

# **Appendix F**

## **Environmental Compliance**

## **APPENDIX F. ENVIRONMENTAL COMPLIANCE**

This appendix includes the following enclosures supporting the environmental compliance of the study:

1. Fish & Wildlife Coordination Act: Email from USFWS dated 17 May 2021 opting not to issue a Fish and Wildlife Coordination Act (FWCA) Planning Aid Letter (PAL) or full FWCA report at this time due to limited staffing. Endangered Species Act Section 7 consultation will take place during the public review period.
2. Endangered Species Act: IPaC Report obtained on 23 April 2021 from the Columbia, MO Field Office.
  - a. USFWS Concurrence obtained on: Date TBD after public review.
3. State Listed Species: Missouri Department of Conservation (MDC) Natural Heritage Review Level Two Report: State Listed Endangered Species and/or Missouri Species/Natural Communities of Conservation Concern dated 15 June 2021.
  - a. Letter of response from Missouri Department of Natural Resources State Historic Preservation Office dated 9 June 2021.
4. Environmental Justice: EJSscreen Report (Version 2019) obtained on 6 October 2020.
5. Section 106: Consultation letter sent to the Office of Historic Preservation, Missouri Department of Natural Resources, on 25 May 2021. Subject: Re: Request to Initiate Consultation on River Des Peres, University City General Reevaluation Report (GRR), a Flood Risk Management (FRM) Study.
  - a. MO SHPO responded on 9 June 2021 to provide the project with a SHPO Reference Number of: 076-SL-21.
6. Tribal Coordination: Letter sent to 23 Tribal entities on 15 June 2021.

Enclosures currently in separate PDF document, "Appendix F - Environmental Compliance ENCLOSURES.pdf".



## United States Department of the Interior

FISH AND WILDLIFE SERVICE  
Missouri Ecological Services Field Office  
101 Park Deville Drive  
Suite A  
Columbia, MO 65203-0057  
Phone: (573) 234-2132 Fax: (573) 234-2181



In Reply Refer To:  
Consultation Code: 03E14000-2020-SLI-2677  
Event Code: 03E14000-2021-E-03851  
Project Name: River Des Peres GRR

April 23, 2021

Subject: Updated list of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

### To Whom It May Concern:

This response has been generated by the Information, Planning, and Conservation (IPaC) system to provide information on natural resources that could be affected by your project. The U.S. Fish and Wildlife Service (Service) provides this response under the authority of the Endangered Species Act of 1973 (16 U.S.C. 1531-1543), the Bald and Golden Eagle Protection Act (16 U.S.C. 668-668d), the Migratory Bird Treaty Act (16 U.S.C. 703-712), and the Fish and Wildlife Coordination Act (16 U.S.C. 661 et seq.).

### Threatened and Endangered Species

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and may be affected by your proposed project. The species list fulfills the requirement for obtaining a Technical Assistance Letter from the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. **Note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days.** The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

### Consultation Technical Assistance

Refer to the Midwest Region [S7 Technical Assistance](#) website for step-by-step instructions for making species determinations and for specific guidance on the following types of projects: projects in developed areas, HUD, pipelines, buried utilities, telecommunications, and requests for a Conditional Letter of Map Revision (CLOMR) from FEMA.

### **Federally Listed Bat Species**

Indiana bats, gray bats, and northern long-eared bats occur throughout Missouri and the information below may help in determining if your project may affect these species.

*Gray bats* - Gray bats roost in caves or mines year-round and use water features and forested riparian corridors for foraging and travel. If your project will impact caves, mines, associated riparian areas, or will involve tree removal around these features – particularly within stream corridors, riparian areas, or associated upland woodlots –gray bats could be affected.

*Indiana and northern long-eared bats* - These species hibernate in caves or mines only during the winter. In Missouri the hibernation season is considered to be November 1 to March 31. During the active season in Missouri (April 1 to October 31) they roost in forest and woodland habitats. Suitable summer habitat for Indiana bats and northern long-eared bats consists of a wide variety of forested/wooded habitats where they roost, forage, and travel and may also include some adjacent and interspersed non-forested habitats such as emergent wetlands and adjacent edges of agricultural fields, old fields and pastures. This includes forests and woodlots containing potential roosts (i.e., live trees and/or snags  $\geq 5$  inches diameter at breast height (dbh) for Indiana bat, and  $\geq 3$  inches dbh for northern long-eared bat, that have exfoliating bark, cracks, crevices, and/or hollows), as well as linear features such as fencerows, riparian forests, and other wooded corridors. These wooded areas may be dense or loose aggregates of trees with variable amounts of canopy closure. Tree species often include, but are not limited to, shellbark or shagbark hickory, white oak, cottonwood, and maple. Individual trees may be considered suitable habitat when they exhibit the characteristics of a potential roost tree and are located within 1,000 feet (305 meters) of other forested/wooded habitat. Northern long-eared bats have also been observed roosting in human-made structures, such as buildings, barns, bridges, and bat houses; therefore, these structures should also be considered potential summer habitat and evaluated for use by bats. If your project will impact caves or mines or will involve clearing forest or woodland habitat containing suitable roosting habitat, Indiana bats or northern long-eared bats could be affected.

Examples of unsuitable habitat include:

- Individual trees that are greater than 1,000 feet from forested or wooded areas;
- Trees found in highly-developed urban areas (e.g., street trees, downtown areas);
- A pure stand of less than 3-inch dbh trees that are not mixed with larger trees; and
- A stand of eastern red cedar shrubby vegetation with no potential roost trees.

### **Using the IPaC Official Species List to Make No Effect and May Affect Determinations for Listed Species**

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1. If IPaC returns a result of “There are no listed species found within the vicinity of the project,” then project proponents can conclude the proposed activities will have **no effect** on any federally listed species under Service jurisdiction. Concurrence from the Service is not required for **No Effect** determinations. No further consultation or coordination is required. Attach this letter to the dated IPaC species list report for your records. An example ["No Effect" document](#) also can be found on the S7 Technical Assistance website.
2. If IPaC returns one or more federally listed, proposed, or candidate species as potentially present in the action area of the proposed project – other than bats (see #3 below) – then project proponents can conclude the proposed activities **may affect** those species. For assistance in determining if suitable habitat for listed, candidate, or proposed species occurs within your project area or if species may be affected by project activities, you can obtain [Life History Information for Listed and Candidate Species](#) through the S7 Technical Assistance website.
3. If IPaC returns a result that one or more federally listed bat species (Indiana bat, northern long-eared bat, or gray bat) are potentially present in the action area of the proposed project, project proponents can conclude the proposed activities **may affect** these bat species **IF** one or more of the following activities are proposed:
  - a. Clearing or disturbing suitable roosting habitat, as defined above, at any time of year;
  - b. Any activity in or near the entrance to a cave or mine;
  - c. Mining, deep excavation, or underground work within 0.25 miles of a cave or mine;
  - d. Construction of one or more wind turbines; or
  - e. Demolition or reconstruction of human-made structures that are known to be used by bats based on observations of roosting bats, bats emerging at dusk, or guano deposits or stains.

If none of the above activities are proposed, project proponents can conclude the proposed activities will have **no effect** on listed bat species. Concurrence from the Service is not required for **No Effect** determinations. No further consultation or coordination is required. Attach this letter to the dated IPaC species list report for your records. An example ["No Effect" document](#) also can be found on the S7 Technical Assistance website.

If any of the above activities are proposed in areas where one or more bat species may be present, project proponents can conclude the proposed activities **may affect** one or more bat species. We recommend coordinating with the Service as early as possible during project planning. If your project will involve removal of over 5 acres of suitable forest or woodland habitat, we recommend you complete a Summer Habitat Assessment prior to contacting our office to expedite the consultation process. The Summer Habitat Assessment Form is available in Appendix A of the most recent version of the [Range-wide Indiana Bat Summer Survey Guidelines](#).

### Other Trust Resources and Activities

*Bald and Golden Eagles* - Although the bald eagle has been removed from the endangered species list, this species and the golden eagle are protected by the Bald and Golden Eagle Act and the Migratory Bird Treaty Act. Should bald or golden eagles occur within or near the project area

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please contact our office for further coordination. For communication and wind energy projects, please refer to additional guidelines below.

*Migratory Birds* - The Migratory Bird Treaty Act (MBTA) prohibits the taking, killing, possession, transportation, and importation of migratory birds, their eggs, parts, and nests, except when specifically authorized by the Service. The Service has the responsibility under the MBTA to proactively prevent the mortality of migratory birds whenever possible and we encourage implementation of recommendations that minimize potential impacts to migratory birds. Such measures include clearing forested habitat outside the nesting season (generally March 1 to August 31) or conducting nest surveys prior to clearing to avoid injury to eggs or nestlings.

*Communication Towers* - Construction of new communications towers (including radio, television, cellular, and microwave) creates a potentially significant impact on migratory birds, especially some 350 species of night-migrating birds. However, the Service has developed [voluntary guidelines for minimizing impacts](#).

*Transmission Lines* - Migratory birds, especially large species with long wingspans, heavy bodies, and poor maneuverability can also collide with power lines. In addition, mortality can occur when birds, particularly hawks, eagles, kites, falcons, and owls, attempt to perch on uninsulated or unguarded power poles. To minimize these risks, please refer to [guidelines](#) developed by the Avian Power Line Interaction Committee and the Service. Implementation of these measures is especially important along sections of lines adjacent to wetlands or other areas that support large numbers of raptors and migratory birds.

*Wind Energy* - To minimize impacts to migratory birds and bats, wind energy projects should follow the Service's [Wind Energy Guidelines](#). In addition, please refer to the Service's [Eagle Conservation Plan Guidance](#), which provides guidance for conserving bald and golden eagles in the course of siting, constructing, and operating wind energy facilities.

### Next Steps

Should you determine that project activities **may affect** any federally listed species or trust resources described herein, please contact our office for further coordination. Letters with requests for consultation or correspondence about your project should include the Consultation Tracking Number in the header. Electronic submission is preferred.

If you have not already done so, please contact the Missouri Department of Conservation (Policy Coordination, P. O. Box 180, Jefferson City, MO 65102) for information concerning Missouri Natural Communities and Species of Conservation Concern.

We appreciate your concern for threatened and endangered species. Please feel free to contact our office with questions or for additional information.

