



DEPARTMENT OF THE ARMY
ST. LOUIS DISTRICT CORPS OF ENGINEERS
1222 SPRUCE STREET
ST. LOUIS, MISSOURI 63103-2833

REPLY TO
ATTENTION OF:

2 August 2012

Regional Planning and Environmental Division North
Environmental Compliance Section

Dear Sir or Madam:

A copy of the Environmental Assessment (EA) and Draft Finding of No Significant Impact (FONSI) for Emergency Levee Repairs (Public Law 84-99) at Preston, Clear Creek, and Kaskaskia Island Drainage and Levee Districts, Union and Randolph Counties, Illinois is available online or upon request for your review. Please note that the Draft Finding of No Significant Impact is unsigned. This document will be signed into effect only after having carefully considered comments received as a result of this public review.

The Draft Environmental Assessment serves to notify the public of the proposed project and requests assistance in identifying the probable environmental impacts of the project alternatives. We invite your comments related to the content of the posted environmental assessment by August 31, 2012.

Electronic copies of the EA are available online at:
<http://www.mvs.usace.army.mil/pm/pm-reports.html>

For questions, or comments, please contact:

Mr. Francis Walton of the Environmental Compliance Section
Telephone number: (314) 331-8102
Facsimile number: (314) 331-8606
E-mail: francis.j.walton@usace.army.mil

Submit written comments to:

Mr. Francis Walton
US Army Corps of Engineers
St. Louis District
Planning and Environmental Branch (PD-E)
1222 Spruce St.
St. Louis, MO 63103-2833

Thank you,

A handwritten signature in black ink that reads "Timothy K. George".

Timothy K. George
Chief, Environmental Compliance

DRAFT FINDING OF NO SIGNIFICANT IMPACT

LEVEE REPAIR (PL 84-99): PRESTON, CLEAR CREEK AND KASKASKIA ISLAND DRAINAGE AND LEVEE DISTRICTS UNION AND RANDOLPH COUNTIES, ILLINOIS

1. I have reviewed and evaluated the documents concerning the proposed repair of the levee slides and eroded levee slope at the Preston, Clear Creek and Kaskaskia Island Drainage and Levee Districts, Randolph and Union Counties, Illinois. These damaged areas reduce the ability of the systems to provide the authorized level of flood risk reduction management.
2. As part of this evaluation, I have considered the following project alternatives.
 - a. The Non-Structural Alternative
 - b. No Federal Action ("No Action" Alternative)
 - c. Providing Federal assistance with repairs to the levee systems (Recommended Alternative)
3. The nonstructural alternative was eliminated during preliminary planning because it was not desirable to the sponsors, would have large costs, or would result in loss of numerous acres of prime farmland.
4. The possible consequences of the remaining two alternatives have been studied for physical, biological, and socioeconomic effects, as well as engineering feasibility. Significant factors evaluated as part of my review included the following:
 - a. If repairs are not accomplished, the levee systems could deteriorate to the point that protection would be jeopardized during the next significant flood event. The DLDs would remain in their damaged states and provide an estimated 15 or 25-year levels of protection instead of the 50-year levels that they were designed to provide. These reduced levels of protection would increase flood risk and threaten the livelihood of local landowners.
 - b. Repair activities will cause temporary erosion, noise, and air pollution. Proper construction and soil management techniques will minimize this effect. Upon completion, all construction equipment will be removed and exposed areas will be stabilized by compaction and seeding. Impacts will be short term and minor.
 - c. The St. Louis District proposes work that involves excavation of the slide area to 1 – 2 feet deeper than the failure surface. Material would then be placed and compacted to form the levee. For the eroded areas, material will be placed in the eroded area and

compacted. All work will be performed within the footprint of the proposed levee and the levee rebuilt to Federal standard levee grades, cross sections, and alignments.

d. Levee vegetation will be lost and wildlife disturbed during repair. These impacts will be both minimal and temporary. Seeding will restore vegetation and wildlife disturbance will end after construction completion.

e. No Federally endangered or threatened species will be adversely impacted by the levee repairs.

f. The aesthetic quality of the area will be temporarily reduced by construction equipment and associated noise. Shortly after construction completion, aesthetic quality will return to pre-flood conditions.

g. Construction/repair activities associated with this project will have no effect upon significant archaeological remains or historic properties. As presently designed, earthmoving will be confined to areas previously disturbed during original levee construction or drainage ditches.

h. No adverse socioeconomic impacts from the proposed levee repairs were identified.

i. The repair work will not require the permanent placement of additional fill material below ordinary high water. As such, the public will not be notified of the action by Public Notice under Section 404 or 401 of the Clean Water Act.

4. Based on my analysis and evaluation of the alternative courses of action presented in the Environmental Assessment, I have determined that the implementation of the recommended plan will not have significant effects on the quality of the environment. 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

**ENVIRONMENTAL ASSESSMENT
WITH
DRAFT FINDING OF
NO SIGNIFICANT IMPACT**

**EMERGENCY LEVEE REPAIR
(PUBLIC LAW 84-99):**

**PRESTON, CLEAR CREEK AND KASKASKIA
ISLAND DRAINAGE AND LEVEE DISTRICTS**

UNION AND RANDOLPH COUNTIES, ILLINOIS

**Planning and Environmental Branch
Regional Planning and Environmental Division North
U.S. Army Corps of Engineers
St. Louis District
1222 Spruce St.
St. Louis, Missouri 63103**

August 2012



**US Army Corps
of Engineers®
Saint Louis District**

I. PURPOSE OF AND NEED FOR ACTION

1.1 Introduction: The Preston, Clear Creek and Kaskaskia Island Drainage & Levee Districts (DLDs) are Federal Agricultural Flood Control Works that protect 43,660 acres of agricultural lands. Preston and Clear Creek DLDs are located in Union County, Illinois and Kaskaskia Island DLD is located in Randolph County, Illinois along the Mississippi River between river miles 116 to 111 (Kaskaskia Island) and 76 to 55 (Preston and Clear Creek). Preston and Clear Creek DLDs are part of a large continuous levee system known as the Big Five, which includes: Preston, Clear Creek, East Cape Girardeau, North Alexander and Miller Pond as shown in Figure 1. The levee systems protect primarily agricultural lands from a 50-year flood with 2 feet of freeboard and consist of over 50.4 miles of levee constructed with 10 to 20-foot crown widths and 1 on 3 side slopes.

A high water event on the Mississippi River during the spring of 2011 damaged the Preston, Clear Creek and Kaskaskia Island DLDs. Heavy rains throughout May and June caused flooding along the Mississippi River drainage basin within U.S. Army Corps of Engineers' (USACE) St. Louis District. Saturated soils caused much of the rainfall to become direct runoff. Rainfall totals over Missouri and Illinois ranged from 4 to 12 inches during the months of May and June.

The damages to the three DLDs sustained in the high water event consisted of 7 slides and levee erosion in two locations along the Clear Creek DLD levee slope (See Appendix D). No borrow will be needed for these repairs.

The DLDs are active in the USACE Rehabilitation and Inspection Program (RIP). Therefore, the DLDs are eligible for Flood Control and Coastal Emergency (FCCE) funding authorized by PL 84-99. The total repair cost is approximately \$2,450,000 with a benefit to cost ratio of 1.21 or better. Table 1 summarizes the levee features.

1.2 Project Description: The primary purpose of this project is to restore fully functioning, up-to-date flood protection systems within the areas administered by the DLDs. Upon completion of the project, the USACE will provide recertification that the levee meets the 50-year flood criteria. Repairs to the DLDs will include bringing the slides and erosion damaged areas up to the federal standard (see Figure 2).

A slide is a movement of soil down the levee slope where the levee cannot support its own saturated weight. Repair of the slide area includes excavation of the damaged area, lime treatment of the excavated soil, and replacement of embankment in compacted lifts. Slides affecting the crown of the levee will require the removal and restoration of the crushed stone road on the levee crown. A 20 by 1000 foot area on the toe of the levee will be needed for lime treatment of the excavated levee material. All construction will occur within the cleared ROW of the levee. Repairs to the eroded levee slopes will only require filling, compacting and seeding the eroded area.

Clear Creek DLD is adjacent to the Mississippi River between river miles 57 and 65. The Clear Creek DLD protects residences, small businesses, outbuildings, agricultural lands and the villages of McClure and Reynoldsville. This levee district includes 18,000 acres and primarily protects agricultural lands from a 50-year flood plus 2 feet of freeboard. The system consists of over 21.0 miles of levee constructed with a 20-foot crown width and 1 on 3 side slopes with stability berms. The system also includes seepage berms, relief wells, service roads and gravity drain structures. The high water resulted in one slide and levee erosion at two locations. See Appendix D for repair locations.

