



US Army Corps
of Engineers
Kansas City District

**KANSAS CITY DISTRICT
CORPS OF ENGINEERS
and the
MOKANE LEVEE DISTRICT**

**Public Law 84-99 of the Flood Control Act of 1944
Levee Rehabilitation – NEPA Review, Environmental
Assessment & Finding of No Significant Impact**

**MOKANE LEVEE DISTRICT,
ITEM NO. 31B, NON-FEDERAL,
EMERGENCY LEVEE REHABILITATION PROJECT**

**Missouri River
Callaway County, Missouri**

May 2008



DEPARTMENT OF THE ARMY
KANSAS CITY DISTRICT, CORPS OF ENGINEERS
700 FEDERAL BUILDING
KANSAS CITY, MISSOURI 64106-2896

Finding of No Significant Impact

Mokane Levee District (Item 31B) Levee Rehabilitation Project Callaway County, Missouri

Project Summary

The U.S. Army Corps of Engineers (USACE), Kansas City District, in cooperation with the project sponsor, Mokane Levee District, proposes to construct the Mokane Levee District Levee Rehabilitation Project, under the authority of Public Law 84-99 of the Flood Control Act of 1944. The proposed repairs are located in Callaway County, Missouri, near the city of Jefferson City, along the left descending bank of the Missouri River between River Mile 121.4 and River Mile 120.7, the left descending bank of an unnamed upland branch, the left descending bank of Muddy Creek, and the right descending bank of Auxvasse River. The proposed project would involve repair of severe toe slope erosion with a landward levee setback.

Alternatives

Three alternatives were considered: (1) In-place repairs with slight levee setback; (2) Landward levee setback (**RECOMMENDED PLAN**); and (3) No action.

Alternative 1- To repair damage area by grading the existing Auxvasse River bank line and remaining riverward levee slope to an approximate 1-foot vertical on 2.5-foot horizontal slope. A 3-foot layer of quarry-run-stone protection would be required on graded slope for protection from erosion. During grading operations the levee embankment would be re-established by "shifting" levee alignment slightly landward.

Alternative 2- Recommended Plan- The recommended plan is to repair damage with approximately 700-linear-feet of landward setback, with the maximum landward setback of approximately 75-feet from the original levee alignment.

No Action Alternative- Under the No-Action alternative, the USACE would not repair the damage to the levee caused by the May 2007 flood event.

Summary of Environmental Impacts

The flood risk management level achieved by the recommended plan would be the same as the original pre-flood condition. The recommended plan would not result in any impacts to federally-listed threatened or endangered species or their habitat. The recommended plan would not result in adverse impacts to historical properties and would have no adverse impacts to

wetlands. The long-term, minor adverse effects associated with the proposed project are associated with the loss of 0.1 acre of agricultural cropland and two acres of early successional growth woodland. The short-term, minor impacts to water quality and fish/wildlife resources are associated with noise and potential increased turbidity during project construction. These minor adverse effects would be greatly offset by restoring the flood risk management capability and its associated social and economic benefits of the existing levee system.

Mitigation Measures

The recommended plan would not result in adverse impacts to mitigable resources as defined in the USACE Planning regulations or under Section 404 of the Clean Water Act. Fill activities would not involve placement in or removal of fill from wetlands or waters of the U.S. A previously used borrow site would be utilized to obtain fill for project repairs. The acquisition of fill from this borrow area would remove approximately two acres of early successional woodland growth (willow and cottonwood tree saplings) and herbaceous understory. However, the USACE has determined in coordination with MDC and the USFWS that natural plant succession should provide adequate re-vegetation of non mast producing trees. Therefore, no mitigation measures are warranted or proposed.

Public Availability

Prior to a decision on whether to prepare an Environmental Impact Statement, USACE circulated a Notice of Availability (Notice) of the Environmental Assessment (EA) and Draft Finding of No Significant Impact (FONSI), dated May 27, 2008, with a thirty-day comment period ending on June 27, 2008 to the public and resource agencies. The Notice was e-mailed to individuals/agencies/businesses listed on the USACE Regulatory e-mail mailing list. The Notice informed these individuals that the EA and Draft FONSI were available on the USACE webpage or that they could request a hard copy of the EA and Draft FONSI in order to provide comment.

One comment was received from the U.S. Fish and Wildlife Service (USFWS) by letter dated June 16, 2008. The USFWS stated that the proposed activity is not likely to adversely affect federally listed species or designated critical habitat (Appendix II).

Levee rehabilitation projects completed by the Corps under authority of Public Law 84-99 generally do not require the preparation of an Environmental Impact Statement. These projects typically result in long-term social and economic benefits and the adverse environmental effects are typically minor/short-term construction related. Minor, short-term impacts associated with these projects are typically well outweighed by the overall long-term social and economic benefits of these projects. As described above, the recommended plan is consistent with this assessment of typical levee rehabilitation projects completed by the Corps under authority of Public Law 84-99 of the Flood Control Act of 1944.

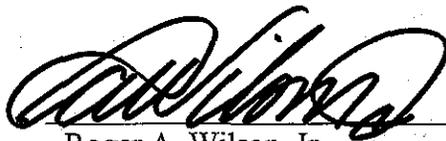
Conclusion

After evaluating the anticipated environmental, economic, and social effects of the proposed activity, it is my determination that construction of the proposed Mokane Levee District Levee Rehabilitation Project does not constitute a major Federal action that would significantly affect

the quality of the human environment; therefore, preparation of an Environmental Impact Statement is not required.

Date:

17 July 08



Roger A. Wilson, Jr.
Colonel, Corps of Engineers
District Commander



DEPARTMENT OF THE ARMY
KANSAS CITY DISTRICT, CORPS OF ENGINEERS
700 FEDERAL BUILDING
KANSAS CITY, MISSOURI 64106-2896

EXECUTIVE SUMMARY

The U.S. Army Corps of Engineers (USACE), Kansas City District, in cooperation with the project sponsor, Mokane Levee District, proposes to construct the Mokane Levee District Levee Rehabilitation Project, under the authority of Public Law 84-99 of the Flood Control Act of 1944. The proposed repairs are located in Callaway County, Missouri, near the city of Jefferson City, along the left bank of the Missouri River between River Mile 121.4 and River Mile 120.7, the left bank of an unnamed upland branch, the left bank of Muddy Creek, and the right descending bank of Auxvasse River. The proposed project would involve repair of severe toe slope erosion with a landward levee setback.

Approximately 80% of the borrow material would be obtained by degrading the remaining existing levee segments riverward of the proposed levee setback. The remaining borrow would be obtained from a previously utilized two-acre borrow area located riverward of the levee (Attach G-1, Appendix I). The borrow area contains early successional growth of willow and cottonwood tree saplings and various herbaceous species (native and non-native). The project area disturbance involves approximately five acres or less (including the borrow area).

