



REPLY TO
ATTENTION OF:

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

July 17, 2008

Planning, Programs, and Project Management
Environmental Branch

To whom it may concern:

A copy of the Environmental Assessment (EA) and Draft Finding of No Significant Impact (FONSI) for the "*Levee Repairs P.L. 84-99: Meramec River Basin, Valley Park Levee, Valley Park, St. Louis County, Missouri*" are enclosed 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. We invite your comments related to the technical content of the attached documents. Please address your comments or questions to Dr. Thomas Keevin, of the Environmental Branch (CEMVS-PM-E), at telephone number (314) 331-8462, facsimile number (314) 331-8806, or e-mail at <thomas.m.keevin@usace.army.mil>, by close of business on August 17, 2008.

Sincerely,

A handwritten signature in cursive script that reads "Thomas Keevin".

Thomas M. Keevin
Chief, Environmental Branch

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

**LEVEE REPAIRS (PL 84-99): MERAMEC RIVER BASIN, VALLEY PARK LEVEE,
VALLEY PARK, ST. LOUIS COUNTY, MISSOURI**

1. PURPOSE AND NEED FOR ACTION

This document is an Environmental Assessment with an attached Draft Finding of No Significant Impact for levee repairs to the Meramec River Basin, Valley Park Levee. It describes levee damage, repair alternatives, the existing environment, and potential environmental impacts associated with each alternative. Under PL84-99, D&L Districts within the federal levee system can request federal assistance with flood damage repairs. The levee system sustained scour and erosion damage as a result of flooding in spring of 2008. This damage reduces the level of protection provided by the levee, making the district vulnerable to flooding at more frequent intervals.

2. LOCATION

The Valley Park project is located in St. Louis County, Missouri, adjacent to the left descending bank of the Meramec River at river mile 21 above the confluence with the Mississippi River.

3. AUTHORIZATION

The Meramec Basin, Valley Park Levee was authorized in 1981 by Public Law 97-128 as amended by the Water Resources Development Acts (WRDA) of 1986 and 1999 and the Energy and Water Development Appropriations Act (E&WDA), FY 2004.

Public Law 84-99 (PL-99), an amendment to the Flood Control Act of 1962, authorizes the US Army Corps of Engineers to assist the D&L Districts in the repair of both federal (Corps constructed, locally operated and maintained) and non-federal (constructed by non-federal interests or by the Work Projects Administration) flood control projects damaged by flooding.

4. LEVEE SYSTEM DESCRIPTION

The Meramec Basin, Valley Park Levee is a Federal organized levee system, Urban (FCW) that protects the City of Valley Park with its residences, commercial and industrial enterprises (Fig 1). This levee district includes approximately 365 acres.

The project includes 3.2 miles of levee with 3 feet of freeboard above the 100-year flood profile, 6 gravity drains, 3 closure structures, 5 detention areas, 41 relief wells, and environmental mitigation. A portion of the levee consists of an "engineered fill" composed of a clay cap surrounding a fill made from crushed material from an abandoned glass plant in the path of the levee. Recreation features were originally included in the project and an ongoing examination will determine if similar recreation features at other project areas can be included.

5. DESCRIPTION OF ALTERNATIVES

The following section describes the cause and damages to the system and alternatives for repairs.

A. CAUSE OF DAMAGE

Heavy rains throughout south central Missouri, and southern Illinois during March 2008 caused flooding along the Mississippi River drainage system within the USACE, St. Louis District, in Missouri and Illinois. Two day rainfall totals for March 17-19 ranged from 3 to 11 inches. This pattern continued through April, exceeding the normal rainfall for that time period. Runoff was high during the event due to lack of ground cover and foliage. This resulted in major flooding on small tributaries and filled Corps reservoirs into their flood control pools. The Mississippi River at Cape Girardeau reached 9 feet over flood stage. Flooding in the Meramec basin resulted in a peak discharge of 53,600 cubic feet per second (cfs) at Eureka. This flow resulted in a peak stage 13 feet over flood stage at Valley Park. The Big Muddy River at Murphysboro recorded a flow of over 28,000 cfs, with a stage 15 ft. over flood stage.

B. DAMAGE DESCRIPTION

The damages sustained during the high water event include: two areas of erosion and two areas of scour. At Kena Avenue there is an area of significant erosion caused by the spring high water event. There is erosion at the Missouri American Water Company (MAWC) pipeline crossing. Pharaoh Avenue had two (2) areas that should be repaired with embankment material (Fig. 1). In its damaged state, the levee provides a 25-year level of protection rather than the 100-year design level.