The Preston DLD protects agricultural lands, small businesses, and the villages of Wolf Lake and Aldridge. This levee district includes 16,200 acres (11,850 cropland acres) and is located adjacent to the Mississippi River between river miles 65 to 75. The levee system provides protection from a 50-year flood plus 2 feet of freeboard. The system consists of over 14.6 miles of levee constructed with a 20-foot crown width and 1 on 3 side slopes. The high water resulted in three levee slides in the Preston DLD as shown in Appendix D.

The Kaskaskia Island Drainage and Levee District protects agricultural lands, conservation areas, and the villages of Kaskaskia and Pujol. Kaskaskia was the first capitol of Illinois and has several historical sites within the district. This levee district includes 9,460 acres (9,110 cropland acres) and protects 200 residents. The levee system provides protection from a 2 percent (50-year) chance exceedance flood plus 2 feet of freeboard. The system consists of 14.8 miles of clay levee constructed with a 10-foot crown and 1 vertical on 3 horizontal side slopes with stability berms. The system also includes seepage berms, relief wells, and gravity drain structures. The damages sustained in the high water event resulted in three slides as shown in Appendix D.

1.3 Need for Project:

Action is needed to repair the Clear Creek DLD damage and, therefore, prevent future flooding of the 18,000 total acres (17,200 cropland acres – corn and soybeans) protected by the levee. The total slide repair cost is approximately \$560,000 with a benefit to cost (b/c) ratio of 17.1 to 1. If the levee is not repaired, the level of protection is estimated at a 6.7% (15-year) chance exceedance. The repair project will provide a 2% (50-year, pre-flood design) chance exceedance level of protection.

If the Kaskaskia DLD is not repaired, the level of protection is estimated at a 6.7% (15-year) chance exceedance flood for the 9,460 DLD acres, of which 9,011 are in crops. The total repair cost is approximately \$745,000 with a benefit to cost (b/c) ratio of 2.2 to 1. The repair project will provide a 2% (50-year, pre-flood design) chance exceedance level of protection.

Action is needed to repair the Preston DLD to prevent future flooding of the 16,200 total acres (11,850 cropland acres) protected by the levee. In its damaged state,

the Preston DLD currently provides approximately a 25-year level of protection. The repair project will provide a 2% (50-year, pre-flood design) level of protection.

Table 1 - Levee Feature Summary				
Levee Districts		Preston	Clear Creek	Kaskaskia Island
Authorized Level of Protection		50- year plus 2 ft. freeboard	50-year plus 2 ft of freeboard	50-year plus 2 ft of freeboard
Current Level of Protection		25-year (5 percent)	15 year (6.7 percent)	15-year (6.7 percent)
Repairs Needed		3 slides	slide and erosion	3 slides
Acres Protected		16,200 (11,850 ag)	18,000 (17,200 ag)	9,460 (9,011 ag)
Miles of Levee		14.6	21	14.8
Benefit/Cost Ratio		14.4 to 1	17.1 to 1	2.2 to 1

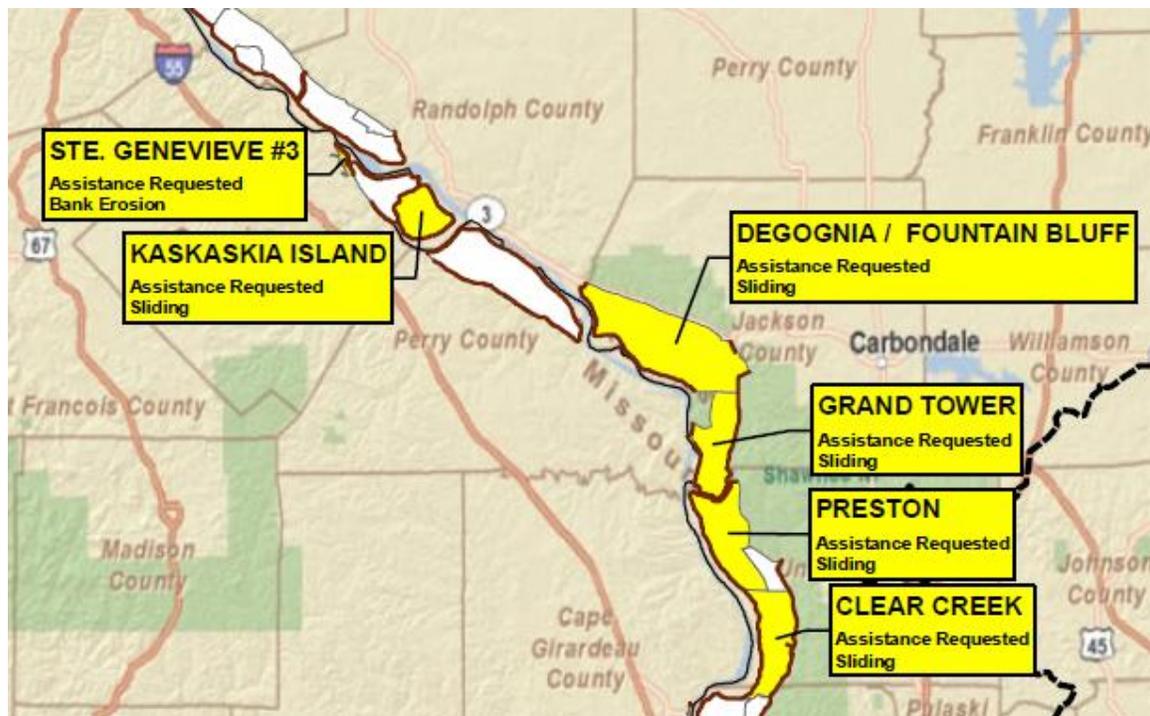


Figure 1 – Location Map for Preston, Clear Creek and Kaskaskia Island DLDs.

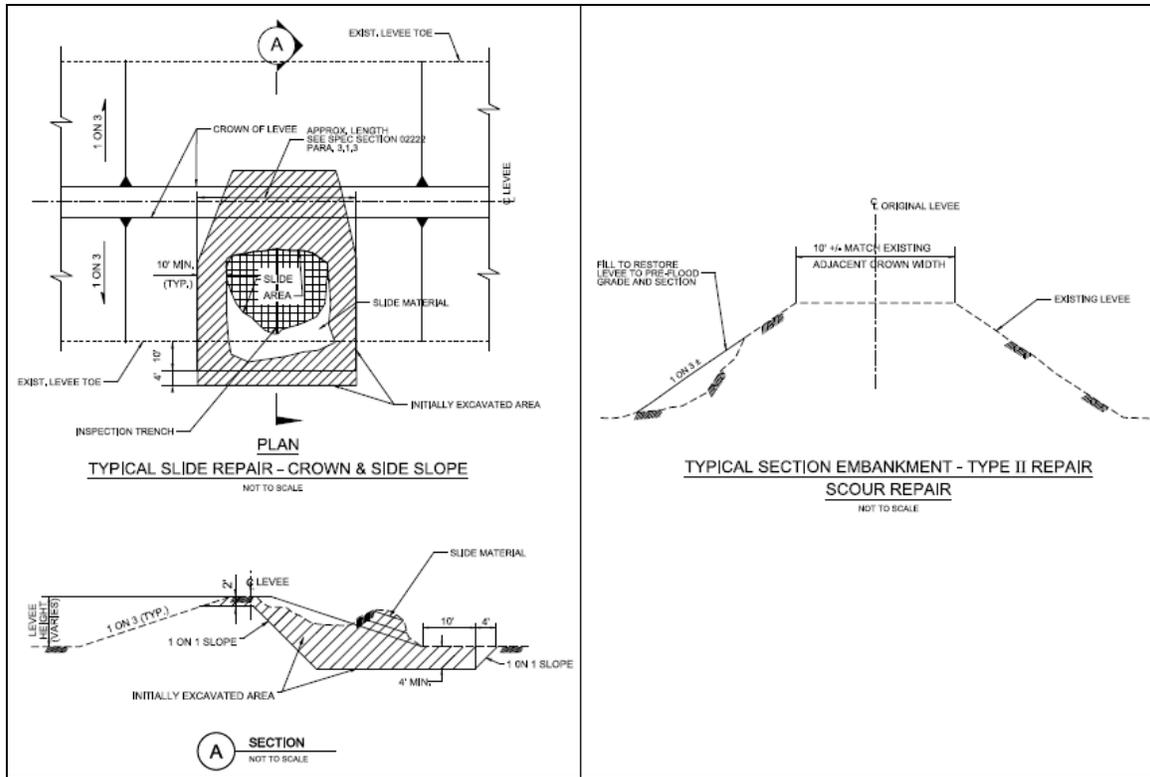


Figure 2 – Typical Slide and Type II Embankment Repair

1.4 Issues and Concerns: Temporary impacts to 0.23 acres of mowed wetland within the levee right of way would occur at Kaskaskia Island DLD as discussed in Appendix E; however, no mitigation will be required.