The flood risk management level achieved by the recommended plan would be the same as the original pre-flood condition. The recommended plan would not result in any impacts to federally-listed threatened or endangered species or their habitat. The recommended plan would not result in adverse impacts to historical properties and would have no adverse impacts to wetlands. The long-term, minor adverse effects associated with the proposed project are associated with the loss of 0.1 acre of agricultural cropland. The short-term, minor impacts to water quality and fish/wildlife resources are associated with noise and potential increased turbidity during project construction. These minor adverse effects would be greatly offset by restoring the flood risk management capability and its associated social and economic benefits of the existing levee system.

Prior to a decision on whether to prepare an Environmental Impact Statement, CENWK circulated a Notice of Availability (Notice) of the Environmental Assessment (EA) and Draft Finding of No Significant Impact (FONSI), dated May 27, 2008, with a thirty-day comment period ending on June 27, 2008 to the public and resource agencies. The Notice was e-mailed to individuals/agencies/businesses listed on CENWK-Regulatory Branch's e-mail mailing list. The Notice informed these individuals that the EA and Draft FONSI were available on the CENWK webpage or that they could request the EA and Draft FONSI in writing, in order to provide comment.

Additional information regarding this project may be obtained from Ms. Lekesha Reynolds, Environmental Resources Specialist, PM-PR, Kansas City District - U.S. Army Corps of Engineers, by writing the above address, or by telephone at 816-389-3160.

**NEPA REVIEW
ENVIRONMENTAL ASSESSMENT
&
FINDING OF NO SIGNIFICANT IMPACT**

**PUBLIC LAW 84-99
MOKANE LEVEE DISTRICT
LEVEE REHABILITATION PROJECT
CALLAWAY COUNTY, MISSOURI**

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ENVIRONMENTAL ASSESSMENT
&
FINDING OF NO SIGNIFICANT IMPACT**

**PUBLIC LAW 84-99
MOKANE LEVEE DISTRICT
LEVEE REHABILITATION PROJECT
CALLAWAY COUNTY, MISSOURI**

Section 1: INTRODUCTION

This Environmental Assessment provides information that was developed during the National Environmental Policy Act (NEPA) public interest review of the proposed Public Law 84-99 Mokane Levee District Levee Rehabilitation Project.

Section 2: AUTHORITY

The Kansas City District – U.S. Army Corps of Engineers (USACE), in cooperation with the project sponsor, the Mokane Levee District, propose to construct the Mokane Levee District Levee Rehabilitation Project under the authority of Public Law 84-99 of the Flood Control Act of 1944.

Section 3: PROJECT LOCATION

The Mokane Levee District levee consists of approximately 18,553 linear feet of earthen flood control works (FCW) and is located in Callaway County, near Jefferson City, Missouri, along the left bank of the Missouri River between river mile 121.4 and 120.7, the left bank of Muddy Creek, and the right bank of Auxvasse River (Appendix I, Attachment B-1).

Section 4: GENERAL DESCRIPTION

The FCW protects approximately 960 acres of agricultural lands (960 acres in cropland). The protected facilities include, a machine shed, an irrigation system, approximately two miles of asphalt surfaced State Highway Route 94 and approximately three miles of unimproved farm to market roads, approximately two miles of fiber optic lines and approximately two miles of overhead power lines and approximately two miles of the Katy trail.

Section 5: PROJECT DAMAGES

The declared flood event on 6 May 2007 caused damages to the Mokane Levee District FCW. These damages consist of a reach of severe riverside erosion, which has resulted in complete loss of foreshore/high bank area, with erosion extending into levee toe slope at approximate levee station 176+50 to 182+00 (Appendix I, Attachment D-2).

Section 6: PURPOSE AND NEED FOR ACTION

The project is needed to rehabilitate the damaged levees and restore the associated social and economic benefits. The Mokane Levee District received damages to sections of their levee during the 6 May 2007 declared flood event. Prior to the May 2007 event, the levee provided an approximately 10-year level of flood risk management. In its current damaged state, the levee is estimated to provide an approximately five-year level of protection. The existing condition exposes all public and private infrastructure and agricultural croplands to a high level of risk from future flooding. Failure to restore the flood risk management capability of the levee system would keep area residents livelihood and social well-being in turmoil and subject to the continuous threat of flooding until a level of flood protection is restored. Failure to reconstruct the levee could adversely affect the tax base of the county and municipal government. In addition, loss of jobs and potential losses in agricultural production on lands previously protected by the levee would also be incurred.

Section 7: ALTERNATIVES

Three alternatives were considered: (1) In-place repairs with a slight levee setback; (2) Landward levee setback (**RECOMMENDED PLAN**); and (3) No Action.

Alternative 1- (In-place repairs) This alternative would consist of grading the existing Auxvasse River bank line and remaining riverward levee slope to an approximate 1-foot vertical on 2.5-foot horizontal slope. A three foot layer of quarry-run-stone protection would be required on graded slope for erosion protection. During grading operations the levee embankment would be re-established by shifting the levee alignment slightly landward.

Alternative2- Recommended Plan- The recommended plan is to repair the riverside eroded slope with a 700-linear-foot landward setback. The maximum landward setback would be approximately 75 feet from the original levee alignment.

Borrow Area: Approximately 80% of the borrow material would be obtained by degrading the remaining existing levee segments riverward of the proposed levee setback. The remaining borrow would be obtained from a previously utilized two-acre borrow area located riverward of the levee (Appendix I, Borrow map). It was determined by USACE field biologist, that the proposed borrow site is not a wetland. The borrow area contains early successional growth of willow and cottonwood tree saplings and various herbaceous species (native and non-native). The project area disturbance involves approximately five acres or less (including the borrow area).

“No Action” Alternative- The “No Action” Alternative would involve no construction and the levee would remain in its damaged condition. The No Action alternative would continue to expose public and private infrastructure and agricultural croplands to a high risk level of future flooding.

Section 8: NATIONAL ENVIRONMENTAL POLICY ACT REVIEW

As part of the NEPA review for the proposed project, USACE circulated a Notice of Availability (Notice) of the Environmental Assessment (EA) and Draft Finding of No Significant Impact (FONSI), dated May 27, 2008, with a thirty-day comment period ending on June 27, 2008 to the public and resource agencies (Appendix II). The Notice was e-mailed to individuals/agencies/businesses listed on the USACE-Regulatory e-mail mailing list. The Notice informed these individuals that the EA and Draft FONSI were available on the USACE webpage or that they could request the EA and Draft FONSI in writing, in order to provide comment. The following comments were received and evaluated from coordination of the Notice:

One comment was received from the U.S. Fish and Wildlife Service (USFWS) by letter dated June 16, 2008. The USFWS stated that the proposed activity is not likely to adversely affect federally listed species or designated critical habitat (Appendix II).