C. ALTERNATIVES

NEPA requires that in analyzing alternatives to a proposed action a federal agency consider an alternative of "No Action." Likewise, Section 73 of the WRDA of 1974 (PL93-251) requires federal agencies to give consideration to nonstructural measures to reduce or prevent flood damage. Nonstructural measures reduce flood damages without significantly altering the nature or extent of flooding. Damage reduction from nonstructural measures is accomplished by changing the use made of the floodplains, or by accommodating existing uses to the flood hazard. Examples are flood proofing, relocation of structures, flood warning and preparedness systems, and regulation of floodplain uses. A flood warning system would do little to reduce structural and agricultural damages. Flood proofing or relocation is not desirable, would have large costs, and result in loss of numerous acres of prime farmland. Therefore, a nonstructural alternative was eliminated from further consideration.

1) NO ACTION ALTERNATIVE

Under the No Action Alternative, the federal government would not repair the Meramec River Basin, Valley Park Levee. It is possible that the City of Valley Park would make repairs without Federal assistance. Environmental impacts of repairs would be similar to the recommended alternative; except that the time period required for repairs may be increased and the environmental protections may be reduced. However, because of the uncertainty of City of Valley Park making repairs, this potential alternative was not addressed further.

Instead, the environmental impacts of allowing the damages to remain unrepaired are evaluated as the No Action Alternative. This would presumably perpetuate a state of reduced levee structural integrity. The levee would be susceptible to further scour and erosion at the damage sites. It is estimated that in its damaged condition, the Meramec

River Basin, Valley Park levee provides a 25-year level of protection instead of the 100-year level it was designed to provide. This reduced level of protection would increase flood risk threatening the livelihood of local landowners.

2) RECOMMENDED ALTERNATIVE: REPAIR OF LEVEES WITH FEDERAL ASSISTANCE

Under this alternative, the federal government would repair the two scour areas and two erosion areas to pre-flood elevations on the original levee alignment. Because this is a federal levee, the repair costs would be 100% federal.

Alternative Description: To repair the levee and bring the levee up to pre-flood protection levels, the following actions would be required. Established roads and the levee crown would be used to move construction equipment. The levee berm on the repair side of the levee would be used as a staging and work area.

The recommended repair at Kena Avenue, to withstand velocities reaching up to 10 feet per second experienced in this area, is stone protection. Velocities that occurred during the high water at the Missouri American Water Company's pipeline crossing scoured the material covering the pressure water line that extended through the levee. Without stone armor protection the scouring could cause the pressure water line to fail resulting in failure of the levee and flooding of the City of Valley Park. Approximately 200 cubic yards (total) of quarry stone will be required to repair both of these areas. Pharaoh Avenue had two areas needing repairs that will require the use of approximately 6,000 cubic yards of borrow material. This borrow material will be purchased from a commercial source that has already undergone all of the environmental compliance documentation required by State and Federal environmental laws and regulations. For contractual reasons, the source cannot be named until after the borrow material procurement contract has been awarded.

D. COMPARISON OF ALTERNATIVES

Under the Repair of Levees with Federal Assistance Alternative damaged levees would be repaired to pre-flood conditions. Under the No Action Alternative, the levee system would remain in its damaged state with a reduced level of protection. This would increase the frequency and risk of monetary damages to the City of Valley Park in the event of future flooding. It is for these reasons that the Repair of Levees with Federal Assistance Alternative is the recommended alternative.

6. IMPACT ASSESSMENT

This section describes the existing environmental and socioeconomic conditions and consequences of both the No Action and the Action Alternatives on these conditions.

Water Resources:

Existing - The areas proposed for repair are located in the Meramec River Floodplain.

No Action – Without repair, the damaged portion of the levee would slowly erode. During floods, the protected area would be more likely to flood.

Federal Action - A temporary increase in water turbidity resulting from erosion may occur around repair operations at the Pharaoh Avenue site. Any impacts would be minor and short term. Repairs would be completed with federal funds, design, and supervision ensuring water quality protection.

Land Use:

Existing - The levee protects the City of Valley Park.

No Action - Without flooding, land use would remain the same. With flooding, there is a possibility of considerable damage to the City of Valley Park, should additional damage cause levee failure.

