as electric for running camper air conditioning. Adding six new campsites will address anticipated future camping demand. The provision of electric will encourage longer stays, return visits and additional user fees. Additional campsites will be added as demand increases. The benefit-cost ratio for electrifying the campsites is 2.3 to 1. The benefit-cost ratio for the additional campsites is 1.3 to 1. A floodproof vault comfort station is proposed for public health and safety.

c. Confluence Point Service Road: (Plate 2)

Existing Conditions: The Vegetative Management Area (V-1) is located on the confluence point of the Kaskaskia and Mississippi Rivers. The land in this area is forested and subject to frequent inundation: the primary species are cottonwood, ash and maple. The public uses this area for fishing, sightseeing, bird watching, hiking, and when permitted, hunting. A service access road is located parallel to the river and extends from the boat ramp/camping area to the confluence. According to the current master plan, this service road is to be maintained and will serve as a hiking trail to the confluence of the Kaskaskia and Mississippi rivers.

Proposed Actions: An interpretive flood proof overlook area (viewing stand with display) will be established at the confluence when a challenge partner participant is identified. This action will provide project visitors with additional opportunities for enjoying the project and would also encourage return trips.

d. Prairie Trail and Signage: (Plate 2)

Existing Conditions: The operations area between the camping area and lock is now maintained as an open, mowed area. 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. The area provides limited wildlife habitat and there are operational and maintenance costs associated with the mowing.

Proposed Actions: This area will be developed and managed for prairie habitat. The site will be disked and planted with native prairie species. A primitive trail will be developed in the prairie. Signs and displays will be provided for interpretation of the prairie habitat. Development of the prairie will reduce mowing costs, encourage appreciation for the project's natural resources and provide an additional activity for project visitors that would encourage return visits to the project.

e. Main Boat Ramp and Parking: (Plate 3)

Existing Conditions: A boat ramp and parking lot is located north of the lock and dam. The area has electric but no water. The area is heavily used by boaters to access the river above the lock and dam and for bank fishing.

Proposed Actions: A floodproof picnic shelter and floodproof vault comfort station will be placed in this area in response to demand for these facilities. A reservation fee will be charged for the picnic shelter. Annual revenues are estimated to be \$1688. Annual costs are \$1381 and the BCR is 1.2 to 1.

4. Environmental Compliance: Environmental impacts are being addressed as stated in Appendix 1. All of the proposed actions are categorically excluded because of their location in previously disturbed areas such as the camping area and the prairie area (former construction cement plant site). The Curation and Archives Analysis Branch reviewed the proposed actions and no impacts to cultural resources were identified.

5. Cost Estimate: Field estimates of cost for each project are included in Appendix 1. As suggested by the Engineering Division, Civil Branch, a 25 percent contingency was added to the cost of each item for budgeting purposes. A cost analysis is also included in Appendix 1 and was prepared based on estimates of use, cost, and revenue generated for some of the proposed facilities. Total cost of all proposed facilities with contingencies is \$164,454.

6. Conclusions: The proposed projects address the identified needs at the Kaskaskia Lock and Dam and are appropriate proposals to meet the demand for operations and public use. Proposed actions address public health and safety and are intended to reduce costs or increase revenues. When feasible, projects will be supported by Corps partners. The proposed actions are in accordance with Corps regulations/policies and support and are compatible with the existing Kaskaskia River Navigation Project Master Plan objectives.

Supplement No. 1  
Kaskaskia River Navigation Project Master Plan  
February 2009

<b>Appendix 1 – Field Estimate of Cost Summary</b>									
<b>Location</b>	<b>Proposed Action</b>	<b>Quantity</b>	<b>Unit</b>	<b>Cost</b>	<b>Total Cost</b>	<b>Cost (with 25 % contingency)</b>	<b>Funding Source</b>	<b>Environ-mental Compliance</b>	
Kaskaskia Lock and Dam	Add electrical receptacles along lock wall extension	5	each	\$1000	\$5000	\$6,250	Corps	Categorically excluded.	
	Install storage building for boats	1	job	\$32,000	\$32,000	\$40,000	Corps	Categorically excluded.	
	Interpretive signage at prairie	1	job	\$3,600	\$3,600	\$4,500	Corps/Challenge Partner	Categorically excluded.	
	Extend pads at campsites	9	each	\$1,407	\$12,663	\$15,829	Corps	Categorically excluded.	
	Install 50 amp electric at camping sites.	9	each	\$1,500	\$13,500	\$16,875	Corps	Categorically excluded.	
	Add campsites with electric.	6	each	\$3,800	\$22,800	\$28,500	Corps	Categorically excluded.	
	Develop interpretive viewing stand/display at confluence point.	1	job	\$4,000	\$4,000	\$5,000	Corps/ Challenge Partner	Categorically excluded.	
	Floodproof concrete vault comfort station.	2	each	11,500	\$23,000	\$28,750	Corps	Categorically excluded.	
	Floodproof Picnic shelter.	1	each	\$15,000	\$15,000	\$18,750	Corps	Categorically excluded.	
	<b>Total Proposed Actions</b>					\$164,454			