Section 9: AFFECTED ENVIRONMENT:

The project area consists primarily of agricultural lands, and is located on the Missouri River flood plain between river miles 121.4 and 120.7. In addition, riparian woodlands are interspersed along the Missouri and Auxvasse Rivers and Muddy Creek. The Katy Trail is located immediately north of the levee system. No residential, commercial or industrial property is located within the project area.

The primary resources of concern identified during the evaluation included: water quality, fish and wildlife, threatened and endangered species, riparian woodlands, wetlands, agriculture, archeological and historical resources, flood control, and economics. Projects impacts to other resources were determined to be no effect.

Section 10: ENVIRONMENTAL CONSEQUENCES:

Water quality

The recommended plan could result in potential minor, short-term impacts to water quality from potential site runoff and increased turbidity. However, potential water quality impacts would be avoided and/or minimized to the greatest extent possible by the implementation of Best Management Practices and measures required under the National Pollutant Discharge Elimination System (NPDES) permit. Best management practices would minimize the introduction of fuel, petroleum products, or other deleterious material from entering the waterway. Such measures could include the use of erosion control fences; storing equipment, solid waste, and petroleum products above the ordinary high water mark and away from areas prone to runoff; and requiring that all equipment be clean and free of leaks. To prevent stockpiled fill from reaching water sources by wind or runoff, stockpiled fill would be covered, stabilized or mulched, and erosion control measures would be used as required. A NPDES permit has been obtained for construction of the project and all appropriate measures will be taken to minimize erosion and storm water discharges during and after construction.

Alternative 1 (In place repairs)—Under this plan, minor, temporary, potential impacts to water quality similar to those describe above are anticipated to occur. As with the Recommended Plan, these impacts would be avoided and/or minimized to the greatest extent possible by the implementation of Best Management Practices and measures required under the NPDES permit.

Under the “No Action” Alternative, a high water event could result in adverse impacts to water quality from increased levels of nutrient loading and wastes, including runoff of pollutants from industrial sources, petroleum products, and non-point sources of human and animal wastes.

Fish and Wildlife

The recommended plan could result in minor, short-term impacts to fish and wildlife resources. The impacts to wildlife resources would be related to noise and visual disturbance during the construction activity. The impacts to fishery resources would be related to potential site runoff and increased turbidity; however, the potential for site runoff would be minimized through the use of erosion control measures.

Alternative 1 (In place repairs) – Repairs resulting from implementation of this alternative plan would result in similar impacts as described above.

The “No Action” Alternative would have minimal effects on fish and wildlife resources. These impacts would arise from flooding within the now unprotected area. Aquatic life species may benefit as more frequent flooding could occur in the now unprotected areas. Terrestrial organisms could be temporarily displaced or have their habitat degraded by flooding.

Threatened and Endangered Species

The recommended plan would have no adverse effects on any federally-listed threatened or endangered species or their habitat. Pallid sturgeon (*Scaphirhynchus albus*) are found primarily in the Missouri River and Mississippi River. No work is proposed within the Missouri River. Indiana bats (*Myotis sodalis*) roost in trees that tend to be greater than 9 inches dbh during the spring and summer, and hibernate in caves during the fall and winter. No Indiana bat habitat would be impacted by the proposed levee repair. No impacts to any state listed threatened or endangered species or their habitat were identified.

Alternative 1 (In place repairs)— Under this plan, no adverse impacts are anticipated to occur to any federally listed or state listed threatened or endangered species or their habitat for the same reasons as described above.

The “No Action” alternative would have no adverse effects on any federally-listed threatened or endangered species or their habitat. No impacts to any state listed threatened or endangered species or their habitat were identified.

Riparian Woodlands

Under the recommended plan, an two-acre woodland area of early successional growth containing cottonwoods and willow tree saplings and herbaceous understory would be removed during borrow operations. However, the USACE has determined in coordination with MDC and the USFWS that natural plant succession should provide adequate re-vegetation of non mast producing trees.

Alternative 1 (In place repairs) – Repairs resulting from implementation of this alternative plan would result in similar impacts as those described above as fill would be required and obtained from the levee and the riverward borrow area.

The “No Action” Alternative could result in increases to the floodplain and to floodplain vegetation if levees are not repaired and lands are abandoned from farming due to the high risk of flooding. Overtime, successional vegetative growth could result in increases of floodplain forest.

Wetlands

The recommended plan would have no impacts on wetlands. Fill activities would not involve placement in or removal of fill from wetlands or waters of the U.S. However, the levee setback would provide increased aquatic habitat riverward of the levee.

Alternative 1 (In place repairs) – This alternative would have no impacts on wetlands. However, because the scour hole would be filled, no opportunity would exist for the scour hole to develop into wetland habitat.

The “No Action” Alternative could result in benefits to wetlands located behind the breached levees as these areas would be subject to a new level of future flooding.

Agricultural Resources

Under the recommended plan, approximately 0.1 acre of farmland will be taken out of production to allow space for the landward levee setback. The 0.1 acre of farmland would be converted to a grassed-levee slope.

Alternative 1 (In place repairs) – Repairs resulting from implementation of this alternative plan would have no impact on agricultural activity or loss of agricultural lands as the levees would be repaired on the existing levee alignment.

The “No Action” Alternative would adversely impact agricultural activity by exposing approximately 960 acres of agricultural lands (960 acres of croplands) to increased flooding. This loss of agricultural production would have related impacts such as lost income, lower tax base, and decreased land value.

Archeological and Historical Resources

The recommended plan would have no impact to sites listed on or eligible for inclusion on the National Register of Historic Places (NRHP). A background check of the NRHP and site location maps identified no previously recorded sites within or near the proposed project areas. In a letter to State Historic Preservation Officer (SHPO), the Corps recommended that the project would have no effect on historic properties and that the project should be allowed to proceed. SHPO concurred with this recommendation on December 27, 2007 (Appendix II). The project will be coordinated with appropriate federally recognized Native American tribes (Tribes). If in the unlikely event that archeological material is discovered during project construction, work in the area of discovery will cease, the discovery would be investigated by a qualified archeologist, and the find would be coordinated with SHPO and the Tribes.

Alternatives 1 (In place repairs) – Repairs resulting from implementation of this alternative would result in no effects to archaeological or historical resources.

The “No Action” Alternative would result in no effects to archaeological or historical resources.

Floodplain

The recommended plan would restore the levee to its near original alignment and pre-flood grade and cross section, no increase in floodwater surface elevations would occur. The recommended plan would not directly or indirectly support more development in the floodplain or encourage additional occupancy and/or modifications of the base floodplain. Therefore, the Corps has determined that the recommended plan complies with the intent of Executive Order 11988.

Alternative 1 (In place repairs) – Repairs resulting from implementation of this alternative plan would result in similar conditions as described above for the recommended plan.

