

INDIANA DEPARTMENT OF TRANSPORTATION

100 North Senate Avenue Room N758-ES Indianapolis, Indiana 46204 PHONE: (855) 463-6848 Eric Holcomb, Governor Joe McGuinness, Commissioner

Date: August 4, 2021

To: Site Assessment & Management

Environmental Policy Office - Environmental Services Division (ESD)

Indiana Department of Transportation 100 N Senate Avenue, Room IGCN 758-ES

Indianapolis, IN 46204

From: Keaton Veldkamp

Parsons

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Indianapolis, IN 46204

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Re: RED FLAG INVESTIGATION

DES 1901643, State Project

Transportation Systems Management and Operations (TSMO) Borman Expressway (I-80/I-94), from Illinois State Line to I-65

Gary, Griffith, Hammond, Highland, Hobart, Lake Station, and Munster, Lake County, Indiana

PROJECT DESCRIPTION

Brief Description of Project: The Indiana Department of Transportation (INDOT) is studying the I-80/I-94 Corridor (Borman Expressway) from I-65 to the Illinois/Indiana State Line, and potentially beyond to include the western portions of the I-65/Indiana Toll Road and the I-80/I-94 and Ripley Street/US 6/SR 51 interchanges. A variety of Transportation Systems Management and Operations (TSMO) strategies are under consideration, including active traffic management (ATM) and intelligent transportation system (ITS) solutions such as hard shoulder running, ramp metering, variable speed limits, lane control and special-purpose lanes; in addition to more traditional or conventional strategies to improve traffic operations. Ground disturbance activities under consideration include various foundations (e.g., large electronic signs, scaffolds, towers, meters, etc.), cable/utility installation, added lanes, and/or noise barriers. Additionally, drainage improvements would occur as needed. Some alternatives could include ditch regrading and/or small structure work (e.g., extension or replacement of pipes/culverts). No bridge work is anticipated, and the intent is to stay within existing right-of-way.

This document is being prepared for a Planning and Environment Linkages (PEL) Study of a range of alternatives. The National Environmental Protection Act (NEPA) process would be conducted in the future under a separate contract that would include standard early coordination and an updated RFI on the preferred alternative.

Bridge and/or Culvert Project: Yes □ No ⊠* Structure #
If this is a bridge project, is the bridge Historical? Yes \square No \square , Select \square Non-Select \square
(Note: If the project involves a historical bridge, please include the bridge information in the Recommendations
Section of the report).
Proposed right of way: Temporary □ # Acres Permanent □ # Acres, Not Applicable ⊠
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Type and proposed depth of excavation: Could include grading, trenching, boring, and/or directional drilling; ranging from the ground surface to over 12 feet below grade.

Maintenance of traffic: Will likely include shoulder and lane closures. At least two lanes of traffic along I-80/I-94 should remain open in each direction. Ramp closures at interchanges could occur and official detours would be provided.

Work in waterway: Yes \boxtimes No \square Below ordinary high water mark: Yes \boxtimes No \square

State Project: ⊠ LPA: □

Any other factors influencing recommendations: *Drainage improvements would be identified under a future contract after completion of this PEL Study; therefore, a list of structures is not applicable of at this time.

INFRASTRUCTURE TABLE AND SUMMARY

Infrastructure Indicate the number of items of concern found within the 0.5 mile search radius. If there are no items, please indicate N/A:				
Religious Facilities	80	Recreational Facilities	75*	
Airports ¹	3	Pipelines	41	
Cemeteries	2	Railroads	28	
Hospitals	N/A	Trails	29*	
Schools	19	Managed Lands	30*	

¹In order to complete the required airport review, a review of public-use airports within 3.8 miles (20,000 feet) is required.

Religious Facilities: Eighty (80) religious facilities are located within the 0.5 mile search radius. Nine (9) religious facilities are adjacent to the project area:

- Unity Church, at the southwest corner of US 41 and River Drive, Hammond
- Riverside Community Reformed Church, at the northwest corner of US 41 and 175th Street, Hammond
- Assembly of God Church of Hessville, aka Life Point Church, at the northwest corner of Kennedy Avenue and 174th Street, Highland
- Pentecostal Church of God, at the northwest corner of East Oakwood Drive and 27th Place, Gary
- Grace Missionary Baptist Church, at the southeast corner of Grant Street and 25th Avenue, Gary
- Saint Timothy Community Church, at the northwest corner of Grant Street and 25th Avenue, Gary
- Abundant Life Tabernacle, at the northwest corner of Burr Street and 29th Avenue, Gary
- Greater Saint James African Methodist Episcopal Church, at the northeast corner of Massachusetts Street and 26th Avenue, Gary
- Saint John Baptist Church, at the northeast corner of Massachusetts Street and 25th Avenue, Gary

Depending on the preferred alternative and its maintenance of traffic, further coordination with religious facilities should occur.

Airports: Although not located within the 0.5 mile search radius, three (3) public-use airports, Gary/Chicago International Airport, Griffith-Merrillville Airport, and the Hobart Sky Ranch Airport, are located within 3.8 miles (20,000 feet) of the project area. The Gary/Chicago International Airport is located approximately 2.3 miles north of the project area, the Griffith-Merrillville Airport is located approximately 3.3 miles south of the project area, and the Hobart Sky Ranch Airport is located approximately 1.0 mile south of the project area; therefore, early coordination with INDOT Aviation will occur.

Cemeteries: Two (2) cemeteries are located within the 0.5 mile search radius. The nearest cemetery, Evergreen Memorial, is located approximately 0.31 mile south of the project area. No impact is expected.

Schools: Nineteen (19) schools are located within the 0.5 mile search radius. Two (2) schools are located adjacent to the project area:

^{*}Includes sites not mapped in GIS.

- Cline Avenue Baptist Childcare/Preschool, at the southeast corner of SR 912 and River Drive, Highland
- Gary Academy & Blessed Beginning Daycare, at the northeast corner of Burr Street and 29th Avenue, Gary Coordination with Gary Academy & Blessed Beginning Daycare and Cline Avenue Baptist Childcare/Preschool will occur.

Recreational Facilities: Seventy-five (75) recreational facilities are located within the 0.5 mile search radius. Eleven (11) recreational facilities are adjacent to the project area:

- George W. Carlson Oxbow Park, near 178th Drive and 177th Street, Hammond (Note, "Kennedy Park" appears to be a duplicate listing).
- Hammond FOP 51 Memorial Field, at the southeast corner of J F Mahoney Drive and 175th Street, Hammond
- Rich's Park, at the southwest corner of Harrison Avenue and 177th Place, Munster
- Griffith Golf Center, at the northwest corner of SR 912 and River Drive, Griffith. Note, this site is no longer a golf course and appears to be vacant and covered in vegetation.
- Frederick Douglass Elementary School, at the northeast corner of Van Buren Street and 28th Avenue, Gary
- Black Oak Elementary School, at the northeast corner of Gerry Street and 29th Avenue, Gary. Note, this site is no longer a school and appears to be vacant and covered in vegetation.
- MC Bennet Park (LWCF Conversion), at the southwest corner of Grant Street and 25th Avenue, Gary
- Miller Park, near the northeast corner of Putnam Street and 20th Place, Lake Station
- Three Rivers County Park, at the southwest corner of Colorado Street and Dakota Street, Lake Station
- Grand Boulevard Lake, at northeast corner of Marquette Road and Grand Boulevard, Lake Station
- Four Winds Park, at the northwest corner of Marquette Road and Morgan Street, Lake Station

Coordination with Gary Community School Corporation, Lake Ridge Schools, Hammond Parks and Recreation, Gary Parks Department, and Lake Station Parks and Recreation is recommended.

Pipelines: Forty-one (41) pipeline segments are located within the 0.5 mile search radius. Thirty (30) pipeline segments, Northern Indiana Public Services Co., Buckeye Pipe Line Co., Phillips Pipe Line Co., Shell Oil Co. Inc., AMOCO Pipeline Co., Wolverine Pipe Line Co., Marathon Pipe Line Co., ARCO Pipe Line Co., Wabash Pipe Line Co., and Explorer Pipeline Co., cross the project area. Coordination with INDOT Utilities and Railroads should occur.

Railroads: Twenty-eight (28) railroads are located within the 0.5 mile search radius. Fourteen (14) railroad segments, Canadian National Railroad, Chicago, Ft. Wayne & Eastern Railroad, CSX Railroad, and an unlabeled railroad, cross the project area. Coordination with INDOT Utilities and Railroads should occur.

Trails: Twenty-nine (29)* trail segments are located within the 0.5 mile search radius. Eighteen (18)* current and planned trail segments cross or are adjacent the project area:

- Little Calumet River Levee Trail (Monon Trail to Calumet Avenue and Monon Trail to Northcote Avenue), Hammond is an existing trail that is adjacent to the project area. It crosses Calumet Avenue and River Drive south of the I-80/I-94 and Indianapolis Avenue/US 41/SR 152 interchange. It is also planned to cross the project area at or near the existing Monon Trail, discussed below.
- Monon Trail (Douglas Street south to Fisher Street), Hammond is an existing trail that crosses under I-80/I-94 at the bridge over the Little Calumet between Hohman Avenue and Harrison Avenue.
- Erie Trail Linear Park, also called the Erie Lackawanna Trail (Cabela's to Little Calumet River, Erie trail Linear Park, and Northcote to US 41 along Little Cal), Hammond is an existing trail that crosses I-80/I-94 via a culvert between Northcote Avenue and the I-80/I-94 and Indianapolis Avenue/US 41/SR 15 interchange.
- Twin Rivers Trail (Grand Calumet Trail to Little Calumet Trail), west of Kennedy Avenue, Hammond is a planned trail that would cross Bormann Expressway at or near the Norfolk Southern Railroad bridge, west of the Bormann Expressway and Kennedy Avenue interchange.
- Little Calumet River Levee Trail (Kennedy Avenue west to Crosstown Trail, Kennedy Avenue to Cline Avenue, and Oxbow Park Connection), Hammond and Highland, is an existing trail adjacent to the project area near the Kennedy Avenue bridge over the Little Calumet River.
- Hammond Parks Trails (Oxbow Park Trail and Oxbow Park Accessible Trail), Hammond and Highland, are existing trails adjacent to the project area in Oxbow Park southeast of the I-80/I-94 and Kennedy Avenue interchange.

- Little Calumet River Levee Trail (Burr Street to Martin Luther King Drive), Gary is an existing trail that crosses the project area at Broadway between 30th Avenue and 33rd Avenue. It also crosses the project area at Grant Street between the Bormann Expressway and Grant Street interchange and 32nd Street.
- An Unmapped Trail* in Gary crosses the project area two times, first on the southside of the Bormann Expressway and Grant Street interchange, and then on the southside of the I-80/I-94 and Broadway/SR 53 interchange.
- Gary Parks Trails (Gleason Park Wetland Trail), Gary is adjacent to the project area and is an existing trail that crosses 30th Avenue west of Broadway/SR 53.
- Lake County Parks Trails (Three Rivers Park Walking Trail), Lake Station is an existing trail adjacent to the project area southeast of the I-80/I-94 and I-65 interchange.
- East Lake Corridor (Marquette Greenway to C&O Corridor), Clay Street, Lake Station is a potential trail that would cross under I-80/I-90 along Clay Street via the existing bridge.
- Lake Station Parks Trail (Grand Boulevard Lake Trail), Lake Station is an existing trail adjacent to the project area south of I-80/I-94 between the I-80/I-94 and I-65 and the I-80/I-94 and Ripley Street/SB US 6/SR 51 interchanges.

Coordination with Gary Parks Department, Hammond Parks and Recreation Board, Lake County Parks and Recreation Department, Lake Station Parks and Recreation Department, Little Calumet River Basin Development Commission, and the Northwestern Indiana Regional Planning Commission will occur.

Managed Lands: Thirty (30)* managed lands are located within the 0.5 mile search radius. Fourteen (14)* managed lands are adjacent to the project area:

- River Drive Park, at the northwest corner of Hohman Avenue and River Drive, Munster
- Rich's Park, at the northeast corner of 177th Street and Harrison Avenue, Hammond
- Riverside Park, at the southwest corner of River Drive and Columbia Avenue, Hammond
- Optimist Youth Sports Complex, at the northwest corner of River Drive and Catalpa Avenue, Hammond
- Centennial Plaza and Trail, northwest of the I-80/I-94 and Indianapolis Avenue/US 41/SR 152 interchange,
 Hammond
- Wicker Memorial Park, southwest of US 41 and I-80, Hammond and Highland
- Edward C. Dowling Park, northeast of the I-80/I-94 and Kennedy Avenue interchange, Hammond
- Carlson Oxbow Park, southeast of 177th Street and 178th Drive, Hammond and Highland
- Indiana Tolleston, west of SR 912 and 179th Street, Highland
- 25th Avenue Park, at the southwest corner of Grant Street and 25th Avenue, Gary
- North Gleason Park Pavilion*, southwest of the I-80/I-94 and Broadway/SR 53 interchange, Gary is unmapped
- Tolleston On the Hill, at the southeast corner of 35th Avenue and I-65, Lake Station
- Three Rivers County Park, southeast of the I-80/I-94 and I-65 interchange, Gary and Lake Station
- Grand Lake Recreation Area, north of Marquette Road, Lake Station

Coordination with East Gary Park Board, Gary Parks Department, Gary Department of Public Works, Hammond Parks and Recreation Department, Lake County Parks and Recreation, Munster Parks and Recreation Department, North Township Park and Recreation Board, Shirley Heinze Land Trust, and The Nature Conservancy is recommended.

WATER RESOURCES TABLE AND SUMMARY

Water Resources Indicate the number of items of please indicate N/A:	concern found with	nin the 0.5 mile search radius. If t	here are no items,
NWI - Points	1	Canal Routes - Historic	N/A
Karst Springs	N/A	NWI - Wetlands	336
Canal Structures – Historic	N/A	Lakes	97
NPS NRI Listed	2	Floodplain - DFIRM	82
NWI-Lines	30	Cave Entrance Density	N/A
IDEM 303d Listed Streams and Lakes (Impaired)	32	Sinkhole Areas	N/A
Rivers and Streams	65	Sinking-Stream Basins	N/A

NWI Point: One (1) NWI Point is located within the 0.5 mile radius. The NWI Point is located approximately 0.17 mile east of the project area. No impact is expected.

National Park Service (NPS) National Rivers Inventory (NRI) Listed: Two (2) NPS NRI Listed segments for the same stream, Plum Creek, are located within the 0.5 mile radius. Plum Creek is located approximately 0.28 mile south of the project area. No impact is expected.

NWI – Lines: Thirty (30) NWI Lines are located within the 0.5 mile search radius. One (1) NWI Line is located within the project area. A Waters of the US Report will be prepared and coordination with INDOT ESD Ecology and Waterway Permitting will occur.

IDEM 303d Listed Streams and Lakes: Thirty-two (32) 303d Listed Streams are located within the 0.5 mile search radius. The Little Calumet River crosses the project area in several locations. The Little Calumet River is listed as impaired for E. coli and polychlorinated biphenyls (PCBs).

- The Little Calumet River is listed for E. coli. Workers who are working in or near water with E. coli should take care to wear appropriate PPE, observe proper hygiene procedures, including regular hand washing, and limit personal exposure.
- The Little Calumet River is impaired for PCBs in fish tissue. If there will be sediment and/or soils disturbed by construction, additional investigation may be necessary. Coordination with INDOT ESD Site Assessment & Management (SAM) will occur.

Rivers and Streams: Sixty-five (65) river and stream segments are located within the 0.5 mile search radius. Eighteen (18) river and stream segments are located within the project area. A Waters of the US Report will be prepared and coordination with INDOT ESD Ecology and Waterway Permitting will occur.

NWI – Wetlands: Three hundred and thirty-six (336) NWI Wetlands are located within the 0.5 mile search radius. Thirty-one (31) wetlands are located within the project area. A Waters of the US Report will be prepared and coordination with INDOT ESD Ecology and Waterway Permitting will occur.

Lakes: Ninety-seven (97) lakes are located within the 0.5 mile search radius. Seven (7) lakes are adjacent to the project area. A Waters of the US Report will be prepared and coordination with INDOT ESD Ecology and Waterway Permitting will occur.

Floodplain – DFIRM: Eighty-two (82) floodplain polygons are located within the 0.5 mile search radius. The project area is located within multiple floodplain polygons. Coordination with INDOT ESD Ecology and Waterway Permitting will occur.

MINING AND MINERAL EXPLORATION TABLE AND SUMMARY

Mining/Mineral Exploration Indicate the number of items of concern found within the 0.5 mile search radius. If there are no items, please indicate N/A:					
Petroleum Wells	ells 1 Mineral Resources N/A		N/A		
Mines – Surface	N/A	Mines – Underground	N/A		

Petroleum Wells: One (1) petroleum well is located within the 0.5 mile search radius. The well is located approximately 0.17 mile south of the project area. No impact is expected.

HAZARDOUS MATERIAL CONCERNS TABLE AND SUMMARY

Hazardous Material Concerns Indicate the number of items of con- please indicate N/A:	cern found wit	hin the 0.5 mile search radius. If there	are no items,
Superfund	1	Manufactured Gas Plant Sites	N/A
RCRA Generator/ TSD	36	Open Dump Waste Sites	1
RCRA Corrective Action Sites	N/A	Restricted Waste Sites	N/A
State Cleanup Sites	15*	Waste Transfer Stations	N/A
Septage Waste Sites	N/A	Tire Waste Sites	1
Underground Storage Tank (UST) Sites	45	Confined Feeding Operations (CFO)	N/A
Voluntary Remediation Program	7	Brownfields	17
Construction Demolition Waste	1	Institutional Controls	92
Solid Waste Landfill	4	NPDES Facilities	62
Infectious/Medical Waste Sites	1	NPDES Pipe Locations	18
Leaking Underground Storage (LUST) Sites	87	Notice of Contamination Sites	N/A

^{*}Includes sites not mapped in GIS.

Unless otherwise noted, site specific details presented in this section were obtained from documents reviewed on the Indiana Department of Environmental Management (IDEM) Virtual File Cabinet (VFC).

Superfund: One (1) superfund site is located within the 0.5 mile search radius. Lake Sandy Jo M&M Landfill, 3615 West 25th Avenue, Gary, Agency Interest Identification (AID) 20154, is located adjacent to the north of the project area, between the intersections of West 25th Avenue with Wright Street and Jennings Street. This former landfill was listed on the National Priority List (aka Superfund) in 1983 and is currently in the monitoring phase. It also has multiple Institutional Controls (ICs), including onsite engineering controls as well as aquifer use restrictions. A Phase II Environmental Site Assessment (ESA) is recommended. Prior to any investigation activities, a scope of work plan will be prepared and submitted to INDOT SAM for review and approval.

RCRA Generator/TSD: Thirty-six (36) RCRA generator/TSD sites are located within the 0.5 mile search radius. Eleven (11) RCRA generator/TSD sites are adjacent to the project area:

 AMOCO 2702, 7405 Indianapolis Boulevard, Hammond, AID 22839, is adjacent to the north of the project area on Indianapolis Boulevard just north of 175th Street. According to a March 22, 2018 IDEM Compliance Letter, the UST owner/operator returned to compliance after a violation letter in February 2018. No impact is expected.

- Sherwin Williams Company, 7930 Nevada Street, Hammond AID 12240, is adjacent to the south of the project area at the southwest corner of New Jersey Avenue and 179th Street. This is a small quantity generator. IDEM issued a Return to Compliance Letter on February 10, 2020. No impact is expected.
- Primet Company Inc., 7917 New Jersey Avenue, Hammond, AID 16984, is adjacent to the south of the project area at the southeast corner of New Jersey Avenue and 179th Street. IDEM conducted an industrial waste inspection on March 22, 2002 and found that the site does not generate hazardous waste. No impact is expected.
- Bulkmatic Transport Company, 2001-2015 North Cline Avenue, Griffith, AID 12386 is adjacent to the project area at the southeast corner of Cline Avenue and River Drive. Refer to the LUST section for further discussion.
- Amoco Service Station 19754, 2567 Burr Street, Gary, AID 17549, is adjacent to the east of the project area at the northeast corner of Burr Street and 26th Avenue. Refer to the leaking underground storage tank (LUST) section for further discussion.
- J Care Service Center, currently Love's Travel Stop, 3030 Grant Street, Gary, AID 15950, is adjacent to the west of the project area at the northwest corner of Grant Street and West 32nd Avenue. Refer to the LUST section for further discussion.
- Amoco 15486, 2500 Broadway, Gary, AID 16913, is located adjacent to the project area at the southwest corner of Broadway and 25th Avenue. Refer to the underground storage tank (UST) section for further discussion.
- Indiana University Northwest, 3400 Broadway, Gary, AID 12295, is adjacent to the west of the project area at the southwest corner of Broadway and 33rd Avenue. This facility is a small quantity generator. Refer to the LUST section for further discussion.
- Lakeshore Truck Services Inc., 2250 East 15th Avenue, Gary, AID 20308, is adjacent to the west of the project area at the northeast corner of East 15th Street and Texas Street. This facility was a conditionally exempt small quantity generator in 2002. See the UST section for further discussion.
- Falcon Transport, 2399 East 15th Avenue, Gary, AID 16115, is adjacent to the project area at the southeast corner of Texas Street and 15th Street. This facility generated waste oil and was conditionally exempt in 2002. No impact is expected.
- Inland Detroit Diesel Allision, 2601 East 15th Avenue, Gary, AID 16488, is adjacent to the south of the I-65 and I-90/Indiana Toll Road/15th Street/US 20 interchange. Refer to the State Cleanup section for further discussion.

