



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

REPLY TO
ATTENTION OF:

4 June 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 Repair (Public Law 84-99) Valley City Drainage and Levee Districts, Pike County, 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 COB July 5, 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 (CEMVP-PD-C)
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 cursive script, reading "Timothy K. George".

Timothy K. George
Supervisor, Environmental Compliance

**EMERGENCY LEVEE REPAIR (PUBLIC LAW 84-99):
VALLEY CITY DRAINAGE AND LEVEE DISTRICT
PIKE COUNTY, ILLINOIS**

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

**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**

May 2012



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

I. PURPOSE OF AND NEED FOR ACTION

1.1 Introduction: The Valley City Drainage & Levee District (VCDLD) is a Federal Agricultural Flood Control Work that protects 4,900 acres of agricultural lands. The VCDLD is located in Pike County, Illinois and is west of the Illinois River between River Miles 63 to 67. See Figure 1 for the project location.

The levee system primarily protects agricultural lands and provides protection from a 40-year flood with 2 feet of freeboard. The system consists of over 8.2 miles of levee constructed with a 10-foot crown width and 1 on 3 side slopes.

A high water event on the Illinois River during the 2011 summer event damaged the VCDLD. Heavy rains throughout May and June caused flooding along the Illinois 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 sustained in the high water event consisted of one slide and erosion along the levee toe between Stations 390+00 and 410+00 (See Figure 3). An estimated 7,400 cubic yards of material is needed for the repairs.

The VCDLD is active in the USACE Rehabilitation and Inspection Program (RIP). Therefore, the VCDLD is eligible for Flood Control and Coastal Emergency (FCCE) funding authorized by PL 84-99. The total repair cost is approximately \$444,000 with a benefit to cost ratio (bcr) of 1.21 to 1.

1.2 Project Description: The primary purpose of this project is to restore a fully functioning, up-to-date flood protection system within the area administered by the VCDLD. Upon completion of the project, the USACE will provide recertification that the levee meets 40-year flood criteria. Repairs to the levee will include bringing slide and wave wash damaged areas up to the federal standard as shown in Figure 2.

1.3 Need for Project: Action is needed to repair the slide and levee toe damage and, therefore, prevent future flooding of the 4,900 acres (4,050 cropland acres) protected by the levee. If the levee is not repaired, Illinois River waters will enter the levee district at approximately a 5% chance exceedance flood (20-year level of protection). The repair project will provide a 40-year level of protection (2.5% chance exceedance flood, pre-flood design).