Karen Herrington

Attachment(s):

- Official Species List
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- USFWS National Wildlife Refuges and Fish Hatcheries
  - Wetlands
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## Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

**Missouri Ecological Services Field Office**

101 Park Deville Drive

Suite A

Columbia, MO 65203-0057

(573) 234-2132

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## Project Summary

Consultation Code: 03E14000-2020-SLI-2677

Event Code: 03E14000-2021-E-03851

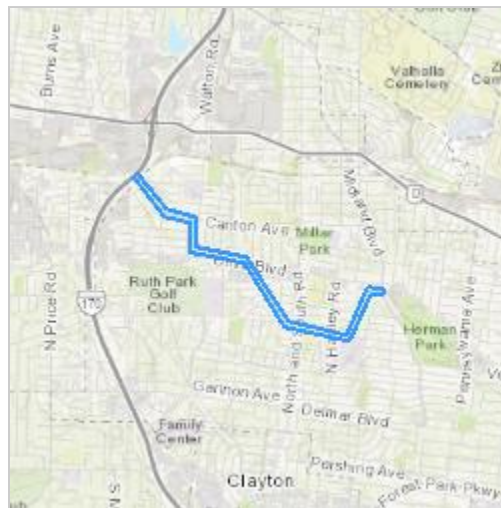
Project Name: River Des Peres GRR

Project Type: STREAM / WATERBODY / CANALS / LEVEES / DIKES

Project Description: Project to address flooding for a section of the River Des Peres.

Project Location:

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@38.67354864887134,-90.34424771132609,14z>



Counties: St. Louis County, Missouri

## Endangered Species Act Species

There is a total of 4 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries<sup>1</sup>, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

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1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

## Mammals

NAME	STATUS
Gray Bat <i>Myotis grisescens</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/6329">https://ecos.fws.gov/ecp/species/6329</a>	Endangered
Indiana Bat <i>Myotis sodalis</i> There is <b>final</b> critical habitat for this species. The location of the critical habitat is not available. Species profile: <a href="https://ecos.fws.gov/ecp/species/5949">https://ecos.fws.gov/ecp/species/5949</a>	Endangered
Northern Long-eared Bat <i>Myotis septentrionalis</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/9045">https://ecos.fws.gov/ecp/species/9045</a>	Threatened

## Flowering Plants

NAME	STATUS
Decurrent False Aster <i>Boltonia decurrens</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/7705">https://ecos.fws.gov/ecp/species/7705</a>	Threatened

## Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

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## USFWS National Wildlife Refuge Lands And Fish Hatcheries

Any activity proposed on lands managed by the [National Wildlife Refuge](#) system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS OR FISH HATCHERIES WITHIN YOUR PROJECT AREA.

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## Wetlands

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

WETLAND INFORMATION WAS NOT AVAILABLE WHEN THIS SPECIES LIST WAS GENERATED.  
PLEASE VISIT [HTTPS://WWW.FWS.GOV/WETLANDS/DATA/MAPPER.HTML](https://www.fws.gov/wetlands/data/mapper.html) OR CONTACT THE FIELD OFFICE FOR FURTHER INFORMATION.

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**From:** [Weber, John S](#)  
**To:** [Hill, Evan B CIV USARMY CEMVS \(USA\)](#)  
**Subject:** [Non-DoD Source] Fish & Wildlife Coordination Act Request  
**Date:** Monday, May 17, 2021 1:22:50 PM

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Hello Evan,

Thank you so much for reaching out about the River Des Peres project. We have opted not to participate in the project at earlier stages because we believe it has a limited conservation benefit aside from obvious flood control benefits. Therefore, we will decline to issue a PAL or full FWCA report at this time due to limited staffing. We sincerely appreciate your continued coordination and hope you will still reach out to us with FWCA requests on other projects in the future. We will, of course, provide ESA consultation when you alert us to its availability.

Thank you for your time

*John Weber  
Deputy Field Supervisor  
Missouri Field Office  
U.S. Fish & Wildlife Service  
Office: 573-234-5040; Cell: 573-825-6048*

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**From:** Hill, Evan B CIV USARMY CEMVS (USA) <Evan.B.Hill@usace.army.mil>  
**Sent:** Wednesday, May 12, 2021 1:32 PM  
**To:** Weber, John S <John\_S\_Weber@fws.gov>  
**Subject:** [EXTERNAL] [WARNING: UNSCANNABLE EXTRACTION FAILED][WARNING: UNSCANNABLE EXTRACTION FAILED]Fish & Wildlife Coordination Act Request

**This email has been received from outside of DOI - Use caution before clicking on links, opening attachments, or responding.**

Hi John,

We have a flood-risk reduction project here in University City, MO along the River Des Peres. I am writing to see if the USFWS would like to do a Planning Aid Letter or a FWCA Report. The alternatives posed include two detention basins, a floodwall, some combination of these structural solutions, and then a non-structural solution (flood-proofing, etc).

My IPaC for this segment of the River Des Peres (see map in the attached IPaC) included the three usual bat species and also Boltonia. I also attached a preliminary .kmz that shows the location of the two detention basins and the floodwall. This .kmz is not our 100% completed design, but it will provide a good overview of our plans, so take it with a grain of salt. We are working towards our

tentatively selected plan, but I just wanted to get this out to you so you can have a look and decide how you want to proceed: either a Planning Aid Letter or full FWCA Report. I do plan on including a Biological Assessment in our Environmental Assessment document which will go out for Public Review this summer for your (and everybody else's) review.

Feel free to give me a call (612) 310-0610 or shoot me an email if you want to discuss!

Thanks,

Evan Hill  
Environmental Compliance Section  
Wildlife Biologist  
U.S. Army Corps of Engineers  
1222 Spruce St  
St. Louis, MO 63103  
Work: (314) 925-5004  
Cell: (612) 310-0610  
evan.b.hill@usace.army.mil



## Missouri Department of Conservation

Missouri Department of Conservation's Mission is to protect and manage the forest, fish, and wildlife resources of the state and to facilitate and provide opportunities for all citizens to use, enjoy and learn about these resources.

### **Natural Heritage Review Level Two Report: State Listed Endangered Species and/or Missouri Species/Natural Communities of Conservation Concern**

There are records for state-listed Endangered Species, or Missouri Species or Natural Communities of Conservation Concern within or near the defined Project Area. Please contact Missouri Department of Conservation for further coordination.

**Foreword:** Thank you for accessing the Missouri Natural Heritage Review Website developed by the Missouri Department of Conservation with assistance from the U.S. Fish and Wildlife Service, the U.S. Army Corps of Engineers, Missouri Department of Transportation and NatureServe. The purpose of this website is to provide information to federal, state and local agencies, organizations, municipalities, corporations and consultants regarding sensitive fish, wildlife, plants, natural communities and habitats to assist in planning, designing and permitting stages of projects.

### **PROJECT INFORMATION**

**Project Name and ID Number:** River Des Peres GRR Project #8185

**Project Description:** Project will be a segment of the River Des Peres upstream of Herman Park to I-170 in St. Louis County, Missouri. The project seeks to address flooding in University City. An alternative has not been selected at this time, but we want to coordinate early on any state listed species that might be in the River Des Peres in this area.

**Project Type:** In-stream / Riverine Activities and Projects, Other

**Contact Person:** Evan Hill

**Contact Information:** [evan.b.hill@usace.army.mil](mailto:evan.b.hill@usace.army.mil) or 5739255004

**Disclaimer:** The NATURAL HERITAGE REVIEW REPORT produced by this website identifies if a species tracked by the Natural Heritage Program is known to occur within or near the area submitted for your project, and shares suggested recommendations on ways to avoid or minimize project impacts to sensitive species or special habitats. If an occurrence record is present, or the proposed project might affect federally listed species, the user must contact the Department of Conservation or U.S. Fish and Wildlife Service for more information. The Natural Heritage Program tracks occurrences of sensitive species and natural communities where the species or natural community has been found. Lack of an occurrence record does not mean that a sensitive plant, animal or natural community is not present on or near the project area. Depending on the project, current habitat conditions, and geographic location in the state, surveys may be necessary. Additionally, because land use conditions change and animals move, the existence of an occurrence record does not mean the species/habitat is still present. Therefore, Reports include information about records near but not necessarily on the project site.

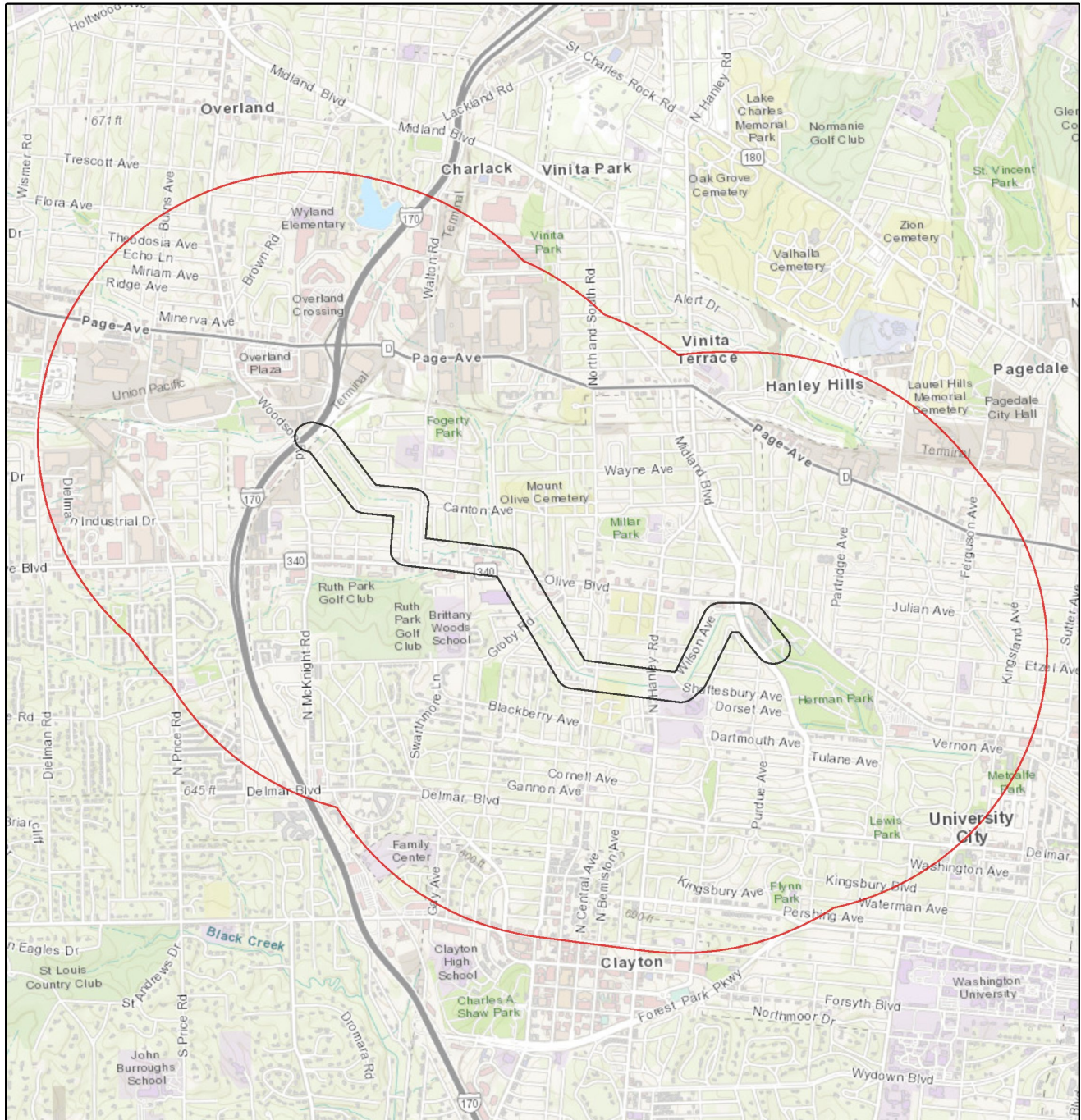
The Natural Heritage Report is not a site clearance letter for the project. It provides an indication of whether or not public lands and sensitive resources are known to be (or are likely to be) located close to the proposed project. Incorporating information from the Natural Heritage Program into project plans is an important step that can help reduce unnecessary impacts to Missouri's sensitive fish, forest and wildlife resources. However, the Natural Heritage Program is only one reference that should be used to evaluate potential adverse project impacts. Other types of information, such as wetland and soils maps and on-site inspections or surveys, should be considered. Reviewing current landscape and habitat information, and species' biological characteristics would additionally ensure that Missouri Species of Conservation Concern are appropriately identified and addressed in planning efforts.