State Cleanup: Fifteen (15)* state cleanup sites are located within the 0.5 mile search radius. Four (4)* state cleanup sites are adjacent to the project area:

- Melody Cleaners, 7501 Calumet Avenue, Hammond, AID 24456, is adjacent to the northeast of the project area at the southeast corner of 175th Street and Calumet Avenue. This facility is a former dry cleaner that has impacted soil, groundwater, and vapors. According to a March 5, 2020 Demand for Compliance Letter, this site requires further investigation. If excavation occurs in this area, proper handling, removal, and disposal of soil and/or groundwater may be necessary. Coordination will be conducted with the IDEM Project Manager Brendan Smith before further site activities occur.
- Woodmar Country Club, 1818 177th Street, Hammond, AID 23370, is located adjacent to the southwest of the I-80/I-94 and Indianapolis Avenue/US 41/SR 152 interchange at the current Cabela's store. On February 23, 2018, IDEM issued a Completion of ICP stating that the site investigation and remediation were completed in accordance with IDEM's Remediation Closure Guide (RCG). No impact is expected.
- Dena's Pub and the adjoining parcel, 3508 Broadway, Gary AID 23369, is a former service station adjacent to the project at the southwest corner of Broadway and East 35th Avenue. A petroleum release and low level soil and groundwater impacts were encountered in 2004 to 2005. On April 19, 2016, IDEM stated that the site was eligible for the Independent Closure Process (ICP). If excavation occurs in this area, proper handling, removal, and disposal of soil and/or groundwater may be necessary. Coordination will be conducted with the IDEM Project Manager Jerry O'Callahan before further site activities occur.
- Inland Detroit Diesel Allision* (aka Western Engineering), 2601 East 15th Avenue, Gary, AID 16488, is adjacent to the south of the I-65 and I-90/Indiana Toll Road/15th Street/US 20 interchange. IDEM reviewed and approved the Site Characterization Report on January 11, 2021. Relatively low levels of chlorinated solvents are present in onsite soil and groundwater and an Environmental Restrictive Covenant (ERC) is proposed. A Phase II ESA is

warranted. Prior to any investigation activities, a scope of work plan will be prepared and submitted to INDOT SAM for review and approval.

UST Sites: Forty-five (45) UST sites are located within the 0.5 mile search radius. Nine (9) UST sites are adjacent or near the project area:

- Shell Station 3586-12, 7902 Kennedy/I-94, Hammond, AID 23170 is within the project area near the intersection of Kennedy Avenue and Corinne Drive. According to the October 12, 1987 Notification Form, all four (4) USTs were removed in May 1987; however, there is no available closure documentation. If excavation occurs in this area, proper handling, removal, and disposal of soil and/or groundwater will be necessary.
- One Stop 227 Shell, 2900 Burr Street, Gary, AID 18547, is adjacent to the project at the corner of Burr Street and West 29th Street. According to the IDEM letter dated April 3, 2019, this active facility had three (3) USTs and several violations but no evidence of a release. No impact is expected.
- Guy Pleasant B&G Citgo, 5330 West 25th Street, Gary, AID 22061, is adjacent to the project at the northeast corner of Burr Street and 25th Street. This facility registered six (6) USTs in 1992 and appears to be vacant. No closure or sampling documentation was found in the VFC. If excavation occurs in this area, proper handling, removal, and disposal of soil and/or groundwater may be necessary.
- Methodist Hospital Transportation Center, 3069 Grant Street, Gary, AID 18895, is 0.03 mile southeast of the project area. Two USTs were reportedly removed in 1999. No impact is expected.
- Amoco 15486, 2500 Broadway, AID 16913, is located adjacent to the project area at the southwest corner of Broadway and 25th Avenue. This facility received a violation letter from IDEM on December 2, 2020 that reported a release of fuel from the north sump. If excavation will occur in this area, proper handling, removal, and disposal of soil and/or groundwater may be necessary. Coordination will be conducted with the IDEM Compliance Manager, Brandon Davis, before further site activities occur.
- Demetrios Vlahos, 2584 Broadway, Gary, AID 19807, is adjacent to the project at the northwest corner of Broadway and East 26th Avenue. According to the August 25, 1990 Notification Form, five (5) tanks were removed in June 1990. Documentation prior to the UST pull suggests that the USTs were leaking prior to removal. It does not appear as though closure sampling or documentation was completed. If excavation occurs in this area, proper handling, removal, and disposal of soil and/or groundwater will be necessary.
- Broadway Produce, 2604 Broadway, Gary, AID 21516, is adjacent to the project near the southwest corner of Broadway and West 26th Avenue. According to the July 12, 1990 Notification Form, four (4) USTs were removed in June 1990. It does not appear as though closure sampling or documentation was completed. If excavation occurs in this area, proper handling, removal, and disposal of soil and/or groundwater will be necessary.
- Pozzo Mack Sales & Service, 3001 East 15th Place, Gary, AID 15929, is adjacent to the project southeast of the I-65 and I-90/Indiana Toll Road/15th Street/US 20 interchange. This facility reported one (1) heating oil UST in 1986. No impact is expected.
- Lakeshore Truck Services Inc., 2250 East 15th Avenue, Gary AID 20308, is adjacent to the west of the project area at the northeast corner of East 15th Street and Texas Street. This facility registered a 500-gallon waste oil tank in 1986. No further information was found in the file. If excavation will occur in this area, proper handling, removal, and disposal of soil and/or groundwater may be necessary.

Voluntary Remediation Program (VRP): Seven (7) VRP sites are located within the 0.5 mile search radius. Two (2) sites are located adjacent to the project area:

- Monon Rail Yard, 173rd Street, Hammond, AID 23494, is located approximately 0.1 mile north of the project area
 at the northeast corner of Southmoor Road and Lyman Avenue. This former rail yard was investigated and found
 to be below 1996 nonresidential closure values. IDEM issued a Covenant Not to Sue and Certificate of Completion
 on February 15, 2002. A Phase II ESA is recommended. Prior to any investigation activities, a scope of work plan
 will be prepared and submitted to INDOT SAM for review and approval.
- Burger King, 7843 Indianapolis Boulevard, Gary, AID 23459, is adjacent to the northeast of the project area at the
 north corner of Indianapolis Boulevard and Interstate Plaza Drive. The USTs were removed from this former gas
 station in 1983. According to the Covenant Not to Sue, issued by IDEM on September 23, 2009, the contamination

did not extend off-site. This facility had an ERC recorded on April 2, 2009 that restricts on-site residential and groundwater use and has excavation requirements. No impacts are expected.

Construction Demolition Waste: One (1) construction demolition waste site is mapped within the 0.5 mile search radius. Lake Station Solid Fill Site, 3400 East 20th Avenue, Gary, AID 25095, is mapped adjacent to the project area southwest of the I-80/I-94 and Ripley Street/SB US 6/SR 51 interchange. The VFC did not contain any files concerning this site. Coordination with IDEM will occur to see if there are any available files or documentation for the site.

Solid Waste Landfill: Four (4) solid waste landfill sites are located within the 0.5 mile search radius. The nearest site, the Gary Landfill, 15th Avenue, Gary, AID 25093, is mapped adjacent to the project area. The VFC did not contain any files concerning this site. Coordination with IDEM will occur to see if there are any available files or documentation for the site.

Infectious/Medical Waste Sites: One (1) Infectious/Medical Waste Site is located within the 0.5 mile search radius. Stericycle Incorporated, 1451 Texas Street, Gary, AID 25080, is located approximately 0.25 mile west of the project area. No impact is expected.

LUST Sites: Eighty-seven (87) LUST sites are located within the 0.5 mile search radius. Twenty-two (22) LUST sites are adjacent to the project area:

- Amoco Oil Company Station No. 14152, 7530 Calumet Avenue, Hammond, AID 18623, is adjacent to the west of
 the project area at the southwest corner of 175th Street and Calumet Avenue. On January 8, 2014, IDEM issued
 a NFA Determination Approval Pursuant to IDEM RISC Guidance based on non-default, industrial for soil and
 default, residential for groundwater. Based on the ERC, recorded on October 2, 2013, the residual soil
 contamination is limited to an affected area near the pump island. Coordination with Lynette Schrowe
 (LSchrowe1@idem.in.gov) will occur before further site activities occur.
- Superior Trucking, Calumet Avenue, Hammond, "@ I-80/I-94", AID 21595, is mapped within the project area within the I-80/I-94 and Indianapolis Avenue/US 41/SR 152 interchange. This facility has one document in the VFC. On January 28, 1999 IDEM requested an Initial Site Characterization, which was returned "No Such Address". No impact is expected.
- Shell Station 3586-14, 7517 Calumet Avenue North, Hammond, AID 24059, is adjacent to the project area at the
 northeast corner of Calumet Avenue and 175th Place. IDEM issued a NFA Approval Determination Pursuant to
 RCG on April 5, 2007. Low levels of contaminated soil and groundwater remain on site. Based on the July 26,
 2005 Corrective Action Plan Implementation Report the impacted areas were on the eastern side near the alley.
 No impact is expected.
- Witham Sav-A-stop, 7452 Indianapolis Boulevard, Hammond, AID 18424, is adjacent to the project area at the northwest corner of 175th Street and Indianapolis Boulevard. On February 3, 2016, IDEM issued this service station a NFA Determination Approval Pursuant to IDEM 1994 LUST Guidance. No impact is expected.
- Clark Store, 7410 South Kennedy Avenue, Hammond, AID 20431, is adjacent to the west of the project at the southwest corner of 174th Street and Kennedy Avenue. Two USTs were removed from this former service station in 2017 and impacted soil was encountered. IDEM issued a Notice of Deficiency on January 3, 2020. If excavation occurs in this area, proper handling, removal, and disposal of soil and/or groundwater may be necessary. Coordination will be conducted with the IDEM Project Manager Nawal Hopkins before further site activities occur.
- Speedway/Sm #8332, 7345 Kennedy Avenue, Hammond, AID 10493 is adjacent to the project area northeast of 174th Street and Kennedy Avenue. Seven (7) USTs were removed on November 10 and 11, 2020. On February 22, 2021, IDEM determined that the UST closure had been completed. On March 21, 2019, IDEM issued a NFA Approval Pursuant to RCG that states a Notice of Contamination was sent to City of Hammond. An ERC, recorded on February 21, 2019, restricts groundwater use, residential use, and has provisions for excavations and redevelopment. If excavation occurs in this area, proper handling, removal, and disposal of soil and/or groundwater may be necessary. Coordination with Lynette Schrowe (LSchrowe1@idem.in.gov) will occur before further site activities occur.

- Bulkmatic Transport Company, 2001-2015 North Cline Avenue, Griffith, AID 12386, is adjacent to the project area
 at the southeast corner of Cline Avenue and River Drive. Two (2) diesel fuel USTs that were 10,000 and 15,000
 gallons in capacity were removed on July 17, 2019. On November 19, 2019 IDEM issued a NFA letter with
 unconditional closure for soil and groundwater. No impact is expected.
- Gary Travel Center, 2510 Burr Street, Gary, AID 14015, is adjacent to the project area at the southwest corner of 25th Avenue and Burr Street. IDEM issued this active truck stop a NFA Determination Approval Pursuant to RISC Guidance on March 4, 2016, based on non-default industrial for soil and default, industrial for groundwater. An ERC was recorded on November 20, 2015 that shows the restricted area is around the fuel pump island. No impacts are expected.
- TA Truckstops, 2510 Burr St, Gary, FID 19261, is adjacent to the project area at the southwest corner of 25th Avenue and Burr Street. No files were encountered in the VFC for this facility. Based on the address, it appears to be the same property Gary Travel Center, 2510 Broadway, discussed above.
- Mr. Fuel 7, 2945 South Burr Street, Gary, Facility Identification (FID) 25235, is adjacent to the southeast of the project area at West 29th Avenue and Burr Street. This facility submitted a Release Investigation on September 25, 2020 due to a release of fuel to a sump. On May 4, 2020, an Initial Site Investigation Report was submitted, which requested NFA. The USTs and dispensers are approximately 0.03 mile from existing right-of-way. No impact is expected.
- Amoco Service Station 19754, 2567 Burr Street, Gary, AID 17549, is adjacent to the east of the project area at the northeast corner of Burr Street and 26th Avenue. The former service station has been closed since 1998 and tanks were removed in 2000. On August 12, 2004 IDEM issued a NFA letter pursuant to 1994 guidance. No impact is expected.
- Pilot Corp #271, 2501 Burr Street, Gary, AID 13656, is adjacent to the project area at the southeast corner of 25th
 Avenue and Burr Street. A draft ERC was submitted to IDEM for this site on July 29, 2019. The draft ERC would
 prohibit residential, and groundwater use and excavation underneath the existing pavement. If excavation occurs
 in this area, proper handling, removal, and disposal of soil and/or groundwater may be necessary. Coordination
 with Lynette Schrowe (<u>LSchrowe1@idem.in.gov</u>) will occur before further site activities occur.
- Flying J Travel Plaza, 3150 Grant Street, Gary, AID 14218, is adjacent to the southwest of the project area at the
 northwest corner of West 32nd Avenue and Grant Street. On March 19, 2019, IDEM issued this truck stop a NFA
 Approval Determination Pursuant to RCG based on unconditional closure for soil, groundwater and vapor
 exposure. No impacts are expected.
- J Care Service Center, currently Pilot Flying J Travel Stop, 3030 Grant Street, Gary AID 15950, is adjacent to the west of the project area at the northwest corner of Grant Street and West 32nd Avenue. This facility has three LUST incidents. IDEM issued a No Further Action (NFA) Approval Determination Pursuant to RCG on March 24, 2017 with unconditional closure for soil and groundwater exposure. No impact is expected.
- Steel City, 3001 Grant Street, Gary, AID 14008, is a truck stop adjacent to the project area at the northeast corner of Grant Street and West 32nd Avenue. A draft ERC was submitted to IDEM for this site on September 8, 2020. On March 11, 2020, IDEM requested an ERC that prohibits residential and groundwater use, and maintenance of pavement. Based on data and maps in the April 30, 2020 Quarterly Monitoring Report, petroleum-impacted soil and groundwater is likely within existing right-of-way. If excavation occurs in this area, proper handling, removal, and disposal of soil and/or groundwater may be necessary. Coordination will be conducted with the IDEM Project Manager Steven Baumann before further site activities occur.
- Indiana University Northwest, 3400 Broadway, Gary, AID 12295, is adjacent to the west of the project area at the southwest corner of Broadway and 33rd Avenue. IDEM issued a NFA Approval Determination Pursuant to RCG on November 13, 2003. Low levels of soil and groundwater remain on the site. Based on the Follow-up Soil/Groundwater Sampling Report, dated May 5, 2003, the affected area was near 34th Avenue and Massachusetts Avenue. No impact is expected.
- 0213 Clark Service Station, 2569 South Broadway, Gary, AID 19260, is adjacent to the project area at the
 northeast corner of West 26th Avenue and Broadway. IDEM issued this former service station a NFA
 Determination Approval Pursuant to IDEM RISC Guidance on September 11, 2012 based on non-default industrial
 for soil and groundwater. An ERC was recorded on June 19, 2012 that shows low levels of petroleum
 contaminants were present in soil and groundwater in 2011 and 2012. If excavation occurs in this area, proper

handling, removal, and disposal of soil and/or groundwater may be necessary. Coordination with Lynette Schrowe (LSchrowe1@idem.in.gov) will occur before further site activities occur.

- Lovely Mobil Inc, 3077 Broadway, Gary, AID 22953, is adjacent to the project area at the southeast corner of West 30th Avenue and Broadway. On July 20, 2005 IDEM issued a NFA letter based on non-default industrial closure, and an ERC was referred to; coordination with Lynette Schrowe (<u>LSchrowe1@idem.in.gov</u>) will occur before further site activities occur.
- RYR Broadway (Former Shell), 3501 Broadway, Gary, AID 18863, is adjacent to the project area at the southeast corner of 35th Avenue and Broadway. IDEM issued a NFA Approval Determination Pursuant to RCG on June 23, 2017 that was unconditional for soil exposure and conditional for groundwater and vapor intrusion. Based on the March 16, 2017 NFA Request, low levels of contaminated groundwater remained on-site and within existing right-of-way near the intersection of Broadway and West 35th Avenue. An ERC was recorded on February 17, 2017 that includes residential and groundwater use restrictions. If excavation occurs in this area, proper handling, removal, and disposal of soil and/or groundwater may be necessary. Coordination with Lynette Schrowe (LSchrowe1@idem.in.gov) will occur before further site activities occur.
- Organizational Maintenance Shop 13, 2501 East 15th Avenue, Gary, AID 12341, is adjacent to the project area, south of the I-65 and I-90/Indiana Toll Road/15th Street/US 20 interchange. Based on the November 11, 1997 LUST Investigation Report, two (2) USTs were removed, and confirmatory sampling was below the applicable guidelines. No impact is expected.
- Western Engineering, 2601 East 15th Avenue, Gary, AID 16488, is discussed above under State Cleanup under the name Inland Detroit Diesel Allison.
- Flying J, 1401 Ripley Street, Lake Station, AID 13873, is adjacent to the northeast of the project area, northeast of the I-80/I-94 and Ripley Street/SB US 6/SR 51 interchange. On June 14, 2019, IDEM issued a NFA Approval Determination Pursuant to RCG based on unconditional closure for soil and conditional closure for groundwater and vapor intrusion. An ERC was recorded on May 13, 2019 that restricts residential and groundwater uses and has redevelopment conditions. Based on the maps in the November 19, 2018 NFA Request Report, the contaminated area is limited and does not encroach on existing right-of-way. No impact is expected.

Open Dump Waste Sites: One (1) open dump waste site is located within the 0.5 mile search radius. Highland-Dump, 3994 179th Street, Highland, is adjacent to the project area at the corner of Cline Avenue and 179th Street. The VFC did not contain any files concerning this site. Coordination with IDEM will occur to determine if there are any available records or files.

Tire Waste Sites: One (1) tire waste site is located within the 0.5 mile search radius. Phoenix Recycling Company, 6024 West 30th Avenue, Gary, AID 22386, is located approximately 0.37 mile south of the project area. No impact is expected.

Brownfields: Seventeen (17) brownfields are located within the 0.5 mile search radius. Two (2) brownfields are mapped near the project area:

- Arogas Parcel, 2760 Gerry Street, Gary, AID 125405, is at the northwest corner of West 29th Street and Gerry Street. This former salvage yard facility has an ERC that was recorded on August 13, 2020 that includes soil and groundwater restrictions for two parcels located approximately 0.10 mile south of the project area. No impact is expected.
- State Road 51 North, SR 51 North, Lake Station, AID 24208, is mapped within the project area. However, based on the maps in the 1998 report it is located 0.28 miles north-northwest. No impact is expected.

Institutional Controls: Ninety-one (91) institutional control sites are located within the 0.5 mile search radius. Nine (9) institutional control facilities (including a facility with multiple ICs) are adjacent to the project area:

- Amoco Oil Company Station No. 14152, 7530 Calumet Avenue, Hammond, AID 18623, is discussed above under LUST sites.
- Speedway/Sm #8332, 7345 Kennedy Avenue, Hammond, AID 10493, is discussed above under LUST sites.
- Burger King, 7843 Indianapolis Boulevard, Gary, AID 23459, is discussed above under VRP sites.

