

#### **DEPARTMENT OF THE ARMY** ST. LOUIS DISTRICT, CORPS OF ENGINEERS ROBERT A. YOUNG BUILDING - 1222 SPRUCE ST. ST. LOUIS, MISSOURI 63103-2833

3 April 2014

Reply to: US Army Corps of Engineers St. Louis District Environmental Compliance Section (PD-C) 1222 Spruce St. St. Louis, MO 63103-2833

RE: Chouteau Island Levee District Levee Repairs

Dear Sir or Madam:

We are providing for your review an Environmental Assessment (EA) and Draft Finding of No Significant Impact (FONSI) for the Chouteau Island Levee District that will require repair due to damages incurred during the spring and summer 2013 flooding. An electronic copy can be obtained from the St. Louis District's website at

http://www.mvs.usace.army.mil/Missions/ProgramsProjectManagement/PlansReports.aspx. Please note that the Draft Finding of No Significant Impact is unsigned. The FONSI will be signed into effect only after having carefully considered comments received as a result of this public review.

Levees throughout the St. Louis District were damaged during flooding in April and July 2013. Many drainage and levee districts have requested assistance under Public Law 84-99 which provides repair assistance for flood damaged levees. We are in the process of preparing plans and specifications and completing all necessary documentation including environmental compliance documents.

We invite your comments related to the content of the environmental assessments. Please address your comments or questions to Francis Walton of the Environmental Compliance Section (CEMVP-PD-C), at telephone number (314) 331-8102, facsimile number (314) 331-8606, or e-mail at <francis.j.walton@usace.army.mil>, by close of business on May 2, 2014.

Thank you,

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Timothy K. George Chief, Environmental Compliance Section

## ENVIRONMENTAL ASSESSMENT AND DRAFT FINDING OF NO SIGNIFICANT IMPACT

#### PUBLIC LAW 84-99 EMERGENCY FLOOD DAMAGE REPAIR

# CHOUTEAU ISLAND DRAINAGE AND LEVEE DISTRICT

#### MADISON COUNTY, ILLINOIS MISSISSIPPI RIVER

## April 2014

## 1. INTRODUCTION

This document is an Environmental Assessment (EA) with an attached Draft Finding of No Significant Impact (FONSI) for levee repairs to the Chouteau Island Drainage and Levee District (D&LD). The purpose of this EA is to address potential environmental impacts of the proposed rehabilitation, and to serve as a record of interagency coordination for the emergency rehabilitation actions.

#### 1.1. Project Authorization

Emergency actions undertaken by the U.S. Army Corps of Engineers (USACE) to repair flood control works damaged or destroyed by flooding are authorized by Public Law 84-99, as amended by Section 206 of the Flood Control Act of 1962 (hereafter referred to as PL 84-99). USACE regulations covering these and other emergency rehabilitation activities are contained in the Rehabilitation Code 910-300 of ER 500-1-1 (33 Part 203).

The Code states that actions taken to *restore facilities to pre-disaster conditions* under PL 84-99 will not be construed to be either major federal actions or as having significant effects.

However, the effect of rehabilitation on the environment must be considered. This includes the effects of construction on endangered species (P.L. 93-205 and Appendix B of ER 1105-2-50) and archeological and historic properties (Chapter 3 of ER 1105-2-50).

## 1.2 Project Location and Scope

Chouteau Island D&LD is located in Madison County, Illinois and is adjacent to the Left Descending Bank (LDB) of the Mississippi River between Mississippi river miles 190 to 195. See Figure 1, the Project Location Map. The D&LD is composed of two segments: Chouteau Island Levee (5.2 mi.) and Chain of Rocks West Levee (7.9 mi.).

The Chain of Rocks West Levee is not enrolled in the Rehabilitation and Inspection Program; it is operated and maintained by USACE, St. Louis District.

The levee system protects primarily agricultural lands and conservation areas and provides protection from a 12-year frequency flood with 2 feet of freeboard. The system consists of 13 miles of levee constructed with an 8-foot crown width and 1 on 3 side slopes.