The “No Action” Alternative would continue to expose all public and private infrastructure and agricultural croplands previously protected to a high level risk of future flooding.

Economics

The recommended plan would repair the eroded levee. Public and private infrastructure protected by the levee prior to the flood damage would continue to be protected against a 10-year flood event. Economic conditions are unlikely to change from those of pre-damage levee conditions with the repair of this levee system.

Alternative 1 (In place repairs) – Repairs resulting from implementation of this alternative plan would result in similar conditions as described above for the recommended plan, except Alternative 1 would result in a lower benefit to cost ratio.

The “No Action” Alternative has a zero benefit to cost ratio and would continue to expose all public and private infrastructure and agricultural croplands previously protected by the levee to a high level risk of future flooding. People’s livelihood and social well-being would remain in

turmoil, subject to the continuous threat of flooding until the level of flood protection is restored. Failure to reconstruct the levee could adversely affect the tax base of the counties and municipal governments and special districts, such as school districts. In addition, loss of jobs and potential losses in agricultural production on lands protected by the levee would also be incurred.

Section 11: CUMULATIVE IMPACTS

The combined incremental effects of human activity are referred to as cumulative impacts (40CFR 1508.7). While these incremental effects may be insignificant on their own, accumulated over time and from various sources, they can result in serious degradation to the environment. The cumulative impact analysis must consider past, present, and reasonably foreseeable actions in the study area. The analysis also must include consideration of actions outside of the Corps, to include other State and Federal agencies. As required by NEPA, the Corps has prepared the following assessment of cumulative impacts related to the alternatives being considered in this EA.

Historically, the Missouri River and its floodplain has been altered by bank stabilization, dams on the river and its tributaries, roads/bridges, agricultural and urban levees, channelization, farming, water withdrawal for human and agricultural use, urbanization and other human uses. These activities have substantially altered the terrestrial and aquatic ecosystem within the Missouri River watershed.

The USACE, which administers Section 10 of the Rivers and Harbors Act of 1899 and Section 404 of the Clean Water Act, has issued and will continue to evaluate permits authorizing the placement of fill material in the Waters of the United States and/or work on, in, over or under a navigable water of the United States including the Missouri River and its tributaries.

These levee repair projects typically result in minor impacts to the aquatic ecosystem. The Corps, under the authority of the Public Law 84-99 Levee Rehabilitation and Inspection Program, has and will continue to provide rehabilitation assistance to Federal and non-Federal levee sponsors along the Missouri River which participate in the Public Law 84-99 Program. These projects typically result in minor short term construction related impacts to fish and wildlife and the habitats upon which they depend. Resources typically affected by this type of project generally include, but are not limited to, wetlands, flood plain values, water quality, and fish and wildlife habitat. It should be noted that these projects do not result in an addition to flood heights or reduced flood plain area but are merely a form of maintenance to that which had previously existed.

Of the reasonably foreseeable projects and associated impacts that would be expected to occur, further urbanization of the floodplain will probably have the greatest impact on these resources in the future. The possibility of wetland conversion and the clearing of riparian habitat is ever present, and these activities also tend to impact these resources. Construction of additional agricultural levees may occur provided land becomes available for this purpose; however, the trend seems to be moving in the opposite direction and towards urban development. The era of major reservoir construction has likely past, thus impacts from these projects likely will not occur.

The long-term, minor adverse effects associated with the proposed project are associated with the loss of 0.1 acre of agricultural cropland. The short-term, minor impacts to water quality and fish/wildlife resources are associated with noise and potential increased turbidity during project construction. These minor adverse effects would be greatly offset by restoring the flood risk management capability and its associated social and economic benefits of the existing levee system. The PL84-99 Program is designed to merely bring the damaged levees back to pre-existing conditions (i.e., the status quo). Thus, no significant cumulative impacts associated with the proposed rehabilitation of the existing levee system have been identified.

Section 12: MITIGATION MEASURES

The recommended plan would not result in adverse impacts to mitigable resources as defined in the USACE Planning regulations or under Section 404 of the Clean Water Act. Fill activities would not involve placement in or removal of fill from wetlands or waters of the U.S. The acquisition of fill from this borrow area would remove approximately two acres of early successional woodland growth (willow and cottonwood tree saplings) and herbaceous understory. However, the USACE has determined in coordination with MDC and the USFWS that natural plant succession should provide adequate re-vegetation of non mast producing trees. Therefore, no mitigation measures are warranted or proposed.

Section 13: COMPLIANCE WITH ENVIRONMENTAL QUALITY STATUTES

Compliance with Designated Environmental Quality Statutes that have not been specifically addressed earlier in this report is covered in Table 1. Additional information is listed for the most pertinent statutes following the table.

Table 1
Compliance of Preferred Alternative with Environmental Protection
Statutes and Other Environmental Requirements

Federal Polices	Compliance
Archeological Resources Protection Act, 16 U.S.C. 470, et seq.	Full Compliance
Clean Air Act, as amended, 42 U.S. C. 7401-7671g, et seq.	Full Compliance
Clean Water Act (Federal Water Pollution Control Act), 33 U.S.C. 1251, et seq.	Full Compliance
Coastal Zone Management Act, 16 U.S.C. 1451, et seq.	Not Applicable
Endangered Species Act, 16 U.S.C. 1531, et seq.	Full Compliance
Estuary Protection Act, 16 U.S.C. 1221, et seq.	Not Applicable
Federal Water Project Recreation Act, 16 U.S.C. 4601-12, et seq.	Full Compliance
Fish and Wildlife Coordination Act, 16 U.S.C. 661, et seq.	Full Compliance

Land and Water Conservation Fund Act, 16 U.S.C. 4601-4, et seq.	Not Applicable
Marine Protection Research and Sanctuary Act, 33 U.S.C. 1401, et seq.	Not Applicable
National Environmental Policy Act, 42 U.S.C. 4321, et seq.	Full Compliance
National Historic Preservation Act of 1966, as amended, 16 U.S.C. 470a, et seq.	Full Compliance
Rivers and Harbors Act, 33 U.S.C. 403, et seq.	Full Compliance
Watershed Protection and Flood Prevention Act, 16 U.S.C. 1001, et seq.	Full Compliance
Wild and Scenic River Act, 16 U.S.C. 1271, et seq.	Not Applicable
Farmland Protection Policy Act, 7 U.S.C. 4201, et. seq.	Full Compliance
Protection & Enhancement of the Cultural Environment (Executive Order 11593)	Full Compliance
Floodplain Management (Executive Order 11988)	Full Compliance
Protection of Wetlands (Executive Order 11990)	Full Compliance
Environmental Justice (Executive Order 12898)	Full Compliance

NOTES:

- a. Full compliance. Having met all requirements of the statute for the current stage of planning (either preauthorization or postauthorization).
- b. Partial compliance. Not having met some of the requirements that normally are met in the current stage of planning.
- c. Noncompliance. Violation of a requirement of the statute.
- d. Not applicable. No requirements for the statute required; compliance for the current stage of planning.