**U.S. Fish and Wildlife Service – Endangered Species Act (ESA) Coordination:** Lack of a Natural Heritage Program occurrence record for federally listed species in your project area does not mean the species is not present, as the area may never have been surveyed. Presence of a Natural Heritage Program occurrence record does not mean the project will result in negative impacts. The information within this report is not intended to replace Endangered Species Act consultation with the U.S. Fish and Wildlife Service (USFWS) for listed species. Direct contact with the USFWS may be necessary to complete consultation and it is required for actions with a federal connection, such as federal funding or a federal permit; direct contact is also required if ESA concurrence is necessary. Visit the USFWS Information for Planning and Conservation (IPaC) website at <https://ecos.fws.gov/ipac/> for further information. This site was developed to help streamline the USFWS environmental review process and is a first step in ESA coordination. The Columbia Missouri Ecological Field Services Office may be reached at 573-234-2132, or by mail at 101 Park Deville Drive, Suite A, Columbia, MO 65203.

**Transportation Projects:** If the project involves the use of Federal Highway Administration transportation funds, these recommendations may not fulfill all contract requirements. Please contact the Missouri Department of Transportation at 573-526-4778 or [www.modot.mo.gov/ehp/index.htm](http://www.modot.mo.gov/ehp/index.htm) for additional information on recommendations.



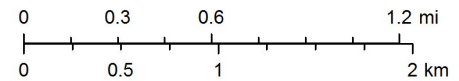
# River Des Peres GRR Project



October 8, 2020

1:35,283

- Project Boundary
- Buffered Project Boundary



Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

## Species or Communities of Conservation Concern within the Area:

There are records for state-listed Endangered Species, or Missouri Species or Natural Communities of Conservation Concern within or near the defined Project Area. Please contact the Missouri Department of Conservation for further coordination.

MDC Natural Heritage Review  
Resource Science Division  
P.O. Box 180  
Jefferson City, MO  
65102-0180  
Phone: 573-522-4115 ext. 3182  
[NaturalHeritageReview@mdc.mo.gov](mailto:NaturalHeritageReview@mdc.mo.gov)

## Other Special Search Results:

No results have been identified for this project location.

## Project Type Recommendations:

Recommendations for Best Management Practices are under development.

## Project Location and/or Species Recommendations:

**Endangered Species Act Coordination - Indiana bats** (*Myotis sodalis*, federal- and state-listed endangered) and **Northern long-eared bats** (*Myotis septentrionalis*, federal-listed threatened) may occur near the project area. Both of these species of bats hibernate during winter months in caves and mines. During the summer months, they roost and raise young under the bark of trees in wooded areas, often riparian forests and upland forests near perennial streams. During project activities, avoid degrading stream quality and where possible leave snags standing and preserve mature forest canopy. Do not enter caves known to harbor Indiana bats or Northern long-eared bats, especially from September to April. **If any trees need to be removed for your project, please contact the U.S. Fish and Wildlife Service (Ecological Services, 101 Park Deville Drive, Suite A, Columbia, Missouri 65203-0007; Phone 573-234-2132 ext. 100 for Ecological Services) for further coordination under the Endangered Species Act.**

The project location submitted and evaluated is within the range of the Gray Myotis (i.e., Gray Bat) in Missouri. Depending on habitat conditions of your project's location, Gray Myotis (*Myotis grisescens*, federal and state-listed endangered) could occur within the project area, as they forage over streams, rivers, lakes, and reservoirs. Avoid entry or disturbance of any cave inhabited by Gray Myotis and when possible retain forest vegetation along the stream and from the cave opening to the stream. See <http://mdc.mo.gov/104> for best management recommendations.

**Invasive exotic species** are a significant issue for fish, wildlife and agriculture in Missouri. Seeds, eggs, and larvae may be moved to new sites on boats or construction equipment. Please inspect and clean equipment thoroughly before moving between project sites. See <http://mdc.mo.gov/9633> for more information.

- Remove any mud, soil, trash, plants or animals from equipment before leaving any water body or work area.
- Drain water from boats and machinery that have operated in water, checking motor cavities, live-well, bilge and transom wells, tracks, buckets, and any other water reservoirs.
- When possible, wash and rinse equipment thoroughly with hard spray or HOT water (?140° F, typically available at do-it-yourself car wash sites), and dry in the hot sun before using again.

**Streams and Wetlands – Clean Water Act Permits:** Streams and wetlands in the project area should be protected from activities that degrade habitat conditions. For example, soil erosion, water pollution, placement of fill, dredging, in-stream activities, and riparian corridor removal, can modify or diminish aquatic habitats. Streams and wetlands may be protected under the Clean Water Act and require a permit for any activities that result in fill or other modifications to the site. Conditions provided within the U.S. Army Corps of Engineers (USACE) Clean Water Act Section 404 permit (<http://www.nwk.usace.army.mil/Missions/RegulatoryBranch.aspx>) and the Missouri Department of Natural Resources (DNR) issued Clean Water Act Section 401 Water Quality Certification (<http://dnr.mo.gov/env/wpp/401/index.html>), if required, should help minimize impacts to the aquatic organisms and aquatic habitat within the area. Depending on your project type, additional permits may be required by the Missouri Department of Natural Resources, such as permits for stormwater, wastewater treatment facilities, and confined animal feeding operations. Visit <http://dnr.mo.gov/env/wpp/permits/index.html> for more information on DNR permits. Visit both the USACE and DNR for more information on Clean Water Act permitting.

For further coordination with the Missouri Department of Conservation and the U.S. Fish and Wildlife Services, please see the contact information below.

MDC Natural Heritage Review  
Resource Science Division  
P.O. Box 180  
Jefferson City, MO  
65102-0180  
Phone: 573-522-4115 ext. 3182  
[NaturalHeritageReview@mdc.mo.gov](mailto:NaturalHeritageReview@mdc.mo.gov)

U.S. Fish and Wildlife Service  
Ecological Service  
101 Park Deville Drive  
Suite A  
Columbia, MO  
65203-0007  
Phone: 573-234-2132

### Miscellaneous Information

**FEDERAL** Concerns are species/habitats protected under the Federal Endangered Species Act and that have been known near enough to the project site to warrant consideration. For these, project managers must contact the U.S. Fish and Wildlife Service Ecological Services (101 Park Deville Drive Suite A, Columbia, Missouri 65203-0007; Phone 573-234-2132; Fax 573-234-2181) for consultation.

**STATE** Concerns are species/habitats known to exist near enough to the project site to warrant concern and that are protected under the Wildlife Code of Missouri (RSMo 3 CSR 1 0). "State Endangered Status" is determined by the Missouri Conservation Commission under constitutional authority, with requirements expressed in the Missouri Wildlife Code, rule 3CSR 1 0-4.111. Species tracked by the Natural Heritage Program have a "State Rank" which is a numeric rank of relative rarity. Species tracked by this program and all native Missouri wildlife are protected under rule 3CSR 10-4.110 General Provisions of the Wildlife Code.

Additional information on Missouri's sensitive species may be found at <http://mdc.mo.gov/discover-nature/field-guide/endangered-species>. Detailed information about the animals and some plants mentioned may be accessed at [http://mdc4.mdc.mo.gov/applications/mofwis/mofwis\\_search1.aspx](http://mdc4.mdc.mo.gov/applications/mofwis/mofwis_search1.aspx). If you would like printed copies of best management practices cited as internet URLs, please contact the Missouri Department of Conservation.





# Missouri Department of Conservation Natural Heritage Review Report

June 15, 2021 -- Page 1 of 3

Science Branch  
P. O. Box 180  
Jefferson City, MO 65102  
Prepared by: Hannah Roos  
NaturalHeritageReview@mdc.mo.gov  
(573) 522 - 4115 ext. 3182

Evan Hill  
U.S. Army Corps of Engineers  
[evan.b.hill@usace.army.mil](mailto:evan.b.hill@usace.army.mil)

NHR ERT ID:	8185	NHR ERT Level:	2
Project type:	Instream Other		
Location/Scope:	River Des Peres upstream of Herman Park to I-170		
County:	St. Louis		
Query reference:	River Des Peres GRR		
Query received:	6/14/2021		

**This NATURAL HERITAGE REVIEW is not a site clearance letter. Rather, it identifies public lands and sensitive resources known to have been located close to and/or potentially affected by the proposed project.** On-site verification is the responsibility of the project. Natural Heritage records were identified at some date and location. This report considers records near but not necessarily at the project site. Animals move and, over time, so do plant communities. To say "there is a record" does not mean the species/habitat is still there. To say that "there is no record" does not mean a protected species will not be encountered. These records only provide one reference and other information (e.g. wetland or soils maps, on-site inspections or surveys) should be considered. Look for additional information about the biological and habitat needs of records listed in order to avoid or minimize impacts. More information is at <https://mdc.mo.gov/discover-nature/places/natural-areas> and [https://mdc12.mdc.mo.gov/applications/mofwis/mofwis\\_search1.aspx](https://mdc12.mdc.mo.gov/applications/mofwis/mofwis_search1.aspx)

## **Level 3 issues: Records of federal-listed (these are also state-listed) species or critical habitats near the project site:**

Natural Heritage records identify no wildlife preserves, no designated wilderness areas or critical habitats, and no federal-listed species records within the project area, or in the public land survey section listed above or sections adjacent.

