



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

February 9, 2011

Reply to:

Regional Planning Division North
Planning and Environmental Branch (PD-E)

Dear Sir or Madam:

The St. Louis District of the U.S. Army Corps of Engineers is proposing to enter into a Project Partnership Agreement (PPA) with the Metropolitan St. Louis Sewer District (MSD) for work to construct the Harlem-Baden Watershed Sewer Separation and Hebert Street Stormwater Detention Basin. In this agreement, the Corps proposes to provide Federal construction assistance to MSD for the separation of combined sewers in north St. Louis City, the City of Wellston, and the Village of Hillsdale as well as the construction of a stormwater detention basin in north St. Louis City.

In addition, the St. Louis District has prepared an Environmental Assessment (EA) with Draft Finding of No Significant Impact (FONSI) for the work. This document serves to notify the public of the proposed project and analyze the probable environmental impacts of the project alternatives. You are receiving this letter because you may be interested in the project. The EA with FONSI is available for public review. The electronic version of the EA is available online at <http://www.mvs.usace.army.mil/pm/pm-reports.html>, or you may request a copy be mailed to you.

This document is provided to you for your information and review. We invite your comments related to the content of the enclosed Environmental Assessment. If you would like to submit comments, please address your comments or questions to Brandon Schneider of the Planning and Environmental Branch (CEMVS-PD-E), at telephone number (314) 331-8496, facsimile number (314) 331-8606, or e-mail at <brandon.schneider@usace.army.mil>, by close of business on March 11, 2011.

Thank you,

A handwritten signature in black ink that reads "Thomas Keevin".

Thomas Keevin, Ph.D.
Chief, Planning and Environmental Branch

ENVIRONMENTAL ASSESSMENT
with DRAFT FINDING OF NO SIGNIFICANT IMPACT

HARLEM-BADEN WATERSHED SEWER SEPARATION AND
HEBERT STREET STORMWATER DETENTION BASIN,
ST. LOUIS COUNTY, MISSOURI

U.S. Army Corps of Engineers
St. Louis District
ATTN: Planning & Environmental Branch (PD-E)
St. Louis, Missouri 63103-2833

Phone: 314-331-8496

February 2011

I. INTRODUCTION

The St. Louis District, U.S. Army Corps of Engineers (CEMVS) has proposed to enter into a Project Partnership Agreement (PPA) with the Metropolitan St. Louis Sewer District (MSD) for work to construct the Harlem-Baden Watershed Sewer Separation and Hebert Street Stormwater Detention Basin. In this agreement, CEMVS proposes to provide Federal construction assistance to MSD for the separation of combined sewers in north St. Louis City, the City of Wellston, and the Village of Hillsdale as well as the construction of a stormwater detention basin in north St. Louis City. Construction assistance or implementation for this project is authorized by Section 219 (f) (32) of the Water Resource Development Act (WRDA) of 1992 (Public Law 102-580), as amended by Section 502 (b) of WRDA 1999 (Public Law 106-53), and Section 5100 of WRDA 2007 (Public Law 110-114). MSD is the non-Federal project sponsor. The project detailed in this Environmental Assessment is located in the City of St. Louis, Wellston, and the Village of Hillsdale, Missouri. A location map and project map are shown below in Figures 1 and 2, respectively.

II. PROJECT LOCATION

The proposed combined sewer separation and detention basin area is located in the City of St. Louis, Wellston, and the Village of Hillsdale, Missouri in St. Louis County, Missouri. The proposed project is located primarily in north St. Louis City, just southeast of the intersection of Natural Bridge Road and Goodfellow Boulevard. The proposed detention basin area includes Hebert Street, Blackstone Avenue, and Ashland Avenue, immediately west of Clara Avenue and is located above the confluence of the 12-foot horseshoe shaped South Harlem Trunk Sewer and the 8-foot diameter South Branch of the South Harlem Trunk Sewer. Sewer separation would occur in the catchment area served by the South Branch of the South Harlem Trunk.