Federal Action – Until repair completion, impacts are similar to the No Action Alternative. After construction completion, flood risk would be returned to pre-flood condition reducing risk and associated impacts.

Prime Farmland:

Existing – There is no farming within the Meramec River Basin, Valley Park Levee.

No Action – No impact.

Federal Action – No impact.

Flora:

Existing - Vegetation on the riverside of the levee is dominated by floodplain species. Common tree species include willow (*Salix sp.*), cottonwood (*Populus deltoides*), ash (*Fraxinus sp.*), maples (*Acer sp.*), sweet gum (*Liquidambar styraciflua*), sycamore (*Platanus occidentalis*), and oaks (*Quercus sp.*). Shrub and herbaceous wetland species include buttonbush (*Cephalanthus occidentalis*), coontail (*Ceratophyllum demersum*), arrow arum (*Peltandra virginica*), pondweeds (*Potamogeton sp.*), duckweeds (*Lemna sp.*), and many sedges. The habitat on the levee is mowed cool season grasses.

No Action – No impacts would be anticipated.

Federal Action - Disturbances to levee vegetation (predominantly cool season grasses) would occur during repairs. After repair, the area would be reseeded with similar vegetation resulting in no long term vegetation impacts.

Fauna:

Existing - Floodplain forest, swamp, and aquatic habitat support a great variety of insects, crustaceans, mollusks, reptiles, amphibians, fish, birds, and mammals. The proposed repair area does not provide quality wildlife habitat because of regular disturbances from mowing, burrowing mammal control, and other maintenance activities. Therefore, it is unlikely that the repair area supports significant wildlife populations.

No Action – Without flooding, fauna and associated habitat would remain unchanged. With flooding, fauna would be displaced and habitat would be impacted by flood waters.

Federal Action - Wildlife populations occupying the natural areas adjacent to the levee toe would be disturbed by noise, increased water turbidity, and exhaust. These impacts would cease shortly after construction completion.

Fisheries:

Existing - Aquatic species that occur within the lower Meramec River, include catfish, crappie, freshwater drum (*Aplodinotus grunniens*), gar, shad, paddlefish (*Polyodon spathula*), buffalo, carp, largemouth bass (*Micropterus salmoides*), and sunfish.

No Action - Without flooding, there would be no impacts to fisheries. With flooding, fish would potentially be stranded in an urban area.

Federal Action - Any minor and temporary increase in turbidity should have no long-term adverse impacts to fish or their habitat.

Threatened and Endangered Species:

Existing - In compliance with Section 7(c) of the Endangered Species Act of 1973, as amended, the St. Louis District, Environmental Branch requested the US Fish and Wildlife Service provide a listing of federally threatened or endangered species that may occur in the vicinity of the proposed project. Mr. Rick Hansen, Columbia, MO, Fish and Wildlife Service, provided a verbal list of species that may occur in the project area (Table 1). Potential impacts are discussed for each species below.

No Action - Conditions for threatened and endangered species would remain the same.

Table 1. List of federally threatened and endangered species provided by USFWS on June 30, 2008.

St. Louis	Gray bat (<i>Myotis grisescens</i>)	Endangered	Caves
	Indiana bat (<i>Myotis sodalis</i>)	Endangered	Hibernacula: Caves and mines; Maternity and foraging habitat:

			small stream corridors with well developed riparian woods; upland forests
	Bald eagle (<i>Haliaeetus leucocephalus</i>)	No Longer Listed, but Covered Under Other Federal Laws.	
	Pallid sturgeon (<i>Scaphirhynchus albus</i>)	Endangered	Mississippi and Missouri Rivers
	Pink mucket (<i>Lampsilis abrupta</i>)	Endangered	Rivers
	Scaleshell (<i>Leptodea leptodon</i>)	Endangered	Bourbeuse and Meramec Rivers
	Spectaclecase (<i>Cumberlandia monodonta</i>)	Candidate	Meramec River
	Running buffalo clover (<i>Trifolium stolonifereum</i>)	Endangered	Disturbed bottomland meadows

Pallid Sturgeon (*Scaphirhynchus albus*)

Federal Action – The Pallid Sturgeon occurs in Mississippi River and is not know from the Meramec River Valley. The proposed project is not likely to adversely affect the Pallid Sturgeon.

Interior Least Tern (*Sterna antillarum*)

Federal Action - The Interior Least Tern occurs in Mississippi River, where it uses sandbars for nesting. It is not know from the Meramec River Valley. Levee repairs would take place within the footprint of the levee and would not impact any potential Interior Least Tern habitat, if they were to use the area. The proposed project is not likely to adversely affect the Interior Least Tern.