The Chouteau Island D&LD is a non-federal levee system that protects primarily agricultural lands and conservation areas. Levee district acreage is 1,999

## 1.2 Project Purpose and Need

The Chouteau Island Levee System sustained damages as a result of high water events in 2013 as shown in Figure 2. Action is needed to repair the levee damage (breach) to prevent future flooding of the 1,999 acres (1,740 cropland acres) protected by the levee. If the levee is not repaired, Mississippi River waters will enter the levee district at approximately a 50% (2-year frequency) chance exceedance flood. The repair project will provide protection against an 8.3% (12-year frequency, pre-flood design) chance exceedance flood. Without federal involvement through the PL84-99 program, it is unlikely that the D&LD has the financial ability to restore the level of protection according to USACE standards.

The project objective is to repair the breach to USACE standards while avoiding or minimizing environmental impacts.



Figure 1 - Location of the Chouteau Island DLD



2013 PL84-99 - Chouteau Island Drainage and Levee District

Figure 2 – Chouteau Island D&LD and 2013 flood damages.

## 1.2.1 Damage Description

Chouteau Island levee system damages that will be repaired by USACE, as a result of spring 2013 flooding on the Mississippi River, consist of a breach requiring 32,850 cubic yards of pervious (sand) and 22,240 cubic yards of impervious material (clay) required for repair. The breach is approximately 200 feet in length with over 270 feet of deep scour from riverside to landside. Depth of scour reached approximately 45 feet below the existing ground. Two pipelines cross the breach scour area as shown in Figure 3.



Figure 3. Breach on Chouteau Island Levee.

## 2. ALTERNATIVES

This chapter describes the alternatives and compares the alternatives in terms of their resource impacts and their achievement of project objectives. Alternatives were formulated by the St. Louis District staff from Engineering and Project Management Divisions. Alternatives are defined and summarized in Section 2.4.

NEPA requires that in analyzing alternatives to a proposed action, a federal agency must consider an alternative of "No Action." Likewise, Section 73 of the WRDA of 1974 (PL 93-251) requires federal agencies to give consideration to nonstructural measures to reduce or prevent flood damage.

# 2.1. Alternative 1 - No Action (Future without Project)

Under the No Action Alternative, the federal government would not repair the damages to the Chouteau Island levee. It is possible that the D&LD would make repairs without federal assistance. Environmental impacts of repairs made by the D&LD would be

similar to the preferred alternative, except that the repair duration may differ and the environmental protections may be reduced.

Therefore, due to the uncertainty of the D&LD making repairs, the environmental impacts of allowing the damage to remain unrepaired are regarded as the No Action Alternative. This would presumably perpetuate a state of reduced levee structural integrity. The levee would be susceptible to further erosion at the damaged sites. The current damages would decrease flood protection, thereby increasing risks to individuals, structures, businesses, and agricultural activities within the leveed areas.

## 2.2. Alternative 2 – Nonstructural Measures

Nonstructural measures reduce flood damages without significantly altering the nature or extent of flooding. Damage reduction from nonstructural measures is accomplished by changing the land use within the floodplains, or by accommodating existing uses to the flood hazard. Examples include flood proofing, relocation of structures such as levees, flood warning and preparedness systems, and regulation of floodplain uses. This allows flood waters to spread out over a larger area reducing flood heights and damages. Allowing the river to have greater access to the floodplain re-establishes some of the river's historic productivity by creating wetlands and by providing connection to wetlands that are essential to the long-term viability of aquatic and terrestrial communities.

Under PL 84-99, the Corps has the authority to pursue a non-structural alternative only if the project sponsor requests such an alternative.