Clean Water Act, Section 404 and 401

The recommended plan does not involve placement of fill material in a Water of the United States and therefore, Clean Water Act, Section 401 Water Quality Certification and Section 404(b)(1) are not required.

Clean Water Act, Section 402

A Section 402, construction stormwater NPDES permit that covers this project is located in Appendix II.

Endangered Species Act, Section 7

The USACE has made a determination that no impacts to any federally listed threatened or endangered species or their habitat would occur with the project action. Coordination of ESA would be completed upon review of this EA and concurrence of this determination with the USFWS.

National Historic Preservation Act

No sites listed on or eligible for listing on the National Register of Historic Places are located within or near the proposed project area. Coordination with the Missouri State Historic Preservation Office (SHPO) was made and the SHPO concurred on December 27, 2007 that no historic properties will be affected (Appendix II).

Section 14: CONCLUSION & RECOMMENDATION

The flood risk management level achieved by the recommended plan would be the same as the original pre-flood condition. The recommended plan would not result in any impacts to federally-listed threatened or endangered species or their habitat. The recommended plan would not result in adverse impacts to historical properties and would have no adverse impacts to wetlands. The long-term, minor adverse effects associated with the proposed project are associated with the loss of 0.1 acre of agricultural cropland and two acres of early successional growth woodland. The short-term, minor impacts to water quality and fish/wildlife resources are associated with noise and potential increased turbidity during project construction. These minor adverse effects would be greatly offset by restoring the flood risk management capability and its associated social and economic benefits of the existing levee system.

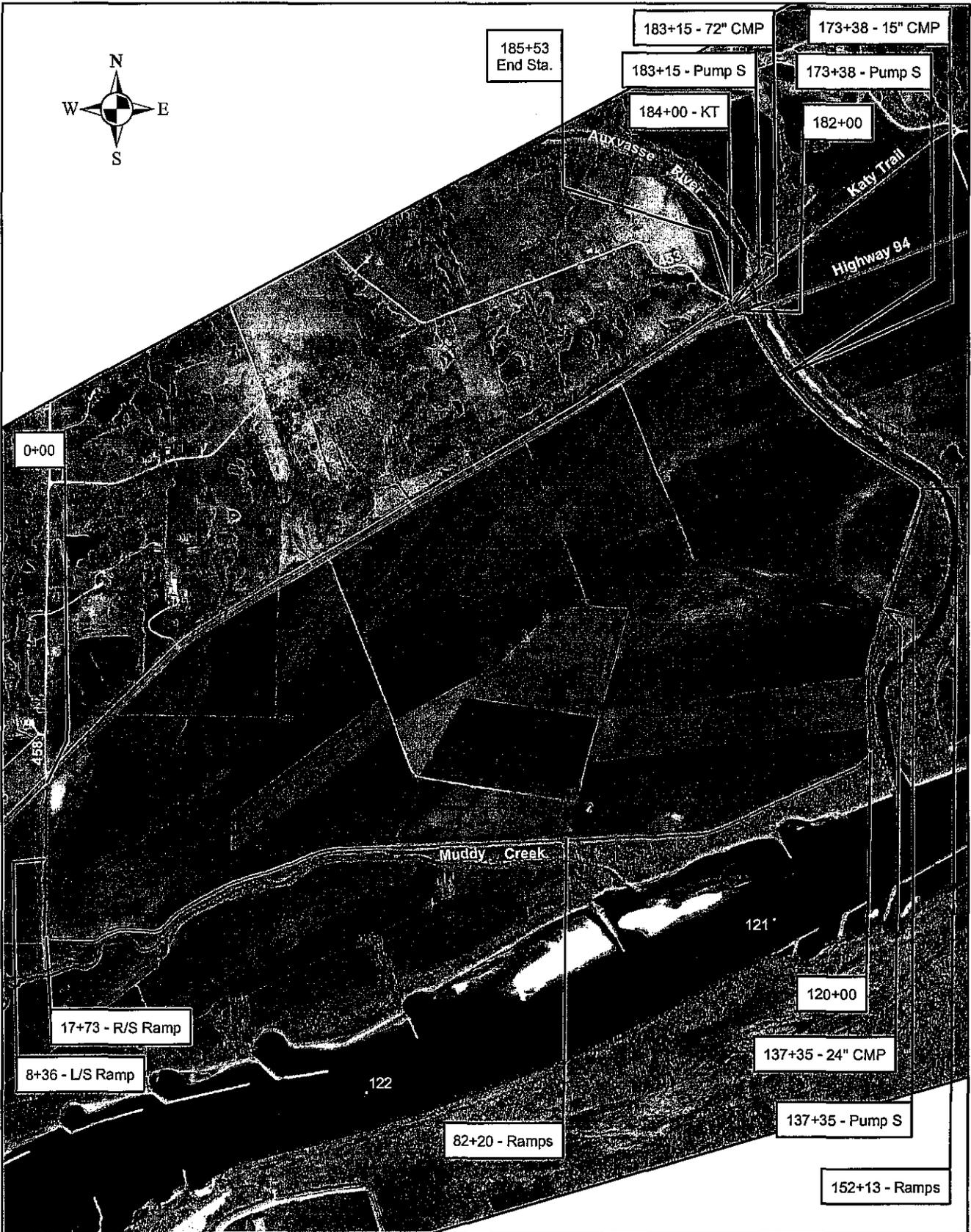
Based on coordination with the resource agencies and input gained through a public interest review, as documented in this Environmental Assessment, the USACE has made a determination that this project would have no significant impacts on the human environment including natural and cultural resources and Federally-listed threatened and endangered species; therefore, a Finding of No Significant Impact (FONSI) has been prepared. This NEPA decision document will be forwarded to the District Engineer with a recommendation for approval following the conclusion of the public review period.