Indiana Bat (*Myotis sodalis*)

Federal Action - The repair would take place within the footprint of the existing levee and it is unlikely that trees would be adversely impacted. The construction activities will occur in late fall, so it is unlikely that bats would be impacted. The proposed project is not likely to adversely affect the Interior Least Tern.

Pink mucket (*Lampsilis abrupta*), Scaleshell (*Leptodea leptodon*), Spectaclecase (*Cumberlandia monodonta*)

Federal Action - The only action with a potential to impact mussel species would be placement of borrow material on the levee and erosion. As previously mentioned, any water quality impacts would be expected to be minor and short-term. The proposed project is not likely to adversely affect the three freshwater mussel species.

Running Buffalo Clover (*Trifolium stolonifereum*)

The Meramec River Basin, Valley Park Levee is a newly built levee that was recently seeded for vegetation cover/erosion protection. It is highly unlikely that the species would be on the newly build levee. The proposed project is not likely to adversely affect Running Buffalo Clover.

Air Quality:

Existing – The project area is in an urban area intersected by two major highway systems.

No Action – There would be no change in air quality under this alternative.

Federal Action - Repair activities would result in minor dust and exhaust from construction equipment. The repair activities would result in minor, short-term, and highly localized increases in dust and construction equipment emissions.

Hazardous, Toxic and Radioactive Waste Sites:

Existing - There are no recognized environmental conditions that would indicate a risk of HTRW contamination within the project area. The likelihood of hazardous substances existing within the project area or adversely affecting the project area due to the proposed construction activities is very low.

No Action – There would be no change under this alternative.

Federal Action - Impacts are the same as the No Action Alternative.

Noise:

Existing - Ambient noise in the study area is generated by wildlife, human activities and vehicular traffic.

No Action - There would be no change in noise under this alternative.

Federal Action - The proposed project would be expected to temporarily increase noise levels near the repair sites. The U.S. Environmental Protection Agency has set a limit of 85 decibels on the A scale (the most widely used sound level filter) for eight hours of continuous exposure to

protect against permanent hearing loss. Based upon similar construction activities conducted in the past, noise above this level would not be expected to occur for periods longer than eight hours.

Recreation:

Existing - There are two small city parks within the levee: Leonard Park has a playground and Brignole Center Park has a baseball field and small playground. In addition, outside the levee is the Vance Trail that runs a short distance between Hanna and Vance roads. A trailhead off Rt. 141 that includes parking, picnic tables and a picnic shelter is located on the Valley Park levee. Some recreationists use the top of the levee for walking or jogging. A trail leading from the trailhead eastward along the Meramec River is under construction. A small baseball/soccer complex is being proposed outside the levee west of Kena Avenue.

No Action – Without flooding, recreation would be possible at all of the City's recreation facilities. With flooding, recreation activities inside the levee and on the levee would only be possible if the levee remained uncompromised because of the unrepaired damage.

Federal Action - Without flooding, recreation could continue at all City recreation facilities. With flooding, only recreation inside the levee would be protected and could continue. During the repair period, construction equipment and activities would cause temporary noise affecting and potentially disrupting recreation activities within the vicinity of the repair area. Upon construction completion, all disruption would cease and recreation inside the levee would continue if road access was available.

Aesthetics:

Existing - Floodplain forest is a feature riverward of the repair areas.

No Action – Without flooding, there would be no aesthetic impacts. With flooding, flood damage, sedimentation and scour would cause degradation to the landscape.

Federal Action - Construction equipment and activities would cause short-term degradation of the landscape. Upon construction completion all equipment would leave the area, and the seeded repair area would re-vegetate to closely resemble pre-flood conditions. Rock revetment is not aesthetically appealing.

Socioeconomic:

Existing – The levee protects an urban area, the City of Valley Park.

No Action - Without flooding, there would be no socioeconomic impacts. With flooding, high economic losses could occur.

Federal Action - Under the Federal Action Alternative, repairs would be 100% federal. Landowners within the levee system would benefit from levee repair and subsequent restoration

of the pre-flood level of protection. The proposed initial levee repairs would not require residential displacement and could provide short-term employment for local contractors and laborers.

Environmental Justice:

There are no known Environmental Justice issues associated with this project.