FEDERAL LIST species/habitats are protected under the Federal Endangered Species Act. Contact the U.S. Fish and Wildlife Service (101 Park Deville Drive Suite A, Columbia, Missouri 65203-0007; 573-234-2132) for Endangered Species Act coordination and concurrence information).

## **Level 2 issues: Records of state-listed (not federal-listed) endangered species AND / OR state-ranked (not state-listed endangered) species and natural communities of conservation concern. The Department tracks these species and natural communities due to population declines and/or apparent vulnerability.**

Natural Heritage records indicate several Peregrine Falcons (*Falco peregrinus*, state-listed endangered) within 5 miles of the project area.

- **Peregrine Falcons:** Peregrine Falcons (*Falco peregrinus*) were introduced to downtown buildings in the St. Louis and Kansas City areas in the 1990s, and populations of this state endangered-list species have been increasing since. They nest April 15-July 15 on natural bluffs, building ledges and bridges. Work should be avoided within 1500 feet of nests when nest building or active nests (eggs or hatchlings) are present. Follow best management recommendations at <https://mdc.mo.gov/sites/default/files/2020-06/PeregrineFalconBMP.pdf>.

Natural Heritage records indicate the following state-ranked species/natural communities near the project area:

Scientific Name	Common Name	State Rank	Proximity (miles)
<i>Ictinia mississippiensis</i>	Mississippi Kite	S3	0.67
<i>Ludwigia leptocarpa</i>	Primrose Willow	S2	2.08

<i>Macrochelys temminckii</i>	Alligator Snapping Turtle	S2	4.15
<i>Trematodon longicollis</i>	A Moss	S2	1.97

### **State Rank Definitions:**

- S1: Critically imperiled in the state because of extreme rarity of or because of some factor(s) making it especially vulnerable to extirpation from the state. Typically, 5 or fewer occurrences or very few remaining individuals (<1,000).
- S2: Imperiled in the state because of rarity or because of some factor(s) making it very vulnerable to extirpation from the state (6 to 20 occurrences or few remaining individuals).
- S3: Vulnerable in the state either because rare and uncommon, or found only in a restricted range (even if abundant at some locations), or because of other factors making it vulnerable to extirpation. Typically 21 to 100 occurrences or between 3,000 and 10,000 individuals.
- S4: Uncommon but not rare, and usually widespread in the nation or state. Possible cause of long-term concern. Usually more than 100 occurrences and more than 10,000 individuals.

There are no regulatory requirements associated with this status, however we encourage voluntary stewardship to minimize the risk of further decline that could lead to listing.

STATE ENDANGERED species are listed in and protected under the Wildlife Code of Missouri (3CSR10-4.111). See [https://mdc.mo.gov/sites/default/files/mo\\_nature/downloads/2021\\_SOCC.pdf](https://mdc.mo.gov/sites/default/files/mo_nature/downloads/2021_SOCC.pdf) for a complete list of species and communities of conservation concern.

### **General recommendations related to this project or site, or based on information about the historic range of species (unrelated to any specific Natural Heritage records):**

- **Stream Protection:** Streams in the area should be protected from soil erosion, water pollution and in-stream activities that modify or diminish aquatic habitats. Best management recommendations relating to streams and rivers may be found at <https://live-mdcd8.pantheonsite.io/sites/default/files/2020-06/Streams.pdf>
- **Gray Bats:** Gray Bats (*Myotis grisescens*, federal and state-listed endangered) occur in St. Louis County and could occur in the project area, as they forage over streams, rivers, and reservoirs. Avoid entry or disturbance of any cave inhabited by gray bats and when possible retain forest vegetation along the stream and from the gray bat cave opening to the stream.
- **Indiana Bats and Northern Long-eared Bats** occur in St. Louis County and could occur in the project area. Indiana Bats (*Myotis sodalis*, federal and state-listed endangered) and Northern Long-eared Bats (*Myotis septentrionalis*, federal-listed threatened) hibernate during winter months in caves and mines. During the summer months, they roost and raise young under the bark of trees in riparian forests and upland forests near perennial streams. During project activities, avoid degrading stream quality and where possible leave snags standing and preserve mature forest canopy. Do not enter caves known to harbor Indiana Bats and/or Northern Long-eared Bats, especially from September to April. **If any trees need to be removed by your project, please contact the U.S. Fish and Wildlife Service (Ecological Services, 101 Park Deville Drive, Suite A, Columbia, Missouri 65203-0007; Phone 573-234-2132 Ext. 100 for Ecological Services) for further coordination under the Endangered Species Act.**
- Invasive exotic species are a significant issue for fish, wildlife and agriculture in Missouri. Seeds, eggs, and larvae may be moved to new sites on boats or construction equipment, so inspect and clean equipment thoroughly before moving between project sites.

- ♦ Remove any mud, soil, trash, plants or animals from equipment before leaving any water body or work area.
  - ♦ Drain water from boats and machinery that has operated in water, checking motor cavities, live-well, bilge and transom wells, tracks, buckets, and any other water reservoirs.
  - ♦ When possible, wash and rinse equipment thoroughly with hard spray or HOT water ( $\geq 140^{\circ}\text{F}$ , typically available at do-it-yourself carwash sites), and dry in the hot sun before using again.
- **Karst:** St. Louis County has known karst geologic features (e.g. caves, springs, and sinkholes, all characterized by subterranean water movement). Few karst features are recorded in Natural Heritage records, and ones not noted here may be encountered at the project site or affected by the project. Cave fauna (many of which are species of conservation concern) are influenced by changes to water quality, so check your project site for any karst features and make every effort to protect groundwater in the project area. See <https://live-mdcd8.pantheonsite.io/sites/default/files/2020-06/Karst.pdf> for best management recommendations.

These recommendations are ones project managers might prudently consider based on a general understanding of species needs and landscape conditions. Natural Heritage records largely reflect sites visited by specialists in the last 30 years. Many privately owned tracts have not been surveyed and could host remnants of species once but no longer common.

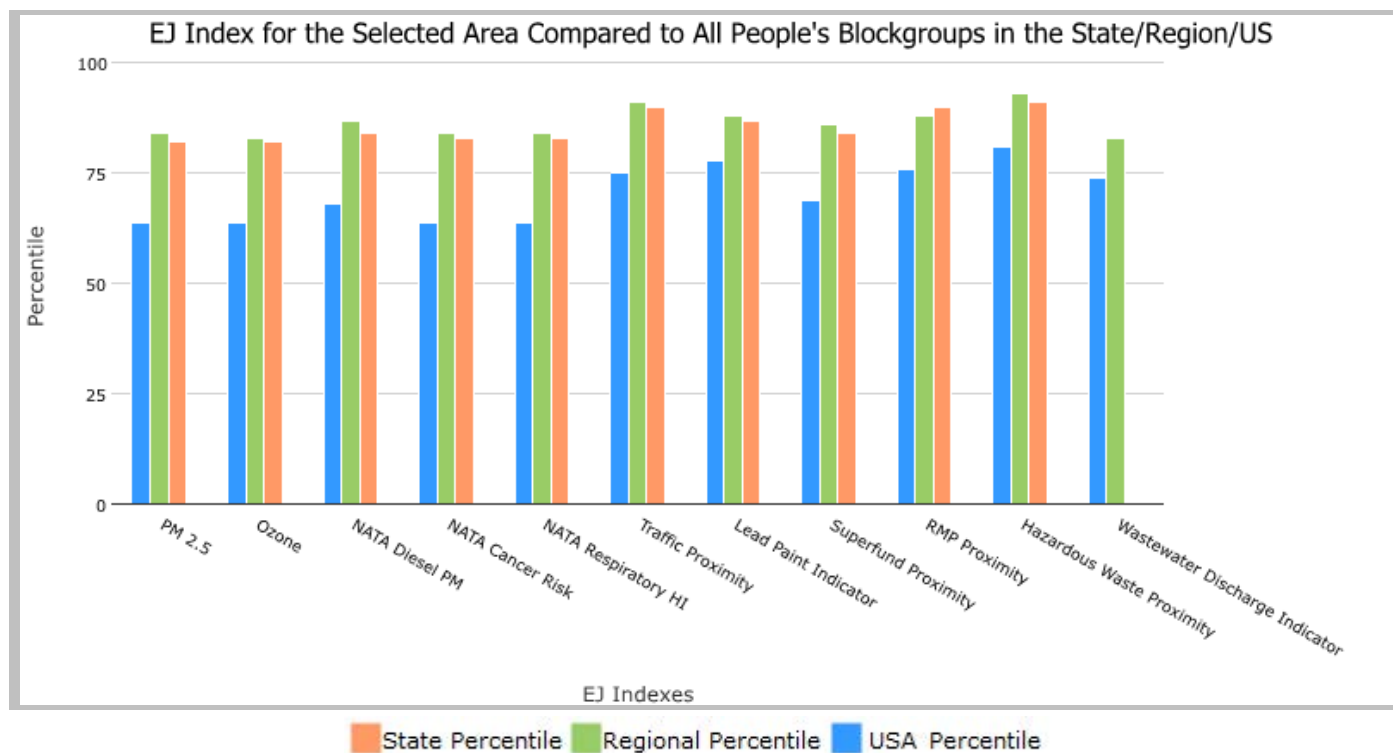


the User Specified Area, MISSOURI, EPA Region 7

Approximate Population: 34,663

Input Area (sq. miles): 5.99

Selected Variables	State Percentile	EPA Region Percentile	USA Percentile
<b>EJ Indexes</b>			
EJ Index for PM <sub>2.5</sub>	82	84	64
EJ Index for Ozone	82	83	64
EJ Index for NATA* Diesel PM	84	87	68
EJ Index for NATA* Air Toxics Cancer Risk	83	84	64
EJ Index for NATA* Respiratory Hazard Index	83	84	64
EJ Index for Traffic Proximity and Volume	90	91	75
EJ Index for Lead Paint Indicator	87	88	78
EJ Index for Superfund Proximity	84	86	69
EJ Index for RMP Proximity	90	88	76
EJ Index for Hazardous Waste Proximity	91	93	81
EJ Index for Wastewater Discharge Indicator	N/A	83	74