Section 15: PREPARERS

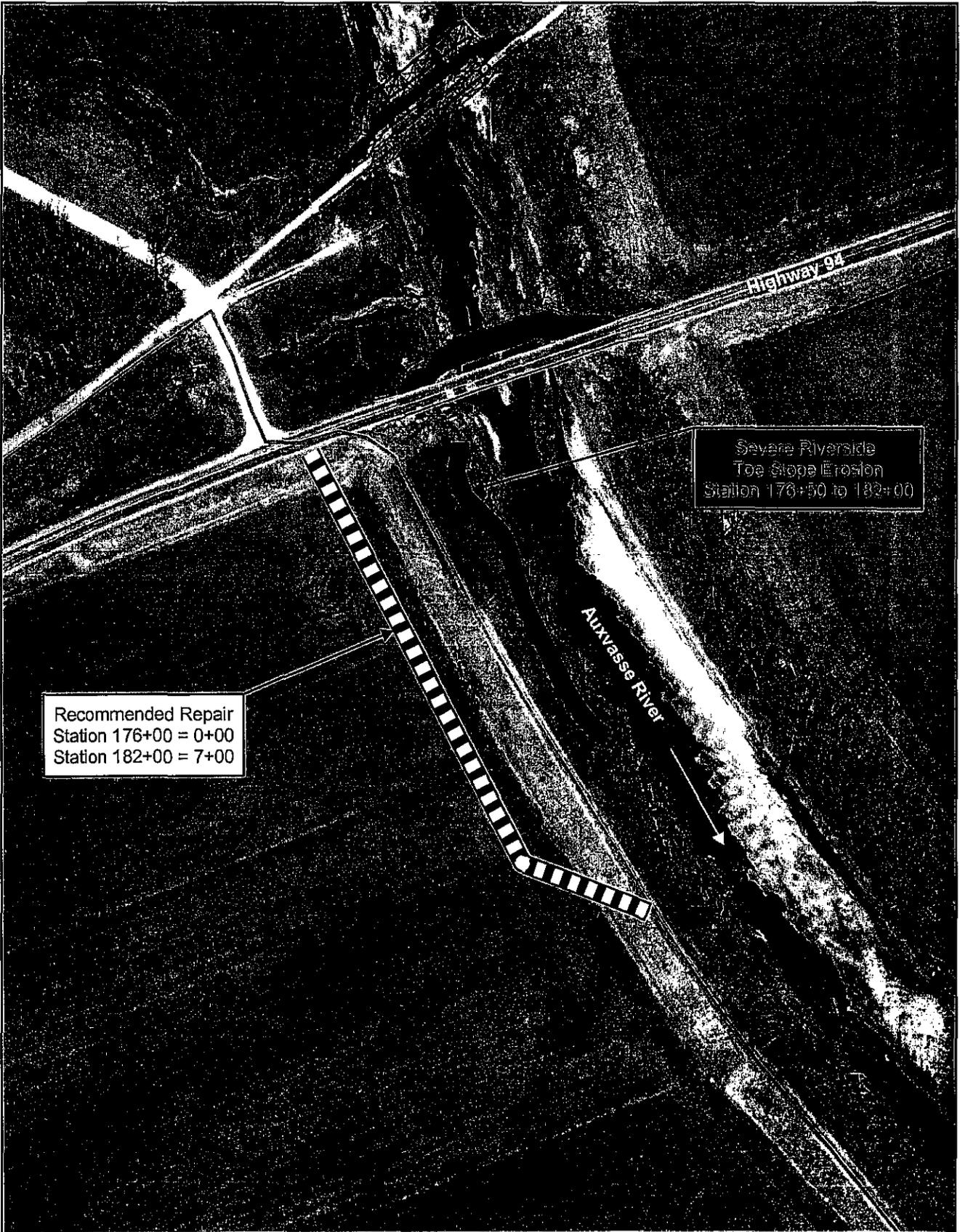
This EA and the associated FONSI were prepared by Ms. Lekesha Reynolds (Environmental Resource Specialist), with relevant sections prepared by Mr. Timothy Meade (Cultural Resources). The address of the preparers is: U.S. Army Corps of Engineers, Kansas City, District; PM-PR, Room 843, 601 E. 12th St, Kansas City, MO 64106.

APPENDIX I – PROJECT MAPS

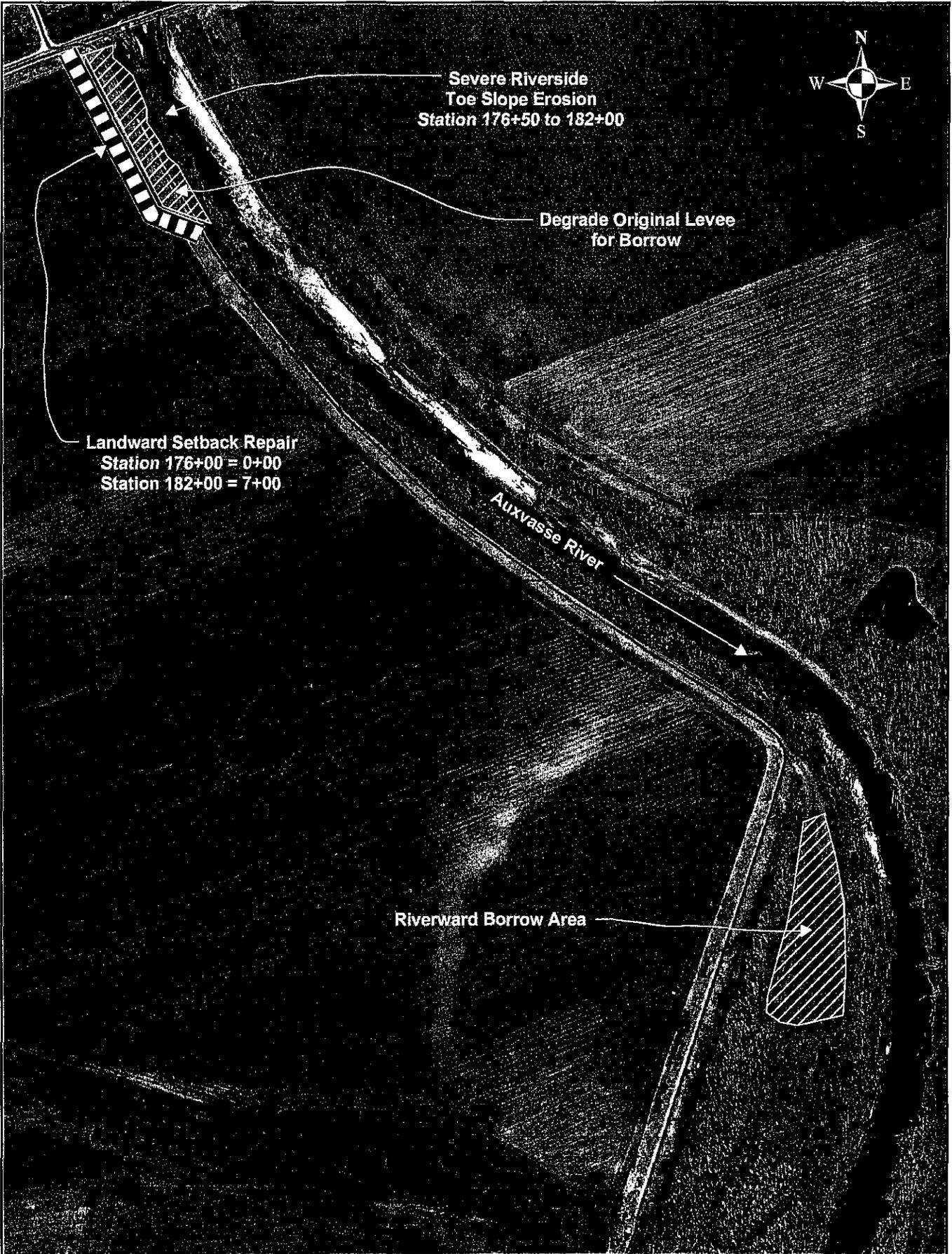
Mokane Levee District (Item 31B)
P.L. 84-99 Levee Rehabilitation Project
Callaway County, Missouri
May 2008