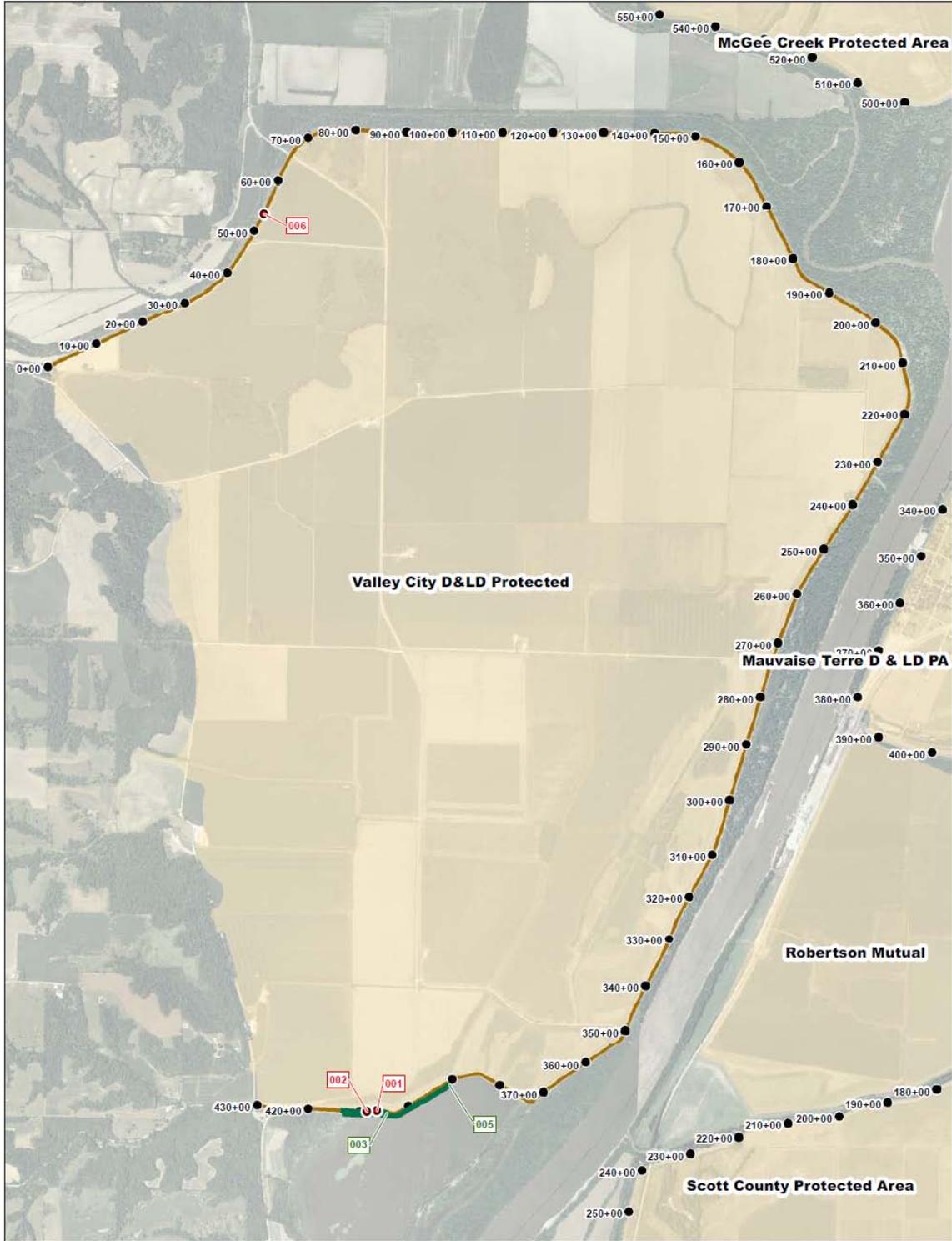


Figure 1 - Valley City Drainage and Levee District and