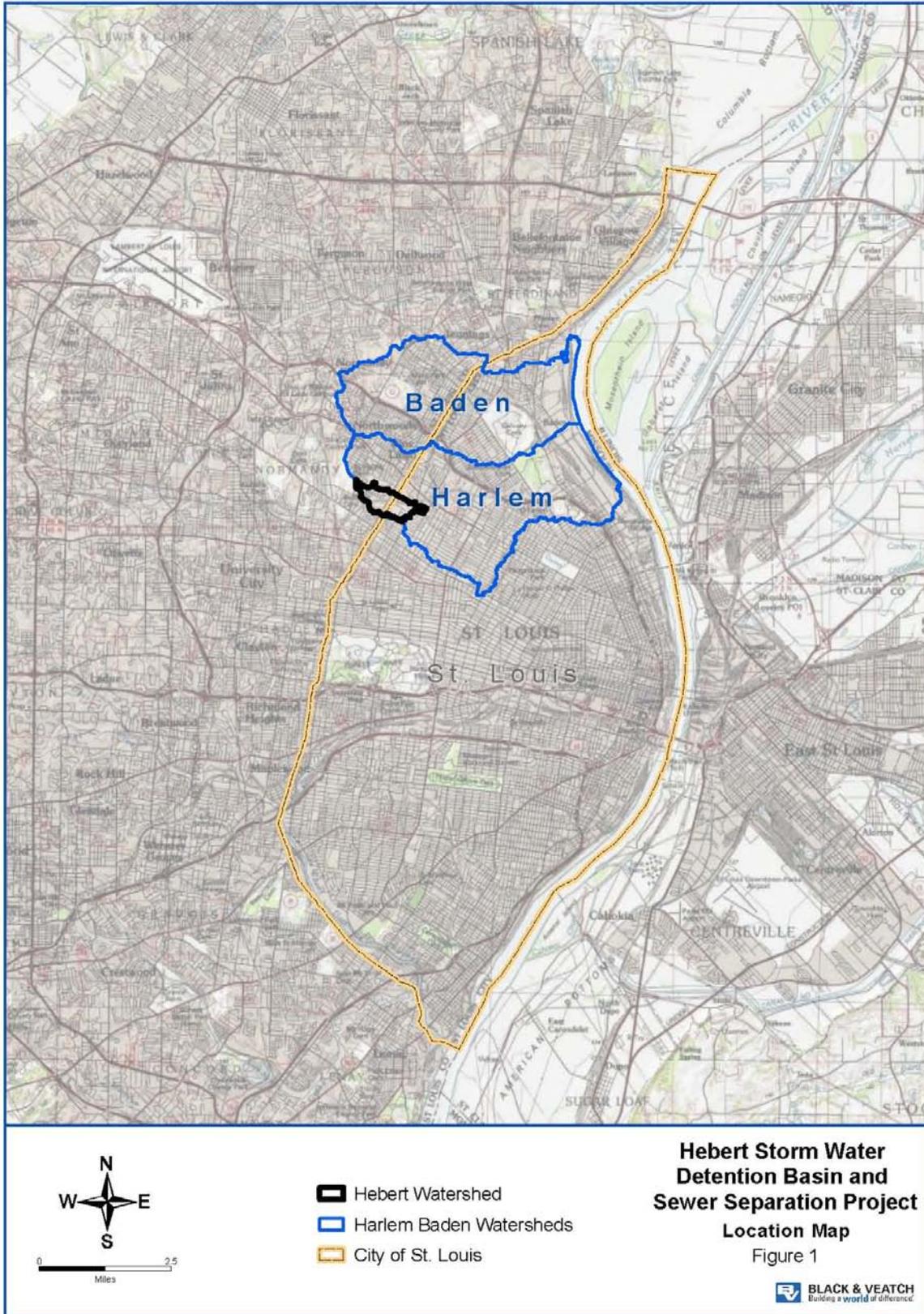


Figure 1: Hebert Stormwater Detention Basin and Sewer Separation Project Location Map (Black and Veatch 2009).