1.5 Related Documentation:

a. Clean Water Act 404 Evaluation and 401 State Certification: The Corps Regulatory office determined that a Section 404 nationwide permit No. 33 would cover the 0.23 acre of temporary impacts to mowed or disturbed wetland related to the mixing or laydown area for slide KI 01-11-R, riverside of the levee on Kaskaskia Island. No mitigation will be required for this project and no violation of State Water Quality Standards is expected as a result of construction activities associated with this project. Appendix E includes the authorizing permit and regulatory site visit notes for the levee repair sites.

b. Hazardous and Toxic Wastes: Phase I Environmental Site Assessments were completed for each DLD. No evidence of RECs was observed and thus the likelihood of encountering HTRW materials in connection with this project is unlikely. Phase II ESAs are not necessary for the proposed project.

c. Floodplain Management: In the plan formulation for this repair project, the Water Resources Council's eight-step process for addressing the basic requirements of

Executive Order 11988 (Floodplain Management) was followed. Appendix A includes the Corps' compliance with each step.

1.6 Project Objective: The project objective is to repair the slides and eroded levee to Federal standards.

II. ALTERNATIVES

2.1 Introduction: This section describes the alternatives, compares the alternatives in terms of their environmental impacts and achievement of objectives, and recommends an alternative.

a. Description

(1) No Action. This alternative consists of providing no emergency levee repairs under PL 84-99 authority or funding sources. The damaged levee would not provide the original level of protection (50-year) compromising the integrity of the levee system.

(2) Non-Structural Flood Recovery/Floodplain Management. This alternative consists of non-structural strategies generally involving change in land use offered by other federal and state programs. Such strategies would include: (a) acquisition, relocation, elevation, and flood proofing existing structures; (b) rural land easements and acquisitions; and (c) restoration of wetland. See Appendix B for the local sponsors written request declining the non-structural alternative.

(3) Providing Federal Assistance for Structural Repair. This alternative consists of restoring the levee systems to the pre-event/pre-disaster condition under the authorities of PL 84-99. The repairs would be completed in one construction season. No borrow areas are required for the project.

b. Discussion

(1) The "No Action" alternative is not an acceptable alternative to the sponsors because the sponsors would like the levees to be restored to pre-event conditions, minimizing potential impacts of future events.

(2) The non-structural flood recovery/floodplain management alternative is not acceptable to the sponsors because the present owners desire to continue agricultural use during high water events.

(3) The structural repair alternative restores the levee systems to the pre-event condition and is fully supported and desired by the sponsors. If the repair is not done, additional damage may occur during future flooding events.

2.2 Recommended Alternative: Alternative 3, providing Federal assistance for the structural repair of the levee slides and erosion is the recommended alternative. A team including members of the St. Louis District's Design Branch and Geotechnical Branch were involved with developing the most economical and efficient design for repair. Structural repair will reconstruct the levee to the current federal levee standard for section and grade.

III. AFFECTED ENVIRONMENT

The uncompromised DLDs provide protection to 4,900 total acres (4,050 cropland acres) up to a 50-year flood event. The DLDs cropland acreage is approximately 50 percent soybeans and 50 percent corn.

3.1 Physical Resources: The DLDs are located on the floodplain of the Mississippi River in a rural setting. Because of the fertility of the soil and moisture, the lands are prized for their agricultural productivity. Levees have been constructed to keep out flood waters up to a 50-year level flood and provide a reasonable amount of certainty of yearly crop production. Most of the area within the levee is considered prime farmland. Air quality is considered to be excellent due to the rural location of the project area.

3.2 Biological Resources:

a. Fish and Wildlife:

Riparian zones adjacent to the Mississippi River support bottomland hardwood tree species such as cottonwood, black locust, dogwood, hackberry, silver maple, sycamore, and mulberry. The floodplain habitat and aquatic habitats support a variety of insects, crustaceans, reptiles, amphibians, fish, birds, and mammals. Typical terrestrial species that use this habitat include turkey, white-tailed deer, beaver, raccoon, opossum, wood duck, and many songbirds. Aquatic vertebrates include catfish, minnows, and sunfish. The levees themselves are mowed grass areas that are managed to prevent shrub and tree growth and animals from making burrows. Federally listed species which may occur in Randolph and Union Counties include the Indiana bat, interior least tern, and pallid sturgeon. Small whorled pogonia is present in Randolph County.

b. Federally Threatened and Endangered Species:

In compliance with Section 7(c) of the Endangered Species Act of 1973, as amended, the U.S. Army Corps of Engineers accessed the U.S. Fish and Wildlife Service (USFWS) Region III website on 13 June 2012 to obtain a listing of Federally threatened or endangered species, currently classified or proposed for classification, that may occur in Union and Randolph Counties. These species are shown in Table 2.

Table 2 – List of Federally Endangered and Threatened Species

Randolph County (Accessed: 13 June 2012)	<u>Indiana bat</u> (<i>Myotis sodalis</i>)	Endangered	Caves, mines (hibernacula); small stream corridors with well developed riparian woods; upland forests (foraging)
	<u>Least tern</u> (<i>Sterna antillarum</i>)	Endangered	Bare alluvial and dredged spoil islands
	<u>Pallid sturgeon</u> (<i>Scaphirynchus albus</i>)	Endangered	Large rivers
	<u>Small whorled pogonia</u> (<i>Isotria medeoloides</i>)	Threatened	Dry woodlands

Union County (Accessed 13 June 2012)	<u>Indiana bat</u> (<i>Myotis sodalis</i>)	Endangered	Caves, mines (hibernacula); small stream corridors with well developed riparian woods; upland forests (foraging)
	<u>Least tern</u> (<i>Sterna antillarum</i>)	Endangered	Bare alluvial and dredged spoil islands
	<u>Pallid sturgeon</u> (<i>Scaphirynchus albus</i>)	Endangered	Large rivers

3.3 Socioeconomic Description:

a. Economic: The main occupation in the DLDs is farming and levees are of regional economic importance to maintain the agricultural productivity occurring in the floodplain. The DLDs contain a few residential properties and farm related structures. It is estimated that the levee erosion and slides have reduced the degree of levee protection to a 15-year flood event for the Clear Creek and Kaskaskia DLDs and 25-year for the Preston DLD.

b. Recreation: No developed recreational facilities are located in the proposed repair areas of the DLDs; however, some low-density recreation activities such as sightseeing, hunting, fishing and walking/hiking undoubtedly do occur.

c. Cultural: The project repair sites are composed of recently deposited material and are not expected to include any culturally significant materials. No borrow areas would be required for this project.

IV. ENVIRONMENTAL IMPACTS OF PROPOSED ALTERNATIVES

4.1 No Action Alternative:

a. Physical Resources: If the DLDs levees are not repaired to the Federal standard there would be an increased flood risk and more physical damages would occur within the DLDs such as erosion and sedimentation. Air quality and noise pollution would not be affected by this alternative.

b. Biological Resources: Due to the possibility of more frequent flooding of the DLDs under this alternative, some vegetation would be destroyed and some wildlife would be more frequently displaced. There would also be some beneficial impacts if agriculture use diminished and a more diverse environment developed, especially for aquatic oriented wildlife.

c. Socioeconomic Description:

(1). Economic: The flood protection is reduced under this alternative to the 15-year protection level for two DLDs and 25 year for the Preston DLD. A more frequent flood interval (6.7 percent exceedance) would greatly diminish agriculture with negative regional economic impacts.

(2). Recreation: Recreational activities such as sightseeing, hunting, fishing and hiking/walking may be disrupted more often due to the possibility of more frequent flooding within the DLDs.

(3). Cultural Resources: Although it is unlikely that erosion of the levee would expose any cultural material, any material that was exposed by flooding in the DLDs could potentially be adversely impacted. No cultural material was observed.

d. Cumulative Effects: Cumulative impacts are those “impacts which result from the incremental consequences of an action when added to other past and reasonably foreseeable future actions” (40 CFR 1508.7). It is assumed that the other drainage and levee districts would continue to maintain the integrity of their DLDs as they have in the past; therefore, this alternative would not result in any major negative cumulative impacts to the Illinois River valley regional economy.

4.2 Non-structural Alternative:

a. Non-Structural Flood Recovery/Floodplain Management. This alternative consists of non-structural strategies generally involving a change in land use offered by other federal and state programs. Such strategies would include: (a) acquisition, relocation, elevation, and flood proofing existing structures; (b) rural land easements and acquisitions; and (c) restoration of wetland. The non-structural solution would result in a more natural floodplain ecosystem with more frequent flooding and natural succession of

vegetation. This would result in more natural conditions for wildlife and potentially improved opportunities for certain recreation activities when conditions permit. Agricultural activities of course would be subject to the whims of nature and productivity and profitability may suffer. The DLDs has rejected this alternative. See Appendix B for the local sponsor's written request declining the non-structural alternative.

b. Cumulative Effects: It is assumed that the other drainage and levee districts would continue to maintain the levee system as in the past; therefore, this alternative would not result in any major negative cumulative impacts to the Illinois River valley regional economy. This alternative would likely increase the availability of wetland and aquatic habitat.