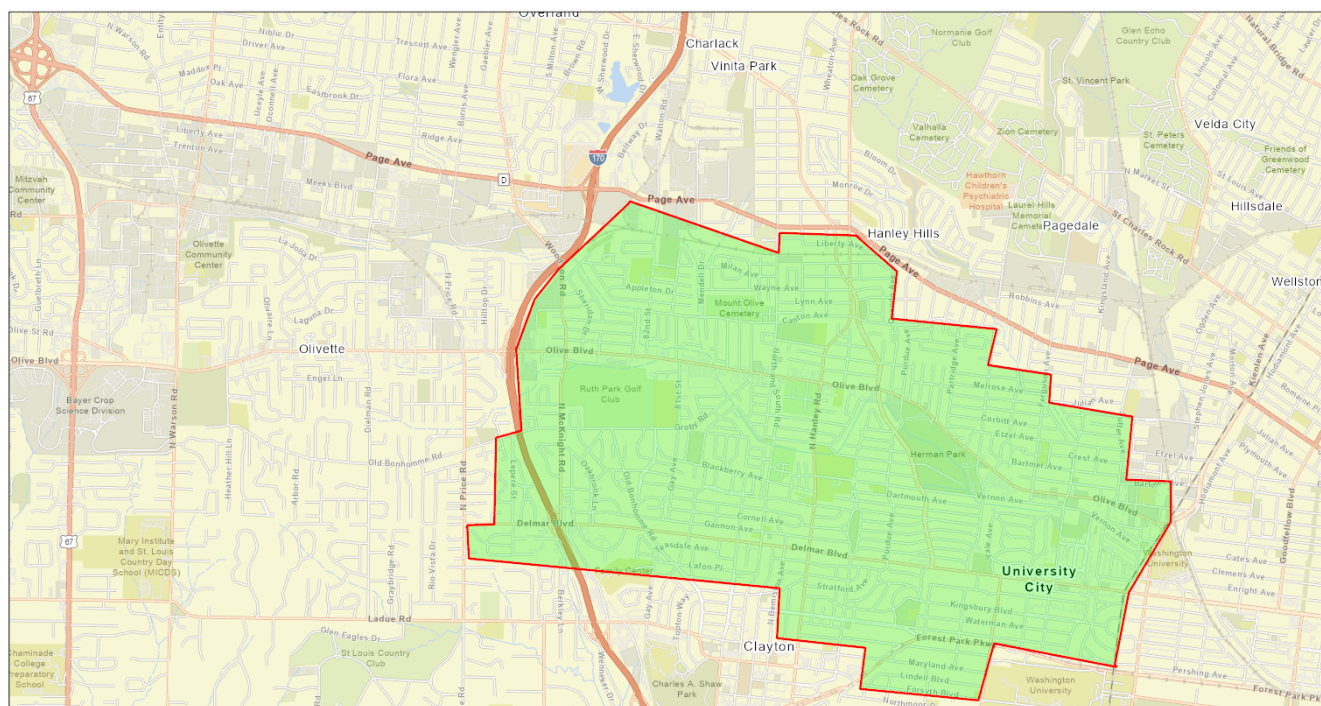
This report shows the values for environmental and demographic indicators and EJSCREEN indexes. It shows environmental and demographic raw data (e.g., the estimated concentration of ozone in the air), and also shows what percentile each raw data value represents. These percentiles provide perspective on how the selected block group or buffer area compares to the entire state, EPA region, or nation. For example, if a given location is at the 95th percentile nationwide, this means that only 5 percent of the US population has a higher block group value than the average person in the location being analyzed. The years for which the data are available, and the methods used, vary across these indicators. Important caveats and uncertainties apply to this screening-level information, so it is essential to understand the limitations on appropriate interpretations and applications of these indicators. Please see EJSCREEN documentation for discussion of these issues before using reports.



the User Specified Area, MISSOURI, EPA Region 7

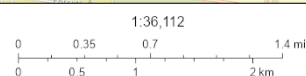
Approximate Population: 34,663

Input Area (sq. miles): 5.99



October 6, 2020

Project 1



Sources: Esri, HERE, Garmin, FAO, NOAA, USGS, OpenStreetMap contributors, and the GIS User Community

#### Sites reporting to EPA

Superfund NPL

0

Hazardous Waste Treatment, Storage, and Disposal Facilities (TSDF)

0



## EJSCREEN Report (Version 2019)

the User Specified Area, MISSOURI, EPA Region 7

Approximate Population: 34,663

Input Area (sq. miles): 5.99

Selected Variables	Value	State Avg.	%ile in State	EPA Region Avg.	%ile in EPA Region	USA Avg.	%ile in USA
<b>Environmental Indicators</b>							
Particulate Matter (PM 2.5 in $\mu\text{g}/\text{m}^3$ )	9.28	8.29	93	7.77	97	8.3	77
Ozone (ppb)	46.6	43.1	92	42.5	96	43	77
NATA* Diesel PM ( $\mu\text{g}/\text{m}^3$ )	0.932	0.447	96	0.367	95-100th	0.479	90-95th
NATA* Cancer Risk (lifetime risk per million)	38	32	90	27	95-100th	32	70-80th
NATA* Respiratory Hazard Index	0.52	0.42	93	0.36	95-100th	0.44	70-80th
Traffic Proximity and Volume (daily traffic count/distance to road)	820	370	88	330	90	750	78
Lead Paint Indicator (% Pre-1960 Housing)	0.72	0.29	89	0.34	88	0.28	88
Superfund Proximity (site count/km distance)	0.092	0.099	61	0.1	68	0.13	63
RMP Proximity (facility count/km distance)	1.3	0.63	85	0.94	75	0.74	82
Hazardous Waste Proximity (facility count/km distance)	4	0.99	93	0.8	96	4	88
Wastewater Discharge Indicator (toxicity-weighted concentration/m distance)	0	1.6	N/A	0.97	26	14	37
<b>Demographic Indicators</b>							
Demographic Index	39%	27%	80	26%	81	36%	62
Minority Population	47%	20%	87	19%	88	39%	65
Low Income Population	30%	34%	46	32%	52	33%	51
Linguistically Isolated Population	2%	1%	86	2%	80	4%	59
Population With Less Than High School Education	6%	11%	32	10%	39	13%	32
Population Under 5 years of age	6%	6%	54	6%	51	6%	54
Population over 64 years of age	17%	16%	61	15%	61	15%	66

\* The National-Scale Air Toxics Assessment (NATA) is EPA's ongoing, comprehensive evaluation of air toxics in the United States. EPA developed the NATA to prioritize air toxics, emission sources, and locations of interest for further study. It is important to remember that NATA provides broad estimates of health risks over geographic areas of the country, not definitive risks to specific individuals or locations. More information on the NATA analysis can be found at: <https://www.epa.gov/national-air-toxics-assessment>.

For additional information, see: [www.epa.gov/environmentaljustice](http://www.epa.gov/environmentaljustice)

EJSCREEN is a screening tool for pre-decisional use only. It can help identify areas that may warrant additional consideration, analysis, or outreach. It does not provide a basis for decision-making, but it may help identify potential areas of EJ concern. Users should keep in mind that screening tools are subject to substantial uncertainty in their demographic and environmental data, particularly when looking at small geographic areas. Important caveats and uncertainties apply to this screening-level information, so it is essential to understand the limitations on appropriate interpretations and applications of these indicators. Please see EJSCREEN documentation for discussion of these issues before using reports. This screening tool does not provide data on every environmental impact and demographic factor that may be relevant to a particular location. EJSCREEN outputs should be supplemented with additional information and local knowledge before taking any action to address potential EJ concerns.



**DEPARTMENT OF THE ARMY**  
**U.S. ARMY CORPS OF ENGINEERS, ST. LOUIS DISTRICT**  
**1222 SPRUCE STREET**  
**ST. LOUIS, MISSOURI 63103**

REPLY TO  
ATTENTION OF:

25 May 2021

Curation and Archives Analysis Branch  
Engineering and Construction Division

Amy Rubingh  
Office of Historic Preservation  
Missouri Department of Natural Resources  
P.O. Box 176  
Jefferson City, Missouri 65102

Re: Request to Initiate Consultation on River Des Peres, University City General Reevaluation Report (GRR), a Flood Risk Management (FRM) Study.

Dear Ms. Rubingh:

The U.S. Army Corps of Engineers (USACE) Saint Louis District is in the process of evaluating flood risk management solutions for the River Des Peres in University City, Missouri. In 1988 a USACE Saint Louis District Feasibility Report identified a flood risk problem along the River Des Peres in University City, and recommended a solution to address the problem which was approved in a 1989 Chief's Report and authorized in the Water Resource Development Act (WRDA) of 1990. However, before the project was constructed, updated hydraulic analysis showed the recommended solution caused unacceptable downstream impacts, so the project could not be implemented. Recurrent flooding in the study area continues to threaten life safety and cause economic damage to buildings and infrastructure. The present General Reevaluation Report (GRR) study was initiated to reevaluate the recommendations from the 1988 study and analyze alternatives that would improve life safety and reduce economic damages from flooding of the River Des Peres. The study falls under the USACE Flood Risk Management (FRM) program area. Pursuant to Section 106 of the National Historic Preservation Act (P.L. 89-665, as amended), the USACE St. Louis District would like to initiate consultation regarding this GRR study.

The GRR with integrated Environmental Assessment (EA) will evaluate and compare the benefits, costs, and impacts (positive or negative) of alternatives including the No Action Alternative. The report will also satisfy the requirement of the National Environmental Policy Act (NEPA) to evaluate the proposed federal action. The study is currently at the Tentatively Selected Plan (TSP) Milestone, which means that several alternatives have been developed and a TSP has been identified. This letter to initiate consultation is a requirement at this stage of the study.