"There is hereby authorized an emergency fund to be expended in preparation for emergency response to any natural disaster, in flood fighting and rescue operations, or in the repair or restoration of any flood control work threatened or destroyed by flood, including the strengthening, raising, extending, or other modification thereof as may be necessary at the discretion of the Chief of Engineers for the adequate functioning of the work for flood control, or in implementation of **nonstructural alternatives to the repair or restoration of such flood control work if requested by the non-Federal sponsor.**"

The Chouteau Island D&LD declined to request the pursuit of a non-structural alternative; therefore, this alternative was eliminated from further consideration.

# 2.3 Alternative 3 – Repair of Levees with Federal Assistance (Preferred Alternative)

Under this alternative, the federal government would repair the breach on the non-Federal Chouteau Island Levee to the pre-flood level of protection. Since the Chouteau Island D&LD is active in the USACE Rehabilitation and Inspection Program, it is eligible for Flood Control and Coastal Emergency funding authorized by PL 84-99.

# 2.3.1 Breach Repair

The proposed levee repair includes the reconstruction of the levee at the breach location. The damaged embankment will be replaced in compacted lifts to the original construction contour and require borrow material. Borrow material is proposed to be primarily taken from three locations within or near the Chouteau Island levee system: the highway borrow area (Borrow Area 1), the interior blowout borrow area (Borrow Area 2) and the exterior borrow area (Borrow Area 3). The breach repair area would be reseeded when conditions are suitable for grass germination to prevent or minimize erosion. See Figure 4 which shows a typical breach repair. Figure 5 shows the entire project repair area including borrow sites.



Figure 4 - Typical breach repair.

## 2.3.2 Borrow Material

**Highway Borrow Area:** Borrow site 1 is located along the southern edge of a farm field adjacent to Interstate 270. The site will be referred to as the highway borrow area; 8,200 cubic yards of clay are needed from this area. The site is approximately one mile from the breach, a reasonable haul distance. The borrow area would be 30 feet wide by 2,200 feet long and 5 feet deep. The western end of the borrow area will be sloped to drain to an emergent wetland. A temporary construction road would be needed to access the borrow area. Before obtaining the borrow material, 6 inches of top soil will need to be stripped off, stockpiled, then redeposited as top dressing on the disturbed area. Two pipelines cross the borrow area as shown in Figure 6.

**Interior Blowout Borrow Area:** Approximately 5 acres of this farm field is covered in sand from the breach blow out. The sand is about 4 feet deep and total volume is

approximately 6,000 cubic yards. This pervious material will be used to fill in the scour hole. Under the sand, there is 4 feet of natural clay. Approximately 9,000 cubic yards will be needed from this site. Before obtaining the borrow material, 6 inches of top soil will need to be stripped off, stockpiled, then redeposited as top dressing on the disturbed area.

**Exterior Borrow Area:** The exterior borrow area is a 3-acre farm field. Approximately 5,040 cubic yards are needed from this area. The borrow area is 30 feet wide by 1000 feet long and 3 feet deep. To the west of the borrow area is a forested wetland. Two pipelines cross the borrow area as shown in Figure 6. The site is outside of the protected area of the levee system and the field is submerged at 28 feet. Before obtaining the borrow material, 6 inches of top soil will need to be stripped off, stockpiled, then redeposited as top dressing on the disturbed area.



Figure 5 – Project Area showing breach and borrow locations.



Figure 6 – Pipeline utilities near Chouteau Island levee system.

#### 2.4 Evaluation and Comparison of Alternative Plans

Under Alternative 1 - No Action, the levee system would remain in its damaged state with a reduced level of protection. This would increase the frequency and risk of monetary damages to croplands, structures, and infrastructure in the event of future flooding. The levee district declined to request the pursuit of a Non-Structural Alternative; therefore, Alternative 2 - Nonstructural Measures, is not included in the comparison of alternative plans. Under Alternative 3 - Repair of Levees with Federal Assistance, the breached levee would be repaired to pre-flood conditions. It is for these reasons that the Repair of Levees with Federal Assistance Alternative is the preferred alternative. See Table 1 for a comparison of impacts of No Action and Federal Action alternatives.