4.3 Preferred Alternative: Federal Assistance with Levee Repairs:

a. Physical Resources

(1). Air Quality: Construction activities could cause a slight increase in suspended particulates (i.e., dust). Emissions from construction equipment would increase the carbon monoxide and carbon dioxide levels in the vicinity of the construction site. The expected increases would be very negligible relative to local agricultural activities and cease after construction.

(2). Water Quality: Construction activities would occur on the mowed grass levee berms that are not expected to adversely impact the water quality of the adjacent creeks and streams if standard construction best management practices are in place. Runoff from levee repairs could cause a short-term increase in suspended solids in at the immediate construction site if flooding or heavy rains occurred and erosion controlled measures failed. All disturbed areas would be reseeded following construction to reduce the potential for erosion.

(3). Noise: Construction activities would cause an increase in local noise levels. The expected increase would be short-term and negligible relative to normal agricultural activities.

(4). Prime Farmland: All construction activities would occur on the levee, no agricultural lands will be affected.

b. Biological Resources

(1). Fish and Wildlife: If heavy rain occurs during construction, washing soil into ditches or lake, there would be a temporary increase in turbidity in the immediate area, temporarily displacing fish and other mobile organisms. Following construction; however, aquatic species would be expected to return.

(2). Wetlands/404 Permit Requirements: A nationwide permit No. 33 will be issued for the project.

(3). Federally Threatened or Endangered Species: Federally listed species which may occur in the project area include the Indiana bat, least tern, pallid sturgeon and small whorled pogonia.

There is no designated critical habitat in the project area at this time.

The endangered Indiana bat (*Myotis sodalis*) may occur in Union and Randolph Counties, Illinois. Indiana bats winter in caves or mines, but none of these features are known in the vicinity of project site. Females use trees in the summer months as nursery roosts, and forage for insects in the tree canopy. Trees preferred for maternity roosting in Illinois have included dead individuals with shaggy or loose bark, and diameters at breast height (dbh) greater than 9 inches. Species have included slippery elm, American elm, northern red oak, white oak, post oak, shagbark hickory, bitternut hickory, cottonwood, silver maple, green ash, white ash, and sycamore (Hofmann, 1994). Live shagbark hickory trees with loose bark or cavities are also used. Males have been known to roost in shingle oak, sassafras, and sugar maple (Hofmann, 1994). No trees will be removed for this project and no “bat” trees were observed in the project vicinity. The proposed project would have “no effect” on the Indiana bat.

The Federal endangered pallid sturgeon (*Scaphirynchus albus*) is present in the Mississippi River adjacent to the project locations. Pallid sturgeons require large, turbid, free-flowing riverine habitat with rocky or sandy substrate (Federal Register 1989). Pallid sturgeon are adapted to large rivers with extensive micro-habitat diversity, turbid water, braided channels, irregular flows and flood cycles. Little is known of its micro-habitat preferences; however, it is suspected that sand/gravel bars and the mouths of major tributaries may be utilized for spawning. This species feeds on aquatic invertebrates and small fish. No large river habitat will be impacted by the repairs; therefore, this project will have “no effect” on the pallid sturgeon.

The least tern (*Sterna antillarum*) is listed as endangered and occurs in several Illinois counties along the Mississippi and Ohio Rivers. It nests on bare alluvial or dredge spoil islands and sand/gravel bars in or adjacent to rivers, lakes, gravel pits and power plant cooling ponds. It nests in colonies with other least terns and sometimes with the piping plover. This species forages in shallow water areas along the river and in backwater areas, such as side channels and sloughs. Foraging habitat must be located in close proximity to nesting habitat. No sand bar habitat will be affected by the slide or erosion repairs; therefore, this project will have “no effect” on the least tern.

The small whorled pogonia (*Isotria medeoloides*) is a member of the orchid family. It usually has a single grayish-green stem that grows about 10 inches tall when in flower and about 14 inches when bearing fruit. The plant is named for the whorl of five or six leaves near the top of the stem and beneath the flower. The leaves are grayish-green, somewhat oblong and 1 to 3.5 inches long. The single or paired greenish-yellow flowers are about 0.5 to 1 inch long and appear in May or June. The fruit, an upright ellipsoid capsule, appears later in the year. Although widely distributed, the small whorled pogonia is rare. It is found in 17 eastern states and Ontario, Canada. Populations are typically small with less than 20 plants. It has been extirpated from Missouri, New York, Vermont, and Maryland. This orchid grows in older hardwood stands of beech, birch, maple, oak, and hickory that have an open understory. Sometimes it grows in stands of softwoods such as hemlock. It prefers acidic soils with a thick layer

of dead leaves, often on slopes near small streams (USFWS 2012). No wooded areas will be impacted by the levee repair construction; therefore, the project will have “no effect” on the small whorled pogonia.

c. Socioeconomic Description

(1). Economic Resources: Local agricultural and agri-businesses would benefit from levee repair and subsequent flood protection. The proposed initial levee repairs would not require residential displacement. No impacts to life, health, or safety would result from levee repair. The project benefit to cost ratios are greater than 1.

(2). Recreation Resources: Low-density type recreation activities would continue to be available up to the 50-year flood events.

(3). Cultural Resources: It is very unlikely that adverse impacts to cultural resources would occur. The levees are composed of recently disturbed or recently deposited material. However, in the unlikely event that potentially significant archaeological/historic remains are discovered during construction activities, all earthmoving actions in the immediate vicinity of the remains would be held in abeyance until the potential significance of the remains is determined. The precise nature of such investigations would be developed by the SLD in concert with the State Historic Preservation Officer’s representatives in the Illinois Historic Preservation Agency.

d. Cumulative Impacts

For the purposes of this EA, the environmental baseline for the project area and the region is considered to be maintained drainage and levee districts. Impacts associated with past, present and future construction projects in the area have occurred and have maintained the economic vitality of the agricultural community with limited impacts to the present environment. Due to the limited impacts associated with the project addressed in this EA, it would be reasonable to assume the cumulative impacts for the repair alternative would be negligible.

V. LEGAL DISCLOSURES

5.1 Adverse Effects Which Cannot Be Avoided: Unavoidable temporary impacts include the noise and exhaust generated by heavy equipment during construction and the temporary impacts to mowed grass on the levees and the mowed/disturbed wetland of the levee berm at Kaskaskia Island. No mitigation is planned for this project.

5.2 Short-Term Use Versus Long-Term Productivity: The recommended plan does not represent a short-term use of the environment, but a long-term or permanent solution to the levee’s reduced flood risk management capability. This loss of flood risk management capability could lead to a catastrophic levee failure and the damage to lives, property, and livelihoods of many people. The areas of impact, for the most part, were

disturbed by the original project and the rehabilitation of the project will not affect any previously undisturbed areas.

5.3 Irreversible or Irrecoverable Resource Commitments: Funds will be committed for labor and construction materials.

VI. COORDINATION WITH STATE AND FEDERAL AGENCIES

The proposed repairs will be coordinated with respective State and Federal agencies to include the following:

- U.S. Fish and Wildlife Service, Matt Mangan, Carterville IL
- Illinois Department of Natural Resources, Pat Malone, Springfield, IL;
- U.S. Environmental Protection Agency, Ken Westlake, Chicago, IL
- Federal Emergency Management Agency, Amanda Ratliff, Chicago, IL
- Illinois State Historic Preservation Agency, Anne Haaker, Springfield, IL (see typical letter in Appendix F)

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. The mailing list for this EA is located in Appendix C.

VII. RELATIONSHIP OF RECOMMENDED ALTERNATIVE TO ENVIRONMENTAL REQUIREMENTS

Table 2 - Relationship of Recommended Plan to Environmental Requirements Environmental Act/Executive Order	Compliance
Bald and Golden Eagle Protection Act, 42 USC 4151-4157	FC
Clean Air Act, 42 USC 7401-7542	FC
Clean Water Act, 33 USC 1251-1375	FC
Comprehensive Environmental Response, Compensation, and Liability Act, (HTRW) 42 USC 9601-9675	FC
Endangered Species Act, 16 USC 1531-1543	FC
Farmland Protection Policy Act, 7 (Prime Farmland)USC 4201-4208	FC
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

Table 2 - Relationship of Recommended Plan to Environmental Requirements Environmental Act/Executive Order	Compliance
National Environmental Policy Act, 42 USC 4321-4347	PC
National Historic Preservation Act, 16 USC 470 et seq.	PC
Noise Control Act of 1972, 42 USC 4901-4918	FC
Resource, Conservation, and Rehabilitation Act, (Solid Waste) 42 USC 6901-6987	FC
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)	FC
Floodplain Management (EO 11988 as amended by EO 12148)	FC
Federal Compliance with Pollution Control Standards (EO 12088)	FC
Protection and Enhancement of Environmental Quality (EIS Preparation) (EO 11991)	FC
Protection and Enhancement of the Cultural Environment (Register Nomination) (EO 11593)	FC
Protection of Wetlands (EO 11990 as amended by EO 12608)	FC

FC = Full Compliance, PC = Partial Compliance (on-going, will be accomplished before construction); Source: U.S. Army Corps of Engineers, St. Louis District.