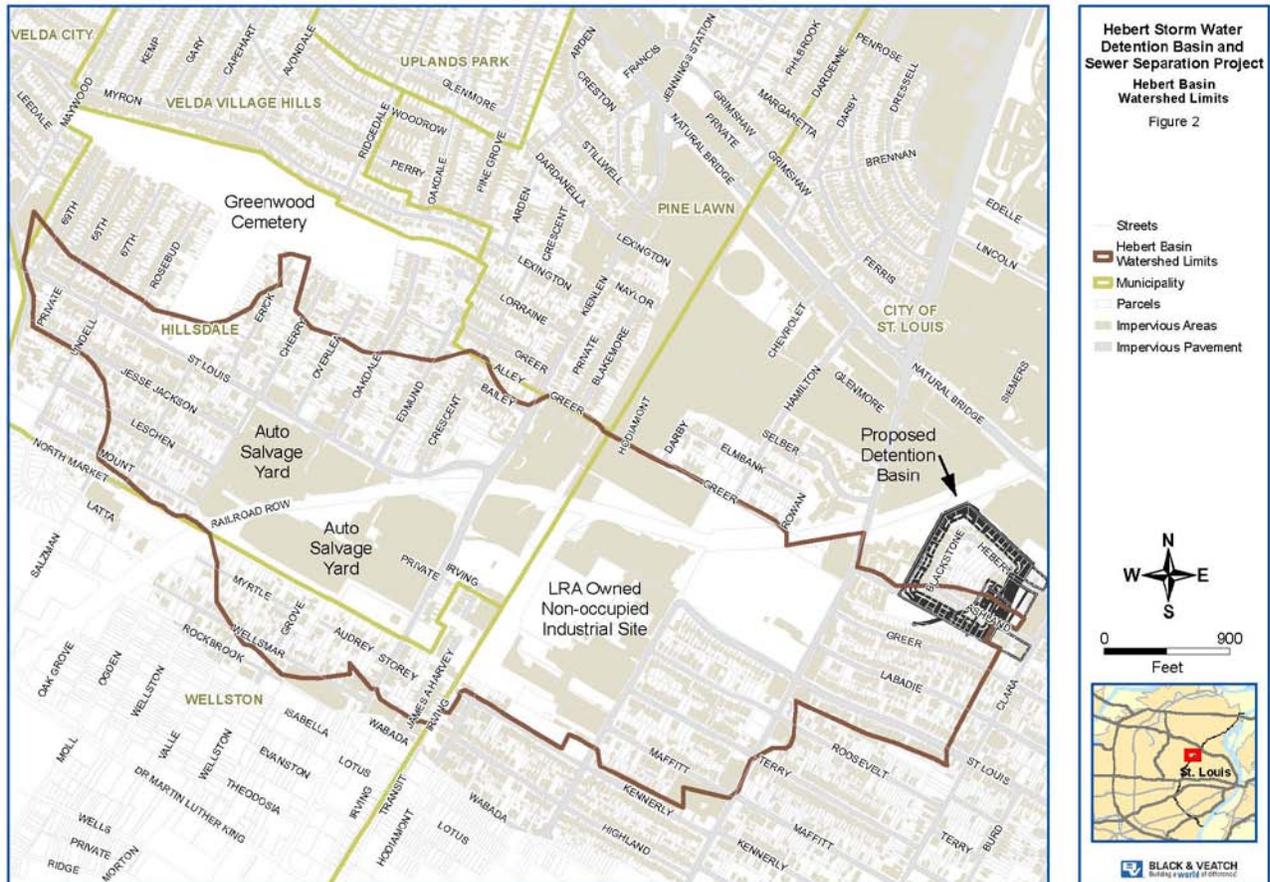


Figure 2. Hebert basin watershed limits and detention basin footprint (Black and Veatch 2009).