Table 1 – Comparison of Project Alternatives				
Resources	Alternatives			
	No Action	Preferred Alternative		
Physical Resources	Flooding may occur if the levees are not repaired and the levee's integrity is compromised during a flood. Estimated that protection is reduced to 2-year flood level with current damages.	Levee repairs would meet the Federal standard. The area inside levees would be flooded only when flood stages exceed levee designs (12-year frequency).		
	Increased potential for further erosion of the levee and sedimentation within the D&LD during flood events.	Temporary minor impacts to water and air quality during construction.		
	Does not meet project objective of making repairs to Federal standard.	Meets project objective of 12- year level of protection.		
Biological Resources	If levee system is not repaired, there is potential for beneficial impacts due to a potential increase in floodplain wetland habitat.	Construction would be confined to the levee and borrow area which may result in minor temporary impacts.		
	Federal T&E species would not be adversely impacted.	There are no suitable bat trees that would be cleared and no bald eagle nests; therefore, the proposed action should have no adverse affect on listed species.		
	Meets project objective of minimal environmental impacts.	Meets project objective of minimal environmental impacts.		
Socioeconomic	The D&LD would be susceptible	Repair of levee would result in		
Resources	to future floods and potential	the protection of croplands and		
	negative impacts to D&LD and	structures from floods up to the		
	regional economy due to levee	design (12- year frequency) of		
	Does not meet project objective	Meets project objective of		
	of protecting the socioeconomic	protecting the economic value		
	value of the D&LD.	of the D&LD.		

## 3. AFFECTED ENVIRONMENT

**3.1 Physical:** Chouteau Island Drainage and Levee District is located in Madison County, Illinois and is east of the Mississippi River between Mississippi River Mile 190

#### Chouteau Island Levee System PL84-99 Environmental Assessment 2014

to 195 and the Chain of Rocks Canal on the east. The island is protected by a levee system; otherwise, the topography of the island is relatively flat with numerous shallow water features. The repair and borrow areas are located in agricultural fields and are located within the levee except Borrow Area 3 which floods at 28 feet. The breach is located on the Mississippi River levee and flooding would occur at the 2-year frequency due to the existing breach. There are gas lines that traverse the project area.

**3.2 Biological:** Chouteau Island's bottomlands and sloughs already provide some habitat for various waterfowl species, herons, egrets and wintering bald eagles. Deer also inhabit some of the wooded portions of the island. The site currently consists of agricultural land uses, which can be seen in the aerial photograph in Figure 2.

Borrow Area 1: While the site does contain hydric soils, the site lacks wetland hydrology and vegetation. No physical evidence of wetland hydrology exists within the borrow area. The western edge of the borrow area would be sloped to drain into an emergent wetland. No cultural remains were found.

Borrow Area 2: While the site does contain hydric soils, the site lacks wetland hydrology and vegetation. The site was covered in sand, but cultural remains are not known to occur in the area.

Borrow Area 3: While the site does contain hydric soils, the site lacks wetland hydrology and vegetation. The western edge of the borrow area ends into a forested wetland. A temporary access road would need to be constructed to access the borrow site, approximately 900 feet away. A wooded swale area of 30 feet wide by 120 feet long will need to be cleared for the borrow road construction. The tree species in the wooded swale area are less than 8-inch dbh elm, silver maple and mulberry. Fill will be temporarily placed in the slough to create a ramp over the levee. No cultural artifacts were found in the area.

#### Federally Threatened or Endangered Species:

In compliance with Section 7(c) of the Endangered Species Act of 1973, as amended, USACE accessed the U.S. Fish and Wildlife Service (USFWS) website on March 25, 2014 to obtain a listing of federally threatened or endangered species, currently classified or proposed for classification that may occur in the vicinity of the project (Madison County, Illinois). Federally listed species (Table 2) which may occur in Madison County include the least tern, pallid sturgeon, decurrent false aster, eastern prairie fringed orchid, spectaclecase mussel and Indiana bat. Two Federal candidate species, the northern long-eared bat and eastern massasauga rattlesnake may also occur in the vicinity of the project.