7.1 Environmental Legal Constraints

The Preferred Alternative was subject to compliance review with all applicable environmental regulations and guidelines. The Preferred Alternative was determined to be (or will be) in full compliance with all applicable acts and legislation (Table 2).

According to EO 11988 (Floodplain Management), the St. Louis District, Corps of Engineers has evaluated the levee damages which occurred in the DLDs during the spring flood of 2011. Based on the potential for property damage (roads, crops, and utilities) that currently exists, it is prudent to restore the levee to afford a level of flood protection that existed prior to the flooding event. By reducing the future risk of flood loss, minimizing the impacts on existing vegetation in the floodplain, and minimizing structural development in the floodplain, this proposed project is in full compliance with this Executive Order.

No environmental justice issues exist for any of the alternatives. Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low- Income Populations, 59 Federal Register 7629 (1994), directs federal agencies to incorporate environmental justice in their decision making process. Federal agencies are

directed to identify and address as appropriate, any disproportionately high and adverse environmental effects of their programs, policies, and activities on minority or low-income populations. No minority or low-income populations would be displaced or negatively affected in any way by the alternatives.

The St. Louis District, Corps of Engineers has evaluated the proposed levee repairs for the DLDs. The proposed project involves the repair of seven slides and an eroded slope. Only a temporary impact to a mowed disturbed wetland was identified; therefore, the proposed levee repairs are in full compliance with Executive Order 11990.

7.2 Bald and Golden Eagle Protection Act

Bald eagles (*Haliaeetus leucocephalus*) range over most of North America. They build huge nests in the tops of large trees near rivers, lakes, marshes, or other aquatic areas. The staple food of most bald eagle diets is fish, but they will also feed on waterfowl, rabbits, snakes, turtles, other small animals, and carrion. In winter, eagles that nest in northern areas migrate south and gather in large numbers near open water areas where fish or other prey are plentiful (USFWS 2006).

On August 9, 2007, the bald eagle was removed from the federal list of threatened and endangered species. It remains protected under the Bald and Golden Eagle Protection Act and the Migratory Bird Treaty Act. The Bald and Golden Eagle Protection Act prohibits unregulated take of bald eagles. The Fish and Wildlife Service finalized a rule defining “take” that includes “disturb.” “Disturb means to agitate or bother a bald or golden eagle to a degree that causes, or is likely to cause, based on the best scientific information available, 1) injury to an eagle, 2) a decrease in its productivity, by substantially interfering with normal breeding, feeding, or sheltering behavior, or 3) nest abandonment, by substantially interfering with normal breeding, feeding, or sheltering behavior” (USFWS 2007).

Construction is currently scheduled to begin in September 2012. Bald eagles typically fledge young by August and begin nest building activities in late January. Currently, there are no known bald eagle nesting locations in or adjacent to the project area. Therefore, the proposed project is not likely to disturb bald eagles.

VIII. LIST OF PREPARERS

Mr. Curtis Moore, Civil Engineer	Role: Project Manager
Mr. Tyson Zobrist, Regulatory Specialist	Role: Regulatory Permits
Mr. Jim Barnes, District Archaeologist	Role: Archeological Compliance
Mr. Francis Walton, Biologist	Role: Environmental Assessment

IX. LITERATURE CITED

Hofmann, J. 1994. Letter dated June 30, 1994, from J. Hofmann, biologist, Illinois State Natural History Survey, Champaign, to J. Collins, U.S. Fish and Wildlife Service, Marion, Illinois.

U.S. Fish and Wildlife Service. 2006 Species Profile: Bald Eagle (*Haliaeetus leucocephalus*). Available at <http://www.fws.gov/midwest/endangered/plants/smallwhorledpogoniafs.html> (Accessed December 14, 2006).

U.S. Fish and Wildlife Service. 2007. Protection of Eagles; Definition of “Disturb”. Federal Register 72(107): 31132- 31139.

U.S. Fish and Wildlife Service. 2012 Species Profile: Small Whorled Pogonia (*Isotria medeoloides*). Available at <http://www.fws.gov/midwest/endangered/plants/smallwhorledpogoniafs.html> (Accessed June 13, 2012).

Appendix A

The Water Resources Council's Eight-Step Process for Addressing the Basic Requirements of Executive Order 11988 (Floodplain Management)

- Step 1. Determine if a proposed action is in the base floodplain. **Corps Action:** Yes, the authorized plan is in the base floodplain of the Mississippi River.
- Step 2. Provide for public review. **Corps Action:** The Environmental Assessment (EA) and Draft FONSI will be submitted for a 30-day agency review. The comments will be addressed in an addendum to the EA if necessary.
- Step 3. Identify and evaluate practicable alternatives to locating in the base floodplain. **Corps Action:** Due to the nature of this Project, there were no alternatives located outside of the base floodplain. The project involves correcting insufficiencies in a flood control system that is already in place. Therefore, all alternatives were located within the base floodplain.
- Step 4. Identify the impacts of the proposed action. **Corps Action:** Impacts have been identified in this document.
- Step 5. Minimize threats to life and property and to natural and beneficial floodplain values. Restore and preserve natural and beneficial floodplain values. **Corps Action:** The repair plan directly addresses the potential threats to life and property.
- Step 6. Reevaluate alternatives. **Corps Action:** Alternatives have been evaluated throughout the entire planning process.
- Step 7. Issue findings and a public explanation. **Corps Action:** This document is being distributed to reviewing agencies and interested parties.
- Step 8. Implement the action.

Appendix B – Sponsor Decline of Non-Structural Alternative

**NONSTRUCTURAL ALTERNATIVES TO
REHABILITATION OF FLOOD CONTROL WORKS**

Authority. Under Public Law 84-99, the Chief of Engineers is authorized, when requested by the non-Federal sponsor, to implement nonstructural alternatives (NSA's) to the rehabilitation, repair, or restoration of flood control works damaged by floods or coastal storms.

I, Mitchel McLane (name), Commissioner (title)

representing the Clear Creek Levee & Drainage (local sponsor) have been provided with information indicating that the option of pursuing a Non-Structural Alternative Project has been made available to the public entity that I represent.

The Clear Creek Levee & Drainage (local sponsor) **does not** wish to pursue the option of a Non-Structural Alternative Project.

Michael Rodgers
Corps of Engineers Representative
Providing Information on NSA

1/11/2012
Date Information Provided

Clear Creek Levee & Drainage
Name of Local Sponsor

[Signature]
Signature

Mitchel McLane
Name (Printed)

Commissioner - chairman
Title

1-11-12
Date

**NONSTRUCTURAL ALTERNATIVES TO
REHABILITATION OF FLOOD CONTROL WORKS**

Authority. Under Public Law 84-99, the Chief of Engineers is authorized, when requested by the non-Federal sponsor, to implement nonstructural alternatives (NSA's) to the rehabilitation, repair, or restoration of flood control works damaged by floods or coastal storms.

I, HERBERT A. KLEIN (name), LEVEE COMMISSIONER (title)

representing the KASKASKIA ISLAND DRAINAGE & LEVEE DIST. (local sponsor) have been provided with information indicating that the option of pursuing a Non-Structural Alternative Project has been made available to the public entity that I represent.

The KASKASKIA ISLAND DRAINAGE & LEVEE DIST. (local sponsor) does not wish to pursue the option of a Non-Structural Alternative Project.

Michael Rodgers
Corps of Engineers Representative
Providing Information on NSA

17-Nov-2011
Date Information Provided

KASKASKIA ISLAND DRAINAGE & LEVEE DIST.
HERBERT KLEIN
Name of Local Sponsor

Herbert Klein
Signature

HERBERT KLEIN
Name (Printed)

LEVEE COMMISSIONER
Title

11-18-11
Date

**NONSTRUCTURAL ALTERNATIVES TO
REHABILITATION OF FLOOD CONTROL WORKS**

Authority. Under Public Law 84-99, the Chief of Engineers is authorized, when requested by the non-Federal sponsor, to implement nonstructural alternatives (NSA's) to the rehabilitation, repair, or restoration of flood control works damaged by floods or coastal storms.

I, Kent Treece (name), Commissioner (title)

representing the Preston Levee & Drainage District (local sponsor) have been provided with information indicating that the option of pursuing a Non-Structural Alternative Project has been made available to the public entity that I represent.

The Preston Levee & Drainage District (local sponsor) does not wish to pursue the option of a Non-Structural Alternative Project.