Valley Park Historic Properties

Existing - The proposed repair sites are comprised of high disturbed, recently deposited fill, placed during the construction of the Valley Park Levee. No potentially significant archaeological remains are situated within these contexts.

No Action - See comments in Existing Conditions, above.

Federal Action - The proposed action will have no effect upon potentially significant historic properties. All repair-related activities will take place upon a highly disturbed / recently deposited landform (new levee). Sources for the material (earthen fill and stone rip-rap) used to complete the proposed repairs will also be obtained from recently deposited / highly disturbed sources (stored earthen overburden and cut stone from an existing quarry).

Cumulative Impacts:

Existing - System-wide repairs to levees to fix damages caused by flooding in the spring and summer of 2008 are currently underway. Final repairs would involve returning most of the levee breaches to the same alignment and level of protection as existed prior to the flood of 1993. Temporary impacts from noise, air, and water pollution would occur; however, repair sites are widely scattered throughout the St. Louis District and therefore additive effects of these impacts would be negligible. Other PL84-99 projects currently being planned include projects that require borrow and some that are infeasible to repair on the original alignment, such as the damage to the Vandalia D&L District. Borrow would most likely come from agriculture areas or previously identified areas. For new levee alignments, some acreage would be removed from agricultural use causing a minor loss to overall farm production and increase in floodplain habitat. The widely scattered nature of repair sites and shallow excavation depth of borrow sites would reduce impacts and no long term adverse impacts are expected.

No Action - No long term adverse impacts are expected.

Federal Action - No long term adverse impacts are expected.

7. EXECUTIVE ORDER 11988 (FLOODPLAIN MANAGEMENT)

Under this Executive Order, federal agencies are to "provide leadership and shall take action to reduce the risk of flood loss, to minimize the impacts of floods on human safety, health, and welfare, and to restore and preserve the natural and beneficial values served by floodplains". The St. Louis District, Corps of Engineers has evaluated the proposed levee repairs at the slides

which occurred in the Preston D&L District during the spring flooding of 2008. Not repairing the levee would increase the risk of flood damage and loss. Based on the extent of levee damage that currently exists, it is prudent to repair the levee to restore the level of flood protection that existed prior to the flood event.

By reducing the future risk of flood the proposed project is in full compliance with this Executive Order.

8. EXECUTIVE ORDER 11990 (PROTECTION OF WETLANDS)

Under this Executive Order, federal agencies shall take action to minimize the destruction, loss or degradation of wetlands, and to preserve and enhance the natural and beneficial values of wetlands in carrying out the agency's responsibilities.

The St. Louis District, Corps of Engineers has evaluated the levee repairs at the levee slides which occurred in the Preston D&L District during the spring flooding of 2008. The proposed project work would be conducted within the footprint of the levee. Therefore, the proposed levee repairs are in full compliance with this Executive Order because no wetlands would be affected by this action.

9. BALD AND GOLDEN EAGLE PROTECTION ACT OF 1940

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).

The repair would take place within the footprint of the existing levee. Construction is currently scheduled to begin in early fall and be completed by winter. Bald Eagles fledge young in August and begin nest building activities in late January. Therefore, the proposed project is not likely to disturb bald eagles.

10. ENVIRONMENTAL REGULATORY CONSTRAINTS

The Recommended Alternative was subject to compliance review with all applicable environmental regulations and guidelines. The Recommended Alternative was determined to be in full compliance with all applicable acts and legislation.

11. RELATIONSHIP OF PLANS TO ENVIRONMENTAL LAWS AND REGULATIONS

Federal Policies	Compliance
Bald Eagle Protection Act, 42 USC 4151-4157	Full
Clean Air Act, 42 USC 7401-7542	Full
Clean Water Act, 33 USC 1251-1375	Full
Comprehensive Environmental Response, Compensation, and Liability Act, 42 USC 9601-9675	Full
Endangered Species Act, 16 USC 1531-1543	Full
Farmland Protection Policy Act, 7 USC 4201-4208	Not applicable
Fish and Wildlife Coordination Act, 16 USC 661-666c	Full
Food Security Act of 1985, 7 USC varies	Full
Land and Water Conservation Fund Act, 16 USC 460d-4601	Full
National Environmental Policy Act, 42 USC 4321- 4347	Partial ¹
National Historic Preservation Act, 16 USC 470 <i>et seq.</i>	Partial ²
Noise Pollution and Abatement Act, 42 USC 7691-7642	Full
Resource, Conservation, and Rehabilitation Act, 42 USC 6901-6987	Full
Rivers and Harbors Appropriation Act, 33 USC 401-413	Full
Water Resources Development Acts of 1986 and 1990	Full
Floodplain Management (EO 11988 as amended by EO 12148)	Full
Prevention, Control, and Abatement of Air and Water Pollution at Federal Facilities (EO 11282 as amended by EO's 11288 and 11507)	Full