Levee Repair Area

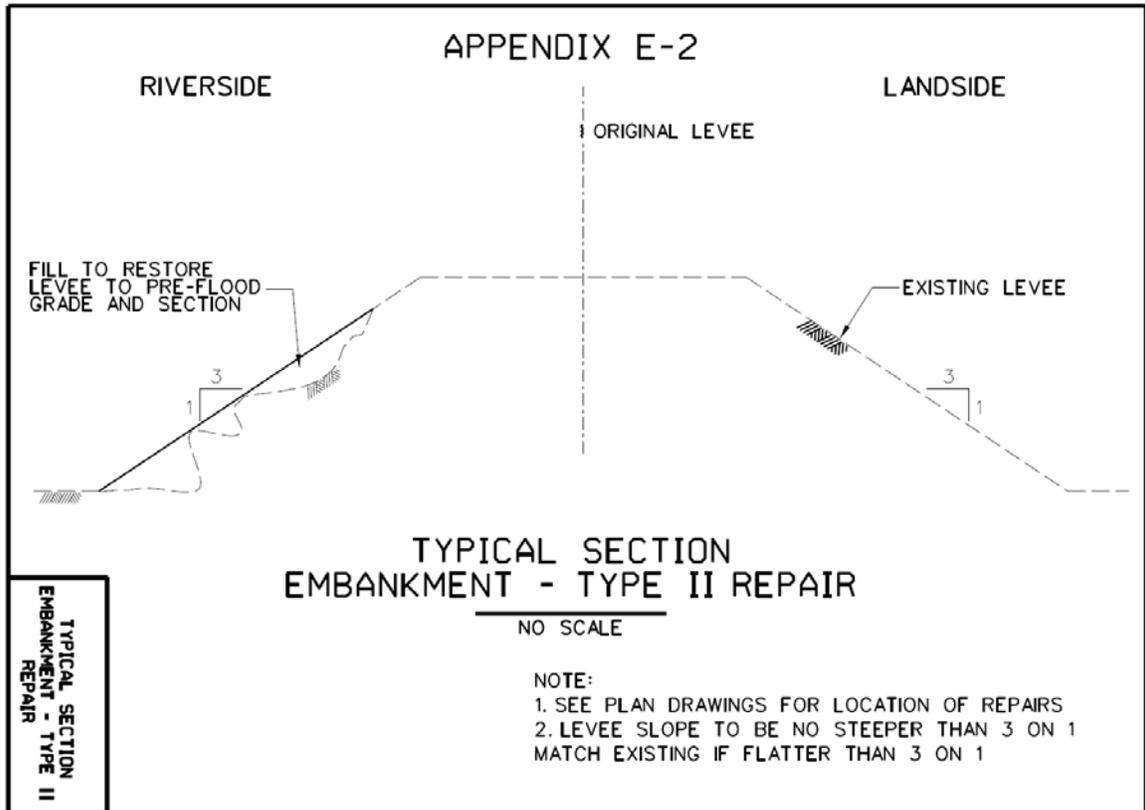
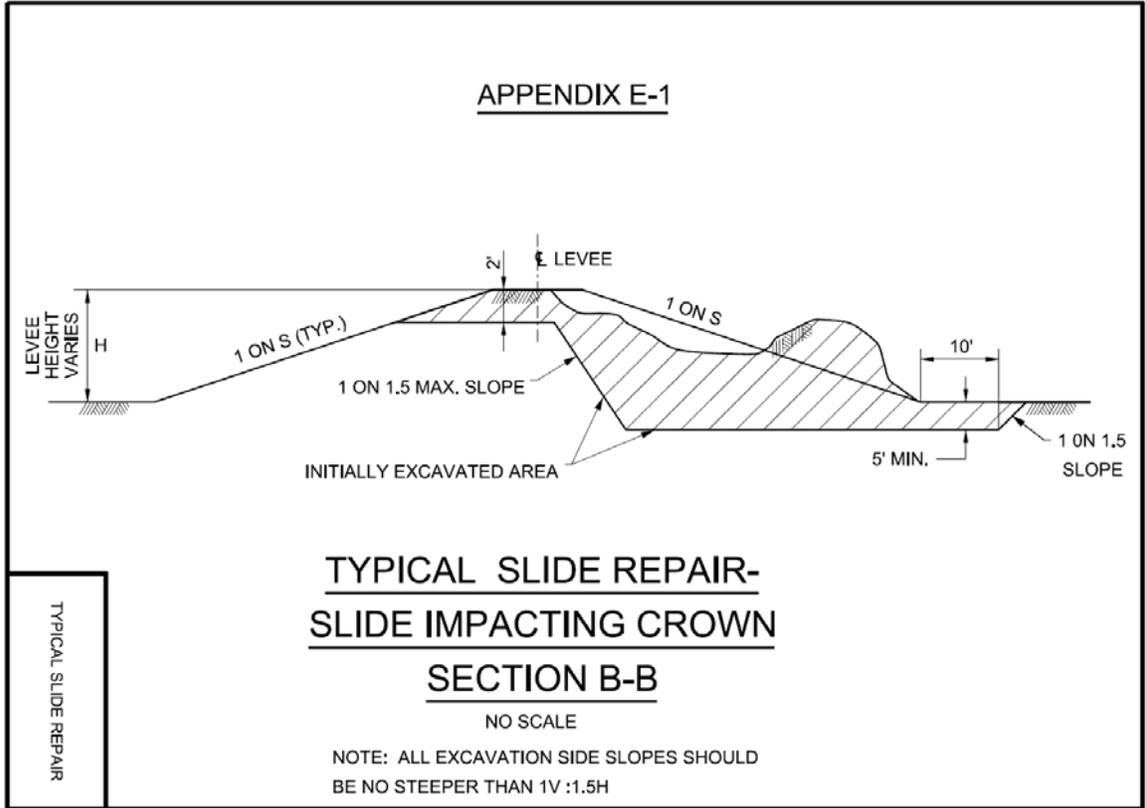