## Supplement No. 1

# Kaskaskia River Navigation Project Master Plan

## February 2009

[illegible]

**Plate 1 – Land Classification at Kaskaskia River Navigation Project**

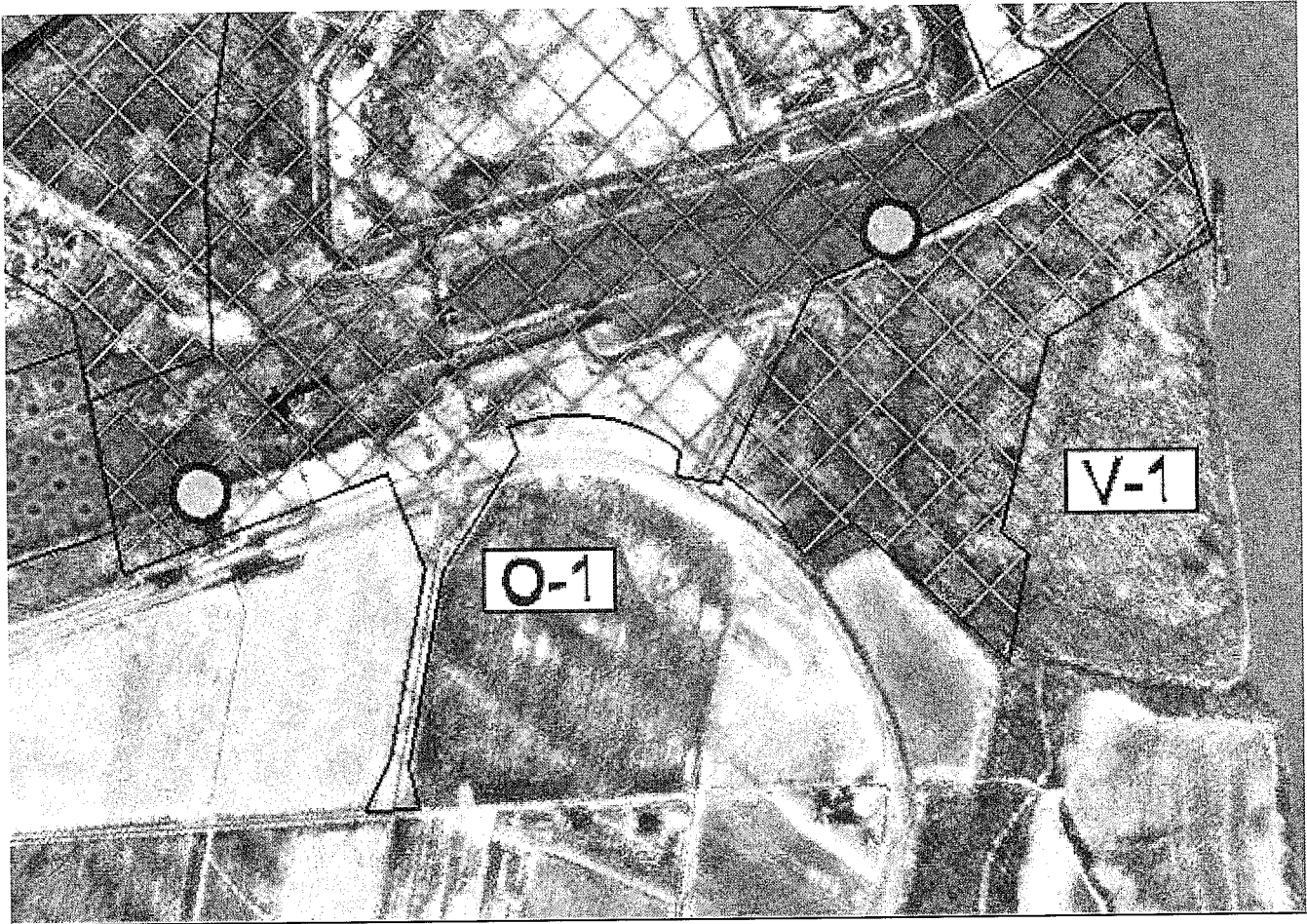
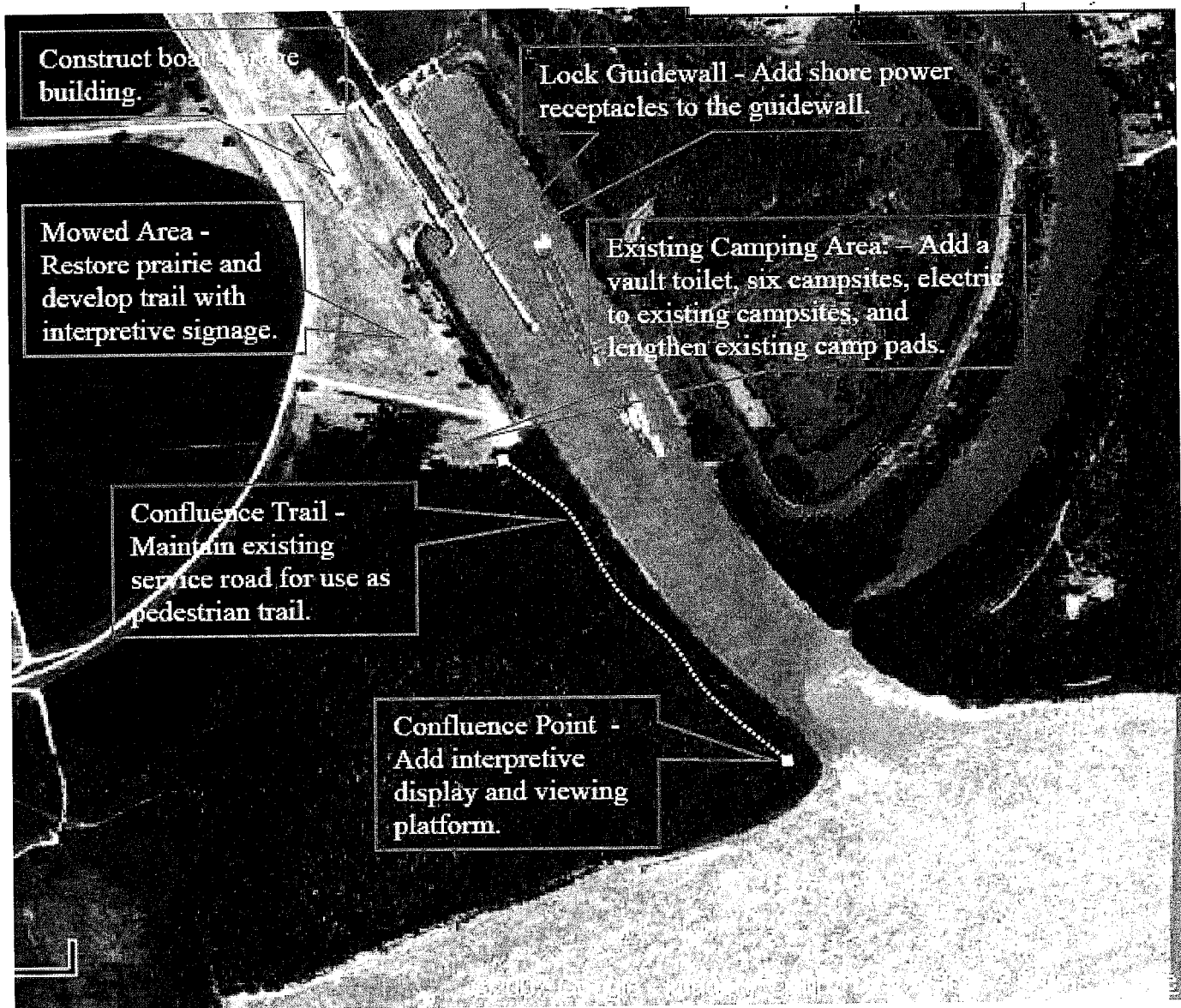




Plate 2 – Kaskaskia River Navigation Project Proposed Actions



**Plate 3 – Kaskaskia River Navigation Project – Upstream of the Lock and Dam**



Date: 19 DEC 2008

MEMORANDUM FOR RECORD - TECHNICAL REVIEW COMPLETE

SUBJECT: Quality Control Review, Kaskaskia Navigation Project Master Plan Update

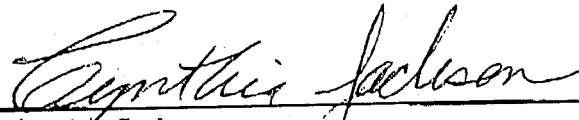
In accordance with the District's Quality Control Management Plan, the Quality Control Review for the Kaskaskia River Navigation Project Master Plan Supplement has been completed and all comments are resolved. We certify the completion of this review.