Protection and Enhancement of Environmental Quality (EO 11991)	Full
Protection and Enhancement of the Cultural Environment (EO 11593)	Full
Protection of Wetlands (EO 11990 as amended by EO 12608)	Full

Full compliance: having met all requirements of the statute for the current stage of planning

Not applicable: compliance with the statute not required

1 Full compliance to be achieved with the District Engineer’s signing of the Finding of No Significant Impact

2 Full compliance to be achieved with the State Historic Preservation Officer’s concurrence in the District's EA conclusions.

12. COORDINATION WITH OTHER STATE AND FEDERAL AGENCIES

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

U.S. Fish and Wildlife Service
 U.S. Environmental Protection Agency
 U.S. Forest Service (Shawnee National Forest)
 Federal Emergency Management Agency
 Natural Resources Conservation Service
 Missouri Department of Conservation
 Missouri Historic Preservation Agency
 Missouri Emergency Management Agency

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

13. LIST OF PREPARERS

Mr. Bruce Douglas, Civil Engineer	Role: Project Manager
Mr. Chuck Frerker, Regulatory Specialist	Role: Regulatory Permits
Dr. Terry Norris, District Archaeologist	Role: Archeological Compliance
Dr. Thomas Keevin, Ecologist	Role: Environmental Assessment

14. REFERENCES

USFWS (U.S. Fish and Wildlife Service). 2006 Species Profile: Bald Eagle (*Haliaeetus leucocephalus*). Available at <http://ecos.fws.gov/speciesProfile/SpeciesReport.do?sPCODE=B008> (Accessed December 14, 2006).