- Lake Sandy Jo M&M Landfill, 3615 West 25th Avenue, FID 7500077, has multiple ICs and is discussed above under Superfund Sites. This site had a Declaration of Restriction filed with Lake County, Indiana on September 6, 1995 that restricts on-site residential and groundwater use and has excavation requirements. Coordination will be conducted with the IDEM Project Manager Justin Hodgson before further site activities occur.
- Arogas Parcel, 2760 Gerry Street, Gary, AID 125405, is discussed above under Brownfields.
- Gary Travel Center, 2510 Burr Street, Gary, AID 14015, is discussed above under LUST sites.
- 0213 Clark Service Station, 2569 South Broadway, Gary AID 19260, is discussed above under LUST sites.
- RYR Broadway (Former Shell), 3501 Broadway, Gary, AID 18863, is discussed above under LUST sites.
- Flying J, 1401 Ripley Street, Lake Station, AID 13873, is discussed above under LUST sites.

NPDES Facilities: Sixty-two (62) NPDES facilities are located within the 0.5 mile search radius. Twenty-one (21) NPDES facilities are adjacent to the project area. Coordination will be required for facilities with active permits.

NPDES Pipe Locations: Eighteen (18) NPDES pipe locations are located within the 0.5 mile search radius. Three (3) NPDES pipe locations are adjacent to the project area. Coordination will be required for facilities with active permits.

ECOLOGICAL INFORMATION SUMMARY

The Lake County listing of the Indiana Natural Heritage Data Center information on endangered, threatened, or rare (ETR) species and high quality natural communities is provided at https://www.in.gov/dnr/naturepreserve/files/np-lake.pdf. A preliminary review of the Indiana Natural Heritage Database by INDOT ESD did indicate the presence of ETR species within the 0.5 mile search radius. Coordination with USFWS and IDNR will occur.

A review of the USFWS database did not indicate the presence of endangered bat species in or within 0.5 mile of the project area. The range-wide programmatic consultation for the Indiana Bat and Northern Long-eared Bat will be completed according to the most recent "Using the USFWS's IPaC System for Listed Bat Consultation for INDOT Projects".

RECOMMENDATIONS SECTION

Include recommendations from each section. If there are no recommendations, please indicate N/A:

INFRASTRUCTURE:

Religious Facilities: Nine (9) religious facilities are adjacent to the project area. Coordination with Unity Church, Assembly of God Church of Hessville, Riverside Community Reformed Church, Pentecostal Church of God, Grace Missionary Baptist Church, Saint Timothy Community Church, Abundant Life Tabernacle, Greater Saint James African Methodist Episcopal Church, and Saint John Baptist Church should occur.

Airports: Although not located within the 0.5 mile search radius, three (3) public-use airports, Gary/Chicago International Airport, Griffith-Merrillville Airport, and the Hobart Sky Ranch Airport, are located within 3.8 miles (20,000 feet) of the project area. Coordination with INDOT Aviation will occur.

Schools: Two (2) schools are located adjacent to the project area. Coordination with Gary Academy & Blessed Beginning Daycare and Cline Avenue Baptist Childcare/Preschool will occur.

Recreational Facilities: Eleven (11) recreational facilities are adjacent to the project area. Coordination with Gary Community School Corporation, Lake Ridge Schools, Hammond Parks and Recreation, Gary Parks Department, and Lake Station Parks and Recreation is recommended.

Pipelines: Thirty (30) pipeline segments cross the project area. Coordination with INDOT Utilities and Railroads should occur.

Railroads: Fourteen (14) railroad segments cross the project area. Coordination with INDOT Utilities and Railroads should occur.

Trails: Eighteen (18) current and planned trail segments, East Lake Corridor, Erie Trail Linear Park, Gary parks Trails, Hammond Parks Trails, Lake County Parks Trails, Lake Station Parks Trails, Little Calumet River Levee Trail, an unmapped trail, Monon Trail, and Twin Rivers Trail, cross or are adjacent to the project area. Coordination with Gary Parks Department, Hammond Parks and Recreation Board, Lake County Parks and Recreation Department, Lake Station Parks and Recreation Department, Little Calumet River Basin Development Commission, and the Northwestern Indiana Regional Planning Commission will occur.

Managed Lands: Fourteen (14) managed lands are adjacent to the project area. Coordination with East Gary Park Board, Gary Parks Department, Gary Department of Public Works, Hammond Parks and Recreation Department, Lake County Parks and Recreation, Munster Parks and Recreation Department, North Township Park and Recreation Board, Shirley Heinze Land Trust, and The Nature Conservancy is recommended.

WATER RESOURCES: The presence of the following water resources will require the preparation of a Waters of the US report and coordination with INDOT ESD Ecology and Waterway Permitting:

- One (1) NWI Line is located within the project area.
- Eighteen (18) river and stream segments are located within the project area.
- Thirty-one (31) wetlands are located within the project area.
- Seven (7) lakes are adjacent to the project area.
- The project is located within floodplains (coordination only).

IDEM 303d Listed Streams and Lakes: The Little Calumet River is listed as impaired for E. coli and PCBs.

- The Little Calumet River is listed for E. coli. Workers who are working in or near water with E. coli should take care to wear appropriate PPE, observe proper hygiene procedures, including regular hand washing, and limit personal exposure.
- The Little Calumet River is impaired for PCBs in fish tissue. If there will be sediment and/or soils disturbed by construction, additional investigation may be necessary. Coordination with INDOT ESD Site Assessment & Management (SAM) will occur.

MINING/MINERAL EXPLORATION: N/A

HAZARDOUS MATERIAL CONCERNS:

Superfund: One (1) superfund site is located within the 0.5 mile search radius. Lake Sandy Jo M&M Landfill, 3615 West 25th Avenue, Gary, AID 20154, is located adjacent to the north of the project area, between the intersections of West 25th Avenue with Wright Street and Jennings Street. This former landfill was listed on the National Priority List (aka Superfund) in 1983 and is currently in the monitoring phase. It also has multiple ICs, including onsite engineering controls as well as aquifer use restrictions. A Phase II ESA is recommended. Prior to any investigation activities, a scope of work plan will be prepared and submitted to INDOT SAM for review and approval.

State Cleanup:

Melody Cleaners, 7501 Calumet Avenue, Hammond, AID 24456, is adjacent to northeast of the project area at
the southeast corner of 175th Street and Calumet Avenue. This facility is a former dry cleaner that has impacted
soil, groundwater, and vapors. According to a March 5, 2020 Demand for Compliance Letter, this site requires
further investigation. If excavation occurs in this area, proper handling, removal, and disposal of soil and/or
groundwater may be necessary. Coordination will be conducted with the IDEM Project Manager Brendan Smith
before further site activities occur.

- Dena's Pub and the adjoining parcel, 3508 Broadway, Gary AID 23369, is a former service station adjacent to the project at the southwest corner of Broadway and East 35th Avenue. A petroleum release and low level soil and groundwater impacts were encountered in 2004 to 2005. On April 19, 2016, IDEM stated that the site was eligible for the ICP. If excavation occurs in this area, proper handling, removal, and disposal of soil and/or groundwater may be necessary. Coordination will be conducted with the IDEM Project Manager Jerry O'Callahan before further site activities occur.
- Inland Detroit Diesel Allision* (aka Western Engineering), 2601 East 15th Avenue, Gary, AID 16488, is adjacent to the south of the I-65 and I-90/Indiana Toll Road/15th Street/US 20 interchange. IDEM reviewed and approved the Site Characterization Report on January 11, 2021. Relatively low levels of chlorinated solvents are present in onsite soil and groundwater and an ERC is proposed. A Phase II ESA is warranted. Prior to any investigation activities, a scope of work plan will be prepared and submitted to INDOT SAM for review and approval.

UST Sites:

- Shell Station 3586-12, 7902 Kennedy/I-94, Hammond, AID 23170 is within the project area near the intersection of Kennedy Avenue and Corinne Drive. According to the October 12, 1987 Notification Form, all four (4) USTs were removed in May 1987; however, there is no available closure documentation. If excavation occurs in this area, proper handling, removal, and disposal of soil and/or groundwater will be necessary.
- Guy Pleasant B&G Citgo, 5330 West 25th Street, Gary, AID 22061, is adjacent to the project at the northeast corner of Burr Street and 25th Street. This facility registered six (6) USTs in 1992 and appears to be vacant. No closure or sampling documentation was found in the VFC. If excavation occurs in this area, proper handling, removal, and disposal of soil and/or groundwater may be necessary.
- Amoco 15486, 2500 Broadway, AID 16913, is located adjacent to the project area at the southwest corner of Broadway and 25th Avenue. This facility received a violation letter from IDEM on December 2, 2020 that reported a release of fuel from the north sump. If excavation will occur in this area, proper handling, removal, and disposal of soil and/or groundwater may be necessary. Coordination will be conducted with the IDEM Compliance Manager, Brandon Davis, before further site activities occur.
- Demetrios Vlahos, 2584 Broadway, Gary, AID 19807, is adjacent to the project at the northwest corner of Broadway and East 26th Avenue. According to the August 25, 1990 Notification Form, five (5) tanks were removed in June 1990. Documentation prior to the UST pull suggests that the USTs were leaking prior to removal. It does not appear as though closure sampling or documentation was completed. If excavation occurs in this area, proper handling, removal, and disposal of soil and/or groundwater will be necessary.
- Broadway Produce, 2604 Broadway, Gary, AID 21516, is adjacent to the project near the southwest corner of Broadway and West 26th Avenue. According to the July 12, 1990 Notification Form, four (4) USTs were removed in June 1990. It does not appear as though closure sampling or documentation was completed. If excavation occurs in this area, proper handling, removal, and disposal of soil and/or groundwater will be necessary.
- Lakeshore Truck Services Inc., 2250 East 15th Avenue, Gary AID 20308, is adjacent to the west of the project area at the northeast corner of East 15th Street and Texas Street. This facility registered a 500-gallon waste oil tank in 1986. No further information was found in the file. If excavation will occur in this area, proper handling, removal, and disposal of soil and/or groundwater may be necessary.

VRP Sites:

• Monon Rail Yard, 173rd Street, Hammond, AID 23494, is located approximately 0.1 mile north of the project area at the northeast corner of Southmoor Road and Lyman Avenue. This former rail yard was investigated and found to be below 1996 nonresidential closure values. IDEM issued a Covenant Not to Sue and Certificate of Completion on February 15, 2002. A Phase II ESA is recommended. Prior to any investigation activities, a scope of work plan will be prepared and submitted to INDOT SAM for review and approval.

Construction Demolition Waste: One (1) construction demolition waste site is mapped within the 0.5 mile search radius. Lake Station Solid Fill Site, 3400 East 20th Avenue, Gary, AID 25095, is mapped adjacent to the project area southwest of the I-80/I-94 and Ripley Street/SB US 6/SR 51 interchange. The VFC did not contain any files concerning this site. Coordination with IDEM will occur to see if there are any available files or documentation for the site.

Solid Waste Landfill: Four (4) solid waste landfill sites are located within the 0.5 mile search radius. The nearest site, the Gary Landfill, 15th Avenue, Gary, AID 25093, is mapped adjacent to the project area. The VFC did not contain any files concerning this site. Coordination with IDEM will occur to see if there are any available files or documentation for the site.

LUST Sites:

- Amoco Oil Company Station No. 14152, 7530 Calumet Avenue, Hammond, AID 18623, is adjacent to the west of
 the project area at the southwest corner of 175th Street and Calumet Avenue. On January 8, 2014, IDEM issued
 a NFA Determination Approval Pursuant to IDEM RISC Guidance based on non-default, industrial for soil and
 default, residential for groundwater. Based on the ERC, recorded on October 2, 2013, the residual soil
 contamination is limited to an affected area near the pump island. Coordination with Lynette Schrowe
 (LSchrowe1@idem.in.gov) will occur before further site activities occur.
- Clark Store, 7410 South Kennedy Avenue, Hammond, AID 20431, is adjacent to the west of the project at the southwest corner of 174th Street and Kennedy Avenue. The USTS were removed from this former service station in 2017 and impacted soil was encountered. IDEM issued a Notice of Deficiency on January 3, 2020. If excavation occurs in this area, proper handling, removal, and disposal of soil and/or groundwater may be necessary. Coordination will be conducted with the IDEM Project Manager Nawal Hopkins before further site activities occur.
- Speedway/Sm #8332, 7345 Kennedy Avenue, Hammond, AID 10493 is adjacent to the project area northeast of 174th Street and Kennedy Avenue. Seven (7) USTs were removed on November 10 and 11, 2020. On February 22, 2021, IDEM determined that the UST closure had been completed. On March 21, 2019, IDEM issued a NFA Approval Pursuant to RCG that states a Notice of Contamination was sent to City of Hammond. An ERC, recorded on February 21, 2019, restricts groundwater use, residential use, and has provisions for excavations and redevelopment. If excavation occurs in this area, proper handling, removal, and disposal of soil and/or groundwater may be necessary. Coordination with Lynette Schrowe (LSchrowe1@idem.in.gov) will occur before further site activities occur.
- Pilot Corp #271, 2501 Burr Street, Gary, AID 13656, is adjacent to the project area at the southeast corner of 25th Avenue and Burr Street. A draft ERC was submitted to IDEM for this site on July 29, 2019. The draft ERC would prohibit residential and groundwater use and excavation underneath the existing pavement. If excavation occurs in this area, proper handling, removal, and disposal of soil and/or groundwater may be necessary. Coordination with Lynette Schrowe (LSchrowe1@idem.in.gov) will occur before further site activities occur.
- Steel City, 3001 Grant Street, Gary, AID 14008, is a truck stop adjacent to the project area at the northeast corner of Grant Street and West 32nd Avenue. A draft ERC was submitted to IDEM for this site on September 8, 2020. On March 11, 2020, IDEM requested an ERC that prohibits residential and groundwater use, and maintenance of pavement. Based on data and maps in the April 30, 2020 Quarterly Monitoring Report, petroleum-impacted soil and groundwater is likely within existing right-of-way. If excavation occurs in this area, proper handling, removal, and disposal of soil and/or groundwater may be necessary. Coordination will be conducted with the IDEM Project Manager Steven Baumann before further site activities occur.
- 0213 Clark Service Station, 2569 South Broadway, Gary, AID 19260, is adjacent to the project area at the northeast corner of West 26th Avenue and Broadway. IDEM issued this former service station a NFA Determination Approval Pursuant to IDEM RISC Guidance on September 11, 2012 based on non-default industrial for soil and groundwater. An ERC was recorded on June 19, 2012 that shows low levels of petroleum contaminants were present in soil and groundwater in 2011 and 2012. If excavation occurs in this area, proper handling, removal, and disposal of soil and/or groundwater may be necessary. Coordination with Lynette Schrowe (LSchrowe1@idem.in.gov) will occur before further site activities occur.
- Lovely Mobil Inc, 3077 Broadway, Gary, AID 22953, is adjacent to the project area at the southeast corner of West 30th Avenue and Broadway. On July 20, 2005 IDEM issued a NFA letter based on non-default industrial closure, and an ERC was referred to; coordination with Lynette Schrowe (<u>LSchrowe1@idem.in.gov</u>) will occur before further site activities occur.

• RYR Broadway (Former Shell), 3501 Broadway, Gary, AID 18863, is adjacent to the project area at the southeast corner of 35th Avenue and Broadway. IDEM issued a NFA Approval Determination Pursuant to RCG on June 23, 2017 that was unconditional for soil exposure and conditional for groundwater and vapor intrusion. Based on the March 16, 2017 NFA Request, low levels of contaminated groundwater remained on-site and within existing right-of-way near the intersection of Broadway and West 35th Avenue. An ERC was recorded on February 17, 2017 that includes residential and groundwater use restrictions. If excavation occurs in this area, proper handling, removal, and disposal of soil and/or groundwater may be necessary. Coordination with Lynette Schrowe (LSchrowe1@idem.in.gov) will occur before further site activities occur.

Open Dump Waste Sites: One (1) open dump waste site is located within the 0.5 mile search radius. Highland-Dump, 3994 179th Street, Highland, is adjacent to the project area at the corner of Cline Avenue and 179th Street. The VFC did not contain any files concerning this site. Coordination with IDEM will occur to determine if there are any available records or files.

Institutional Control Site: Lake Sandy Jo M&M Landfill, 3615 West 25th Avenue, FID 7500077, has multiple ICs and is discussed above under Superfund Sites. This site had a Declaration of Restriction filed with Lake County, Indiana on September 6, 1995 that restricts on-site residential and groundwater use and has excavation requirements. Coordination will be conducted with the IDEM Project Manager Justin Hodgson before further site activities occur.

NPDES Facilities: Twenty-one (21) NPDES facilities are adjacent to the project area. Coordination will be required for facilities with active permits.

NPDES Pipe Locations: Three (3) NPDES pipe locations are adjacent to the project area. Coordination will be required for facilities with active permits.

ECOLOGICAL INFORMATION: Coordination with USFWS and IDNR will occur. The range-wide programmatic consultation for the Indiana Bat and Northern Long-eared Bat will be completed according to the most recent "Using the USFWS's IPaC System for Listed Bat Consultation for INDOT Projects".

Nicole Fohey Nicole Fohey-Breting

INDOT ESD concurrence: Breting Date: 2021.08.12 (Signature)

Prepared by: Keaton Veldkamp Associate Environmental Planner Parsons

Graphics:

A map for each report section with a 0.5 mile search radius buffer around all project area(s) showing all items identified as possible items of concern is attached. If there is not a section map included, please change the YES to N/A:

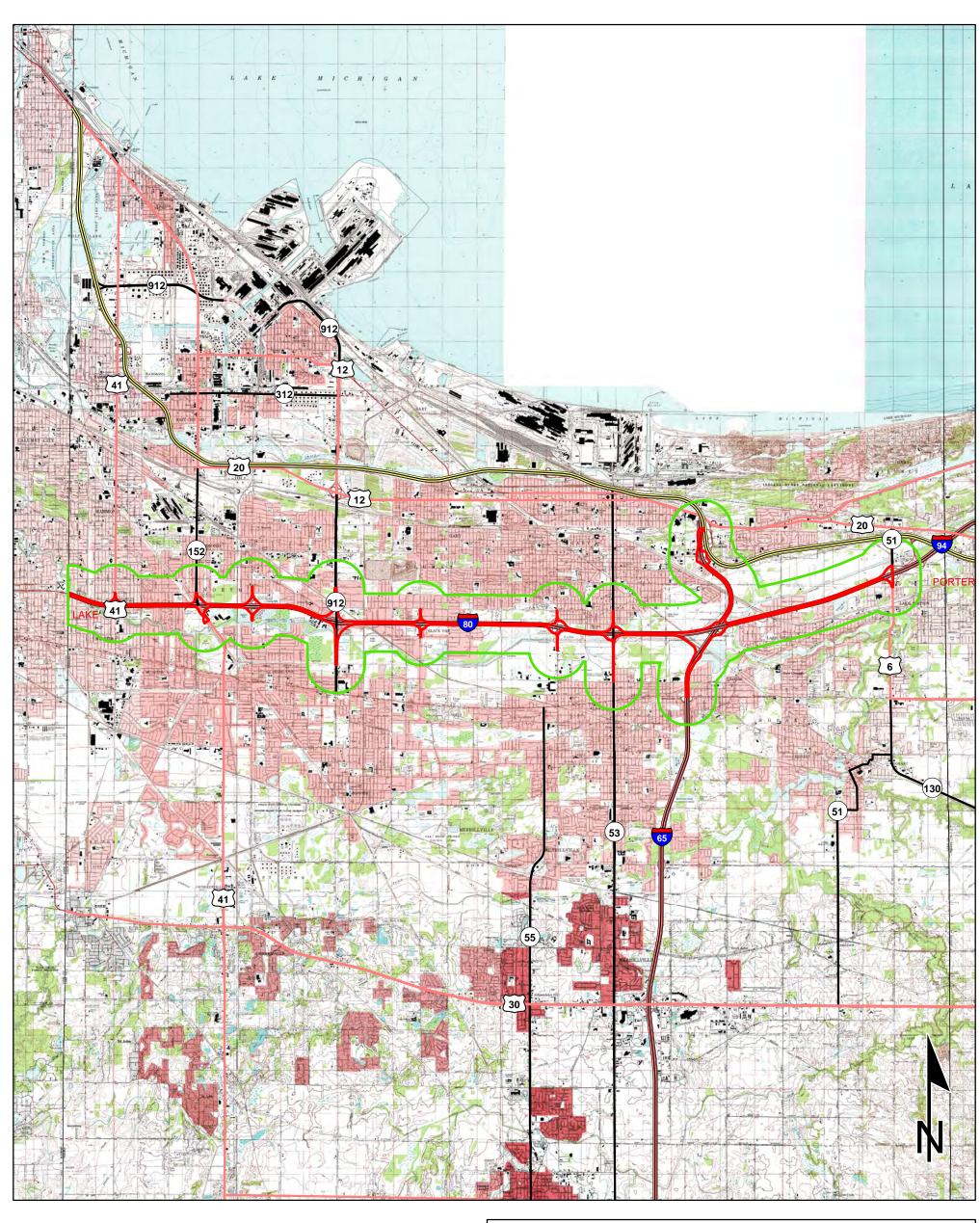
SITE LOCATION: YES

INFRASTRUCTURE: YES

WATER RESOURCES: YES

MINING/MINERAL EXPLORATION: YES

HAZARDOUS MATERIAL CONCERNS: YES



Sources:

Non Orthophotography
Data - Obtained from the State of Indiana Geographical

2 1 0 2 Miles
Miles

Information Office Library

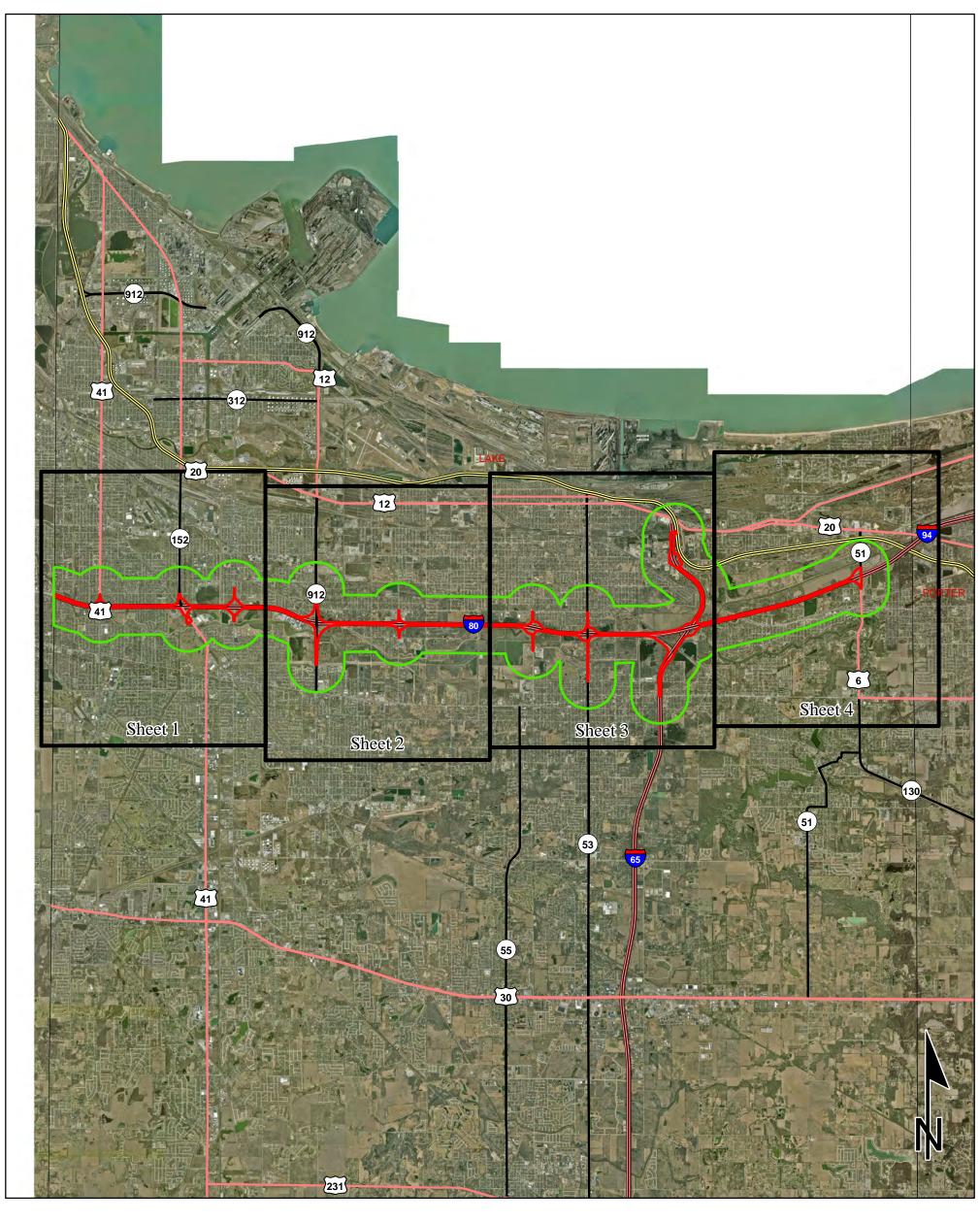
Orthophotography - Obtained from Indiana Map Framework Data

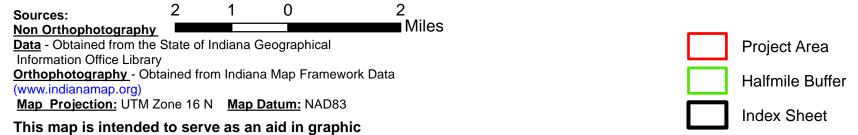
Map Projection: UTM Zone 16 N Map Datum: NAD83

(www.indianamap.org)

This map is intended to serve as an aid in graphic representation only. This information is not warranted for accuracy or other purposes.

CALUMET CITY, HIGHLAND, GARY, AND PORTAGE QUADRANGLES INDIANA



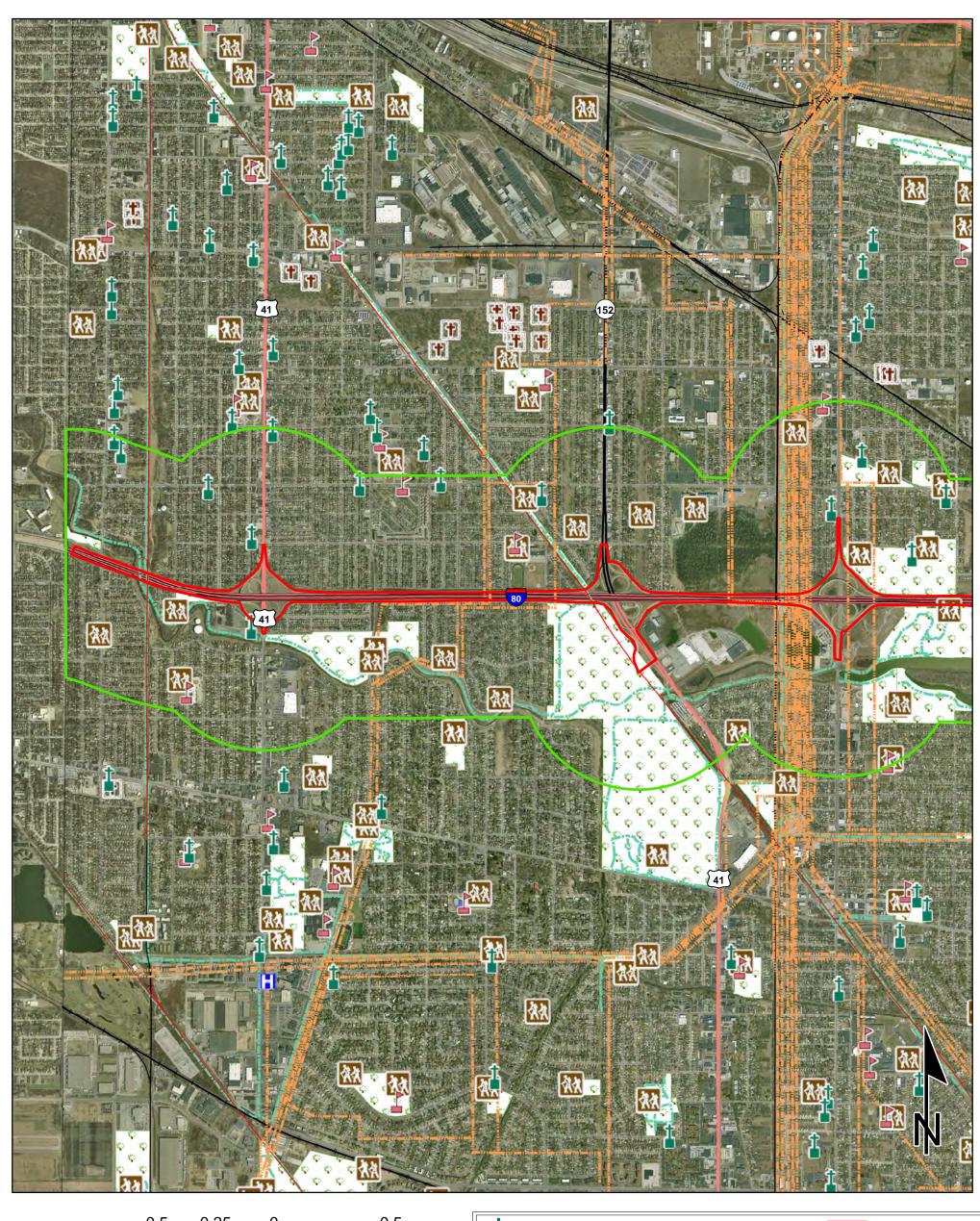


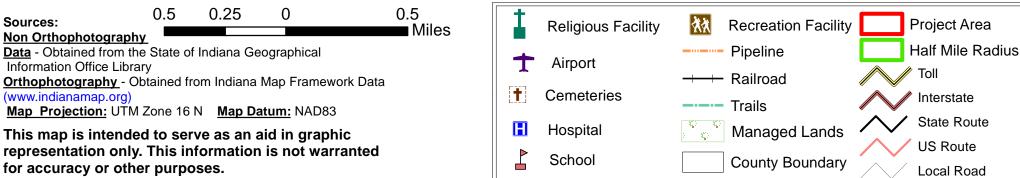
representation only. This information is not warranted

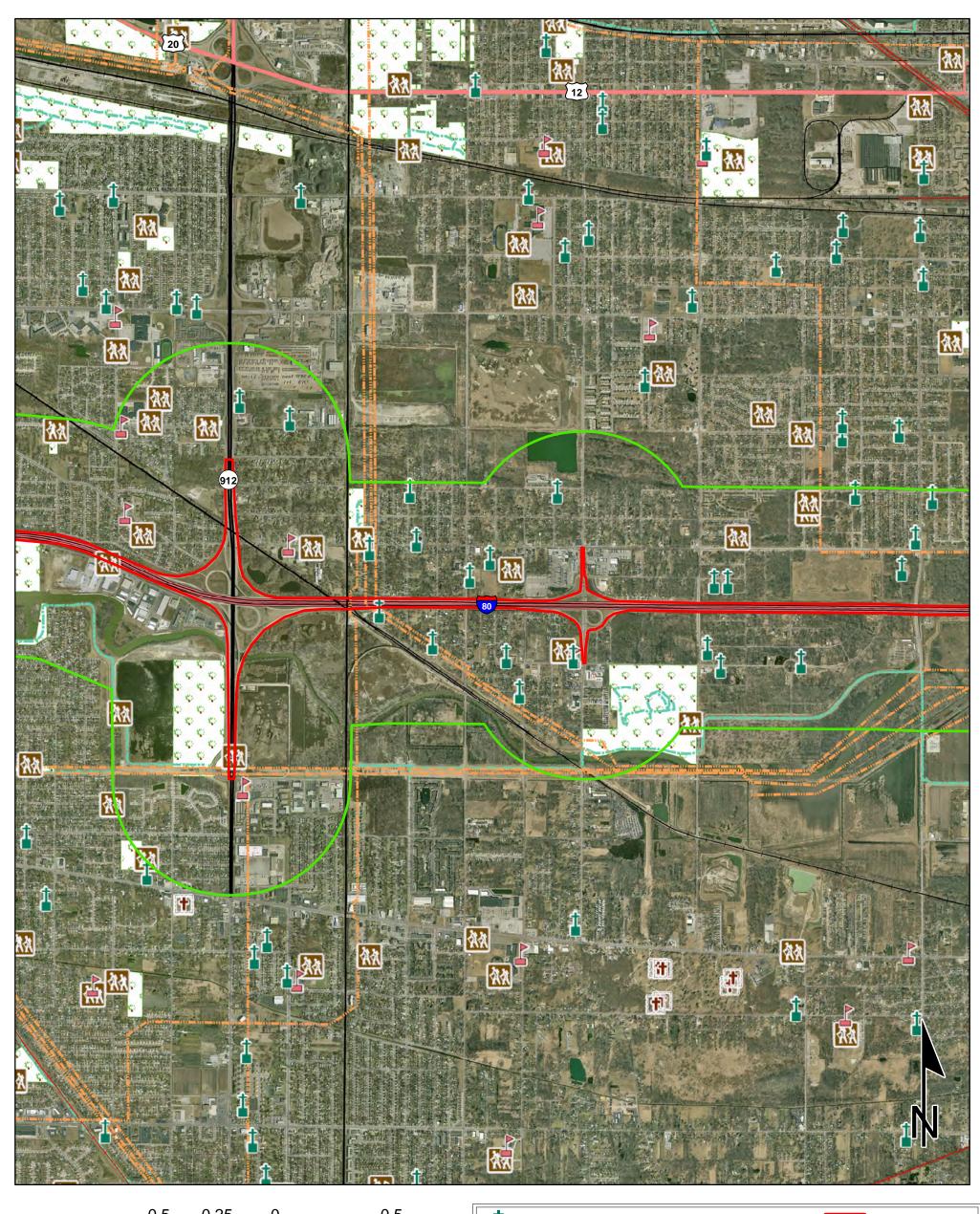
for accuracy or other purposes.

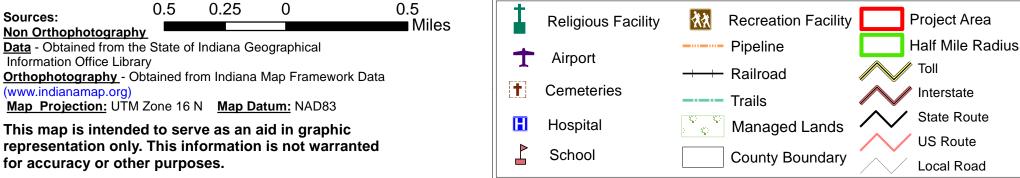
Red Flag Investigation - Infrastructure Borman Expressway, I-80/I-94, Illinois State Line east 15 miles to Ripley Street/US 6/SR 51 Des. 1901643, TSMO

Lake County, Indiana



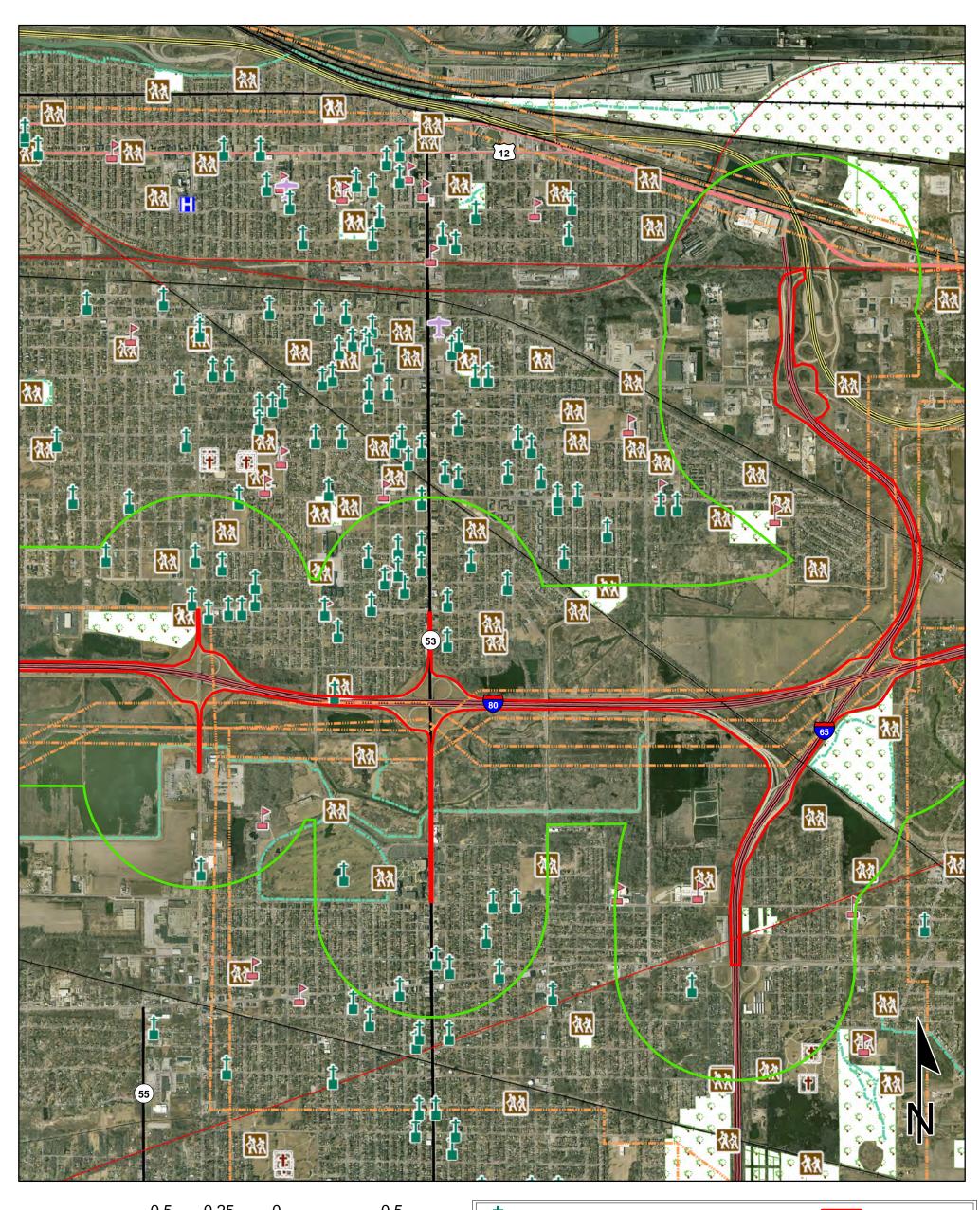






Red Flag Investigation - Infrastructure Borman Expressway, I-80/I-94, Illinois State Line east 15 miles to Ripley Street/US 6/SR 51

Des. 1901643, TSMO Lake County, Indiana



Project Area

Interstate

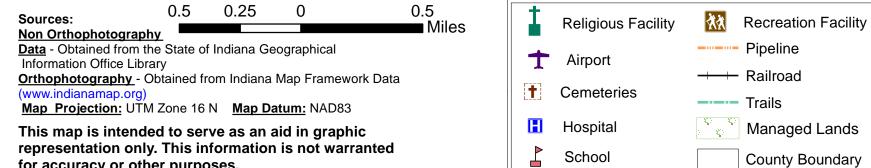
State Route

US Route

Local Road

Toll

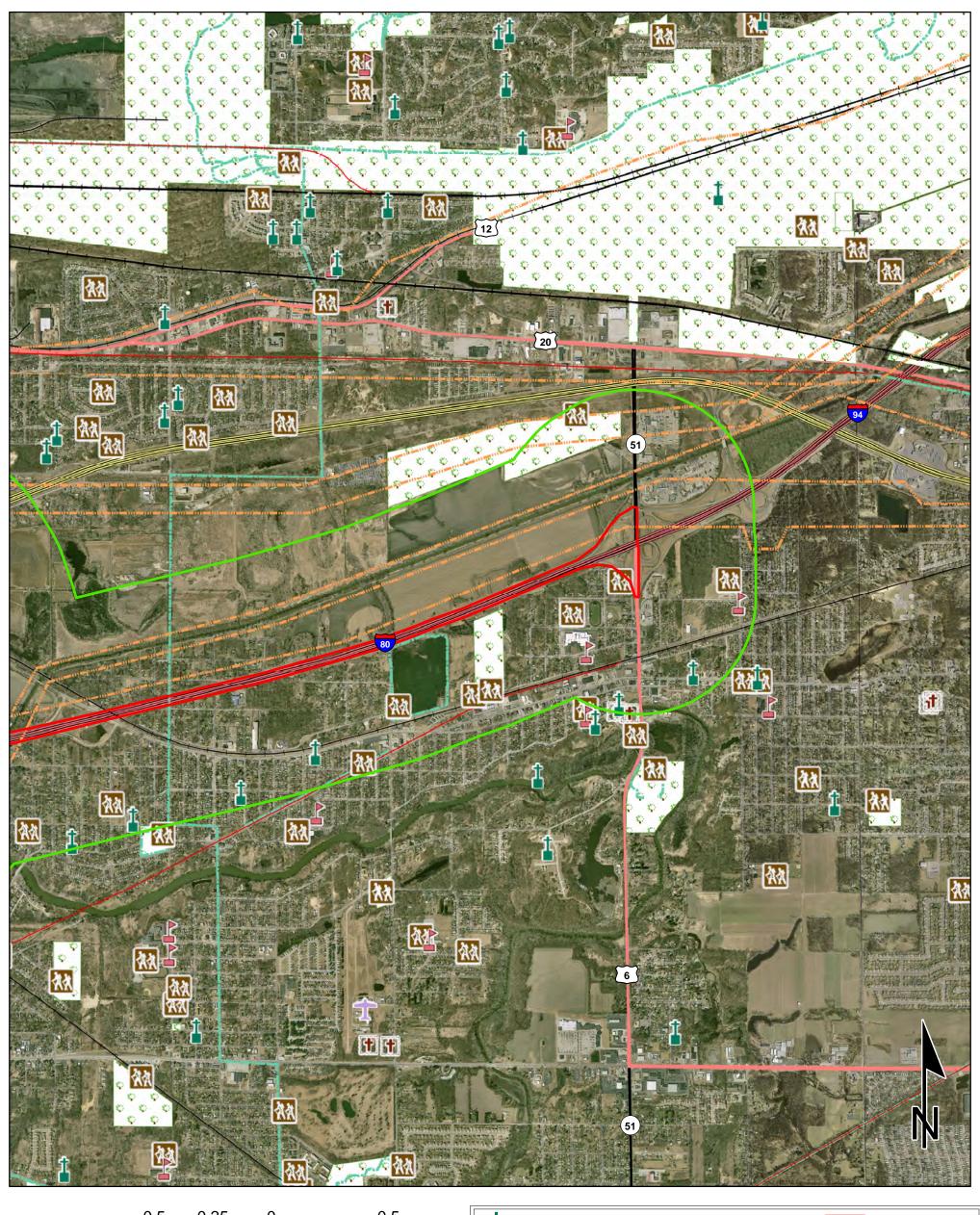
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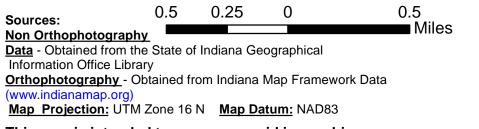


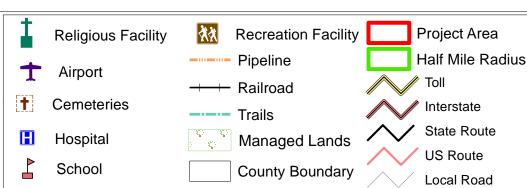
for accuracy or other purposes.