Figure 2 – Typical Slide and Type II Embankment Repair



Figure 3 – Levee and Toe Damage

1.4 Issues and Concerns: McCoe Lake is located adjacent to the repair sites and is designated as an Illinois Natural Areas Inventory site. The construction site is separated from the lake by a gravel road.

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. 41 would cover the construction impacts related to the excavation of the ditch for borrow. No violation of State Water Quality Standards is expected as a result of construction activities associated with this project.

b. Hazardous and Toxic Wastes: A Phase I Environmental Site Assessment was completed and no evidence of RECs was observed and thus the likelihood of encountering HTRW materials in connection with this project is unlikely. A Phase II ESA is 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 slide and the eroded levee toe area between Stations 390+00 and 410+00 approximately 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 (20-year versus 40-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 sponsor's written request declining the non-structural alternative.

(3) Providing Federal Assistance for Structural Repair. This alternative consists of restoring the levee system to the pre-event/pre-disaster condition under the authorities of PL 84-99. The repairs would be completed in one construction season. One borrow area (#4) for the project has been identified and includes the ditch area in front of the existing pump station as shown in Figure 4. Figure 5 is a photo of the ditch area after previous maintenance operations and shows stockpiled material.

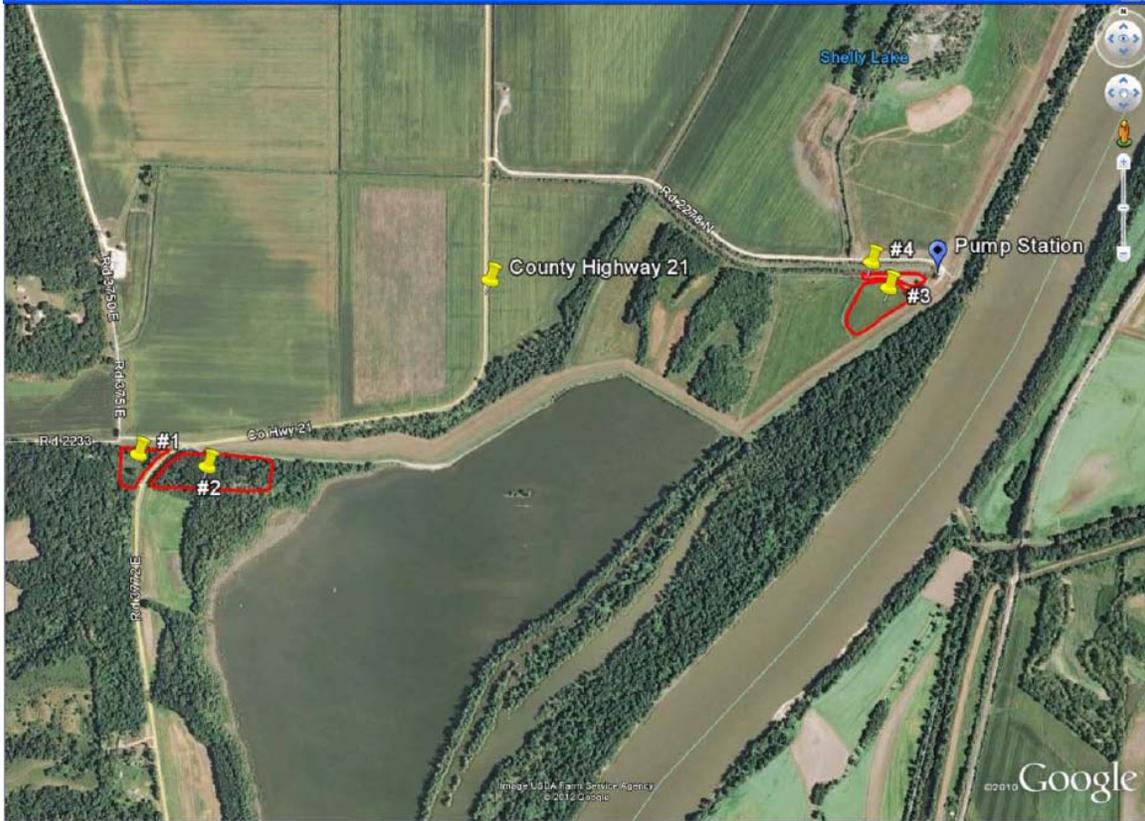


Figure 4 – Borrow Areas



Figure 5 – Excavated material at Pump Station During Previous Maintenance (Borrow Area #4)

b. Discussion

(1) The “No Action” alternative is not an acceptable alternative to the Sponsor because the sponsor would like the levee 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 sponsor because the present owners desire to continue agricultural use during high water events.

(3) The structural repair alternative restores the levee system to the pre-event condition and is fully supported and desired by the sponsor. 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 VCDLD levee slide and toe 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 VCDLD provided protection to 4,900 total acres (4,050 cropland acres) up to a 40-year flood event. The VCDLD cropland acreage is approximately 50 percent soybeans and 50 percent corn.