The alternatives developed for this study are: 1. No Action Alternative; 2. River Des Peres channel and bridge modifications and detention basins; 3. Detention Basins, one at Woodson Park, Overland MO and one at 8020 Olive Blvd. University City, MO; 4. Levee / Floodwall segment along the River Des Peres; 5. Nonstructural - acquisition/buyouts of structures damaged at the 25-year flood event (~500 structures); 6. Nonstructural - floodproofing and elevation of structures damaged at the 25-year flood event (~500 structures). Based on preliminary cost benefit analysis, the TSP has been identified as alternative 6, consisting of nonstructural floodproofing and elevation of structures and homes that sustain flood damage at the 25-year flood event along the River Des Peres. It should be noted that at this stage of the study, the alternatives and TSP have only been developed to a low level of detail (~10% design), and the details of the TSP are expected to change in the next stage of the study. For example, a smaller or larger flood event than the 25-year flood may be used to maximize the net economic benefits of the nonstructural solutions.

Initial archival research indicates that within the limits of the 25-year flood event are two National Register Historic Districts (University City Education District and University Heights Subdivision Number 1) and four homes determined eligible for the National Register (7479, 7483, 7487, 7491 Shaftesbury). Sixty-five homes within the University Heights Subdivision as well as the four eligible homes on Shaftesbury potentially sustain damages at the 25-year flood event and would be eligible for floodproofing under the TSP. A list of these structures with their significance determination based on the National Register form is attached. Additionally, maps identifying the project area and the evaluated alternatives, as well as a Section 106 Project information form MO 780-1027 (1-20), are attached.

Given this information, the St. Louis District would like to initiate consultation regarding this project. If you have any questions regarding this matter, please contact Ms. Lara Anderson directly at (314) 331-8779, or e-mail [Lara.anderson@usace.army.mil](mailto:Lara.anderson@usace.army.mil).

Sincerely,

Jennifer L. Riordan  
Chief, Curation and Archives  
Analysis Branch

Attachments



Missouri Department of

dnr.mo.gov

**NATURAL RESOURCES**

Michael L. Parson, Governor

Dru Buntin, Acting Director

June 9, 2021

U.S. Army Corps of Engineers  
St. Louis District  
Attn: Lara Anderson  
1222 Spruce Street  
St. Louis, MO 63103-2833

RE: **SHPO Number: 076-SL-21** – River Des Peres, University City, General Reevaluation Report, St. Louis County, Missouri

Dear Lara Anderson:

Thank you for submitting the information regarding the above-referenced project for our records 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 require identification and evaluation of cultural resources.

Based on the information provided no project is being proposed for action. Therefore we look forward to reviewing the individual projects as the properties and scope of work are determined.

If you have any questions please write Missouri Department of Natural Resources, State Historic Preservation Office, Attn: Review and Compliance, P.O. Box 176, Jefferson City, Missouri 65102, or call Amy Rubingh (573) 751-4589. Please be sure to include the SHPO Project Number **(076-SL-21)** on all future correspondence relating to this project.

Sincerely,

STATE HISTORIC PRESERVATION OFFICE

Toni M. Prawl, PhD  
Director and Deputy  
State Historic Preservation Office





MISSOURI DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF STATE PARKS  
**STATE HISTORIC PRESERVATION OFFICE**  
**SECTION 106 PROJECT INFORMATION FORM (PAGE 1 OF 2)**

Submission of a completed Project Information Form with adequate information and attachments constitutes a request for a review pursuant to Section 106 of the National Historic Preservation Act of 1966 (as amended). We reserve the right to request more information. **Please refer to the CHECKLIST on Page 2 to ensure that all basic information relevant to the project has been included.** For further information, refer to our website at: <http://dnr.mo.gov/shpo> and follow the links to Section 106 Review.

**NOTE:** Section 106 regulations provide for a 30-day response time by the Missouri State Historic Preservation Office from the **date of receipt**.

PROJECT NAME

River Des Peres, University City, General Reevaluation Report

FEDERAL AGENCY PROVIDING FUNDS, LICENSE, OR PERMIT

USACE, Saint Louis District

OTHER INVOLVED AGENCY

University City, Missouri

CONTACT PERSON

Lara Anderson

TELEPHONE

314-331-8779

CONTACT EMAIL -- (this will be used for digital response regarding your project)

lara.anderson@usace.army.mil

CONTACT ADDRESS

1222 Spruce Street

CITY

Saint Louis

STATE

MO

ZIP

63017

LOCATION OF PROJECT

COUNTY

Saint Louis

STREET ADDRESS

n/a

CITY

University City

LATITUDE/LONGITUDE

38

UTM -- NORTHING/EASTING (Include datum)

15S 731836 4283205

LEGAL DESCRIPTION OF PROJECT AREA (TOWNSHIP, RANGE, SECTION, 1/4 SECTION)

TOWNSHIP

45 N

RANGE

5 E

SECTION

2,3,4,5, 32, 33

PROJECT INFORMATION CHECKLIST

TO THE BEST OF YOUR KNOWLEDGE, IS THE PROJECT LOCATED IN ANY OF THE FOLLOWING?

☐ AN AREA PREVIOUSLY SURVEYED  
FOR HISTORIC PROPERTIES

☒ A NATIONAL REGISTER DISTRICT

☐ A LOCAL HISTORIC DISTRICT

WHAT ARE THE DATES OF CONSTRUCTION OR DATES OF ADDITIONS FOR BUILDINGS OR STRUCTURES IN THE PROJECT AREA?

University City Education District 1930, 1933, 1937; University Heights Subdivision No.1 1905 -1930

HAS THE GROUND INVOLVED BEEN GRADED, BUILT ON, BORROWED, OR OTHERWISE DISTURBED?

☒ YES

☐ NO

WILL THE PROJECT REQUIRE FILL MATERIAL?

☒ YES

☐ NO

IF YES, INDICATE PROPOSED BORROW AREAS (SOURCE OF FILL MATERIAL) ON PROJECT AREA MAP

Borrow may occur if detention basin alternatives are chosen no source for this material has been identified at this time.  
Detention basins are presently not part of the tentatively selected plan.

ARE YOU AWARE OF ARCHAEOLOGICAL SITES ON OR ADJACENT TO PROJECT AREA?

☐ YES

☒ NO

IF YES, IDENTIFY THEM ON THE TOPOGRAPHIC MAP (see additional requirements)





MISSOURI DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF STATE PARKS  
STATE HISTORIC PRESERVATION OFFICE  
SECTION 106 PROJECT INFORMATION FORM (PAGE 2 OF 2)

**PROJECT DESCRIPTION**

DESCRIBE THE OVERALL PROJECT IN DETAIL. IF IT INVOLVES EXCAVATION, INDICATE HOW WIDE, HOW DEEP, ETC. IF THE PROJECT INVOLVES DEMOLITION OF EXISTING BUILDINGS, MAKE THAT CLEAR. IF THE PROJECT INVOLVES REHABILITATION, DESCRIBE THE PROPOSED WORK IN DETAIL. USE ADDITIONAL PAGES IF NECESSARY.

The River Des Peres University City, Missouri General Reevaluation Report with integrated Environmental Assessment (EA) presents the results of a U.S. Army Corps of Engineers (USACE) flood risk management study for University City in St. Louis County, Missouri. The general purpose of this study with integrated Environmental Assessment (EA) is to analyze alternatives to reduce the risk to life safety and economic damages from the River des Peres flooding. The study will evaluate and compare the benefits, costs, and impacts (positive or negative) of alternatives including the No Action Alternative. The study will identify whether an economically justified plan exists to reduce economic damages and life safety risk due to flooding. Alternatives developed for this study are: 1. No Action Alternative; 2. River Des Peres channel and bridge modifications and detention basins; 3. Detention Basins, one at Woodson Park, Overland MO and one at 8020 Olive Blvd. University City, MO; 4. Levee / Floodwall along the River Des Peres; 5. Nonstructural - acquisition/buyouts of structures damaged at the 25-year flood event ~ 500 structures; 6. Nonstructural - floodproofing and elevation of structures and homes that sustain flood damaged at the 25-year flood events along the River Des Peres. Based on a comparison of the cost benefit of the alternatives, the tentatively selected plan that is being proposed is alternative number 6 the nonstructural flood proofing or elevation. Sixty-five of the structures identified as needing flood proofing are located within National Register District Ref # 80004391, University Heights Subdivision Number One. According to the National Register form of the 65 structures one is recognized as "State Significant", four are recognized as "Locally Significant", 26 are recognized as "Essential to the Fabric of the Neighborhood", and 34 have "No Special Significance".

**ADDITIONAL REQUIREMENTS**

**Map Requirements:** Attach a map depicting the project area, and, if necessary, a large scale project map. If project involves ground disturbance, the project footprint must be clearly delineated on the map. Please do not send an individual map with each structure or site. While a topographic map is preferred, a map from online map providers is acceptable. For a list of sites from which to order, download or print the required USGS 7.5 min. topographic maps at little or no cost, consult <http://dnr.mo.gov/shpo/sectionrev.htm>.

**Photography Requirements:** Clear black and white or color photographs (minimum 3" x 5") are acceptable. Polaroids, photocopies, emailed or faxed photographs are not acceptable. Images do not need to be printed on photo paper, standard 8x11 paper is fine. **Clear and good quality photographs are important for expeditious project review.** Photographs of neighboring or nearby buildings are also helpful. All photographs should be labeled and keyed to one map of the project area. Images captured from Google Earth are not acceptable as they fail to provide the most current view of the area.