**Table 2** – List of federally threatened and endangered species for Madison County, Illinois and their habitat potentially occurring in the project area (USFWS website accessed March 25, 2014)

<u>Indiana bat</u> (Myotis sodalis)	Endangered	Caves, mines (hibernacula); small stream corridors with well developed riparian woods; upland forests (foraging)
<u>Northern long-eared bat</u> (Myotis septentrionalis)	Proposed as Endangered	Hibernates in caves and mines - swarming in surrounding wooded areas in autumn. Roosts and forages in upland forests and woods.
<u>Least tern</u> (Sterna antillarum)	Endangered	Bare alluvial and dredged spoil islands
<u>Eastern massasauga</u> (Sistrurus catenatus)	Candidate	Graminoid dominated plant communities (fens, sedge meadows, peatlands, wet prairies, open woodlands, and shrublands)
Pallid sturgeon (Scaphirynchus albus)	Endangered	Large rivers
<u>Spectaclecase mussel</u> (Cumberlandia monodonta)	Endangered	Shallow areas in larger rivers and streams
<u>Decurrent false aster</u> (Boltonia decurrens)	Threatened	Disturbed area subject to flooding.
Eastern prairie fringed orchid (Platanthera leucophaea)	Threatened	Mesic to wet prairies

Although the **bald eagle** (*Haliaeetus leucocephalus*) was removed from the federal list of threatened and endangered species in 2007, it continues to be protected under the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act (BGEPA). The BGEPA prohibits unregulated take of bald eagles, including disturbance. The U.S. Fish and Wildlife Service developed the National Bald Eagle Management Guidelines (USFWS 2007) to provide landowners, land managers, and others with information and recommendations regarding how to minimize potential project impacts to bald eagles, particularly where such impacts may constitute disturbance.

3.3 Socioeconomic: The Chouteau Island D&LD is a non-federal levee system that

protects primarily agricultural lands and conservation areas. Levee district acreage totals 1,999 and 1,740 acres are cropland.

## 4. ENVIRONMENTAL IMPACTS

## 4.1 Alternative 1 - No Action (Future without Project)

If the Chouteau Island D&LD decides not to repair the damaged sections, the level of protection would be decreased from that provided by the design (pre-2013 flood event) levee. The previously leveed area would continue to be subject to flooding, making the area less suitable and possibly unsuitable for agriculture. This could result in a negative economic effect on the levee system and the local economy.

Additionally, during high water events, water could pond on the landside of the levee and deposit sediment, decreasing flood water turbidity, filling wetlands, killing vegetation as flood water ponds on typically dry areas currently dominated by agriculture. However over time, wetland vegetation would become established. During high water events, terrestrial fauna would be displaced as their habitat is inundated. Conversely, fishes would gain access to a large area of floodplain habitat, which would benefit the spawning and rearing of many fish species.

**4.2** Alternative 2 – Non-Structural Alternative. Sponsor did not request so this alternative was dropped.

#### 4.3 Alternative 3 – Repair of Levees with Federal Assistance

**A. Physical:** If USACE assists the Chouteau Island Levee System in repairing the levee breach, the levee system would prevent the flooding of the agricultural fields within the levee system. The borrow areas with gas utility lines will be marked with a 50-foot buffer. A Phase I Environmental Site Assessment was completed in March 2014 for the project and no HTRW materials were noted or discovered during the borrow site investigation and no environmental issues or concerns were identified at the borrow and repair sites

**B. Biological**: The borrow areas are not marginal emergent wetland areas. The agricultural field will continue to be farmed after the borrow is removed; therefore, the borrow activity in this area is exempt from the Section 404 Clean Water Act Regulations (Section 323.4). The number of trees cleared to provide access to Borrow Area 3 will be minimized. No Indiana bat habitat was observed in the area to be cleared for the access road to Borrow Area 3. No bald eagle nests were observed in the project vicinity.