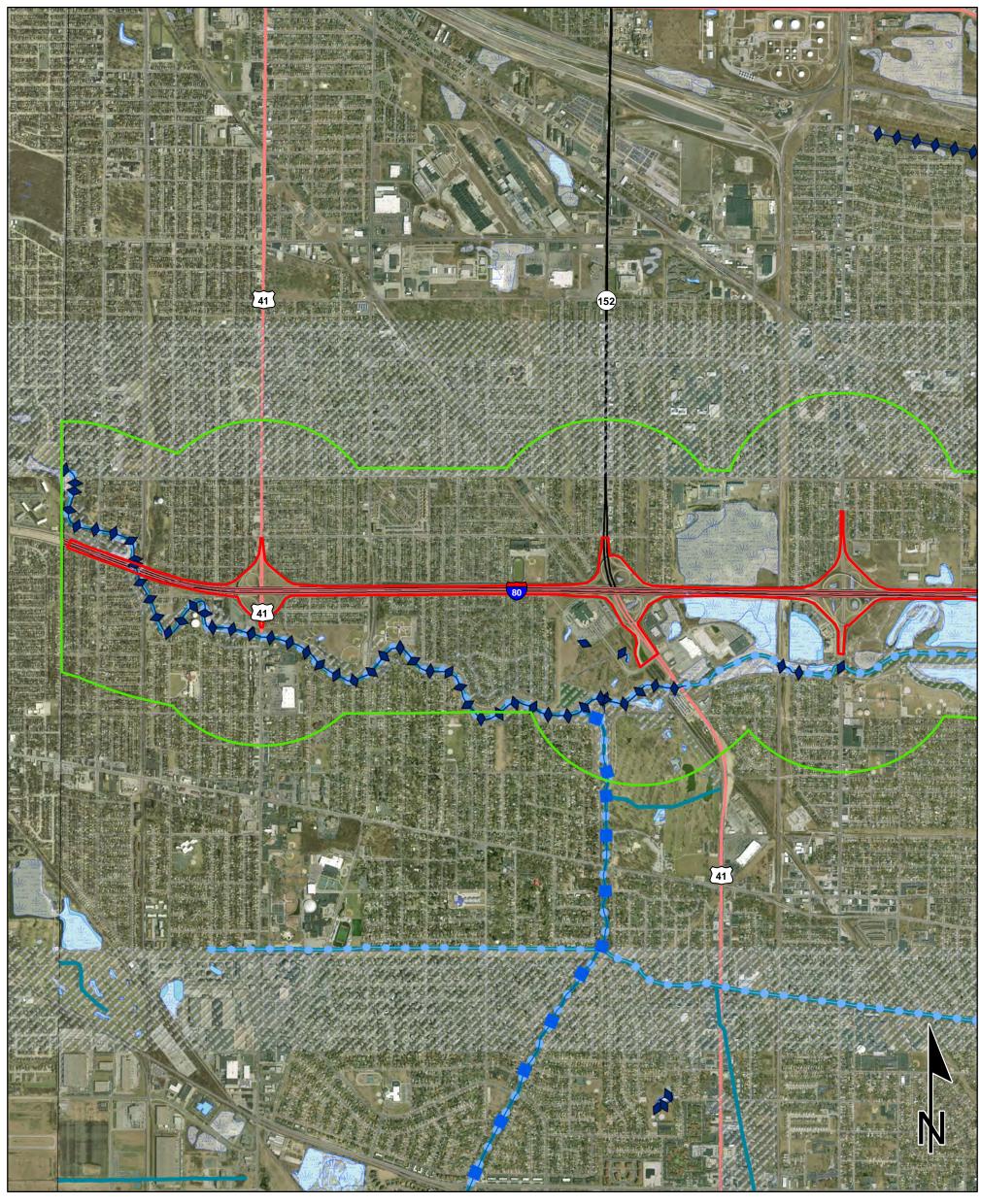
Red Flag Investigation - Infrastructure Borman Expressway, I-80/I-94, Illinois State Line east 15 miles to Ripley Street/US 6/SR 51

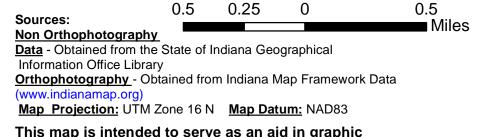
Des. 1901643, TSMO Lake County, Indiana

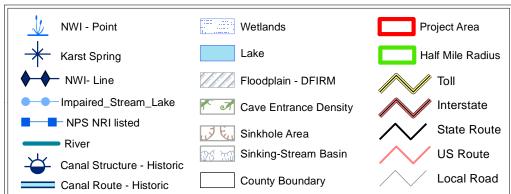






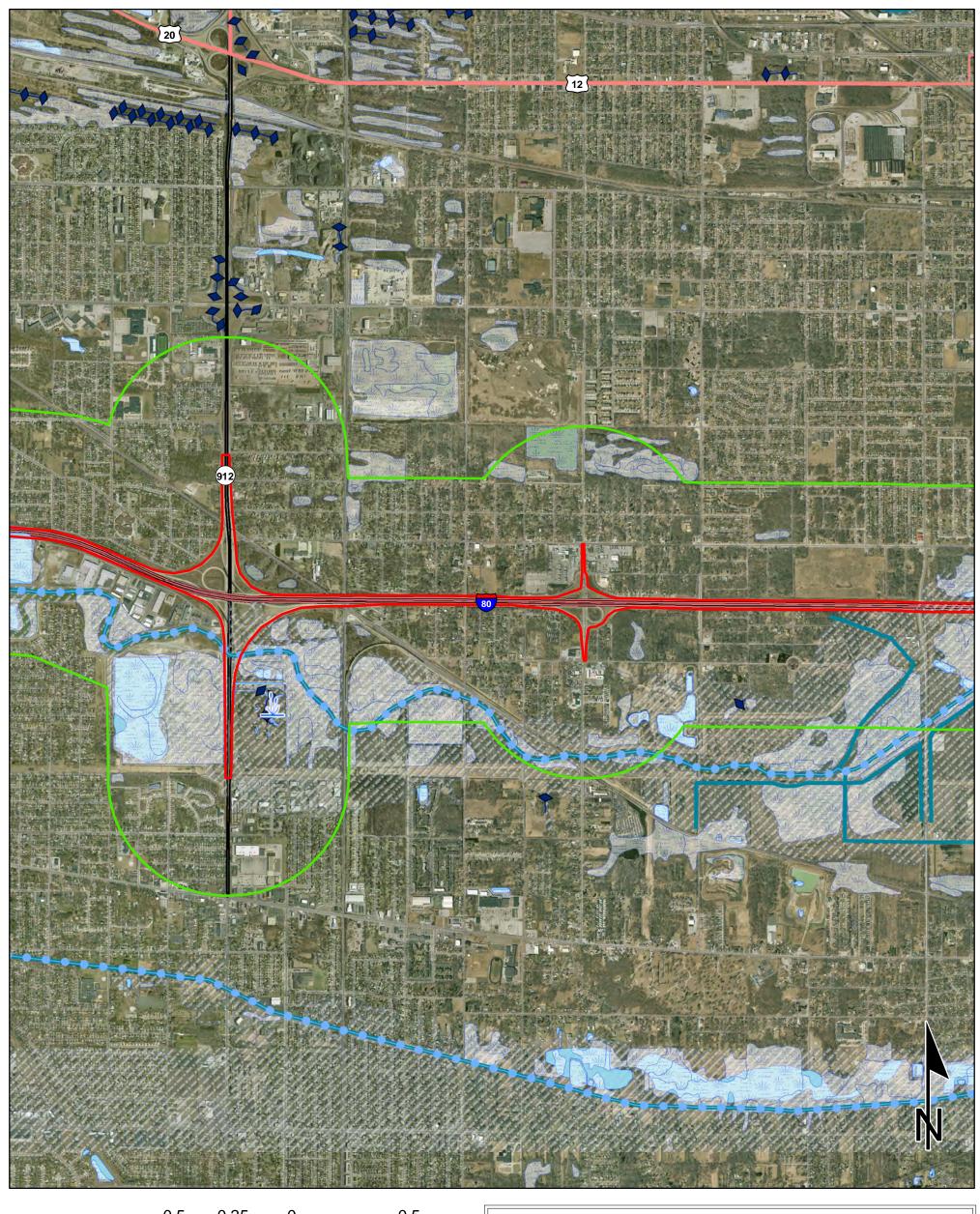


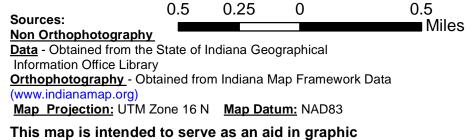




Red Flag Investigation - Water Resources Borman Expressway, I-80/I-94, Illinois State Line east 15 miles to Ripley Street/US 6/SR 51 Des. 1901643, TSMO

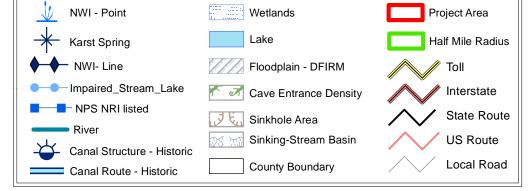
Lake County, Indiana





representation only. This information is not warranted

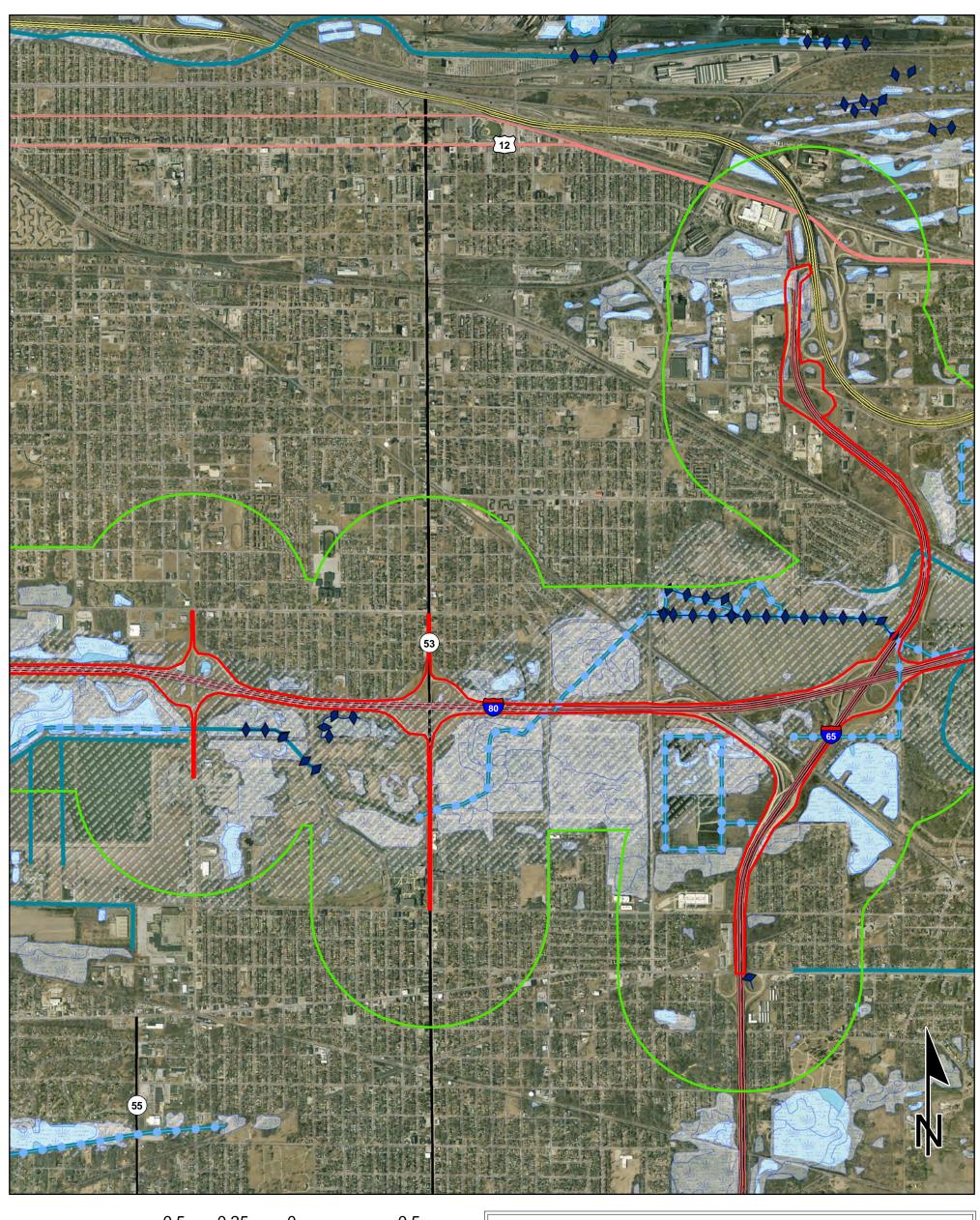
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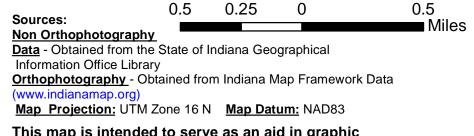


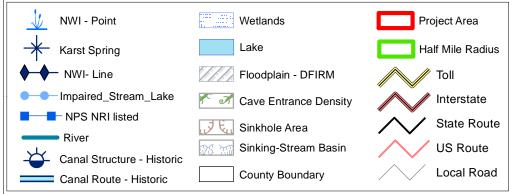
Red Flag Investigation - Water Resources

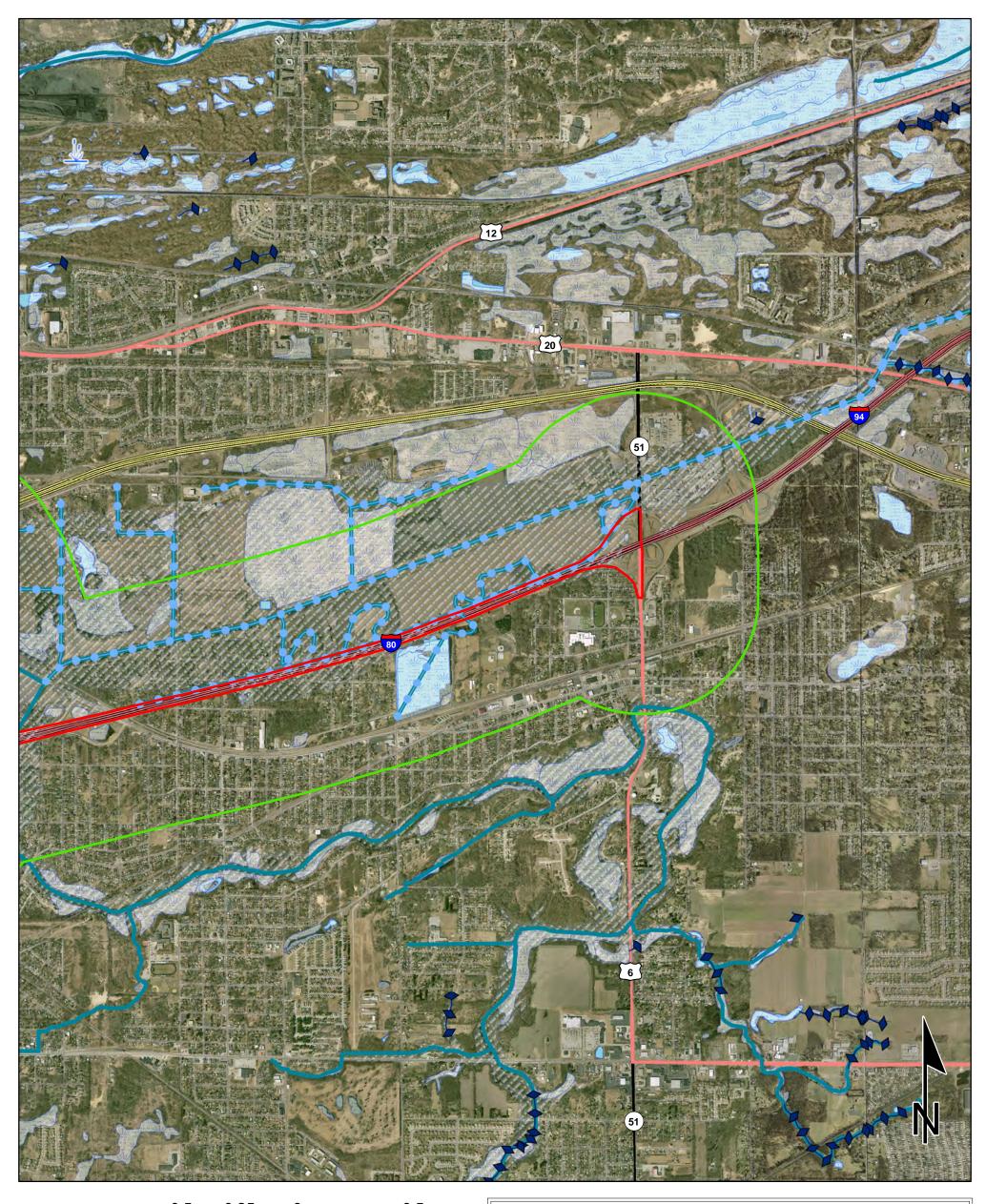
Borman Expressway, I-80/I-94, Illinois State Line east 15 miles to Ripley Street/US 6/SR 51 Des. 1901643, TSMO