III. PROJECT ALTERNATIVES

Two alternatives were considered for this project.

Alternative #1 - ("No Action Alternative"). The National Environmental Policy Act requires that the No Action Alternative be addressed. Under this alternative, no Federal construction assistance would be provided and the combined sewer system would remain intact and the area for the proposed detention basin would remain in MSD ownership.

Alternative #2 –Combined Sewer Separation and Hebert Stormwater Detention Basin. The current project consists of separating storm and sanitary sewers near Hillsdale and building a detention basin west of Clara Ave. The project requires the construction of 24,600 feet of storm sewer and 8,100 feet of sanitary sewer in the area served by the 8-foot diameter South Branch of the South

Harlem Trunk Sewer and its upstream combined sewer network. The purpose of the sewer construction is to separate the combined network into separate sanitary and stormwater conveyance networks designed to accommodate flows during a rain event with a return frequency of 20 years and a duration of 20 minutes.

The proposed detention basin would be of earthen construction with an approximate surface area of 9 acres. The basin would provide a maximum capacity of approximately 2,463,500 cubic feet. The site would require minor excavation at the basin floor, construction of a berm along the eastern side, and additional excavation at the area surrounding the proposed inlet and outlet structures. The detention basin would be operated and maintained by MSD as a dry detention basin.

The site of the detention basin consists of approximately two city blocks along Hebert St. and Ashland Ave. bounded on the east by Clara Ave. and on the west by Blackstone Ave. The detention basin site consists of properties in MSD ownership that have had frequent flooding and backup issues (Figure 3). The basin would detain all stormwater runoff generated in the drainage area during a 20-year storm and reduce downstream peak flows during all rain events.