**Item 31B
Mokane Levee District**



Item 31B
Mokane Levee District



Item 31B
Mokane Levee District

Borrow Map

APPENDIX II – NEPA REVIEW

*Mokane Levee District (Item 31B)
P.L. 84-99 Levee Rehabilitation Project
Callaway County, Missouri
May 2008*



DEPARTMENT OF THE ARMY
KANSAS CITY DISTRICT, CORPS OF ENGINEERS
700 FEDERAL BUILDING
KANSAS CITY, MISSOURI 64106-2896

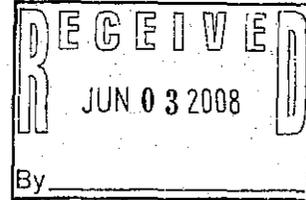
REPLY TO

ATTENTION OF:

May 28, 2008

Planning, Programs and Project Management Division
Planning Branch

Charlie Scott
US Fish and Wildlife Service
101 Park DeVille Drive, Suite A
Columbia, Missouri 65203



In accordance with provisions of the National Environmental Policy Act of 1969 (NEPA), enclosed for your review and comment is the Environmental Assessment (EA) and Draft Finding of No Significant Impacts (FONSI) for the Mokane Levee District, Item No. 31 B, Non-Federal, Emergency Levee Rehabilitation Project.

The Kansas City District - U.S. Army Corps of Engineers (CEC), in cooperation with the project sponsor, the Mokane Levee District, propose to construct the Mokane Levee District, Item No. 31 B, Non-Federal, Emergency Levee Rehabilitation Project under the authority of Public Law 84-99, of the Flood Control Act of 1944. Under this authority, the Corps of Engineers can provide assistance to public agencies in responding to flood emergencies.

The Mokane Levee District is located in Callaway County, Missouri, east of the town of Mokane, along the left descending bank (LDB) of the Missouri River Mile 121.4 to River Mile 120.7, the LDB of an unnamed tributary, the LDB of the Muddy Creek, and the right descending bank of Auxvasse River.

The proposed project would involve repair in-place of a severe toe erosion and a landward levee setback. Repairs are required as a result of the flood event declared on May 6, 2007.

Written comments on the EA and Draft FONSI should be mailed to Mr. Neil Bass, Environmental Resources Specialist, Corps of Engineers, Kansas City District, PM-PR, 601 E. 12th Street, Kansas City, Missouri 64106-3667, no later than 30 days from the date of this letter.

Sincerely,

"The U.S. Fish and Wildlife Service has reviewed the David R. Hibbs subject proposal and accompanying information and Acting Chief, Environmental Resource Section determined that the activity as described is not likely to adversely affect federally listed species or designated critical habitat. Consequently, this concludes section 7 consultation. Please contact the Missouri Department of Conservation (573/522-4115) for state listed species of concern"

Field Supervisor

6/16/08
Date

STATE OF MISSOURI
DEPARTMENT OF NATURAL RESOURCES

Matt Blunt, Governor • Doyle Childers, Director

www.dnr.mo.gov

January 2, 2008

Timothy Meade
Corps of Engineers, Kansas City District
700 Federal Building
Kansas City, Missouri 64106-2896

Re: Emergency Repairs, Mokane Levee (COE) Callaway County, Missouri

Dear Mr. Meade:

Thank you for submitting information on the above referenced project for our review pursuant to Section 106 of the National Historic Preservation Act (P.L. 89-665, as amended) and the Advisory Council on Historic Preservation's regulation 36 CFR Part 800, which requires identification and evaluation of cultural resources.

We have reviewed the information provided concerning emergency repairs to the Mokane Levee. Based on this review we concur with your recommendation that that the project is in areas of low potential as recently accreted land, or areas of previous disturbance and that there will be **no historic properties affected**, with the condition that construction and borrowing activities will avoid previously recorded site 23CY203. We have no objection to the initiation of project activities.

Please be advised that, should project plans change, information documenting the revisions should be submitted to this office for further review. In the event that cultural materials are encountered during project activities, all construction should be halted, and this office notified as soon as possible in order to determine the appropriate course of action.

If you have any questions, please write Judith Deel at State Historic Preservation Office, P.O. Box 176, Jefferson City, Missouri 65102 or call 573/751-7862. Please be sure to include the SHPO Log Number **(002-CY-08)** on all future correspondence or inquiries relating to this project.

Sincerely,

STATE HISTORIC PRESERVATION OFFICE



Mark A. Miles
Director and Deputy
State Historic Preservation Officer

MAM:jd



DEPARTMENT OF THE ARMY
KANSAS CITY DISTRICT, CORPS OF ENGINEERS
700 FEDERAL BUILDING
KANSAS CITY, MISSOURI 64106-2896

December 27, 2007

REPLY TO
ATTENTION OF

Environmental Resources Section
Planning Branch

Mr. Mark Miles
Director and Deputy State Historic Preservation Officer
State Historic Preservation Office
Department of Natural Resources
P. O. Box 176
Jefferson City, Missouri 65102-0176

Dear Mr. Miles:

The U.S. Army Corps of Engineers, Kansas City District (Corps) is planning emergency repairs to the Mokane Levee in Callaway County. The repairs are required because of damage to the existing structure during flooding events in May of 2007. The Corps has completed its review of the project in compliance with the terms as described in the 1993 Programmatic Agreement with your office regarding the implementation of emergency repair and restoration of damaged flood control projects as authorized by Public Law 84-99. Attached for your review and comment are project maps showing locations of the proposed work.

The levee damage consists of a reach of severe riverside erosion, which has resulted in complete loss of foreshore/high bank area, with erosion extending into the levee toe slope at approximate levee station 176+50 to 182+00. The recommended repair action consists of repairs to severe toe slope erosion (sta. 176+50 to 182+00), with an approximate 700-linear-foot-long landward levee setback. Two borrow areas, one riverward of the levee and the other consisting of the current degraded levee, have been selected for the repairs (see attached maps). The borrow from the new area would be obtained from the upper 24 inches and the borrow from the degraded levee will be taken entirely from the former fill and will not disturb underlying soils. The new levee will involve placing the borrow material directly on the surface of the agricultural fields. No preparatory ground work would be required for the levee construction.