Francis Walton,  
Outdoor Recreation Planner

Lake

Technical Reviewer



Cynthia Jackson,  
Assistant Operations Manager, Wappapello

Technical Reviewer

Enc/2

# Technical Review Checklist

Project: Kaskaskia River Navigation Project Master Plan Supplement

Date 19 December 2008

Item	Yes	No	N/A	Comments
<b>GENERAL</b>				
<b>1. AUTHORITY:</b>				
a. Does the activity/project conform with authorized project purposes?	X			
<b>2. SCOPE:</b>				
a. Have all significant resources been adequately considered?	X			
b. Have all foreseeable short-term and long-term needs been adequately considered?	X			
c. Have implications outside the activity/project area been properly addressed?	X			
<b>3. OBJECTIVE OF MASTER PLAN:</b>				
a. Are master plan objectives clearly stated?	X			
<b>4. COORDINATION:</b>				
a. Was there adequate coordination with stakeholders; and State, local, and Federal agencies, and were their views considered in formulating the recommended plan?	X			
b. Has coordination conformed with law, executive orders, and agreements between agencies; and, if not, has the departure been satisfactorily explained?	X			
c. Have the proper preservation, conservation, historical, and scientific interests been consulted, and were their views given adequate consideration during plan development?	X			
<b>5. PUBLIC INVOLVEMENT:</b>				
a. Was the scoping process in accordance with EP 1130-2-550, Sect. 3-4 d.?	X			
b. Was adequate public involvement conducted during the planning process to fully inform interested parties and to ascertain their views?	X			
c. Have implications associated with the recommended plan been properly addressed?	X			
d. Has there been adequate response to public concerns?	X			
e. Has the public involvement process been documented, and a discussion of the process prepared?	X			

Item	Yes	No	N/A	Comments
<b>6. POLICY ASPECTS:</b>				
a. Does the proposed project conform to policies established in ER 1165-2-400 (Water Resource Policies and Authorities)	X			
<b>8. LEGAL/INSTITUTIONAL:</b>				
a. Have the legal and institutional obstacles to project implementation been considered and has a plan been developed to overcome them?	X			
<b>9. REPORT REVIEW:</b>				
a. Does the report format follow the most recent guidance?	X			
b. Have all major technical review issues and resolutions been documented?	X			
c. Is the technical review certification signature page included?	X			
<b>10. FINANCIAL ANALYSIS</b>				
a. If applicable, does the report state the benefit-cost ratio (BCR) for proposed actions assuming existing conditions prevail over the period of analysis?	X			
b. Has the economic evaluation of recreational development been adequately determined?	X			
<b>11. RECREATION/AESTHETIC</b>				
a. Have the necessary recreational coordination been conducted in accordance with the NFCA of 1944, FFWA of 1965, and the WRDA of 1986, the Land and Water Conservation Fund Act, and appropriate Corps regulations?	X			
b. Has the assessment of adverse effects dealing with recreation and aesthetic conditions been considered in each alternative plan?	X			
c. Has coordination with the State Department of Culture, Recreation, and Tourism been conducted, and the State Comprehensive Outdoor Recreation Plan been consulted concerning proposed recreational development.	X			
d. Has appropriate NED unit day values been assessed via Economic Guidance Memorandum, Unit Day Values for recreation? Are current fiscal year rates being used?	X			

CEMVS-DE (1105)

02 APR 2009

MEMORANDUM FOR CEMVS-PM-E

SUBJECT: Supplement No. 1, Kaskaskia River Navigation Project Master Plan,  
Kaskaskia River, Illinois.

Supplement No. 1 to the Kaskaskia River Navigation Project Master Plan, February  
2009:

Approved ✓ Disapproved \_\_\_\_\_



THOMAS E. O'HARA, JR.  
COL, EN  
Commanding