Michael Rodgers
Corps of Engineers Representative
Providing Information on NSA

1-26-2012
Date Information Provided

Preston Levee & Drainage District
Name of Local Sponsor

Kent Treece
Signature

Kent Treece
Name (Printed)

Commissioner
Title

1-26-2012
Date

Appendix C - Mailing List

Honorable Richard J. Durbin
United States Senator
309 Hart Senate Bldg.
Washington, DC 20510

Honorable Jerry Costello
Representative in Congress
2408 Rayburn House Office Building
Washington, D.C. 20515

Honorable Richard J. Durbin
United States Senator
525 South 8th St.
Springfield, IL 62703

Honorable Jerry Costello
Representative in Congress
144 Lincoln Place Court, Suite 4
Belleville, IL 62221

Honorable Mark Kirk
United State Senator
524 Hart Senate Office Building
Washington, D.C. 20510

Senator David Luechtefeld
103B Capitol Building
Springfield, IL 62706

Honorable Mark Kirk
United State Senator
607 East Adams Street, Suite 1520
Springfield, Illinois 62701

Senator David Luechtefeld
700 North Front Street
P.O. Box 517
Okawville, IL 62271

Representative Mike Bost
202-N Stratton Office Building
Springfield, IL 62706

Representative Mike Bost
300 E. Main
Carbondale, IL 62951

Ken Westlake
US EPA, REGION 5
77 West Jackson Blvd.
Chicago, IL 60604-3507

Matt Mangan
US Fish & Wildlife Service
Marion Illinois Sub-Office
8588 Route 148
Marion, Illinois 62959

Representative Jerry F. Costello, II
200-9S Stratton Office Building
Springfield, IL 62706

Representative Jerry F. Costello, II
128 A West Main
Sparta, IL 62286

Tim Pohlman, District Ranger
Shawnee National Forest
Hidden Springs/Mississippi Bluffs
Ranger District
50 Hwy 145 South
Harrisburg, IL 62946

Kameron C. Sam, Deputy District Ranger
Shawnee National Forest
Hidden Springs/Mississippi Bluffs
Ranger District
50 Hwy 145 South
Harrisburg, IL 62946

Pat Malone
Impact Assessment Section
Realty and Planning Division
Illinois Department of Natural Resources
One Natural Resources Way
Springfield, IL 62702-1271

Karen Miller
Impact Assessment Section
Realty and Planning Division
Illinois Department of Natural Resources
One Natural Resources Way
Springfield, IL 62702-1271

Illinois Department of Natural Resources
Office of Water Resources
One Natural Resources Way, 2nd Floor
Springfield, Illinois 62702-1271

Douglas P. Scott, Director
Illinois Environmental Protection Agency
1021 North Grand Avenue East
P.O. Box 19276
Springfield, Illinois 62794-9276

Bruce Yurdin
Illinois Environmental Protection Agency
Bureau of Water: Watershed Management
Section
1021 N. Grand Avenue East
P.O. Box 19276
Springfield, Illinois 62794-9276

Anne E. Haaker
Deputy State Historic Preservation Officer
Preservation Services Division
Illinois Historic Preservation Agency
1 Old State Capitol Plaza
Springfield, Illinois 62701-1507

Terry Savko
Illinois Department of Agriculture
Bureau of Land and Water Resources
P.O. Box 19281
State Fairgrounds
Springfield, IL 62794-9281

Illinois Emergency Management Agency
2200 South Dirksen Parkway
Springfield, Illinois 62703

David Shryock
Illinois Emergency Management Agency
State Regional Office Building
2309 West Main St., Suite 110
Marion, IL 62959-1196

Pat Laramore
1 Taylor Street, Courthouse
Chester, IL 62233

Preston Drainage and Levee District
c/o Mr. Gary Rendleman
PO Box 119
Wolf Lake, IL 62998

The Nature Conservancy
2800 S. Brentwood Blvd.
St. Louis, MO 63144

Robert D. Shepherd
Izaak Walton League of America
16 Juliet Ave
Romeoville, IL 60446

Ted Horn
Sierra Club
Belleville Group
30 S. 87th St.
Belleville, IL 62223

Mr. Mitchel McClane, Commissioner
Clear Creek Drainage & Levee District
PO Box 119
Wolf Lake, IL 62998

Kaskaskia Drainage and Levee District
c/o Mr. Herb Klein
6450 Klein Lane
St. Mary, MO 63673

Kathy Andria
American Bottoms Conservancy
527 Washington Place
East St. Louis, IL 62205

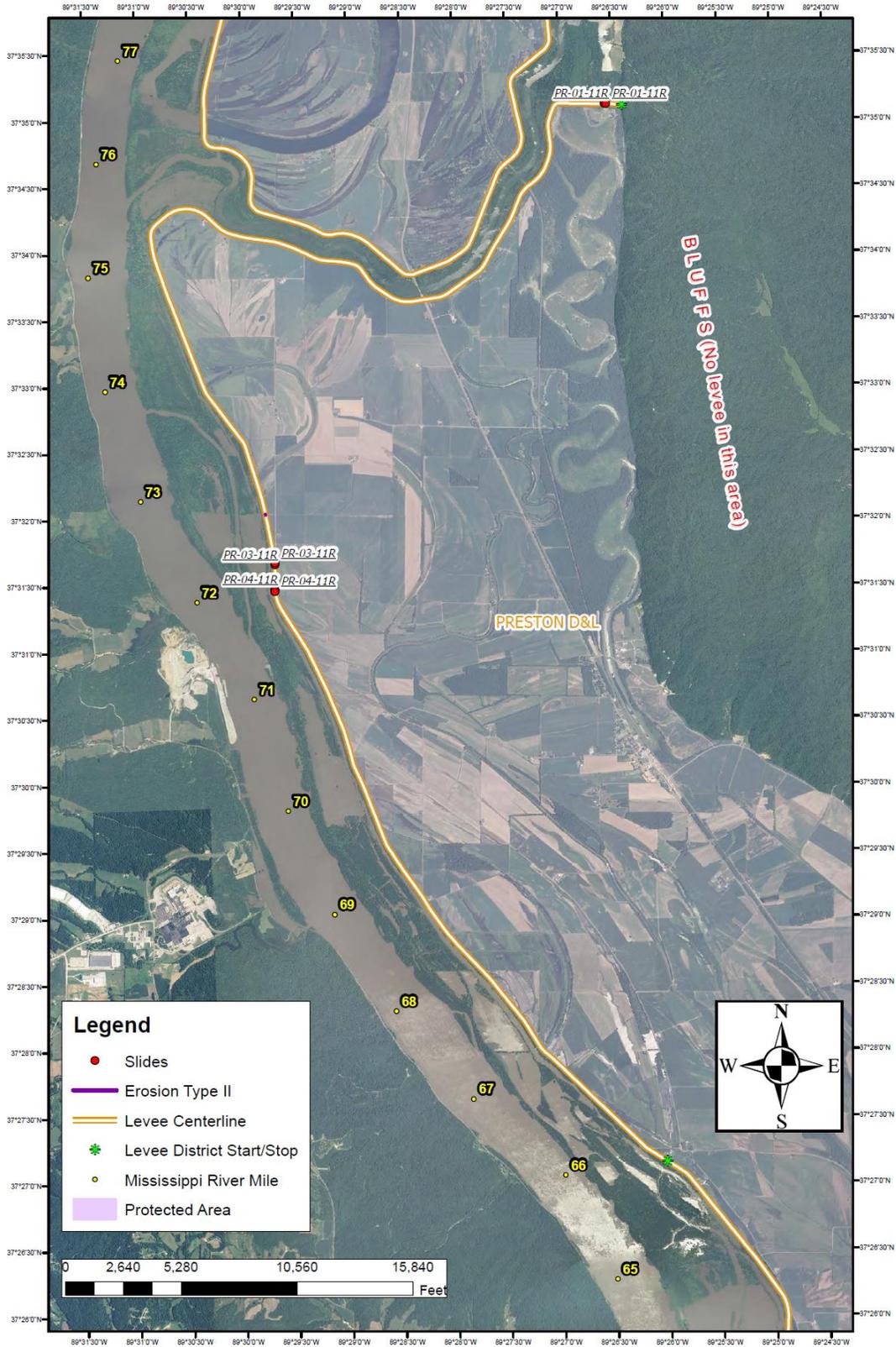
Amanda Ratliff
Federal Emergency Management Agency
536 South Clark St., 6th Floor
Chicago, IL 60605