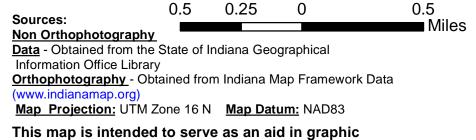
Lake County, Indiana





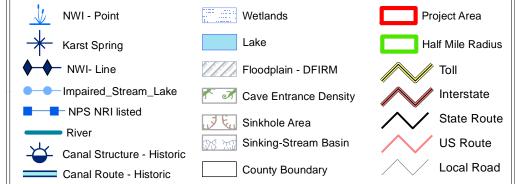


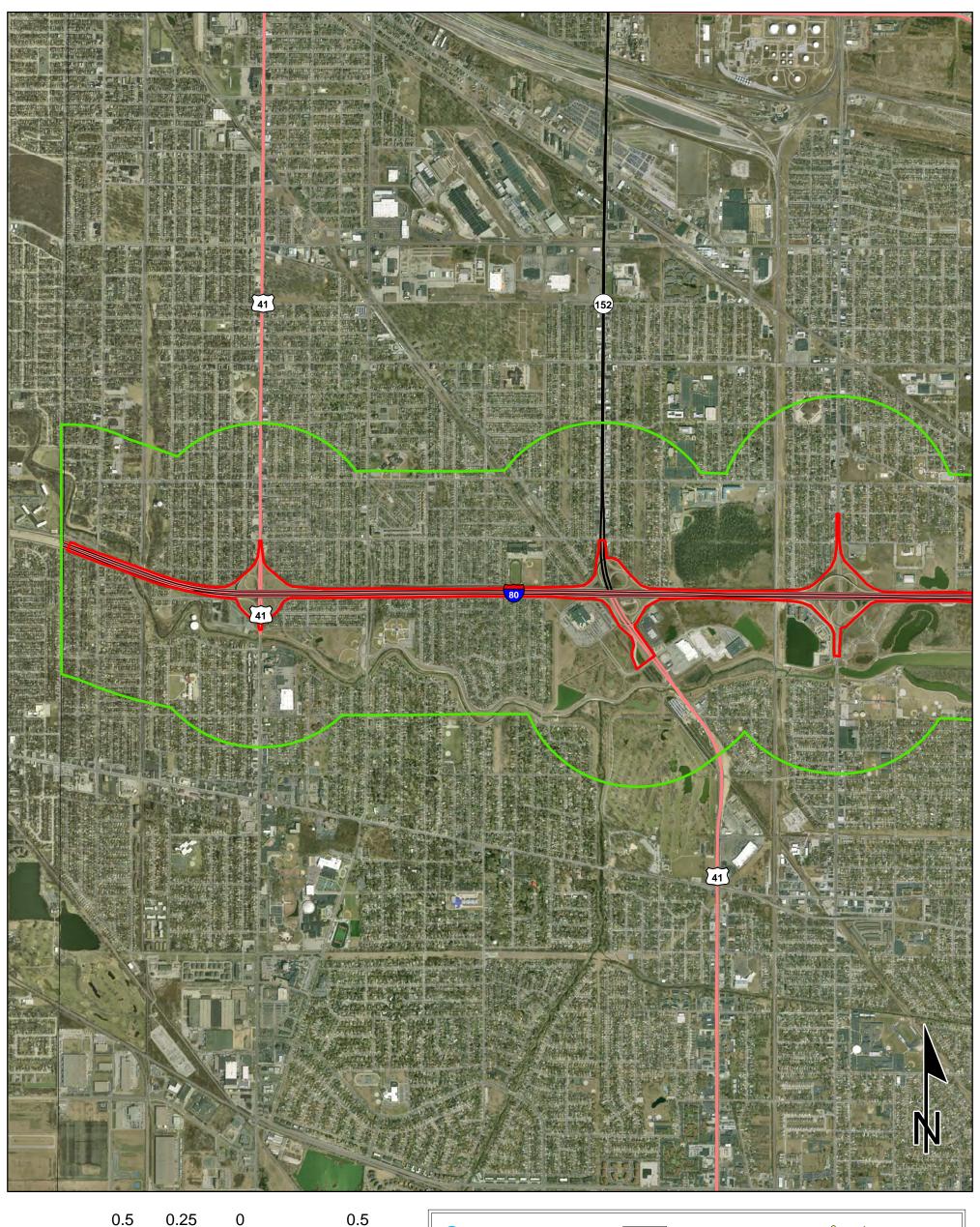




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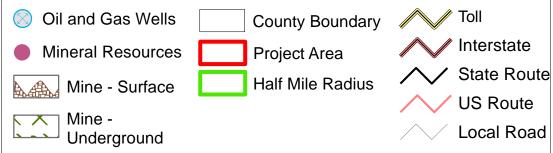
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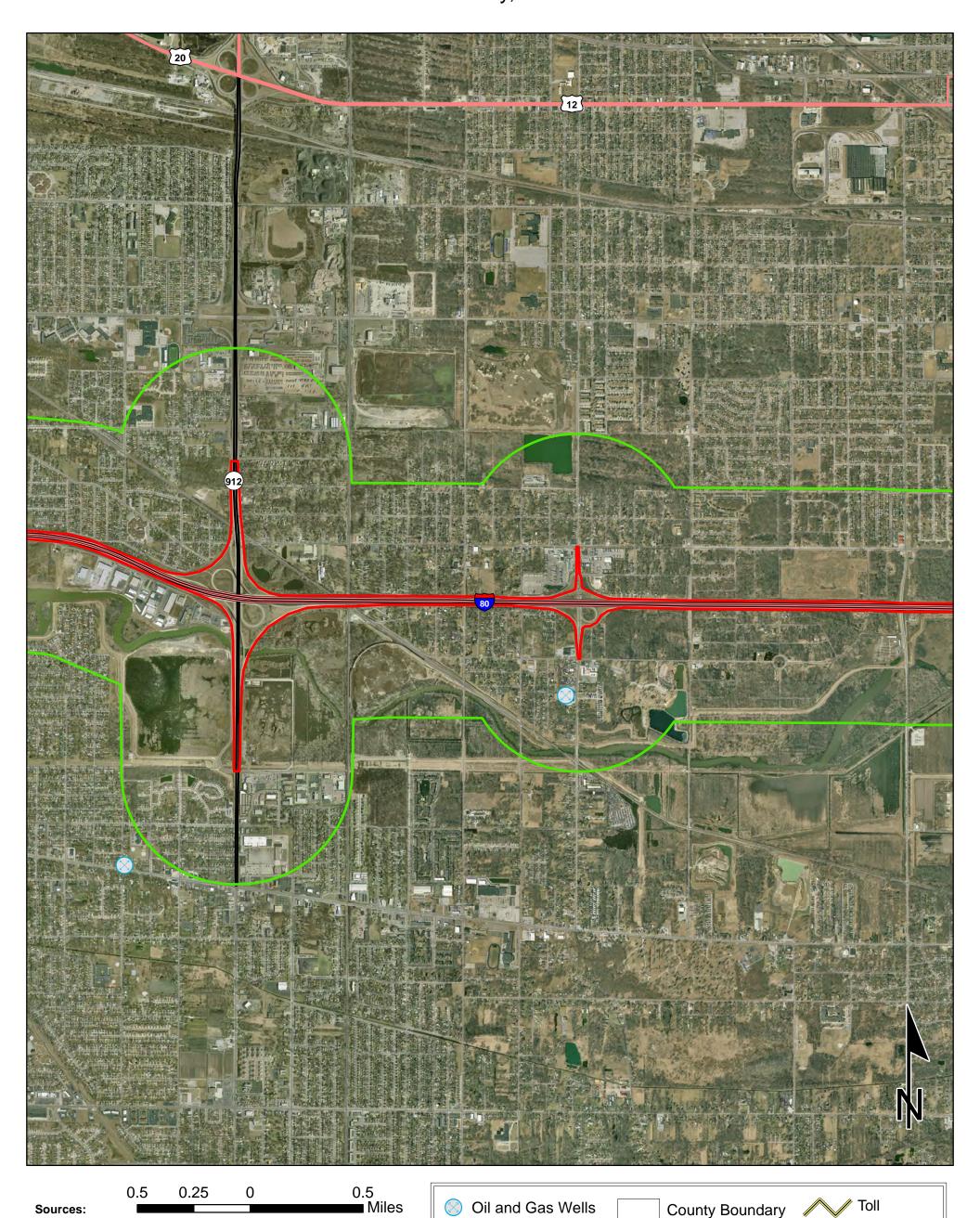
Non Orthophotography

Data - Obtained from the State of Indiana Geographical
Information Office Library

Orthophotography - Obtained from Indiana Map Framework Data
(www.indianamap.org)

Map Projection: UTM Zone 16 N Map Datum: NAD83





Mineral Resources

Mine -

Mine - Surface

Underground

Project Area

Half Mile Radius

Interstate

State Route

US Route

Local Road

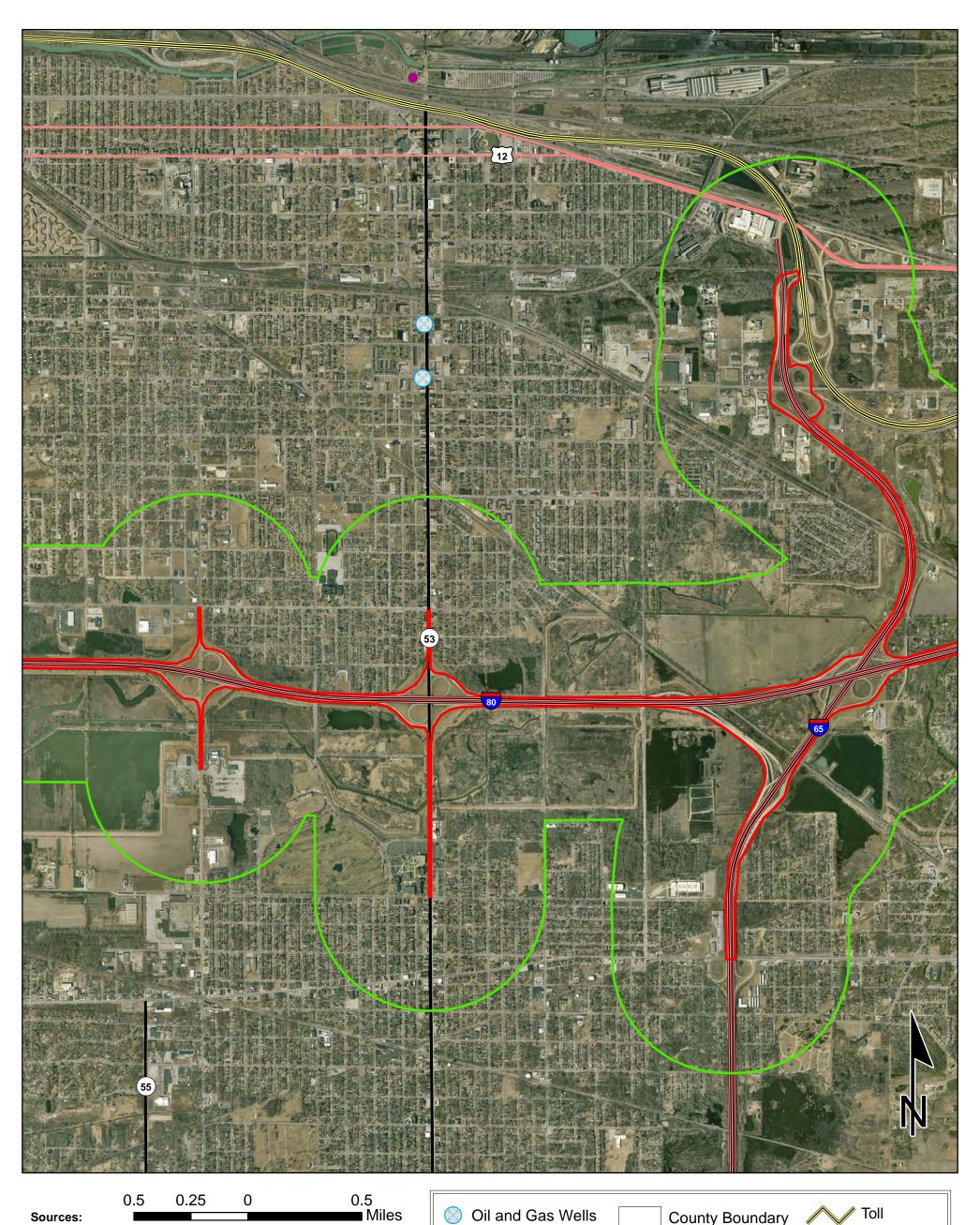
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This man is intended to carve as an aid in graphic



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State Route

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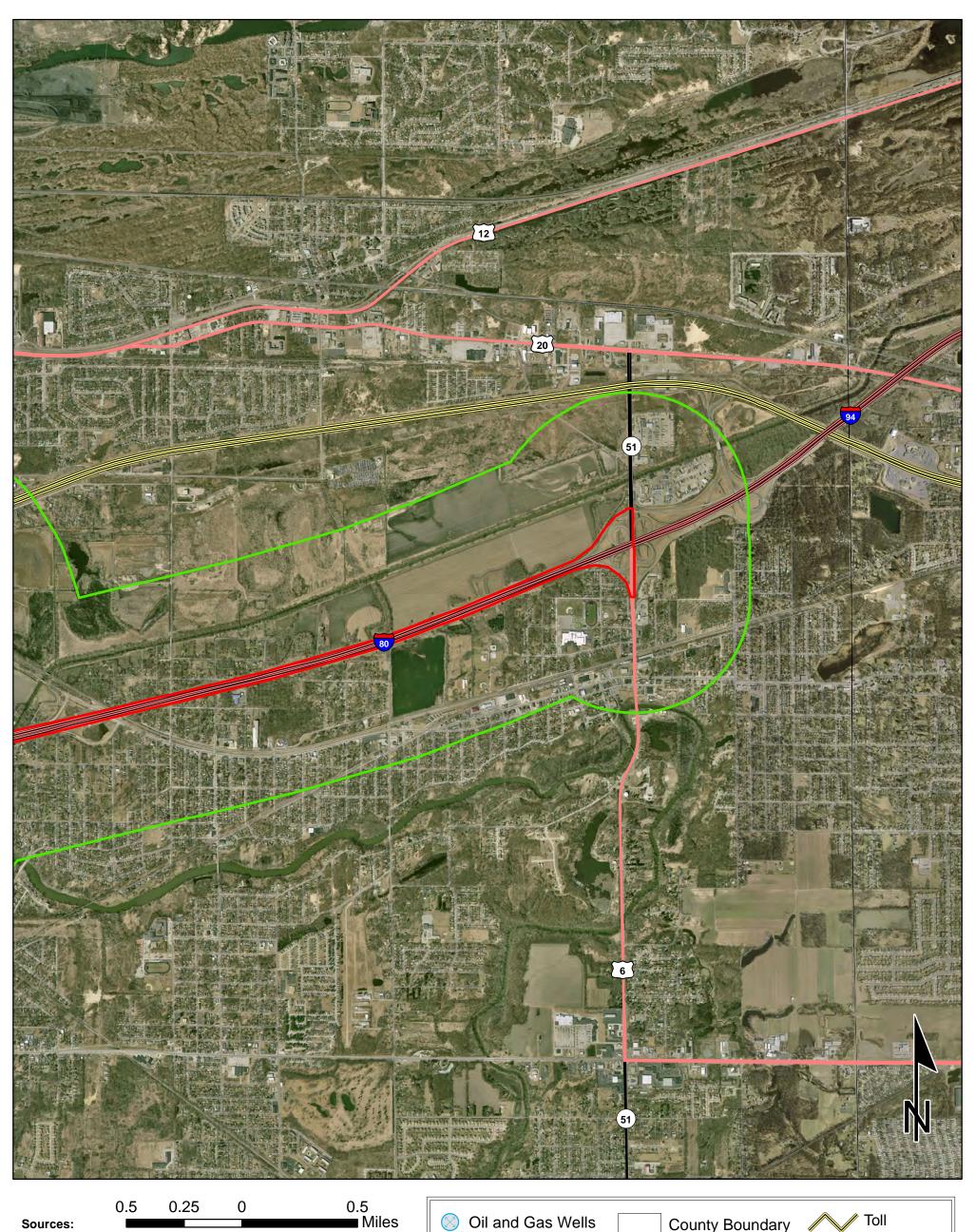
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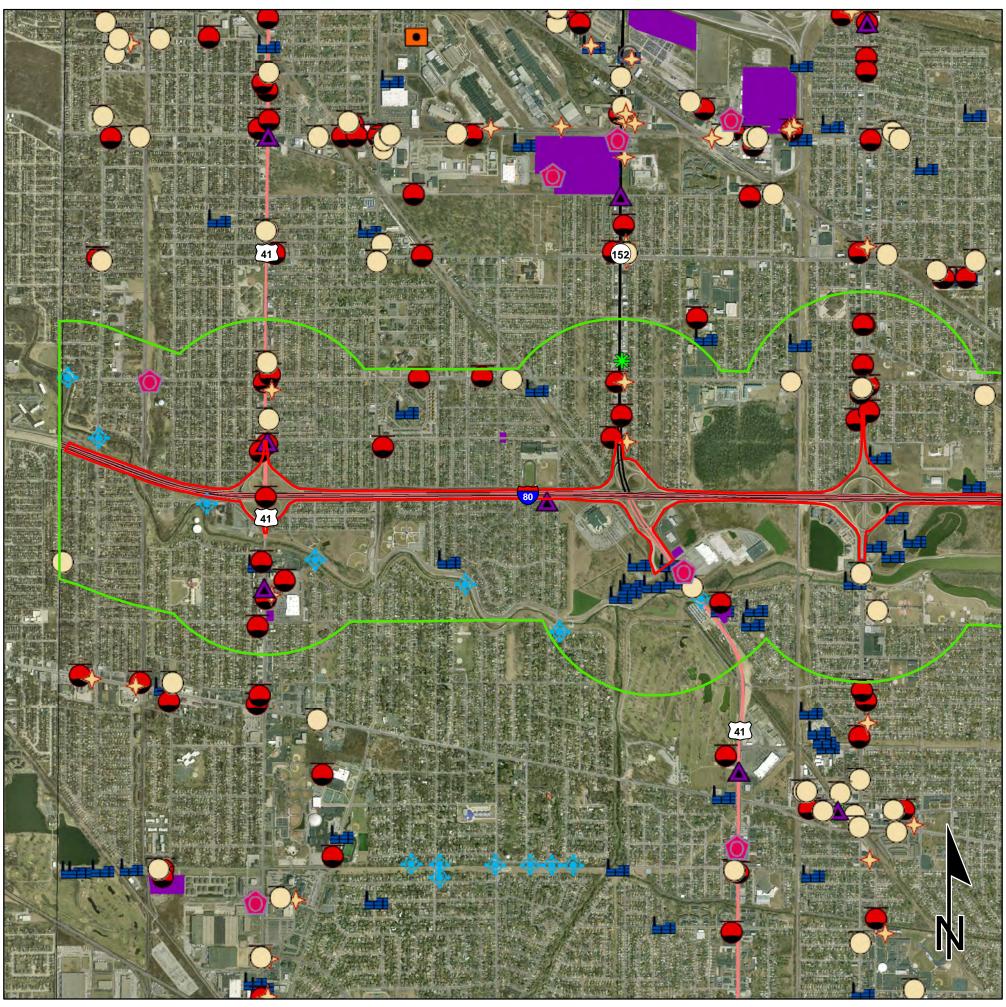
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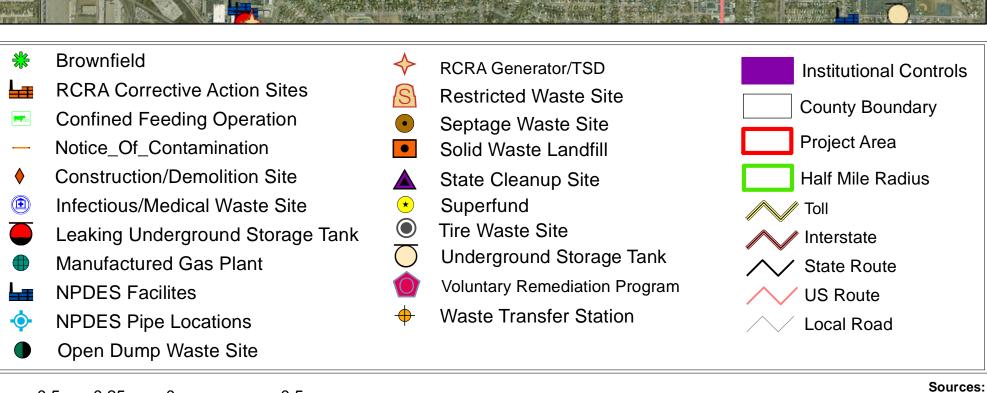


Miles Sources: Non Orthophotography <u>Data</u> - Obtained from the State of Indiana Geographical Information Office Library <u>Orthophotography</u> - Obtained from Indiana Map Framework Data (www.indianamap.org) Map Projection: UTM Zone 16 N Map Datum: NAD83

Mineral Resources **Project Area** State Route Half Mile Radius Mine - Surface **US** Route Mine -This map is intended to serve as an aid in graphic Local Road Underground representation only. This information is not warranted for accuracy or other purposes.