3.1 Physical Resources: The VCDLD is located on the floodplain of the Illinois 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 40-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 McCoe Lake 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 borrow areas is located in an existing drainage ditch at the existing pump station.

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 Pike County include the Indiana bat, decurrent false aster, Higgins’ eye pearlymussel, spectaclecase mussel and eastern prairie fringed-orchid.

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 viewed the U.S. Fish and Wildlife Service (USFWS) Region III website on 8 May 2012 to obtain a listing of Federally

Pike County	Indiana bat <i>(Myotis sodalis)</i>	Endangered	Caves, mines (hibernacula); small stream corridors with well developed riparian woods; upland forests (foraging)
	Decurrent false aster <i>(Boltonia decurrens)</i>	Threatened	Disturbed alluvial soils
	Eastern prairie fringed orchid <i>(Platanthaera leucophaea)</i>	Threatened	Mesic to wet prairies
	Higgins’ eye pearlymussel <i>(Lampsilis higginsii)</i>	Endangered	Mississippi River; Rock River to Steel Dam
	Spectaclecase mussel <i>(Cumberlandia monodonta)</i>	Endangered	Shallow areas in larger rivers and streams

Table 1 – List of Federally Endangered and Threatened Species

threatened or endangered species, currently classified or proposed for classification, that may occur in the vicinity of the VCDLD levee repair. Five species were indicated as occurring in Pike County as shown in Table 1. A check of the Illinois Department of Natural Resources Ecocat website indicated the presence of the occurrence of a state-listed species in the immediate vicinity of the project site. The Ecocat website indicated there was one record of a State-listed threatened species, the ebonyshell mussel. In addition, McCoe Lake was shown as an Illinois Natural Areas Inventory site as shown in Appendix C.

3.3 Socioeconomic Description:

a. Economic: The main occupation in the VCDLD is farming and levees are of regional economic importance to maintain the agricultural productivity occurring in the floodplain. The VCDLD contains a few residential properties and farm related structures. It is estimated that the levee scour and slide have reduced the degree of levee protection to a 20-year flood event for the VCDLD.