Bobby Toler
Union County Clerk
309 W Market
Jonesboro IL 62952

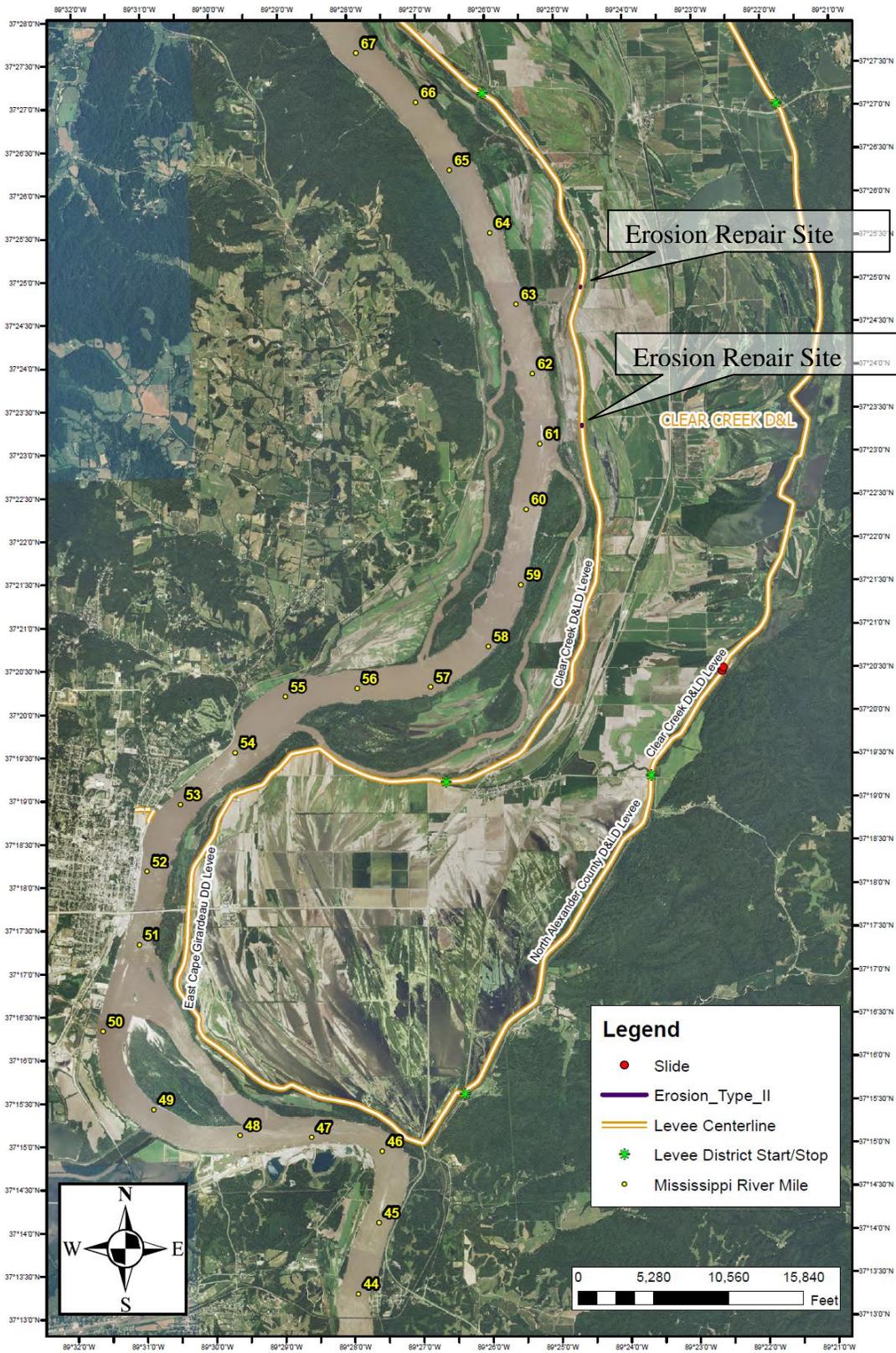
Pat Laramore
1 Taylor Street, Courthouse
Chester, IL 62233

Appendix D

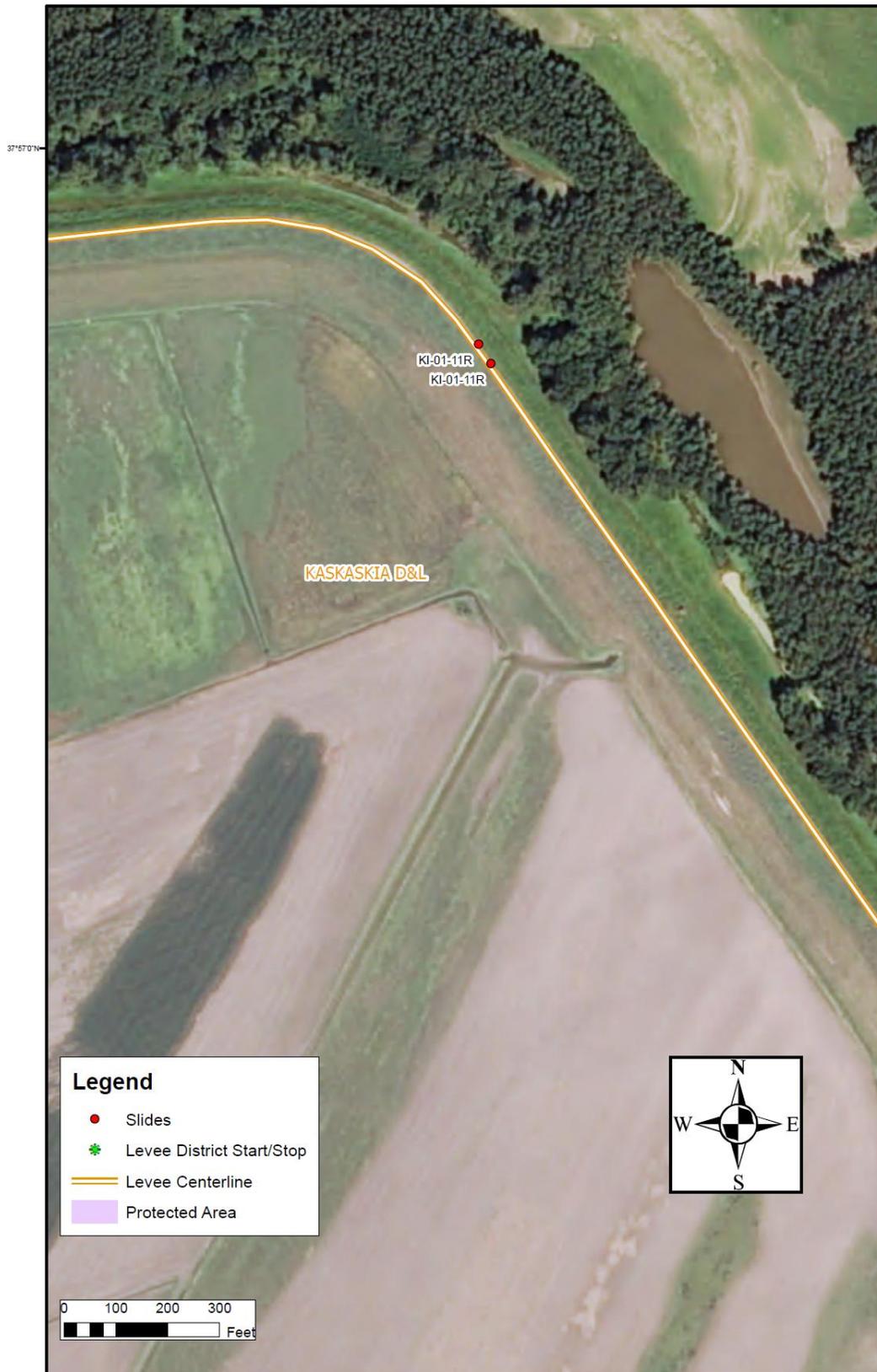
Preston Drainage and Levee District



Clear Creek Drainage and Levee District



Kaskaskia Drainage and Levee District



Kaskaskia Drainage and Levee District



Appendix E

CEMVS-OD-F (Tyson Zobrist)

6 June 2012

MEMORANDUM FOR CEMVS-EC-HD (Mike Rodgers)

REGULATORY PROJECT NUMBER: MVS-2012-359

SUBJECT: Kaskaskia Island Drainage & Levee District, Randolph County, IL, Assessment of Levee Slide Repairs and Temporary Construction Access Areas.