**Federally Threatened or Endangered Species**: The breach repair project would have no effect on the listed and candidate species as discussed below.

<u>Least tern</u>: This species is found on large rivers and sandbars; this habitat is not present on the project site. Therefore the project would have no effect on the least tern.

<u>Pallid Sturgeon</u>: These species are found in rivers; this habitat is adjacent to the project site. No development is planned in the Mississippi River; therefore, the project would have no effect on the pallid sturgeon.

<u>Decurrent False Aster</u>: This plant is found on moist, sandy, floodplains and prairie wetlands along the Illinois River. It relies on periodic flooding to scour away other plants that compete for the same habitat. The repairs would take place within the footprint of the existing levees, a hedgerow and agricultural fields. The proposed borrow site(s) and project areas are unlikely to support any native plant populations; therefore, this project would have no effect on the on the decurrent false aster.

<u>Eastern Prairie Fringed-Orchid</u>: This species are found in wetlands. No wetlands would be impacted by the proposed project; therefore, the project would have no effect on the eastern prairie fringed orchid.

Indiana Bat: This species winter hibernacula is caves; there are no caves onsite. From April to September this species uses larger trees with loose bark for roosting or maternity colonies. This habitat would not be impacted at the project site; therefore, this project would have no effect on the Indiana bat.

Northern Long-eared Bat: This candidate species winters in caves which are not found onsite and prefers "shag" type bark on trees for roosting in summer such as cottonwood, shagbark hickory, and certain oak species. This habitat would not be impacted at the project site; therefore, this project would have no effect on the northern long-eared bat.

<u>Spectaclecase</u>: Spectaclecase mussels are found in large rivers where they live in areas sheltered from the main force of the river current. This habitat would not be impacted at the project site; therefore, this project would have no effect on the spectaclecase.

Eastern massasauga: Massasaugas are candidate species that live in wet areas including wet prairies, marshes and low areas along rivers and lakes. This habitat would not be impacted at the project site; therefore, this project would have no effect on the eastern massasauga.

**C. Socioeconomic:** Closing the breach in the levee to USACE standards will protect the agricultural and economic interests of the Chouteau Island landowners as well as the local agricultural economy. The cultural resources review for Borrow Site 2 would occur after the sand is removed and during the excavation of the borrow area.

#### 4.4 Cumulative Impacts

The majority of the levee systems in the region have been in place for decades. Repairs would involve returning most of the damaged levee sections to the same alignment and level of protection as existed prior to the high water events of 2013. Temporary impacts from noise, air, and water pollution would occur; however, repair sites are widely scattered throughout the St. Louis District and therefore additive effects of these impacts would be negligible. These repairs are not anticipated to decrease the post-flood productivity of lands riverward or landward of the levee systems. The Chouteau Island PL84-99 project along with several other levees will require borrow for levee repairs. Borrow sites have been examined and selected in order to avoid sensitive areas and resources. Borrow for the majority of these projects will come from agriculture areas, low quality farmed wetlands, and previously identified borrow areas. The widely scattered nature of repair sites and shallow excavation depth of borrow sites would reduce impacts and no long term adverse cumulative impacts are expected.

## 5. COMPLIANCE WITH RELEVANT LAWS AND REGULATIONS

#### National Historic Preservation Act

Compliance with Section 106 of the National Historic Preservation Act of 1966, as amended, will be as set out in the Programmatic Agreement (PA) among the U.S. Army Corps of Engineers, Rock Island District; the Advisory Council on Historic Preservation; the Illinois Historic State Historic Preservation Officer; the Iowa State Historic Preservation Officer; and the Missouri State Historic Preservation Officer, regarding the Implementation of the Public Law 84-99 Program in those States. This compliance must be completed before project implementation.

#### **Executive Order 11988**

No change in existing (pre-flood) land use or level of protection will occur as a result of the proposed repairs. This project will not adversely impact floodplains or floodplain values.

Table 3 lists the environmental requirements and the status of compliance.