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

c. Cultural: The project repair sites and borrow area are composed of recently deposited material and are not expected to include any culturally significant materials.

IV. ENVIRONMENTAL IMPACTS OF PROPOSED ALTERNATIVES

4.1 No Action Alternative:

a. Physical Resources: If the VCDLD levees were not repaired to the Federal standard there would be an increased flood risk and more physical damages would occur within the VCDLD 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 VCDLD 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 20-year protection level. A more frequent flood interval (5 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 VCDLD.

(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 VCDLD 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:

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 VCDLD has rejected this alternative. See Appendix B for the local sponsor's written request declining the non-structural alternative.

Cumulative Effects: It is assumed that the other drainage and levee districts would continue to maintain the levee system in the past; therefore, this alternative would not result in any major negative cumulative impacts to the Illinois River valley regional economy.

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 and a drainage ditch that are not expected to adversely impact the water quality of the adjacent creek and stream if standard construction best management practices are in place. Runoff from levee repairs could cause a short-term increase in suspended solids in McCoe Lake at the immediate construction site if flooding or heavy rains occurred and the silt fences failed. All disturbed areas would be reseeded following construction to reduce the potential for erosion. Borrow removed from the drainage ditch may result in some sediment being released into the interior drainage system and turbidity, but not in significant quantities due to the presence of the pump station. Although the construction site is not directly located on the lake's edge, construction best management practices to prevent turbidity and siltation of the lake will be followed.

(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 short-term increase in turbidity in the immediate area, temporarily displacing fish and other mobile organisms. Following construction; however, aquatic species would be expected to return. Only limited temporary impacts to fish and wildlife resources are expected.

(2). Wetlands/404 Permit Requirements: A nationwide permit No. 41 (Reshaping Existing Drainage Ditches) will be issued for the project.

(3). Federally Threatened or Endangered Species: Federally listed species which may occur in the VCDLD project area include the Indiana bat, decurrent false aster, Higgins' eye pearl mussel, spectacle mussel and the eastern prairie fringed-orchid.

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

Indiana bat: The endangered Indiana bat may occur in Pike County, Illinois. Indiana bats (*Myotis sodalis*) also winter in caves or mines, but none of these features are known in the vicinity of project site in Pike County. 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.

Decurrent false aster: The threatened decurrent false aster (*Boltonnia decurrens*) is presently known from scattered localities on the floodplains of the Illinois River, and Mississippi River from its confluence with the Missouri River south to Madison County, Illinois. Its natural habitat is the shores of lakes and the banks of streams and it appears to require abundant light. Populations presently grow on stream banks and lake shores, but are more common in disturbed lowland areas where they appear to be dependent on human activity for survival. Habitat for this species does not occur in the impacted areas because they are for the most part located on elevated ground; therefore, the soil is too dry to support germination. This project will have "no effect" on the decurrent false aster.

Eastern prairie fringed-orchid: The threatened eastern prairie fringed-orchid (*Plantantera praeclara*) is presently known to occur in a wide variety of habitats, from mesic prairie to wetlands such as sedge meadows, marsh edges and even bogs. It requires full sun for optimum growth and flowering and a grassy habitat with little or no woody encroachment (USFWS 2004). Historic and current declines are primarily due to habitat loss. Historic declines were mainly due to conversion of natural habitats to cropland and pasture and current declines are mainly due to drainage and development of

wetlands. Other reasons include succession to woody vegetation, competition from non-native species and over-collection (USFWS 2004).

The eastern prairie fringed-orchid requires full sun and a grassy habitat with little or no woody encroachment. Historically, declines in the species resulted from natural habitat conversions to croplands and pastures. Currently, the land use within the project area is predominantly a mowed open field. There are no mesic prairie or wetlands that will be disturbed at the project or borrow sites. Therefore, the proposed project would have “no effect” on the eastern prairie fringed-orchid.