A review of the National Register of Historic Places (NRHP) found no properties listed on the NRHP within or near any of the five proposed repair areas. A check of Missouri River topographic site location maps in the Corps District office (Mokane East, Mo. 7.5 minute topographic quads) found one site, 23CY203, a prehistoric campsite of Late Woodland age recorded in 1985, that may extend into the proposed project area. Archeological materials recorded include "8 fireplaces" and pottery. The site is reported to be situated adjacent to right bank of Auxvasse Creek near the 'new bridge'. Site 23CY203 may have been recorded prior to construction of the Highway 94 that borders the site to the north, as the accompanying site location map shows only the M-K-T Railroad line that parallels the existing road (see attached site form). Based on the map the southern portion of the site may extend south into the area of the proposed realignment. The site form provides neither site eligibility recommendations nor recommendations for further work. It is noted that the site has been disturbed by earth removal. In

In addition, to the construction of Highway 94, the railroad, and past agricultural activity, the site in the project area was likely borrowed for construction of the current levee.

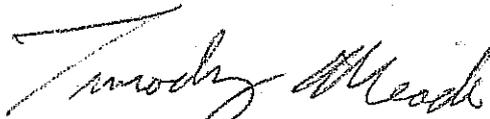
Two shipwrecks, the Howard (1838) and the Nodaway (ND), are recorded south of the proposed project area. No work is planned in the vicinity of the mapped wrecks. All of the proposed construction areas have been previously disturbed by levee construction including borrowing activity and agricultural related disturbances.

Given that the project in the area of the site 23CY203 will not involve using soil from the degraded levee and will not involve subsurface disturbances and because the surface has been heavily disturbed by many years of plowing and likely borrowing activity, it is unlikely that the proposed project would adversely impact intact portions of the site that may be eligible for inclusion on the National Register of Historic Places (NRHP). The remainder of the project area will be conducted in previously disturbed areas and will not impact any sites eligible for the NRHP. Therefore, we recommend no further work for the project. If project plans change and sub-plow zone borrowing is required in the area of site 23CY203, the Corps would consult with your office prior to construction.

If in the unlikely event that archeological materials are discovered during project construction, work in the area of discovery will cease and the discovery investigated by a qualified archeologist. The findings on the discovery would be coordinated with your office and appropriate federally recognized Native American tribes.

Thank you for your consideration in this matter. If you have any questions or have need of further information please contact Timothy Meade, USACE Kansas City District Cultural Resource Manager at Timothy.M.Meade@nwk02usace.army.mil or at (816) 389-3138.

Sincerely,



Timothy Meade
District Archeologist

Enclosure

U.S. Army Corps of Engineers, KC District
MO-R100043, Various County



Matt Blunt, Governor • Doyle Childers, Director

DEPARTMENT OF NATURAL RESOURCES

www.dnr.mo.gov

NOV 30 2007

U.S. Army Corps of Engineers, KC District
700 Federal Building, 601 E. 12th Street
Kansas City, MO 64106

Dear Permittee:

Pursuant to the Federal Water Pollution Control Act, under the authority granted to the State of Missouri and in compliance with the Missouri Clean Water Law, we have issued and are enclosing a General State Operating Permit for U.S. Army Corps of Engineers, KC District.

Please review the requirements of your permit. Monitoring reports that may be required by this permit must be submitted on a periodic basis. Copies of the necessary report forms, if required, are enclosed and should be mailed to the regional office listed below. Please contact that office for additional forms.

This General Permit is both your federal discharge permit and your new state operating permit and replaces all previous state operating permits and letters of approval for the discharges described within. In all future correspondence regarding this permit, please refer to your general permit number as shown on page one of your permit.

If you were affected by this decision, you may appeal to have the matter heard by the administrative hearing commission. To appeal, you must file a petition with the administrative hearing commission within thirty days after the date this decision was mailed or the date it was delivered, whichever date was earlier. If any such petition is sent by registered mail or certified mail, it will be deemed filed on the date it is mailed; if it is sent by any method other than registered mail or certified mail, it will be deemed filed on the date it is received by the administrative hearing commission.

If you have any questions concerning this permit, please do not hesitate to contact the Water Protection Program at PO Box 176, Jefferson City, MO 65102 (573) 751-1300.

Sincerely,

WATER PROTECTION PROGRAM

A handwritten signature in black ink, appearing to read "Robert M. Finkler".

NPDES Permit and Engineering Section

Enclosure

RECEIVED
REGULATORY BRANCH
07 DEC -5 PM 2:30

STATE OF MISSOURI
DEPARTMENT OF NATURAL RESOURCES
MISSOURI CLEAN WATER COMMISSION



**MISSOURI STATE OPERATING PERMIT
WATER POLLUTION CONTROL PROGRAM**

General Operating Permit

In compliance with the Missouri Clean Water Law, (chapter 644 R.S. Mo. as amended, hereinafter, the Law), and the Federal Water Pollution Control Act (Public Law 92-500, 92nd Congress) as amended,

Permit No.: MO-R100043

Owner: U.S. Army Corps of Engineers, KC District
Address: 700 Federal Building, 601 E. 12th Street
Kansas City, MO 64106

Continuing Authority: Same
Same

Facility Name: U.S. Army Corps of Engineers, KC District
Facility Address: 700 Federal Building, 601 E. 12th Street
Kansas City, MO 64106

Legal Description: See Page 2, Various County

Receiving Stream: See Page 2
First Classified Stream: See Page 2

is authorized to discharge from the facility described herein, in accordance with the effluent limitations and monitoring requirements as set forth herein.

FACILITY DESCRIPTION All Outfalls, SIC 1629

Construction or land disturbance activity (e.g., clearing, grubbing, excavating, grading, and other activity that results in the destruction of the root zone) that are performed by or under contract to a city, county, or other governmental jurisdiction that has a storm water control program for land disturbance activities that has been approved by the Missouri Department of Natural Resources.

This permit authorizes only wastewater, including storm waters, discharges under the Missouri Clean Water Law and the National Pollutant Discharge Elimination System, it does not apply to other regulated areas. This permit may be appealed in accordance with Section 644.051.6 of the Law

May 31, 2007
Effective date

November 30, 2007
Issue date

Handwritten signature of Doyle Childers.

Doyle Childers, Director, Department of Natural Resources
Executive Secretary, Clean Water Commission

May 30, 2012
Expiration date
MO 780-1481 (7-94)

Handwritten signature of Edward Galbraith.

Edward Galbraith
Director of Staff, Clean Water Commission

Page 2

Permit Number MO-R100043

This permit accompanies the applicant's General Permit 41 (GP0-41) for the repair of levees due to damages from flooding.

Repair activities may take place anywhere along the Missouri and Grand Rivers and tributaries thereof. Location would be in any county along these waterways from Rulo Nebraska to Saint Louis Missouri.

Detailed receiving stream information is available upon request.