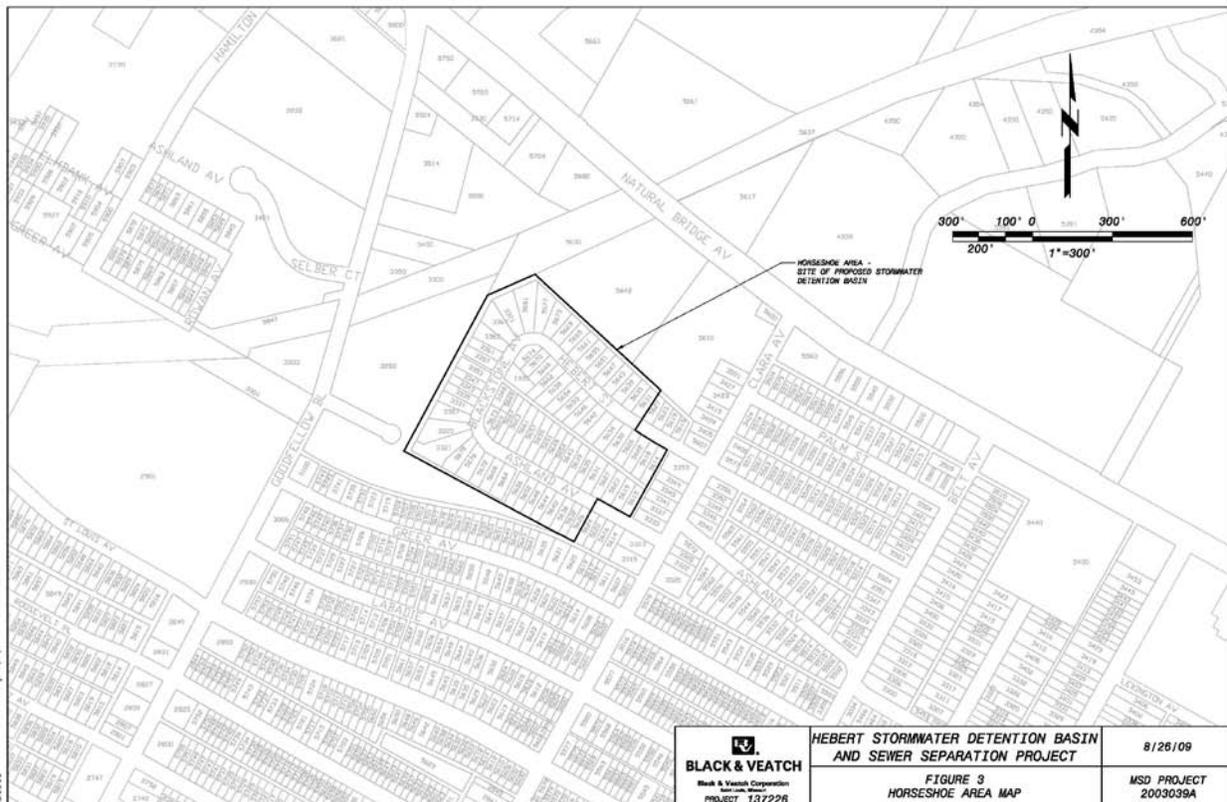


Figure 3. Hebert stormwater detention basin location (Black and Veatch 2009).

IV. PHYSICAL AND ENVIRONMENTAL SETTING & IMPACT ANALYSIS

Existing Conditions

The existing combined sewer within the separation area consists of approximately 4,000 linear feet of 15-inch through 48-inch diameter concrete pipe which extends along St. Louis Avenue, from 69th Street to Crescent Avenue, where it curves to the south and meets with a second branch. The second branch, originally part of the Curtis Sewer District, collects combined flow in a system of small diameter sewers (8-inch through 18-inch sewers) from an area bounded by Lindell Avenue, North Market Street, St. Louis Avenue, and Cherry Avenue. The flow from this area is then conveyed through two large auto salvage yards and below the St. Louis Terminal railroad in approximately 2,000 linear feet of brick sewer ranging in size from 3 feet by 5 feet to 5 feet by 5 feet. These two branches combine near the intersection of Kienlen Avenue and Idadale Avenue. At this juncture, the flow is conveyed to the intersection with the South Harlem Trunk in approximately 4,000 linear feet of concrete sewer, ranging in size from 72-inch diameter pipe to 8-foot concrete sewer. Additional sanitary and stormwater conveyance exists as lateral lines which carry residential flows to the sub-trunk. These pipes range from 8-inch to 36-inch and are constructed of either concrete or vitrified clay.

The site of the proposed stormwater detention basin consists of approximately two city blocks along Hebert Street and Ashland Avenue bounded on the east by Clara Avenue and on the west by Blackstone Avenue. The 12-foot diameter South Harlem Trunk (upstream drainage area 841 acres) and 8-foot diameter South Branch of the South Harlem Trunk (upstream drainage area 311 acres) intersect within the proposed site. This location, like others in the Harlem and Baden watersheds in close proximity to trunk lines, is impacted by surcharge from the trunk sewers along with overland flooding. From 1995 through 2008, there have been 130 documented complaints of sewer backups, overcharged mains, and overland flooding in the proposed detention basin area. From 1997 through 2007, MSD has paid 63 insurance claims totaling nearly \$80,000 to 26 properties within the proposed detention basin area.

Primary, Secondary, and Cumulative Impacts of No Action Alternative

If the combined sewer separation and construction of the detention basin do not occur, the existing sewer system would continue to be susceptible to sewer backups, overcharged mains, and overland flooding resulting in future insurance claims. In addition the properties located in the proposed detention basin would remain in MSD ownership.