1. Proposed access, construction limits and repair areas for the Kaskaskia Drainage & Levee District were reviewed by the Regulatory Branch. The evaluation areas are identified in the project Design and Specification sheets and noted in the attached June 5, 2012 levee inspection memo. Only one slide repair site was identified as having a proposed jurisdictional wetland impact. The slide identified as KI-01-11 R will have temporary wetland impacts associated with the 1000-foot mixing or lay-down area. No borrow will be utilized for this repair project.
2. The majority of the levee embankment repairs involve degrading levee slopes and crown, then restoring the levee back to original construction contours. Once the levee has been degraded the contractor will level the material in the designated 1000-foot lay-down areas and mix the material with lime. Once the mixing process is completed the contractor will utilize this existing material to reconstruct the levee to its original construction contours. Slide repair site KI-01-11 R will temporarily impact 0.23 acre of mowed, emergent wetland at the mixing site or lay-down area. The impacted wetland will be returned to preconstruction contours. Based on the site visit it has been determined that no tree removal will be completed at any of the slide repair sites. It is anticipated that there will be no significant impact on the aquatic or terrestrial environment since the work will be considered temporary.
3. Section 404 of the Clean Water Act assigns responsibility to the Secretary of the Army to administer a permit program to regulate the excavation or placement of dredged or fill material in waters of the United States. The excavation or placement of any dredged or fill material in waters of the United States below ordinary high water elevation or in wetlands, must be authorized under Section 404 of the Clean Water Act.
4. The Corps of Engineers has determined that this activity will have no affect on endangered species, and is authorized under Section 404 of the Clean Water Act by an existing Department of the Army nationwide permit for *Temporary Construction Access, and Dewatering* as described in the February 21, 2012, Federal Register, Reissuance of Nationwide Permits; Notice (77 FR 10278), Appendix A (B)(33). This verification is valid for two years from the date of this letter. Enclosed is a copy of the nationwide permit and conditions and management practices with which you must comply. Enclosed is a copy of the nationwide authorization and conditions and management practices with which you must comply. The following conditions will also be required:
 - a. This document is the Regulatory Branch approval for the slide repair activities along the Kaskaskia Island levee system. The repairs will include returning the levee system to its original contours and alignment and the utilization of temporary construction access areas.

b. Impacts within the riverside wooded wetland areas including tree clearing shall be avoided to the maximum extent.

c. Maintenance of any drainage ditches, drainage control structures and alteration of side slopes or bottom depths and widths may require a separate permit action.

d. Appropriate erosion and siltation controls must be properly maintained in effective operating condition during construction, and all exposed soil and other fills must be permanently stabilized, (mulched and seeded) at the earliest practical date.

e. All materials disturbing wetlands for the construction of haul roads and temporary construction access shall be removed and restored to pre-project conditions including elevations, soil substrate, and vegetation.

5. It is the PM's responsibility to furnish the contractor with a copy of this permit and conditions.

6. With this approval document and observance of all special conditions, there should be no adverse environmental impacts resulting from the proposed temporary filling of the subject levee repairs sites.

7. In accordance with General Condition number 30 of the Nationwide Permit, a compliance certification (Attachment A of this package) must be completed within 30 days of project completion or the permit issuance may be revoked and considered null and void.

8. The Illinois Environmental Protection Agency Division of Water Pollution Control (IEPA/WPC) has conditionally issued general Section 401 Water Quality Certification for this nationwide permit, subject to the special conditions and three general conditions (see enclosure). These conditions are part of the Corps permit. If you have any questions regarding the water quality certification conditions, you may call Mr. Dan Heacock, IEPA/WPC, at 217-782-3362.

9. This determination is applicable only to the permit program administered by the Corps of Engineers. It does not eliminate the need to obtain other federal, state or local approvals before beginning work.

10. You are reminded that the authorizations are based on submitted plans. Variations from these plans shall constitute a violation of Federal law and may result in the revocation of the authorization. If this nationwide authorization is modified, reissued, or revoked during this period, the provisions described at 33 CFR 330.6(b) will apply.

11. Variations from the project description, methods, work areas and potential use of yet undetermined borrow sites, may not meet the requirements of this authorization document and may require amendment(s) and/or revocation of the authorization document. We want to

emphasize the fact that all borrow sites must be unanimously cleared by the multidisciplinary borrow site review team prior to their authorized use.

12. If you have any questions please feel free to contact me at (314) 331-8578.

Tyson Zobrist, PM
Regulatory Branch

CC:

Curtis Moore, CEMVS-EC-GD
Francis Walton, CEMVP-PD-C
Matt Mangan, U.S. Fish and Wildlife Service

MEMORANDUM

COMPLETED BY: Mr. Tyson Zobrist

DATE: 5 June 2012

RE: Inspection of levee slide repairs for the **Preston Drainage & Levee District**, Union County, IL

The Corps personnel in attendance during the site visits were Curtis Moore, Francis Walton and Tyson Zobrist. Levee repair site investigations were conducted on 31 May 2012. 3 slide repair sites and 1 erosion area were assessed.

Slide Repair Inspections:

PR-01-11 R: There is no wetland impact associated with this slide repair or riverside lay-down location.

PR-03-11 R: There is no wetland impact associated with this slide repair or riverside lay-down location.

PR-04-11 R: There is no wetland impact associated with this slide repair or riverside lay-down location.

Erosion Area: The erosion area consisted of a large scour hole caused by the Big Muddy River's recent overbank flooding. Based on the visit it appears that the river was attempting to try to create new high-flow channel through this location. The scour hole was approximately 35-feet from the toe of the levee and will not likely be repaired under the PL-84-99 program. If the Preston D&LD would like to repair the scour hole they would have to provide our office with a Department of the Army Section 404 of the CWA application prior to completing the work. The repair of the scour hole could possibly be covered under a nationwide permit 3 authorization.

Summary:

After reviewing each slide repair site I have found that there should be no wetland impacts for any of the repair work under PL-84-99. Therefore, no further action will be taken by the Regulatory Branch unless the repair plans or design change.

Tyson Zobrist
Regulatory Branch P.M

MEMORANDUM

COMPLETED BY: Mr. Tyson Zobrist

DATE: 5 June 2012

RE: Inspection of levee slide repairs for the **Kaskaskia Island Drainage & Levee District**, Randolph County, IL

The Corps personnel in attendance during the site visits were Curtis Moore, Francis Walton and Tyson Zobrist. Levee repair site investigations were conducted on 31 May 2012. 3 slide repair sites were assessed.

Slide Repair Inspections:

KI-01-11 R: There will be no impacts do to the levee repair within the slide site. The riverside lay-down site will have a temporary impact of 0.23 acre of mowed emergent wetland.

KI-02-11 L: There is no wetland impact associated with this slide repair or landside lay-down location.

KI-03-11 L: There is no wetland impact associated with this slide repair or landside lay-down location.

Summary:

After reviewing each slide repair site I have found that only one wetland impact will occur for the Kaskaskia Island D&LD slide repairs. Approximately 0.23 acre of mowed emergent wetland will be temporarily impacted at the mixing site or lay-down area. The impacted wetland will be returned to preconstruction contours. The temporary construction site will be authorized by our Regulatory Branch under the conditions of Nationwide Permit 33 for "Temporary Construction, Access, and Dewatering." No trees shall be removed to complete this project.

Tyson Zobrist
Regulatory Branch P.M

MEMORANDUM

COMPLETED BY: Mr. Tyson Zobrist

DATE: 5 June 2012

RE: Inspection of levee slide repairs for the **Clear Creek Drainage & Levee District**,
Union County, IL

The Corps personnel in attendance during the site visits were Curtis Moore, Francis Walton and Tyson Zobrist. The levee repair site investigation was conducted on 31 May 2012. 1 slide repair site was assessed.

Slide Repair Inspections:

CC-01-10 L: There is no wetland impact associated with this slide repair or landside lay-down location.

Summary:

After reviewing the slide repair site I have found that there should be no wetland impacts for any of the repair work under PL-84-99. Therefore, no further action will be taken by the Regulatory Branch unless the repair plans or design change.

Tyson Zobrist
Regulatory Branch P.M

Appendix F

Coordination Letter for Levee Repairs



REPLY TO
ATTENTION OF:

DEPARTMENT OF THE ARMY
ST. LOUIS DISTRICT CORPS OF ENGINEERS
1222 SPRUCE STREET
ST. LOUIS, MISSOURI 63103-2833

July 31, 2012

Engineering and Construction Division
Curation and Archives Analysis Branch

Ms. Anne E. Haaker
Deputy State Historic Preservation Officer
Illinois Historic Preservation Agency
Old State Capitol
Springfield, Illinois 62701

Re: Repairs to Preston levee, Union County, under P.L. 84-99

Dear Ms. Haaker:

The U.S. Army Corps of Engineers (USACE) is presently assisting the Preston Drainage and Levee District, Union County, Illinois, in making repairs to drainage structures that were damaged due to flooding in 2011 (see enclosure). This assistance is provided under Public Law 84-99, the Flood Control and Coastal Emergency Act. We are contacting your office to initiate consultation under Section 106 of the National Historic Preservation Act of 1966, as amended (NHPA).

During the 2011 flood event, soil slides, or slumping, occurred in the three locations indicated by the red circles on the accompanying enclosure. The repair to the levee bank will be accomplished using a lime stabilization treatment. The procedure will consist of removing the affected area of the levee embankment, treatment of the excavated soil with a lime consolidant, and refilling of the excavated section. The excavation and refilling will take place within the disturbed soils of the levee embankment. The treatment of soils will take place within twenty feet of the toe of the levee on the river side. This area, too, is within the zone of disturbance created during the original levee construction. Access to the construction areas will be along preexisting roadways. As the construction activity will take place in areas previously disturbed by levee construction, it is our determination that this undertaking will have no significant effect on historic properties.

-2-

Subject: Repairs to Preston levee, Union County under P.L. 84-99

If you have any questions or comments, please feel free to contact me or Mr. Jim Barnes at (314) 331-8830 or at james.e.barnes@usace.army.mil.

Thank you,



Michael K. Trimble, Ph.D.
Chief, Curation and Archives Analysis
Branch

Enclosure