Table 3 - Relationship of Preferred Alternative to Environmental RequirementsEnvironmental Act/Executive Order		
Bald Eagle Protection Act, 42 USC 4151-4157	FC	
Clean Air Act, 42 USC 7401-7542		
Clean Water Act, 33 USC 1251-1375	FC	
Comprehensive Environmental Response, Compensation, and Liability Act, (HTRW) 42 USC 9601-9675		
Endangered Species Act, 16 USC 1531-1543		
Farmland Protection Policy Act, 7 (Prime Farmland)USC 4201-4208		
Fish and Wildlife Coordination Act, 16 USC 661-666c	FC	
Food Security Act of 1985 (Swampbuster), 7 USC varies	FC	
Land and Water Conservation Fund Act, (Recreation)16 USC 460d-4601	FC	
National Environmental Policy Act, 42 USC 4321-4347	PC	
National Historic Preservation Act, 16 USC 470 et seq.		
Noise Control Act of 1972, 42 USC 4901-4918		
Resource, Conservation, and Rehabilitation Act, (Solid Waste) 42 USC 6901- 6987		
Rivers and Harbors Appropriation Act, (Sec. 10) 33 USC 401-413	FC	
Water Resources Development Acts of 1986 and 1990 (Sec 906 – Mitigation; Sec 307 - No Net Loss - Wetlands)		
Floodplain Management (EO 11988 as amended by EO 12148)	FC	
Federal Compliance with Pollution Control Standards (EO 12088)		
Protection and Enhancement of Environmental Quality (EIS Preparation) (EO 11991)		
Protection and Enhancement of the Cultural Environment (Register Nomination) (EO 11593)		
Protection of Wetlands (EO 11990 as amended by EO 12608)	FC	

## 6. COORDINATION, PUBLIC VIEWS, AND RESPONSES

This EA and Draft FONSI will be provided to the following state and federal agencies for their review, comments, and concurrence during the 30 day public comment period.

U.S. Fish and Wildlife Service Federal Emergency Management Agency Illinois Department of Natural Resources Illinois Historic Preservation Office Illinois Emergency Management Agency

To assure compliance with the National Environmental Policy Act, Endangered Species Act, and other applicable environmental laws and regulations, coordination with these agencies will continue as required throughout the planning and construction phases of the proposed levee repairs.

#### 8. ENVIRONMENTAL ASSESSMENT PREPARERS

Francis Walton, B.S. Forest Zoology, Experience: 14 years Environmental Branch, USACE Role: EA Coordinator, Environmental Impact Analysis, NEPA and Environmental Compliance

Mike King, Environmental Engineer Experience: 11 years USFWS, 11 years US Army, 11 years USACE-MVS Role: Environmental Engineering, HTRW

James E. Barnes, District Archaeologist Experience: 8 years private sector; 17 years Center of Expertise, Curation and Maintenance of Archaeological Collections Role: National Historic Preservation Act Analysis and Compliance

Greg Bergtoglio, Project Manager Experience: 32 years USACE-MVS Role: Project Manager

Daniel Linkowski, Economist Experience: 5 years USACE Role: Economist

Alan Edmondson, Regulatory Project Manager, Wildlife Biologist Experience: 13 years, USACE-MVS Regulatory Office Role: Section 404/401 permit review; NEPA and Environmental Compliance Coordination

Chouteau Island Levee System PL84-99 Environmental Assessment 2014

#### FINDING OF NO SIGNIFICANT IMPACT

## PUBLIC LAW 84-99 CHOUTEAU ISLAND DRAINAGE AND LEVEE DISTRICT MADISON COUNTY, ILLINOIS

1. I have reviewed the document concerned with the proposed levee repairs to the Chouteau Island Drainage and Levee District. The purpose of this project is to repair a breached levee damaged by an extended high water event during the spring of 2013. Repairs would return the drainage district to pre-flood conditions in an expedient manner.