Primary and Secondary Impacts of Sewer Separation and Detention Basin

Once the combined sewer separation and construction of the detention basin is completed, it would provide a separate network system for sanitary and stormwater conveyance networks designed to accommodate flows during a rain event with a return frequency of 20 years and a duration of 20 minutes. The remaining buildings in MSD ownership located within the detention basin would

be removed prior to construction of the detention basin. Primary physical and biological impacts are considered minimal. There are no anticipated adverse impacts of the construction of the detention basin and separation of the combined sewer system to terrestrial or aquatic habitat. There are no anticipated impacts to wetland resources. The Corps of Engineers Regulatory Branch has reviewed the proposed project and determined that the proposed work is not authorized under Section 404 of the Clean Water Act and prepared a No Permit Required (NPR) letter.

In addition, the St. Louis District would conduct a Phase I Environmental Site Assessment including a site investigation prior to notice to proceed to ensure that no HTRW contamination exists within the project area. If any suspected hazardous materials are found, the USACE would notify the Missouri Department of Natural Resources, and the hazardous materials would be removed in an approved manner before proceeding with the project.

No secondary impacts are anticipated.

Cumulative Impacts of Sewer Separation and Detention Basin

Although there is considerable development located in the project area, the impacts of the proposed sewer separation and detention basin construction are considered to be minor and would have no adverse impacts that could be considered additive to existing conditions. The separation of the combined sewer system would result in a positive impact with reduced susceptibility of sewer backups, overcharged mains, and overland flooding by accommodating flows during a rain event with a return frequency of 20 years and a duration of 20 minutes. In summary, this action would not have any major cumulative impacts when the proposed project is added to existing conditions.

V. ENDANGERED SPECIES: BIOLOGICAL ASSESSMENT

In compliance with Section 7(c) of the Endangered Species Act of 1973, as amended, a list of species and critical habitat was acquired from the USFWS website on January 20, 2011 (USFWS 2011) (Table 1). The list retrieved from the U.S. Fish and Wildlife Service (USFWS) website contained 12 Federal threatened, endangered and candidate species that could potentially be located in the project area.

The species list contains two endangered bat species – Indiana bat and gray bat. No hibernacula, nursery, or foraging habitat would be adversely impacted by the sewer separation and detention basin construction. The proposed project area does not contain these habitats as it is heavily developed with little natural habitat remaining. As such, the Indiana and Gray bats would not be impacted by the proposed sewer separation and detention basin construction.

The list contains five aquatic invertebrates and one aquatic vertebrate – pink mucket, scaleshell, sheepsnose, snuffbox, spectaclecase mussels and the pallid sturgeon. There is no aquatic habitat located within the proposed project area. The area is heavily developed with little natural habitat remaining. The reduction in overland flooding from the combined sewer system may potentially

improve water quality in nearby waterways and potentially improve water quality in those waterways. Overall, no aquatic habitat impacts (primary or secondary impacts) would result from the proposed sewer separation and detention basin construction.

There are three plants species, decurrent false aster, Mead’s milkweed, and running buffalo clover, listed for St. Louis County. The proposed project site is currently heavily developed with little natural habitat remaining. The area consists primarily of urbanized areas and industrial areas with no known old growth forests, prairies or wetlands. There is no suitable habitat located in the proposed project area. As such, decurrent false aster, Mead’s milkweed and running buffalo clover would not be impacted by the proposed sewer separation and detention basin construction.

The list also contains one Candidate species – the Eastern Massasauga. In Missouri, small numbers survive in north-central and northwest Missouri. Recent species have only been recorded in Chariton, Lynn and Holt counties (MDC 2010). Massasaugas live in wet areas, including wet prairies, marshes and low areas along rivers and lakes. In many areas, massasaugas also use adjacent uplands, including forests, during part of the year. They often hibernate in crayfish burrows, but they also may be found under logs and tree roots or in small mammal burrows. Massasauga hibernacula are typically located in areas with seasonal high water tables, but seldom located in areas with substantial surface inundation. No suitable habitat exists within the project area; therefore, the proposed alternative is not likely to adversely affect the eastern massasauga.

Table 1. List of federally threatened and endangered species and their habitat potentially occurring in St. Louis County.