**DID YOU PROVIDE THE FOLLOWING INFORMATION?**

- |   |   |
|---|---|
| <input checked="" type="checkbox"/> PROJECT AREA MAP (per project, not structure)   | <input checked="" type="checkbox"/> OTHER SUPPORTING DOCUMENTS<br>(if necessary to explain the project)               |
| <input checked="" type="checkbox"/> THOROUGH PROJECT DESCRIPTION (ALL PROJECTS)   | <input type="checkbox"/> FOR NEW CONSTRUCTION, REHABILITATIONS, ETC.,<br>ATTACH WORK WRITE-UPS, PLANS, DRAWINGS, ETC. |
| <input type="checkbox"/> PHOTOGRAPHS OF ALL STRUCTURES AND OVERVIEW<br>PHOTOGRAPHS FOR ARCHAEOLOGY<br>NOTE: all photographs should be labeled and keyed to one<br>map of the project area | <input checked="" type="checkbox"/> DATES OF CONSTRUCTION OF STRUCTURES IN THE PROJECT AREA                           |

**RETURN THIS FORM AND ATTACHMENTS TO:**

MISSOURI DEPARTMENT OF NATURAL RESOURCES  
STATE HISTORIC PRESERVATION OFFICE  
Attn: Section 106 Review  
P.O. BOX 178  
JEFFERSON CITY, MISSOURI 65102-0178

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

June 15, 2021

Curation and Archives Analysis Branch  
Engineering and Construction Division

Subject: River Des Peres, University City General Reevaluation Report (GRR), a Flood Risk Management (FRM) Study, St. Louis County, MO

Ms. Devon Frazier Smith  
Tribal Historic Preservation Officer  
Absentee-Shawnee Tribe of Indians of Oklahoma  
2025 S. Gordon Cooper Drive  
Shawnee, OK 74801

Dear Ms. Frazier Smith:

The U.S. Army Corps of Engineers (USACE), St. Louis District (the District) is contacting your tribe to initiate consultation pertaining to flood risk management solutions for River Des Peres in University City, St. Louis County, Missouri (Figure 1), in accordance with Section 106 of the National Historic Preservation Act of 1966, as amended, and the National Environmental Protection Act, 42 USC 4321-4374. In 1988, a District Feasibility Report identified a flood risk problem along the River Des Peres in University City, and recommended a solution to address the problem which was approved in a 1989 Chief's Report and authorized in the Water Resource Development Act (WRDA) of 1990. However, before the project was constructed, updated hydraulic analysis showed the recommended solution caused unacceptable downstream impacts, so the project could not be implemented. Recurrent flooding in the study area continues to threaten life safety and cause economic damage to buildings and infrastructure. The present General Reevaluation Report (GRR) study was initiated to reevaluate the recommendations from the 1988 study and analyze alternatives that would improve life safety and reduce economic damages from flooding of the River Des Peres. The study falls under the USACE Flood Risk Management (FRM) program area.

The GRR, with integrated Environmental Assessment (EA), has evaluated and compared the benefits, costs, and impacts (positive or negative) of six alternatives:

- 1.) No action;
- 2.) River Des Peres channel and bridge modifications and detention basins;
- 3.) Detention basins, one at Woodson Park in Overland, MO and one at 8020 Olive Blvd., University City, MO;
- 4.) Levee/floodwall along the River Des Peres;
- 5.) Nonstructural – acquisition/buyouts of structures and homes damaged at the 25-year flood event (approximately 500 structures); and
- 6.) Nonstructural – floodproofing and elevation of structures and homes that sustain flood damage at the 25-year flood event (approximately 500 structures).

Based upon a comparison of the cost benefit of the alternatives, the tentatively selected plan (TSP) is alternative number 6, floodproofing and elevation of structures and homes that sustain

flood damage at the 25-year flood event. It should be noted that the alternatives and TSP have only been developed to about 10% design and the details of the TSP are expected to change in the next stage of this study. For example, a smaller or larger flood event than the 25-year flood may be utilized.

The archival review indicates that there are no previously recorded sites within the footprint of the TSP. Two National Register Historic Districts (University City Education District and University Heights Subdivision Number 1) and four homes determined eligible for the National Register (7479, 7483, 7487, 7491 Shaftesbury) are within the TSP. Sixty-five homes within the University Heights Subdivision as well as the four eligible homes on Shaftesbury potentially sustain damages at the 25-year flood event and would be eligible for floodproofing under the TSP (Figure 2).

The District is requesting that you review the maps and information about the project and notify our office if you have any concerns about traditional cultural properties, sacred sites, or other resources that may be located within the study area. If you have any questions or comments, please feel free to contact me at (314) 331-8855, or Meredith Hawkins Trautt (Archaeologist and Tribal Liaison) at (314) 925-5031 or email [Meredith.M.Trautt@usace.army.mil](mailto:Meredith.M.Trautt@usace.army.mil).

Sincerely,

**SIGNED**

Jennifer L. Riordan  
Chief, Curation and Archives  
Analysis Branch



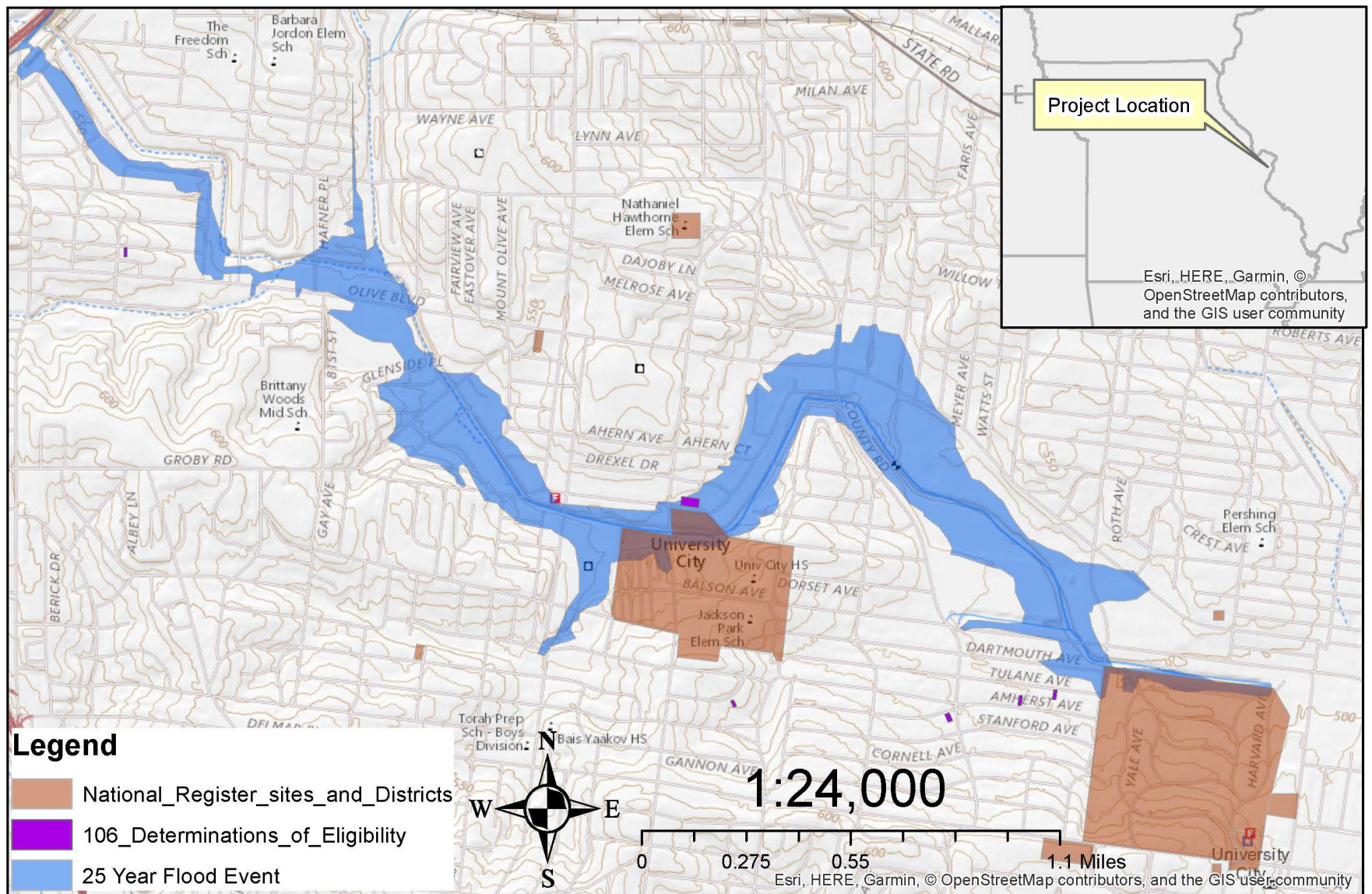


Figure 1: Location Map of University City, MO Report Study Area and Historic Resources.



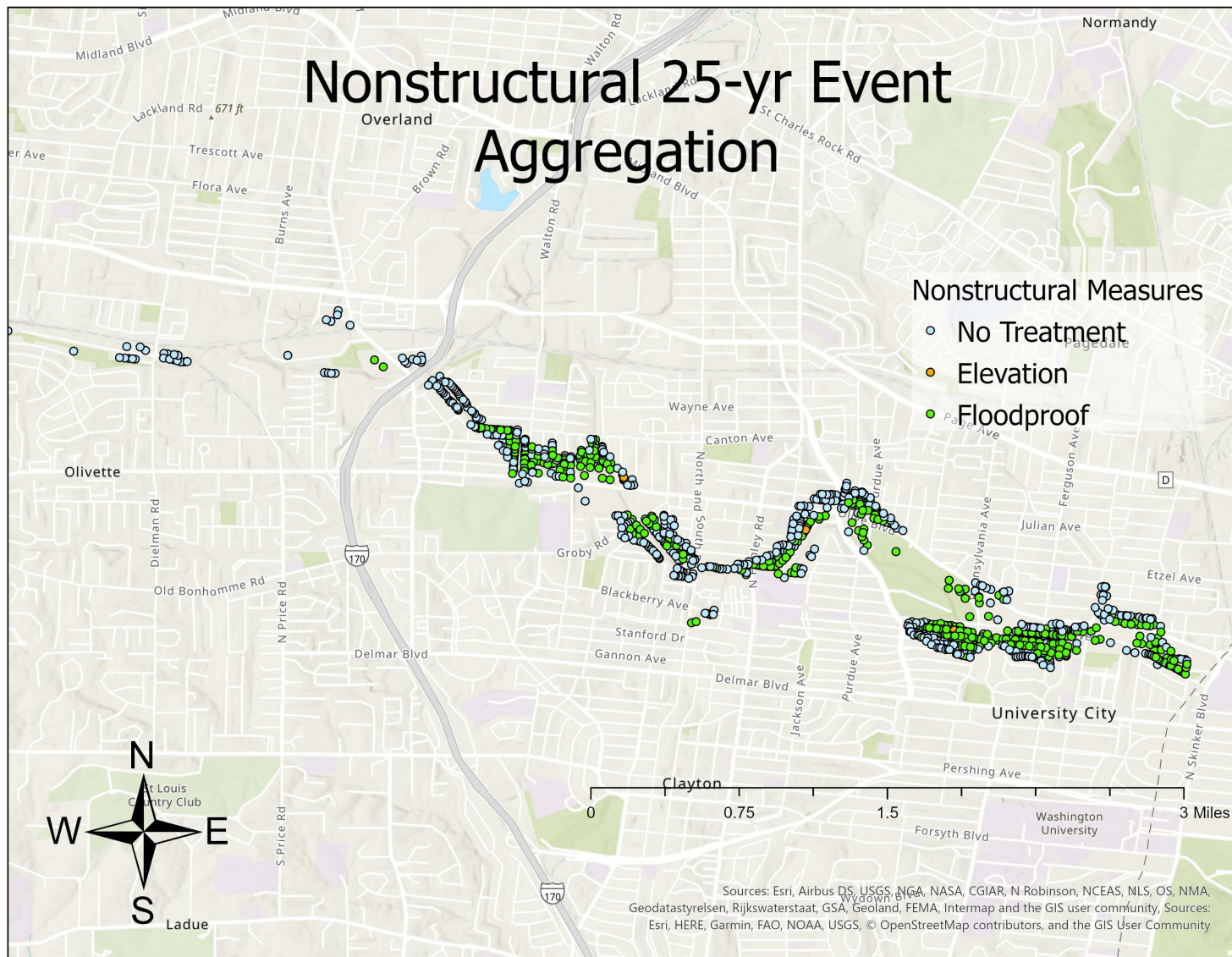


Figure 2: Location Map of Structures within the Tentatively Selected Plan (option #6).