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

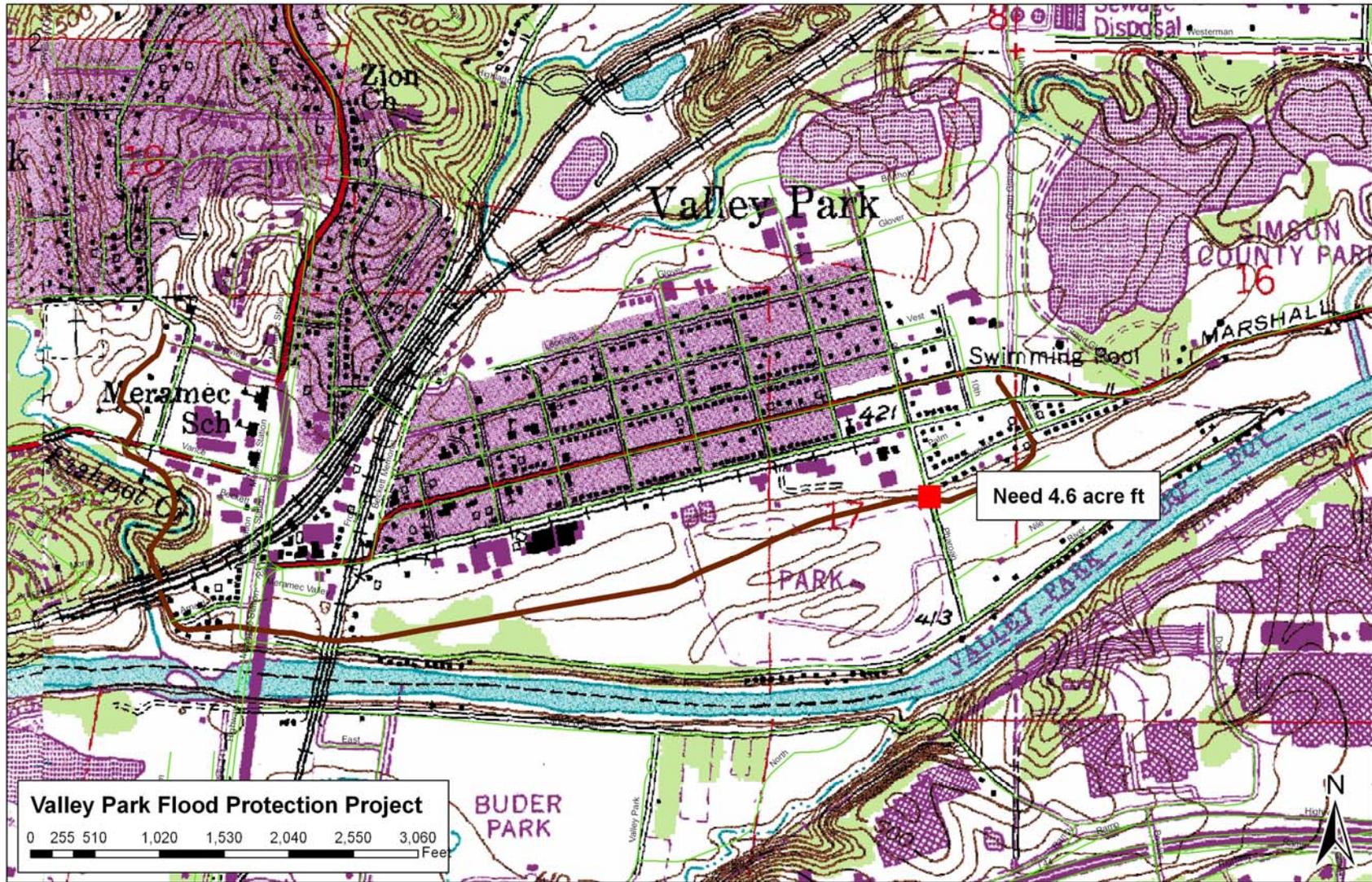


Figure 1. The Valley Park levee and surrounding area and the area requiring borrow material.

DRAFT FINDING OF NO SIGNIFICANT IMPACT

LEVEE REPAIRS (PL 84-99): MERAMEC RIVER BASIN, VALLEY PARK LEVEE, VALLEY PARK, ST. LOUIS COUNTY, MISSOURI

1. I have reviewed and evaluated the documents concerning the proposed repair of scour damage at Kena Avenue and the Missouri American Water Company's (MAWC) pipeline crossing and erosion damage at two areas at Pharaoh Avenue within in the Meramec River Basin, Valley Park Levee District, St. Louis County, Missouri. The scour sites at Kena Avenue and the MAWC pipeline crossing will be armored with protective stone. The levee erosion at Pharaoh Avenue will be repaired with the use of borrow material purchased from a commercial source (stored earthen overburden). These damaged areas reduce the ability of the system to provide the authorized level of 100-year flood protection.
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 Action Alternative.
 - c. Nonstructural Alternative
3. The nonstructural alternative was eliminated during preliminary planning because it is not desirable to the sponsor and would have large costs. The possible consequences of the remaining two alternatives have been studied for physical, environmental, cultural, social and economic effects, and engineering feasibility. Significant factors evaluated as part of my review include:
 - 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 Meramec River Basin, Valley Park Levee would remain in its damaged state and provide an estimated 25-year level of protection instead of the 100-year level it was designed to provide. This reduced level of protection would increase flood risk, threaten the City of Valley Park, and the livelihood of local landowners.
 - b. Repair activities would cause temporary erosion, noise, and air pollution. Proper construction and soil management techniques would minimize this effect. Upon completion, all construction equipment would be removed and exposed areas would be stabilized by compaction and seeding. Impacts would be short term and minor.

- c. Levee vegetation would be lost and wildlife disturbed during repair. These impacts would be both minimal and temporary. Seeding would restore vegetation and wildlife disturbance would end after construction completion.
 - d. No federally endangered, threatened, or proposed species would be adversely impacted by the levee repairs.
 - e. The aesthetic and recreational quality of the area would be temporarily reduced by construction equipment and associated noise. Shortly after construction completion, aesthetic and recreational quality would return to pre-flood conditions.
 - f. Construction/repair activities associated with this project would have no effect upon significant archaeological remains or historic properties. As presently designed, earthmoving would be confined to areas previously disturbed during original levee construction.
 - g. No adverse socioeconomic impacts from the proposed levee repairs were identified.
 - h. The repair work would not require the permanent placement of additional fill material below ordinary high water. As such, the public would 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 would not have significant effects on the quality of the environment. Therefore, an Environmental Impact Statement would not be prepared prior to proceeding with this action.

Date

Thomas E. O'Hara, Jr.
Colonel, U.S. Army
District Engineer