Common Name (Scientific Name)	Classification	Habitat
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
Eastern Massasauga (<i>Sistrurus catenatus catenatus</i>)	Candidate	
Pallid Sturgeon (<i>Scaphirhynchus ablus</i>)	Endangered	Mississippi and Missouri Rivers

Pink Mucket (<i>Lampsilis abrupta</i>)	Endangered	Rivers
Scaleshell (<i>Leptodea leptodon</i>)	Endangered	Bourbeuse and Meramec Rivers
Sheepnose (<i>Plethobasus cyphus</i>)	Proposed as Endangered	Shallow areas in larger rivers and streams
Snuffbox (<i>Epioblasma triquetra</i>)	Proposed as Endangered	Small to medium-sized creeks with a swift current
Spectaclecase (<i>Cumberlandia monodonta</i>)	Proposed as Endangered	Meramec River
Decurrent False Aster (<i>Boltonia decurrens</i>)	Threatened	Disturbed alluvial soils
Mead's Milkweed (<i>Aclepias meadii</i>)	Threatened	Virgin Prairies
Running Buffalo Clover (<i>Trifolium stolonifereum</i>)	Endangered	Disturbed bottomland meadows

In summary, NO IMPACTS to any Federally listed species occurring in St. Louis County would result from the separation of the combined sewer system and construction of the detention basin.

VI. CULTURAL RESOURCES

A site visit was conducted by the St. Louis District's Cultural Resources Branch. The site visit revealed no significant historic properties (archaeological remains or standing structures). All earthmoving activities within the proposed project site would be confined to the detention basin construction and conversion of the combined sewer system to separate systems for storm and sanitary sewers. The proposed sewer separation and detention basin construction would have no effect upon potentially significant historic properties.

In the unlikely event that earthmoving activities associated with the proposed repairs did impact potentially significant archeological/historic remains, all construction activities and earthmoving actions in the immediate vicinity of the remains would be held in abeyance until the potential significance of the remains could be determined. The precise nature of such investigations would be developed by the Saint Louis District in concert with the professional staff of the Missouri Historic Preservation Agency.

All actions taken will be in accordance with the National Historic Preservation Act of 1966, as amended (NHPA). The NHPA requires that any Federal undertaking consider the effects to

historic properties and consultation with State Historic Preservation Officers and the Advisory Council on Historic Preservation. This act is further codified in 36 CFR Part 800, Protection of Historic Properties. Should any actions result in the collection of data or material from historic properties, such information and objects shall be cared for in accordance with 36 CFR Part 79, Curation of Federally Owned and Administered Archaeological Collections

VII. SOCIO-ECONOMIC RESOURCES

Existing Condition

The project involves the separation of the combined sewer system and construction of a detention basin in a heavily developed and industrial area. The proposed detention basin area is in MSD ownership and all other areas within the proposed site would only be temporarily impacted during the separation of the sewer system.

Primary, Secondary, and Cumulative Impacts of No Action Alternative

If no action is taken the sewer system would remain a combined system and be susceptible to sewer backups, overcharged mains, and overland flooding resulting in future insurance claims. In addition the properties located in the proposed detention basin would remain in MSD ownership.

Primary and Secondary, and Cumulative Impacts of Sewer Separation and Detention Basin

If the sewer separation and detention basin are constructed, the action would likely have no adverse economic impacts on the local economy. The local residential properties would benefit from the separation with reduced chances of sewer backups, overcharged mains, and overland flood and decreasing future insurance claims. The proposed sewer separation and detention basin construction would not require residential displacement as all lands are currently in MSD ownership and could provide short-term employment for local contractors and laborers.

VIII. AESTHETIC AND RECREATIONAL RESOURCES

Existing Condition

As previously noted, this area is heavily developed and industrialized with little aesthetic and recreational value. The combined sewer separation area is urbanized with little natural habitat. The proposed detention basin area is currently in MSD ownership and was formerly urbanized. There is currently no designated recreational use of the proposed project site.