## MVS Leaders

Tribe	Title	Name (First, Middle, Last)	Last Name	Street Address	Street Address 2	City	State	Zipcode	Furnished Copy
Absentee-Shawnee Tribe of Indians of Oklahoma	Governor	John Raymond Johnson c/o Representative Alicia Miller	Johnson	2025 S. Gordon Cooper Drive		Shawnee	OK	74801	Ms. Carol Butler and Ms. Devon Frazier Smith
Caddo Nation of Oklahoma	Chairperson	Tamara Francis	Francis	P.O. Box 487		Binger	OK	73009	Mr. Derek Hill
Citizen Potawatomi Nation, Oklahoma	Chairman	John Barrett	Barrett	1601 S. Gordon Cooper Drive		Shawnee	OK	74801	Ms. Tracy Wind
Eastern Shawnee Tribe of Oklahoma	Chief	Glenna J. Wallace	Wallace	12755 S. 705 Road		Wyandotte	OK	74370	Mr. Paul Barton
Forest County Potawatomi Community, Wisconsin	Chairman	Ned Daniels, Jr.	Daniels	P.O. Box 340		Crandon	WI	54520	Ms. Nekole Reske
Hannahville Indian Community, Michigan	Chairman	Kenneth Meshigaud	Meshigaud	N 14911 Hannahville B-1 Road		Wilson	MI	49896	Mr. Earl Meshigaud
Ho-Chunk Nation of Wisconsin	President	Marlon WhiteEagle	WhiteEagle	P.O. Box 667		Black River Falls	WI	54675	Mr. William Quackenbush
Iowa Tribe of Kansas and Nebraska	Chairman	Tim Rhodd	Rhodd	3345 Thrasher Road, #8		White Cloud	KS	66094	Mr. Lance Foster
Iowa Tribe of Oklahoma	Chairman	Edgar B. Kent, Jr.	Kent	335588 E. 750 Rd		Perkins	OK	74059	Cultural Preservation Department
Kickapoo Tribe of Indians of the Kickapoo Reservation in Kansas	Chairman	Lester Randall	Randall	824 111th Drive		Horton	KS	66439	Mr. Fred Thomas
Kickapoo Tribe of Oklahoma	Chairman	David Pacheco	Pacheco	P.O. Box 70		McCloud	OK	74851	Mr. Kent Collier
Match-E-Be-Nash-She-Wish Band of Potawatomi Indians	Chairman	Bob Peters	Peters	2872 Mission Dr.		Shelbyville	MI	49344	Ms. Lakota Pochedley
Miami Tribe of Oklahoma	Chief	Douglas Lankford	Lankford	B.O. Box 1326		Miami	OK	74355	Ms. Diane Hunter
Nottawaseppi Huron Band of the Potawatomi, Michigan	Chairman	Jamie Stuck	Stuck	2221—1 & 1/2 Mile Road		Fulton	MI	49052	Mr. Douglas R. Taylor
Peoria Tribe of Indians of Oklahoma	Chief	Craig Harper	Harper	118 S. Eight Tribes Trail		Miami	OK	74354	Mr. Logan Pappenfort
Prairie Band Potawatomi Nation	Chairman	Joseph Rupnick	Rupnick	Government Center	16281 Q Road	Mayetta	KS	66509	The Historic Preservation Office
Sac & Fox Nation of Missouri in Kansas and Nebraska	Chairperson	Tiauna Carnes	Carnes	305 N. Main Street		Reserve	KS	66434	Mr. Gary Bahr
Sac & Fox Nation, Oklahoma	Principal Chief	Justin F. Woods	Woods	920883 S Highway 99	Building A	Stroud	OK	74079	Mr. Chris Boyd
Sac & Fox Tribe of the Mississippi in Iowa	Chairman	Troy Wanatee	Wanatee	349 Meskwaki Road		Tama	IA	52339	Mr. Johnathan Buffalo
Shawnee Tribe	Chief	Benjamin Barnes	Barnes	P.O. Box 189		Miami	OK	74355	Ms. Tonya Tipton
The Osage Nation	Principal Chief	Geoffrey Standing Bear	Standing Bear	P.O. Box 779		Pawhuska	OK	74056	Dr. Andrea Hunter
The Quapaw Tribe of Indians	Chairman	Joseph Byrd	Byrd	P.O. Box 765		Quapaw	OK	74363	Mr. Everett Bandy
United Keetoowah Band of Cherokee of Oklahoma	Chief	Joe Bunch	Bunch	P.O. Box 746		Tahlequah	OK	74464	Ms. Erica Gorsuch

## MVS Reps

Tribe	Title	Name (First, Middle, Last)	Last Name	Position	Street Address	Street Address 2	City	State	Zipcode
Absentee-Shawnee Tribe of Indians of Oklahoma	Ms.	Devon Frazier Smith	Frazier Smith	Tribal Historic Preservation Officer	2025 S. Gordon Cooper Drive		Shawnee	OK	74801
Absentee-Shawnee Tribe of Indians of Oklahoma	Ms.	Carol Butler	Butler	Cultural Preservation Director	2025 S. Gordon Cooper Drive		Shawnee	OK	74801
Caddo Nation of Oklahoma	Mr.	Derek Hill	Hill	Tribal Historic Preservation Officer	P.O. Box 487		Binger	OK	73009
Citizen Potawatomi Nation, Oklahoma	Ms.	Tracy Wind	Wind	Assistant Tribal Historic Preservation Officer	Cultural Heritage Center	1601 S. Gordon Cooper Drive	Shawnee	OK	74801
Eastern Shawnee Tribe of Oklahoma	Mr.	Paul Barton	Barton	Tribal Historic Preservation Officer	70500 E. 128 Road		Wyandotte	OK	74370
Forest County Potawatomi Community, Wisconsin	Ms.	Nicole Reske	Reske	Assistant Tribal Historic Preservation Officer	8130 Mish ko Swen Dr.	P.O. Box 340	Crandon	WI	54520
Hannahville Indian Community, Michigan	Mr.	Earl Meshigaud	Meshigaud	Historic Preservation Office	P.O. Box 351, Highway 2 & 41		Harris	MI	49845
Ho-Chunk Nation of Wisconsin	Mr.	William Quackenbush	Quackenbush	Tribal Historic Preservation Officer	P.O. Box 667		Black River Falls	WI	54675
Iowa Tribe of Kansas and Nebraska	Mr.	Lance Foster	Foster	Tribal Historic Preservation Officer	3345B Thrasher Road		White Cloud	KS	66094
Iowa Tribe of Oklahoma	The	Cultural Preservation Department	Cultural Preservation Department	Cultural Preservation Department	335588 E. 750 Rd		Perkins	OK	74059
Kickapoo Tribe of Indians of the Kickapoo Reservation in Kansas	Mr.	Fred Thomas	Thomas	Vice Chair	824 111th Drive		Horton	KS	66439
Kickapoo Tribe of Oklahoma	Mr.	Kent Collier	Collier	Historic Preservation Office	P.O. Box 70		McCloud	OK	74851
Match-E-Be-Nash-She-Wish Band of Potawatomi Indians	Ms.	Lakota Pochedley	Pochedley	Tribal Historic Preservation Officer	2872 Mission Drive		Shelbyville	MI	49344
Miami Tribe of Oklahoma	Ms.	Diane Hunter	Hunter	Tribal Historic Preservation Officer	202 S. Eight Tribes Trail	P.O. Box 1326	Miami	OK	74355
Nottawaseppi Huron Band of the Potawatomi, Michigan	Mr.	Douglas R. Taylor	Taylor	Tribal Historic Preservation Officer	1301 T Dr S		Fulton	MI	49052
Peoria Tribe of Indians of Oklahoma	Mr.	Logan Pappenfort	Pappenfort	Director of Cultural Preservation	118 S. Eight Tribes Trail		Miami	OK	74354
Prairie Band Potawatomi Nation	The	Historic Preservation Office	Historic Preservation Officer	Tribal Council Member	Government Center	16281 Q Road	Mayetta	KS	66509
Sac & Fox Nation of Missouri in Kansas and Nebraska	Mr.	Gary Bahr	Bahr	Vice Chairperson	305 N. Main Street		Reserve	KS	66434
Sac & Fox Nation, Oklahoma	Mr.	Chris Boyd	Boyd	NAGPRA/Historic Preservation Office	920883 S. Highway 99	Building A	Stroud	OK	74079
Sac & Fox Tribe of the Mississippi in Iowa	Mr.	Johnathan Buffalo	Buffalo	Historic Preservation Office	349 Meskwaki Road		Tama	IA	52339
Shawnee Tribe	Ms.	Tonya Tipton	Tipton	Historic Preservation Office	P.O. Box 189		Miami	OK	74355
The Osage Nation	Dr.	Andrea Hunter	Hunter	Historic Preservation Office	627 Grandview Avenue		Pawhuska	OK	74056
The Quapaw Tribe of Indians	Mr.	Everett Bandy	Bandy	Tribal Historic Preservation Officer	P.O. Box 765		Quapaw	OK	74363
United Keetoowah Band of Cherokee of Oklahoma	Ms.	Erica Gorsuch	Gorsuch	Assistant Tribal Historic Preservation Officer	P.O. Box 746		Tahlequah	OK	74464