Spectaclecase mussel: The spectaclecase mussel (*Cumberlandia monodonta*) is listed as a federal endangered species and occurs in the Mississippi River north of Monroe County in Illinois, in the Big and Meramec Rivers in Jefferson County, Missouri, and in the Meramec River in St. Louis County, Missouri. This species inhabits patches of sand, cobble, or gravel among boulders in reduced currents. This species is not found in the project area and the project would have “no-effect” on this species.

Higgins’ eye pearlymussel: This mussel is an endangered freshwater mussel with a rounded to slightly elongate smooth-textured shell that is usually yellowish brown with green rays. Since 1980, live Higgins’ eye pearlymussels (*Lampsilis higginsii*) have been found in parts of the following rivers: the upper Mississippi River north of Lock and Dam 19 at Keokuk, Iowa, and in 3 tributaries of the Mississippi River - the St. Croix River between Minnesota and Wisconsin, the Wisconsin River in Wisconsin, and the lower Rock River between Illinois and Iowa. The species' current range is about 50% of its historic distribution which extended as far south as St. Louis, Missouri, and in several additional tributaries of the Mississippi River. The Higgins’ eye is a freshwater mussel of larger rivers where it is usually found in areas with deep water and moderate currents. The animals bury themselves in the sand and gravel river bottoms with just the edge of their partially-opened shells exposed. The river's currents flow over the mussels as they siphon water for microorganisms such as algae and bacteria, which they use as food. The role of Higgins' eye pearlymussels in the natural river ecosystems is as a food source for wildlife like muskrats, otters, and raccoons and as a filter which improves water quality. This species is not found in the project area and the project would have “no-effect” on this species (USFWS 2012).

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 yields a benefit to cost ratio of 1.21 to 1.

(2). Recreation Resources: Low-density type recreation activities would continue to be available up to the 40-year flood events.

(3). Cultural Resources: It is very unlikely that adverse impacts to cultural resources would occur. The levee and borrow area 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 areas.

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 reduction 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; Federal Emergency Management Agency; Illinois State Historic Preservation 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.

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
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	FC

Table 2 - Relationship of Recommended Plan to Environmental Requirements Environmental Act/Executive Order	Compliance
Nomination) (EO 11593)	
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.

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 VCDLD 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 VCDLD. The proposed project involves the repair of one slide and a wave eroded levee toe. One borrow area (an existing ditch at the pump house) would be necessary and would not create additional impacts. Therefore, the proposed levee repairs are in full compliance with Executive Order 11990.

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 recently 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 August 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. David Meyer, 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. 2004. Prairie Fringed Orchid Fact Sheet Internet: www.fws.gov/Midwest/Endangered/Plants/pdf/prairiefringedorchids.pdf

U.S. Fish and Wildlife Service. 2006 Species Profile: Bald Eagle (*Haliaeetus leucocephalus*). Available at <http://ecos.fws.gov/speciesProfile/SpeciesReport.do?spscode=B008> (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. Higgins' Eye Pearlymussel Fact Sheet Internet
http://www.fws.gov/midwest/endangered/clams/higginseye/higgins_fs.html
(Accessed May 8, 2012).

DRAFT FINDING OF NO SIGNIFICANT IMPACT

LEVEE REPAIR (PL 84-99): VALLEY CITY DRAINAGE AND LEVEE DISTRICT PIKE COUNTY, ILLINOIS

1. I have reviewed and evaluated the documents concerning the proposed repair of the levee slide and wave erosion at the Valley City Drainage and Levee District, Pike County, Illinois. These damaged areas reduce the ability of the system to provide the authorized level of flood protection. The St. Louis District proposes work that involves excavation of the slide area to 1 – 2 feet deeper than the failure surface. Borrow material would then be placed and compacted to form the levee. For the wave eroded areas, borrow 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 built to Federal standard levee grades, cross sections, and alignments.

2. I have also evaluated other pertinent data and information on these repairs. As part of this evaluation, I have considered the following project alternatives.