Interstate



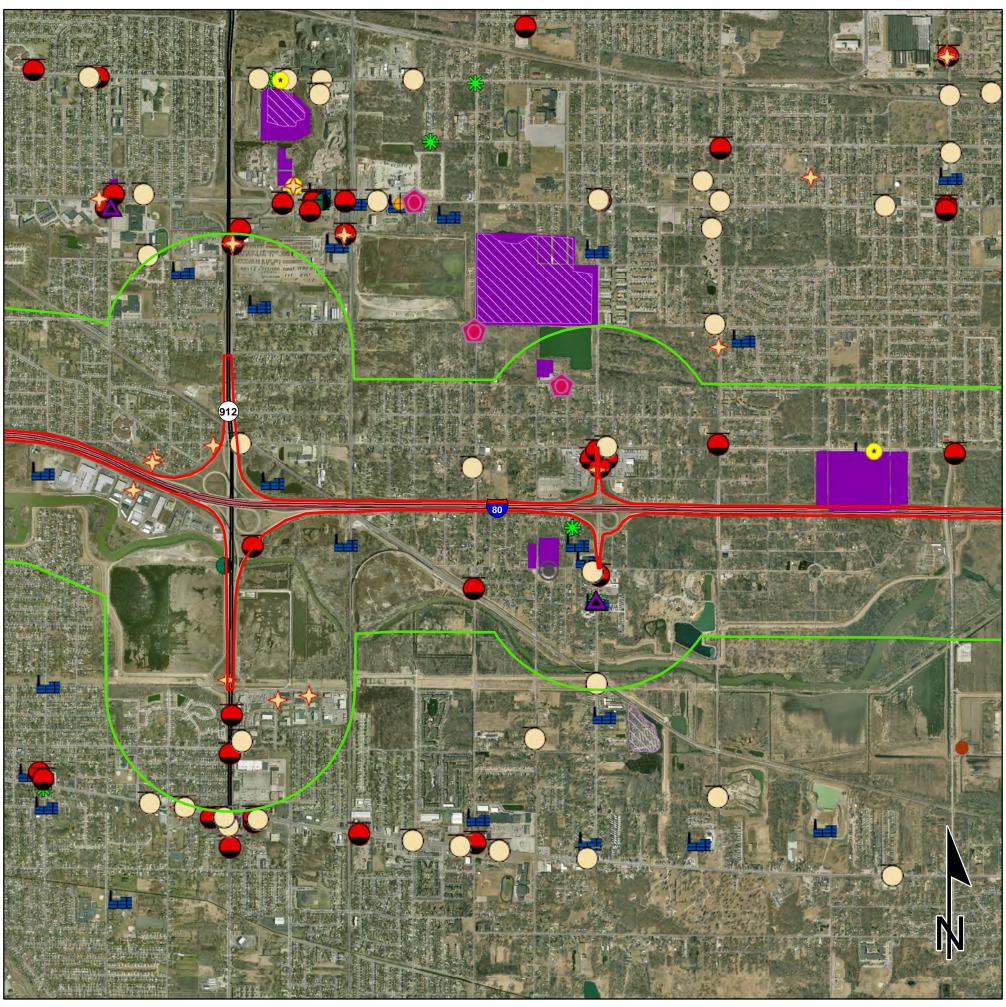


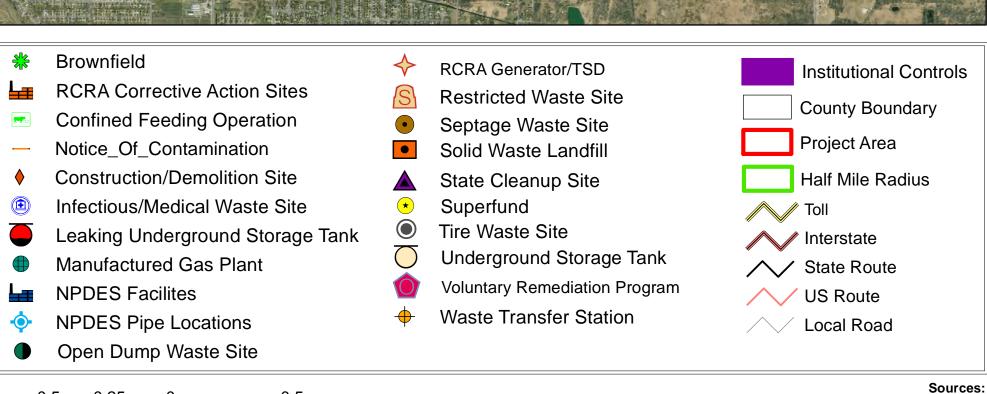
0.5 0.25 0 0.5 Miles

Non Orthophotography

Data - Obtained from the State of Indiana Geographical
Information Office Library
Orthophotography - Obtained from Indiana Map Framework Data

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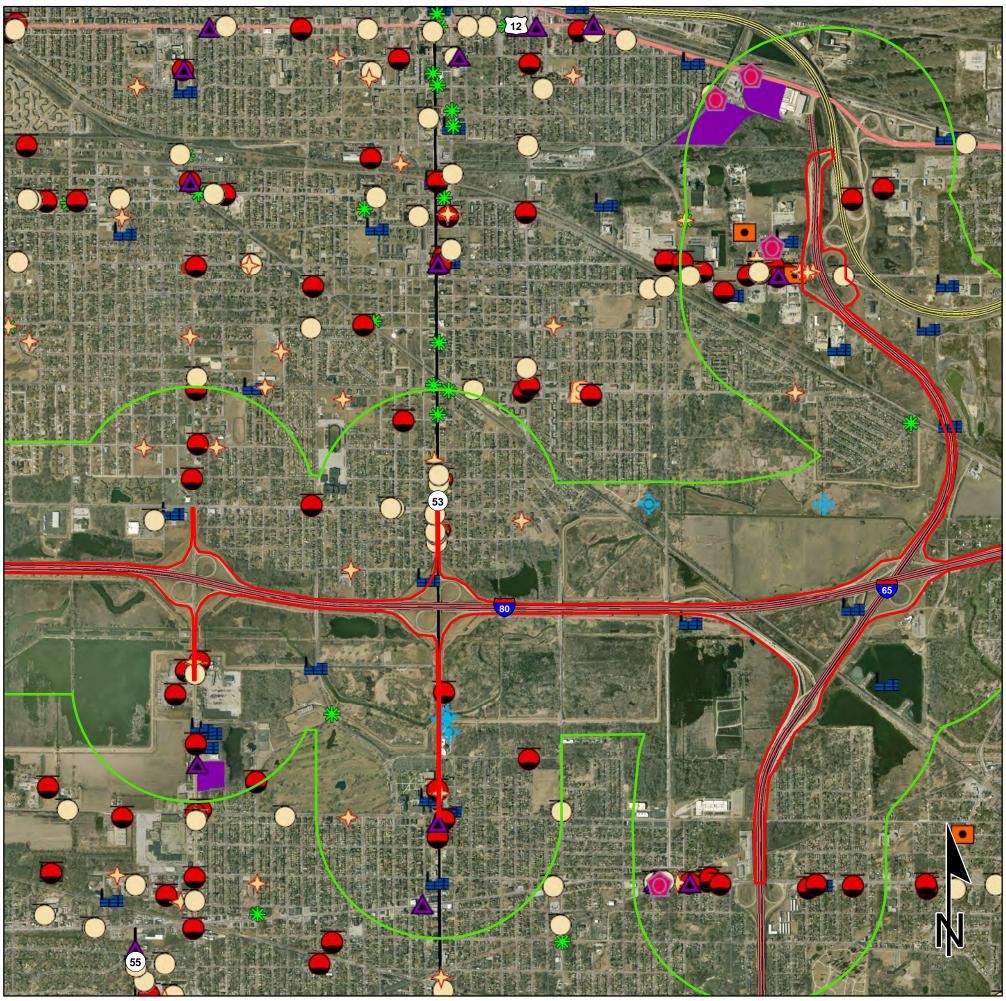


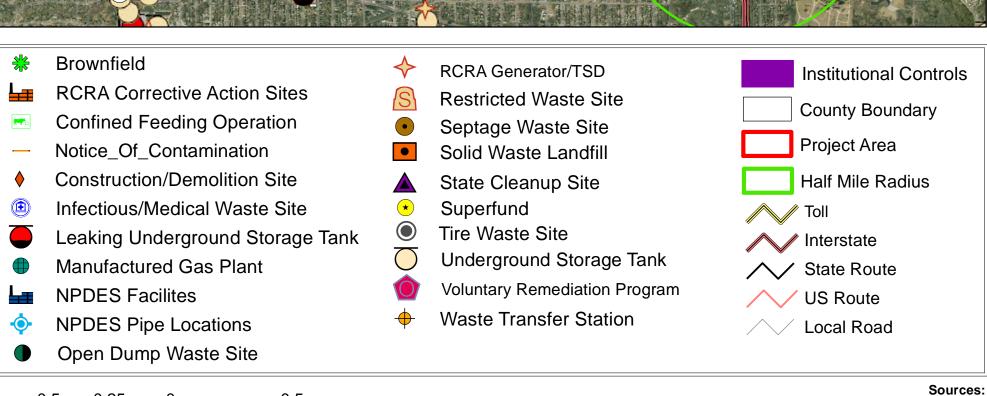


0.5 0.25 0 0.5 Miles

Map Projection: UTM Zone 16 N Map Datum: NAD83

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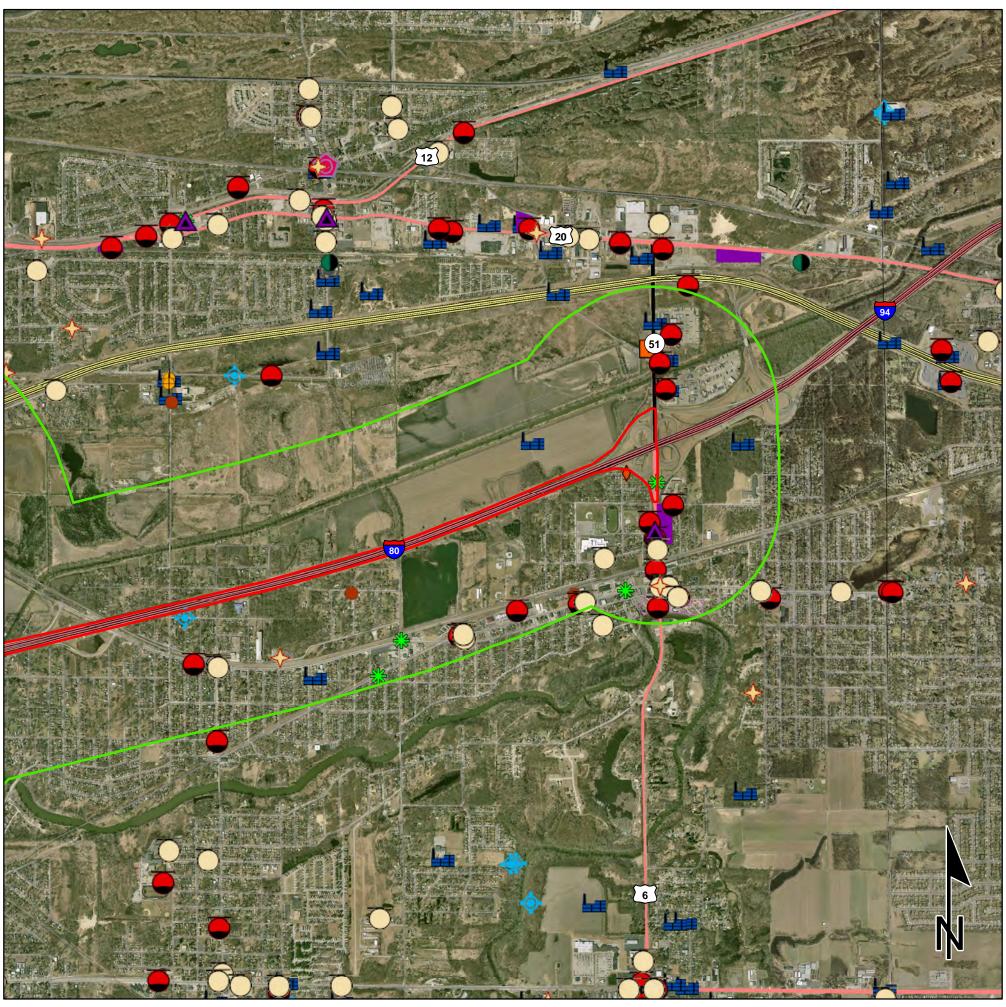


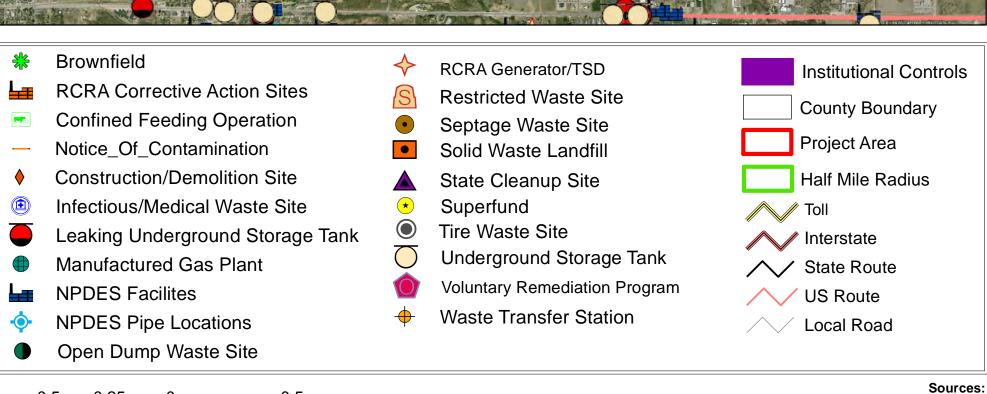


0.5 0.25 0 0.5 Miles

Non Orthophotography

Data - Obtained from the State of Indiana Geographical
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Orthophotography - Obtained from Indiana Map Framework Data





0.5 0.25 0 0.5 Miles

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Page 1 of 12 03/09/2020

Indiana County Endangered, Threatened and Rare Species List County: Lake



Species Name	Common Name	FED	STATE	GRANK	SRANK
Mollusk: Bivalvia (Mussels)		T.D.	GE.	<i>C</i> 2	C1
Plethobasus cyphyus Venustaconcha ellipsiformis	Sheepnose	LE	SE	G3 G4	S1 S2
	Ellipse			U4	52
Insect: Coleoptera (Beetles) Nicrophorus americanus	American Burying Beetle	LE	SX	G3	SX
Insect: Homoptera Bruchomorpha dorsata			SR	GNR	S2
Bruchomorpha extensa	The Long-nosed Elephant Hoppe	r	SR	GNR	S2S3
Bruchomorpha oculata	The Bong mood arepains repp	_	SR	GNR	SNR
Chlorotettix fallax	Deceptive Chlorotettix Leafhopper		SR	GNR	S1S2
Cicadula straminea	Straw-colored Sedge Leafhopper		ST	GNR	S1S2
Cosmotettix bilineatus	Two-lined cosmotettix		SR	GNR	S1S2
Dorydiella kansana	Kansas Spikerush Leafhopper		SR	GNR	S2S3
Flexamia pyrops	The Long-nose Three-awn Leafhopper		ST	GNR	S1
Flexamia reflexus	Indiangrass Flexamia		SR	GNR	S1S2
Graminella mohri	Mohr's Switchgrass Leafhopper		SE	GNR	S1
Laevicephalus acus	Pointed Fen Laevicephalus		SR	GNR	S1S2
Limotettix divaricatus			ST	GNR	SNR
Mesamia nigridorsum	Black-banded Sunflower Leafhopper		WL	GNR	S2S3
Paraphilaenus parallelus	A Spittle Bug		ST	GNR	S1
Paraphlepsius lobatus	Lobed Paraphlepsius Leafhopper		SR	GNR	S2
Paraphlepsius maculosus	Peppered Paraphlepsius Leafhopper		ST	GNR	S1S2
Philaenarcys killa	Great Lakes dune spittlebug		SR	GNR	S2S3
Polyamia caperata	Little Bluestem Polyamia		SR	GNR	S2
Polyamia herbida	The Prairie Panic Grass Leafhopper		ST	GNR	S2
Prairiana kansana	The Kansas Prairie Leafhopper		SE	GNR	S1
Prosapia ignipectus	Red-legged Spittle Bug		SR	G4	S2
Insect: Hymenoptera Bombus affinis	Dorder workload Dordella Dor	LE	SE	G2	S1
Dolichoderus plagiatus	Rusty-patched Bumble Bee	LE	SE	G2 G5	S2
Formica glacialis				G5	S2 S2
Lasius flavus				G5 G5	S2 S2
Lasius minutus Lasius minutus				GNR	S1
Lasius minutus Lasius speculiventris				GNR	S1 S1
Lustus specutiventis Myrmica lobifrons				GNK G5	S1
Solenopsis texana texana				GNRTNR	S1

Indiana Natural Heritage Data Center

Division of Nature Preserves

Indiana Department of Natural Resources

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State:

surveys.