2. I have also evaluated pertinent data concerning practicable alternatives relative to my decision on this action. As part of this evaluation, I have considered the following alternatives:

a. <u>No Action</u>: Under the no-action alternative, the Federal government would not repair the flood damaged levees. It is assumed that, because of the cost of repairs, the levee district would not repair the levee.

b. <u>Repair of Levees with Federal Assistance (Preferred Alternative)</u>: Under this alternative, the federal government would repair the damaged area to the pre-flood level of protection. Since the Chouteau Island D&LD is active in the USACE Rehabilitation and Inspection Program, it is eligible for Flood Control and Coastal Emergency funding authorized by PL 84-99.

3. The possible consequences of these alternatives have been studied for physical, biological, cultural, social and economic effects. Major findings of this investigation include the following:

a. The no action plan was evaluated and subsequently rejected primarily based upon the higher potential for future flooding and damage to area farms.

b. Borrow for the final levee repair would come from the areas deemed acceptable by the borrow inspection team. The selected borrow site locations are shown in the Environmental Assessment (EA). Levee repairs would be seeded using a mixture of fast germinating perennial grasses when conditions are suitable for grass germination.

c. No appreciable effects to general environmental conditions (air quality, noise, water quality) would result from the recommended plan.

d. The recommended plan is not expected to cause significant adverse impacts to aesthetic quality, recreational use, or general fish and wildlife resources.

e. The recommended plan is not expected to cause significant adverse impacts to riparian habitat, bottomland hardwood forest, or other wetlands.

f. No Federally endangered or threatened species would be adversely impacted by the recommended plan.

g. No prime farmland would be adversely impacted as a result of the recommended plan.

h. No significant impacts to historic properties (cultural resources) are anticipated as a result of the recommended plan.

i. Under the recommended plan, local economies would benefit through an increased labor demand to carry out levee repairs. Agricultural land and structures within the drainage district would be provided with pre-2013 flood protection.

4. The following environmental commitments are part of the recommended plan:

a. If any suspected hazardous materials are found, the USACE would notify the Illinois Environmental Protection Agency, and the hazardous materials would be removed in an approved manner before proceeding with the project.

b. For those areas where some erosion may occur from borrow excavations, levee repairs, and staging or storage areas, silt screens or hay bales will be used to reduce siltation into surrounding waterways based on a pre-approved Environmental Protection Plan which includes provisions for erosion control and the protection of natural habitat.

c. The USACE would use fast germinating grass mixtures on restored levee areas to reduce any further erosion.

5. Based upon the EA of the recommended plan, no significant impacts on the environment are anticipated. The proposed action has been coordinated with

appropriate resource agencies, and there are no significant unresolved issues. Therefore, an Environmental Impact Statement will not be prepared prior to proceeding with this action.

Date

Christopher G. Hall Colonel, U.S. Army District Commander

#### EA Distribution List:

Ms. Anne Haaker IL State Historic Preservation Office Springfield, IL 62701

Mr. Pat Malone IDNR Natural Resource Review 1 Natural Resource Way Springfield, IL 62702

Mr. Jack Norman 906 N. Metter Avenue Columbia, IL 62236

Mr. Mike Diedrichsen IDNR Natural Resource Review 1 Natural Resource Way Springfield, IL 62702

Representative Daniel Beiser 528 Henry Street Alton, IL 62002-2611

Senator Mark Kirk Springfield Senate Office 607 East Adams, Suite 1520 Springfield, IL 62701

Honorable Richard Durbin 525 South 8<sup>th</sup> Street Springfield, IL 62703-1601

Governor Pat Quinn Office of the Governor 207 State House Springfield, IL 62706

Honorable William L. Enyart U.S. Congressional District 12 2060 Delmar Ave, Suite B Granite City, IL 62040

Senator William R. Haine District 56 307 Henry St Alton, IL 62002

U.S. Fish and Wildlife Service Attn: Matt Mangan Marion Illinois Sub-Office (ES) 8588 Rte 148 Marion, IL 62959

#### Chouteau Island Levee System PL84-99 Environmental Assessment 2014

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