- a. Providing Federal assistance with repairs to the levee system (Recommended Alternative).
- b. No Federal Action ("No Action" Alternative).
- c. The Non-Structural Alternative

3. The nonstructural alternative was eliminated during preliminary planning because it was not desirable to the sponsor, would have large costs, or would result in loss of numerous acres of prime farmland. 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 no repairs are accomplished, the levee system could deteriorate to the point that protection would be jeopardized during the next significant flood event. The Valley City DLD would remain in its damaged state and provide an estimated 20-year level of protection instead of the 40-year level it was designed to provide. This reduced level 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. 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.

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

e. 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.

f. 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.

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

h. 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

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 Illinois 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, Brice Larson (name), Commissioner (title)
representing the Valley City Drainage and Sewer 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 Valley City Drainage and Sewer 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

1/11/2012
Date Information Provided

Valley City Drainage and Sewer District
Name of Local Sponsor

Brice Larson
Signature

Brice Larson
Name (Printed)

Commissioner
Title

1/23/12
Date

Appendix C - Illinois Department of Natural Resources Eco—CAT Results.



Applicant: francis walton
Contact: Francis
Address: USACE
St, Louis, MO 63103

IDNR Project #: 1214148
Date: 05/08/2012

Project: valley city
Address: McCoe lake, valley city

Description: levee repair

Natural Resource Review Results

This project was submitted for information only. It is not a consultation under Part 1075.

The Illinois Natural Heritage Database shows the following protected resources may be in the vicinity of the project location:

Mauvaise Terre Creek Bed INAI Site
Mccoe Lake Bed INAI Site
Ebonyshell (*Fusconaia ebena*)

Location

The applicant is responsible for the accuracy of the location submitted for the project.

County: Pike

Township, Range, Section:

4S, 2W, 8

4S, 2W, 9

4S, 2W, 17



IL Department of Natural Resources Contact

Impact Assessment Section
217-785-5500
Division of Ecosystems & Environment

Disclaimer

The Illinois Natural Heritage Database cannot provide a conclusive statement on the presence, absence, or condition of natural resources in Illinois. This review reflects the information existing in the Database at the time of this inquiry, and should not be regarded as a final statement on the site being considered, nor should it be a substitute for detailed site surveys or field surveys required for environmental assessments. If additional protected resources are encountered during the project's implementation, compliance with applicable statutes and regulations is required.

Appendix D - Mailing List

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

Honorable Aaron Schock
Representative in Congress
328 Cannon House Office Building
Washington, D.C. 20515

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

Honorable Aaron Schock
Representative in Congress
209 West State Street
Jacksonville, IL 62650

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

Senator John M. Sullivan
417 Capitol Building
Springfield, IL 62706

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

Senator John M. Sullivan
926 Broadway
Suite 6
Quincy, IL 62301

Representative Jill Tracy
3701 East Lake Centre Dr.
Suite 3
Quincy, IL 62305

Representative Jill Tracy
209-N Stratton Building
Springfield, IL 62706

Ken Westlake
US EPA, REGION 5
Ralph Metcalfe Federal Building
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Chicago, IL 60604-3590

Pat Malone
Illinois Department of Natural Resources
One Natural Resources Way
Springfield, Illinois 62702

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

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

Kathy Andria
American Bottoms Conservancy
P.O. Box 4242
Fairview Heights, IL 62208

Pike County Clerk
Donnie Apps
Pike County Government Building,
121 E. Washington,
Pittsfield, IL 62363

Karen Miller
Impact Assessment Section
Realty and Planning Division
Illinois Department of Natural Resources
Office of Water Resources
One Natural Resources Way, 2nd Floor

Mr. Brian Lawson, Commissioner
Valley City Drainage District
445th St.
Griggsville, IL 62340

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

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

Illinois Emergency Management Agency
Region Six
Russ Steil, Regional Coordinator
4800 Rodger Street
Springfield, Illinois 62703-5347

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

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

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

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