Primary, Secondary, and Cumulative Impacts of No Action Alternative

The aesthetics and limited recreational potential would remain unchanged at the proposed project site.

Primary, Secondary, and Cumulative Impacts of Sewer Separation and Detention Basin

The aesthetic quality of the proposed sewer separation and detention basin construction site is typical urbanization including industrial sites such as an automotive salvage yard. The area for the proposed

detention basin construction would be converted from an urbanized area to a maintained detention basin. The aesthetics and limited recreation potential would largely remain unchanged at the proposed project site.

IX. ENVIRONMENTAL JUSTICE

Environmental justice is considered, in summary, to determine if disproportional project impacts are occurring to minority groups or individuals below the poverty level. This project involves the improvement of the existing combined sewer system and construction of a detention basin located in private ownership – MSD. The potential impacts of the proposed sewer separation and detention basin construction are minimal and are not anticipated to have any adverse impacts on minority groups or individuals below the poverty level.

X. REFERENCES

Black and Veatch. 2009. Hebert Stormwater Detention Basin and Sewer Separation. Project No. 2003039A.

Missouri Department of Conservation (MDC). 2010. Eastern Massasauga Rattlesnake Field Guide. Available at <http://mdc.mo.gov/discover-nature/field-guide/eastern-massasauga-rattlesnake> (Accessed January 20, 2011).

USFWS (U.S. Fish and Wildlife Service). 2011. Missouri Threatened and Endangered Species. Available: <http://www.fws.gov/midwest/endangered/lists/missouri-cty.html> (Accessed January 20, 2011)

X. LIST OF PREPARERS

Ms. Ashley Rasnic, EIT	Role: Project Manager
Ms. Traycee Verdun, Community Planner	Role: Planner
Mr. Matt Cosby, Regulatory Specialist	Role: Regulatory Permits
Mr. Jim Barnes, Archaeologist	Role: Archeological Compliance
Mr. Rick Archeski, Environmental Specialist	Role: HTRW Compliance
Mr. Brandon Schneider, Biologist	Role: Environmental Assessment

DRAFT FINDING OF NO SIGNIFICANT IMPACT

HARLEM-BADEN WATERSHED SEWER SEPARATION AND HEBERT STREET STORMWATER DETENTION BASIN, ST. LOUIS COUNTY, MISSOURI

1. I have reviewed and evaluated the documents concerning the proposed sewer separation and detention basin construction located in north St. Louis City, the City of Wellston, and the Village of Hillsdale, Missouri.
2. I have also evaluated other pertinent data and information relevant to the sewer separation and detention basin construction. As part of this evaluation, I have considered the following project alternatives.
 - a. Sewer Separation and Detention Basin Alternative. The Corps would provide Federal construction assistance to the Metropolitan St. Louis Sewer District (MSD) for the separation of combined sewers in the Harlem-Baden Watershed as well as the construction of a stormwater detention basin along Hebert Street.
 - b. No Action Alternative. Under this alternative, no Federal construction assistance would be provided and the combined sewer system would remain intact and the area for the proposed detention basin would remain in MSD ownership.
3. The possible consequences of the two alternatives have been studied for physical, environmental, cultural, social, economic, aesthetic, and recreational effects. Significant factors evaluated as part of my review include:
 - a. No adverse impacts to the physical or biological resources would result from the sewer separation and detention basin construction.
 - b. No federally endangered, threatened, or proposed species would be adversely impacted by the sewer separation and detention basin construction.
 - c. The aesthetic and recreational quality of the area would not be impacted by the proposed sewer separation and detention basin construction.
 - d. The proposed sewer separation and detention basin construction would have no effect upon significant archaeological remains or historic properties.
 - e. No adverse socioeconomic impacts from the proposed sewer separation and detention basin construction were identified.
 - f. The proposed sewer separation and detention basin construction would not require the placement of 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 Commander