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Page 2 of 12 03/09/2020

Indiana County Endangered, Threatened and Rare Species List County: Lake



Species Name	Common Name	FED	STATE	GRANK	SRANK
Insect: Lepidoptera (Butterflies & Moths)					
Acleris semipurpurana	Oak Leaftier Moth		SR	GNR	SNR
Acronicta dactylina	Fingered Dagger Moth		SR	G5	SNR
Acronicta funeralis	Funerary Dagger Moth		SR	G5	SNR
Aethes patricia			SE	G3G4	S 1
Agrotis stigmosa	Spotted Dart Moth		ST	G4	S1S2
Agrotis vetusta	Old Man Dart		SR	G5	S2
Ancylis semiovana			SR	GNR	S2S3
Ipamea burgessi	A Noctuid Moth		ST	G4	S1
Apamea indocilis	The Spastic Apamea		ST	G5	S1S3
lpamea nigrior	Black-dashed Apamea		SR	G5	S2S3
Apantesis virguncula	Little Virgin Tiger Moth		SR	G5	S1S2
Atrytonopsis hianna	Dusted Skipper		ST	G4G5	S2S3
Boloria selene myrina	Silver-bordered Fritillary		ST	G5T5	S2S3
Capis curvata	Curved Halter Moth		ST	G5	S2S3
Capsula laeta	Red Sedge Borer		ST	G4	S1S2
Caradrina meralis	The Rare Sand Quaker		ST	G5	S2
Catocala antinympha	The Sweet Fern Underwing		SE	G5	S1
Catocala gracilis	Graceful Underwing		SR	G5	S2S3
Catocala praeclara	Praeclara Underwing		SR	G5	S2S3
Coenochroa illibella	Dune Panic Grass Moth		SR	GNR	S2S3
Crambus bidens	Forked Grass-veneer		SR	GNR	SNR
Cyclophora pendulinaria	Sweetfern Geometer		SR	G5	SNR
Cycnia collaris			ST	G4	S2S3
Danaus plexippus	Monarch	С	WL	G4	S4S5B
Dargida rubripennis	The Pink Streak		ST	G3G4	S1
Dichagyris acclivis	A Noctuid Moth		ST	G4G5	S2
Dichagyris grotei	Grote's Black-tipped Quaker		ST	G4	S2
Dichomeris aleatrix	Aleatrix dichomeris			GNR	S1S2
Digrammia eremiata	The Goat's Rue Looper		SR	G4	S2S3
Digrammia mellistrigata	A Geometrid Moth		SR	G5	SNR
Erynnis lucilius	Columbine Duskywing		SE	G2G3	SH
Erynnis martialis	Mottled Duskywing		WL	G3	S3
Erynnis persius persius	Persius Duskywing		SE	G5T1T3	S1
Euchloe olympia	Olympia Marble		ST	G5	S2S3
Eucoptocnemis fimbriaris	Fringed Dart		ST	G4	S1
Eucosma bilineana			SR	GNR	S1S2
Eucosma bipunctella	A Moth		SR	GNR	S1S2
Lucosma giganteana	Giant Eucosma		SR	GNR	S1S2
Eucosma ochroterminana	Buff-tipped Eucosma		SR	GNR	SNR

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SRANK: State Heritage Rank: S1 = critically imperiled in state; S2 = imperiled in state; S3 = rare or uncommon in state; G4 = widespread and abundant in state but with long-term concern; SG = state significant; SH = historical in

state; SX = state extirpated; B = breeding status; S? = unranked; SNR = unranked; SNA = nonbreeding status unranked

Page 3 of 12 03/09/2020

Indiana County Endangered, Threatened and Rare Species List County: Lake



Species Name	Common Name	FED	STATE	GRANK	SRANK
Eucosma olivaceana	Olivaceous Eucosma		SR	GNR	S1S2
Eucosma striatana	Striated Eucosma		SR	G5	SNR
Eucosma umbrastriana			SR	GNR	SNR
Euphyes bimacula	Two-spotted Skipper		ST	G4	S1S2
Fagitana littera	The Marsh Fern Moth		ST	G4	S1S2
Feltia manifesta	The Record Keeper Moth		SR	G4	S3S4
Gabara subnivosella	A Noctuid Moth		SR	G4	S1S2
Glaucopsyche lygdamus couperi	Silvery Blue		SE	G5T5	SH
Grammia figurata	The Figured Grammia		SR	G5	S2S3
Grammia phyllira	The Sand Barrens Grammia		SR	G4	S2S3
Hadena capsularis	The Starry Campion Capsule Moth		SR	G5	S1S2
Hadena ectypa	The Starry Campion Moth		ST	G3G4	S1S3
Hemaris gracilis	The Blueberry Clearwing Sphinx		SR	G3G4	S1S2
Hesperia leonardus	Leonard's Skipper		ST	G4	S2S3
Hesperia ottoe	Ottoe Skipper		SE	G3	S1
Hypenodes caducus	Large Hypenodes		SR	GNR	SNR
łyperaeschra georgica	A Prominent Moth		ST	G5	S2
Hypocoena inquinata	Tufted Sedge Moth		ST	G5	S1S2
odopepla u-album	White-eyed Borer Moth		SR	G5	S2
emmeria digitalis	Fingered Lemmeria		SR	G4	S1S2
esmone detrahens	Detracted Owlet		SR	G5	S2
ethe eurydice eurydice	Eyed Brown		WL	G5T5	S3
eucania amygdalina	Salt Marsh Wainscot		SR	GNR	S2
eucania inermis	Unarmed Wainscot		SR	G5	S2S3
eucania multilinea	Many-lined Wainscot		SR	G5	S1S2
ycaeides melissa samuelis	•	LE	SE	G2	S 1
ycaena dione	Gray Copper		SX	G5	SX
ycaena helloides	Purplish Copper		ST	G5	S2S3
Aacaria multilineata	Many-lined Angle		SR	G4	SNR
Aacrochilo absorptalis	Slant-lined Owlet		SR	G4G5	S2S3
Aacrochilo hypocritalis	Twin-dotted Macrochilo		SR	G4	S2
Aacrochilo louisiana	Louisiana Macrochilo		ST	G4	S1S2
Melanomma auricinctaria	Huckleberry Eye-spot Moth		SR	G4	S2S3
1elipotis jucunda	Merry Melipotis Moth		SR	G5	S1S3
Aeropleon ambifusca	Newman's Brocade		ST	G3G4	S1S2
Meropleon diversicolor	Multicolored Sedgeminer		SR	G5	S2S3
1 Aetanema determinata	Dark Metanema		SR	G5	SNR
Aetanema inatomaria	Pale Metanema		SR	G5	SNR
Metarranthis apiciaria	Barrens Metarranthis Moth		SE	G1G3	SH

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Page 4 of 12 03/09/2020

Indiana County Endangered, Threatened and Rare Species List County: Lake



Species Name	Common Name	FED	STATE	GRANK	SRANK
Neodactria murellus	Prairie Sedge Moth		ST	GNR	S1
Nola cilicoides	Blurry-patched Nola Moth		SR	G5	SNR
Notodonta scitipennis	Finned-willow Prominent		ST	G5	S1S2
Odontosia elegans	Elegant Prominent		SR	G5	S1S2
Oligia obtusa	A Noctuid Moth		SE	G4	S1
Pangrapta decoralis	The Multicolored Huckleberry Moth		ST	G5	S2
Papaipema beeriana	Beer's Blazing Star Borer Moth		ST	G2G3	S1S3
Papaipema cerina	Golden Borer Moth		ST	G2G4	S1
Papaipema leucostigma	Columbine Borer		ST	G4G5	S1S2
Papaipema lysimachiae	The St. John's Wort Borer Moth		SR	G4G5	S1S3
Papaipema maritima	The Giant Sunflower Borer Moth		ST	G3	S2
Papaipema pterisii	Bracken Borer Moth		WL	G5	SNR
Papaipema rigida	Rigid Sunflower Borer Moth		SR	G4G5	S2S3
Papaipema sciata	The Culver's Root Borer		ST	G3	S1S2
Papaipema silphii	Silphium Borer Moth		ST	G3G4	S2
Papaipema speciosissima	The Royal Fern Borer Moth		ST	G4	S2S3
Parasa indetermina	Stinging Rose Caterpillar Moth		SR	G4	S1S2
Peoria gemmatella	Gemmed Cordgrass Borer		SE	GNR	S1
Peoria tetradella	-		SR	GNR	SNR
Photedes enervata	The Many-lined Cordgrass Moth		ST	G4	S1
Photedes includens	The Included Cordgrass Borer		ST	G4	S 1
Photedes inops	Spartina Borer Moth		SR	G3G4	S2S3
Photedes panatela	Northern Cordgrass Borer		ST	GNR	S1
Phytometra ernestinana	Ernestine's Moth		SE	G4	S 1
Poanes massasoit	Mulberry Wing Skipper			G4	S3S4
Poanes viator viator	Big Broad-winged Skipper		ST	G5T4	S2
Polites mystic	Long Dash Skipper			G5	S3S4
Polygonia progne	Gray Comma		ST	G5	S2S3
Ponometia binocula	Prairie Tarachidia			GNR	S1S2
Problema byssus	Bunchgrass Skipper		ST	G4	S1S2
Protorthodes incincta	Saturn quaker		SR	GNR	S2
Pygarctia spraguei	Sprague's Pygartic		SR	G5	S1S2
Pyrausta laticlavia	The Southern Purple Mint Moth		SR	GNR	S1S2
Pyrrhia aurantiago	False-foxglove Sun Moth		ST	G3G4	S1S2
Resapamea stipata	The Four-lined Cordgrass Borer		SE	G4	S 1
Schinia indiana	Phlox Moth		SE	G2G4	S 1
Schinia sanguinea	Bleeding Flower Moth			G4	S2S3
Schinia septentrionalis	Northern Flower Moth		SR	G3G4	S2S3
Scirpophaga perstrialis	Reed-boring Crambid Moth		SR	GNR	SNR

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Page 5 of 12 03/09/2020

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Species Name	Common Name	FED	STATE	GRANK	SRANK
Sitochroa dasconalis	Pearly Indigo Borer		ST	GNR	S1S2
Sonia fulminana	a tortricid moth		SR	GNR	S1S2
Speyeria idalia	Regal Fritillary	C	SE	G3?	S1S2
Sphinx luscitiosa	The Luscious Willow Sphinx		SR	G4G5	S1S2
Spilosoma latipennis	The Red-legged Tussock Moth		SR	G4	S2S3
Sympistis riparia	The Dune Oncocnemis Moth		ST	G4	S1S2
Tricholita notata	Marked Noctuid		ST	G5	S1S2
Zomaria interruptolineana	Broken-lined Zomaria		SR	GNR	SNR
nsect: Odonata (Dragonflies & Damselflies) Somatochlora hineana	Hine's Emerald	LE	SX	G2G3	SX
'ympetrum semicinctum		LE	SR SR	G2G3	S2S3
	Band-winged Meadowhawk		SK	03	3233
nsect: Orthoptera	0.111.17		CD	C5	9292
Chloealtis conspersa	Sprinkled Locust		SR	G5	S2S3
Conocephalus saltans	Prairie Meadow Katydid		SR	G5	S1S2
Hesperotettix viridis pratensis	Snakeweed Grasshopper		SR	G5T5	S1S2
Melanoplus fasciatus	Huckleberry Spur-throat Grasshopper		SR	G5	S2
Aelanoplus keeleri luridus	Keeler's Spur-throated Grasshopper		SR	G5T5	S3S4
Neoconocephalus nebrascensis	Nebraska Conehead		SR	GNR	S1S2
Orphulella pelidna	Spotted-wing Grasshopper		SE	G5	S1
Pardalophora phoenicoptera	Orange-winged Grasshopper		SR	G5	S1S2
Paroxya atlantica	Atlantic Spastic Grasshopper		ST	GU	S2
Phoetaliotes nebrascensis	Large-headed Grasshopper		ST	G5	S1S2
Psinidia fenestralis	Sand Locust		SR	G5	S2
rimerotropis maritima	Seaside Grasshopper		ST	G5	S1S2
lish					
cipenser fulvescens	Lake Sturgeon		SE	G3G4	S1
chthyomyzon fossor	Northern Brook Lamprey		SE	G4	S1
Rhinichthys cataractae	Longnose Dace		SSC	G5	S2
Amphibian					
Acris blanchardi	Blanchard's Cricket Frog		SSC	G5	S4
Ambystoma laterale	Blue-spotted Salamander		SSC	G5	S2
Necturus maculosus	Common mudpuppy		SSC	G5	S2
Reptile					
Clemmys guttata	Spotted Turtle	C	SE	G5	S2
Clonophis kirtlandii	Kirtland's Snake		SE	G2	S2
Emydoidea blandingii	Blanding's Turtle	C	SE	G4	S2
Opheodrys vernalis	Smooth Green Snake		SE	G5	S2
Sistrurus catenatus	Eastern Massasauga	LT	SE	G3	S2

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Page 6 of 12 03/09/2020

Indiana County Endangered, Threatened and Rare Species List County: Lake



Terrapene carolina carolina Terrapene ornata ornata Thamnophis proximus proximus Thamnophis radix Bird Ammodramus henslowii Anas clypeata Ardea alba Bartramia longicauda Botaurus lentiginosus Buteo platypterus	Eastern Box Turtle Ornate Box Turtle Western Ribbon Snake Plains Garter Snake Henslow's Sparrow Northern Shoveler Great Egret Upland Sandpiper American Bittern		SSC SE SSC SSC	G5T5 G5T5 G5T5 G5	S3 S1 S3 S4
Thamnophis proximus proximus Thamnophis radix Bird Ammodramus henslowii Anas clypeata Ardea alba Bartramia longicauda Botaurus lentiginosus	Western Ribbon Snake Plains Garter Snake Henslow's Sparrow Northern Shoveler Great Egret Upland Sandpiper American Bittern		SSC SSC	G5T5 G5	S3 S4
Thamnophis radix Bird Ammodramus henslowii Anas clypeata Ardea alba Bartramia longicauda Botaurus lentiginosus	Plains Garter Snake Henslow's Sparrow Northern Shoveler Great Egret Upland Sandpiper American Bittern		SSC	G5 G4	S4
Bird Ammodramus henslowii Anas clypeata Ardea alba Bartramia longicauda Botaurus lentiginosus	Henslow's Sparrow Northern Shoveler Great Egret Upland Sandpiper American Bittern			G4	
Ammodramus henslowii Anas clypeata Ardea alba Bartramia longicauda Botaurus lentiginosus	Northern Shoveler Great Egret Upland Sandpiper American Bittern		SE		S3B
Anas clypeata Ardea alba Bartramia longicauda Botaurus lentiginosus	Northern Shoveler Great Egret Upland Sandpiper American Bittern		SE		S3B
Ardea alba Bartramia longicauda Botaurus lentiginosus	Great Egret Upland Sandpiper American Bittern				
Bartramia longicauda Botaurus lentiginosus	Upland Sandpiper American Bittern			G5	SHB
Botaurus lentiginosus	American Bittern		SSC	G5	S1B
_			SE	G5	S3B
Buteo platypterus			SE	G5	S2B
1 1	Broad-winged Hawk		SSC	G5	S3B
Certhia americana	Brown Creeper			G5	S2B
Charadrius melodus	Piping Plover	LE	SE	G3	SXB
Chlidonias niger	Black Tern		SE	G4G5	S1B
Chordeiles minor	Common Nighthawk		SSC	G5	S4B
Cistothorus palustris	Marsh Wren		SE	G5	S3B
Cistothorus platensis	Sedge Wren		SE	G5	S3B
Cygnus buccinator	Trumpeter Swan		SE	G4	S1B
Euphagus cyanocephalus	Brewer's Blackbird			G5	SHB,S1N
Falco peregrinus	Peregrine Falcon		SSC	G4	S2B
Gallinula galeata	Common gallinule		SE	G5	S3B
Grus canadensis	Sandhill Crane		SSC	G5	S2B,S1N
Haliaeetus leucocephalus	Bald Eagle		SSC	G5	S2
Hydroprogne caspia	Caspian Tern			G5	S1B
Ixobrychus exilis	Least Bittern		SE	G4G5	S3B
Lanius ludovicianus	Loggerhead Shrike		SE	G4	S3B
Laterallus jamaicensis	Black Rail		SE	G3G4	SHB
Mniotilta varia	Black-and-white Warbler		SSC	G5	S1S2B
Nyctanassa violacea	Yellow-crowned Night-heron		SE	G5	S2B
Nycticorax nycticorax	Black-crowned Night-heron		SE	G5	S1B
Pandion haliaetus	Osprey		SSC	G5	S1B
Phalaropus tricolor	Wilson's Phalarope		SSC	G5	SHB
Rallus elegans	King Rail		SE	G4	S1B
Rallus limicola	Virginia Rail		SE	G5	S3B
Scolopax minor	American Woodcock		SSC	G5	S4B
Tringa melanoleuca	Greater Yellowlegs		SSC	G5	S3M
Tringa solitaria	Solitary Sandpiper		SSC	G5	S3M
Tyto alba	Barn Owl		SE SE	G5	S2
Xanthocephalus xanthocephalus	Yellow-headed Blackbird		SE SE	G5	S1B
Mammal	- · · · · · · · · · · · · · · · · · · ·				

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Page 7 of 12 03/09/2020

Indiana County Endangered, Threatened and Rare Species List County: Lake



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Lasiurus borealis	Eastern Red Bat		SSC	G3G4	S4
Lasiurus cinereus	Hoary Bat		SSC	G3G4	S4
Myotis lucifugus	Little Brown Bat	C	SE	G3	S2
Myotis septentrionalis	Northern Long Eared Bat	LT	SE	G1G2	S2S3
Reithrodontomys megalotis	Western Harvest Mouse			G5	S2
Spermophilus franklinii	Franklin's Ground Squirrel		SE	G5	S2
Taxidea taxus	American Badger		SSC	G5	S2
Vascular Plant					
Agalinis auriculata	earleaf foxglove		ST	G3	S2
Agalinis gattingeri	roundstem foxglove		ST	G4	S3
Agalinis skinneriana	pale false foxglove		ST	G3G4	S2
Alnus incana ssp. rugosa	speckled alder		WL	G5T5	S3
Amelanchier humilis	running serviceberry		SE	G5	S1
Androsace occidentalis	western rockjasmine		ST	G5	S2
Aralia hispida	bristly sarsaparilla		SE	G5	S1
Arctostaphylos uva-ursi	bearberry		ST	G5	S3
Arethusa bulbosa	swamp-pink		SX	G5	SX
Aristida longespica var. geniculata	slim-spike three-awn grass		WL	G5T5?	S3
Aristida tuberculosa	seabeach needlegrass		ST	G5	S3
Asclepias meadii	Mead's milkweed	LT	SRE	G2	SX
Aureolaria grandiflora var. pulchra	large-flower false-foxglove		SX	G4G5T4T5	SX
Baptisia bracteata var. leucophaea	cream wild-indigo		WL	G4G5T4T5	S3
Baptisia tinctoria	yellow wild-indigo		WL	G5	S3
Betula papyrifera	paper birch		ST	G5	S3
Betula populifolia	gray birch		WL	G5	S1
Bidens beckii	Beck's water-marigold		SE	G5	S1
Botrychium matricariifolium	chamomile grape-fern		ST	G5	S3
Botrychium simplex	least grape-fern		SE	G5	S1
Buchnera americana	bluehearts		SE	G5?	S1
Calopogon oklahomensis	Oklahoma grass-pink		SX	G3	SX
Carex aurea	golden-fruited sedge		ST	G5	S3
Carex bebbii	Bebb's sedge		ST	G5	S3
Carex brunnescens	brownish sedge		ST	G5	S2
Carex conoidea	prairie gray sedge		ST	G5	S2
Carex crawei	Crawe's sedge		ST	G5	S2
Carex cumulata	clustered sedge		SE	G4G5	S1
Carex eburnea	ebony sedge		ST	G5	S3
Carex echinata	little prickly sedge		SE	G5	S1
Carex garberi	elk sedge		SE	G5	S1
Carex limosa	mud sedge		SE	G5	S1

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Page 8 of 12 03/09/2020

Indiana County Endangered, Threatened and Rare Species List County: Lake



klace sedge hardson's sedge uk stellate sedge w sedge ry-fruit sedge thern catalpa rie redroot weed tted wintergreen 's thistle e thistle mint nton's lily	LT	SE ST ST WL ST SE SE WL SE	G5 G5 G5 G4 G4? G5 G5 G5	SU S2 S3 S2 S3 S3 S3 S1 S1
k stellate sedge w sedge ry-fruit sedge thern catalpa rie redroot weed tted wintergreen 's thistle e thistle mint nton's lily	LT	ST ST WL ST SE SE WL	G5 G5 G4 G4? G5 G5	S3 S2 S3 S3 S1
w sedge ry-fruit sedge thern catalpa rie redroot weed tted wintergreen 's thistle e thistle timint iton's lily	LT	ST WL ST SE SE WL	G5 G4 G4? G5 G5	S2 S3 S3 S1
ry-fruit sedge thern catalpa rie redroot weed tted wintergreen 's thistle e thistle mint tton's lily	LT	WL ST SE SE WL	G4 G4? G5 G5	S3 S3 S1
thern catalpa rie redroot weed tted wintergreen 's thistle e thistle amint nton's lily	LT	ST SE SE WL	G4? G5 G5	S3 S1
rie redroot weed tted wintergreen 's thistle e thistle mint nton's lily	LT	SE SE WL	G5 G5	S 1
weed tted wintergreen 's thistle e thistle amint nton's lily	LT	SE WL	G5	
tted wintergreen 's thistle e thistle mint nton's lily	LT	WL		S1
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's thistle e thistle mint nton's lily	LT	SE	J.	S3
mint nton's lily	LT	~_	G3	S1
nton's lily		SE	G2G3	S1
•		ST	G5	S2
•		SE	G5	S1
		WL	G5	S3
y dogwood		SE	G5	S1
chberry		SE	G5	S1
ndleaf dogwood		ST	G5	S3
e corydalis		SE	G5	S1
hed sedge		SE	G4	S1
ıll white lady's-slipper		ST	G4	S3
ıll yellow lady's-slipper		ST	G5T4T5	S3
		WL	G5T5	S3
		ST	G4G5	S3
		SE	G5	S1
		ST	G5	S3
-		SE	GNR	SU
		ST	G4	S2
= =		WL	G5	S3
•		ST	G5	S3
		WL	G5	SU
•		ST	G5	S2
_		ST	G4	S2
=		ST	G3G5	S2
•		ST	G5	S3
=			G5T5	S1
-		ST	G5	S3
		ST	G5	S2
-		ST	G3	S3
		SE	G5	S1
ow gentian		ST	G4	S3
	e yellow lady's-slipper wy lady's-slipper g-bract green orchid thern witchgrass am's panic-grass berg's witchgrass thern bush-honeysuckle on-leaved sundew cinquefoil itate spike-rush ck-fruited spike-rush lif's spikerush ling arbutus egated horsetail row-leaved cotton-grass der cotton-grass ted aster olina fimbry	e yellow lady's-slipper wy lady's-slipper g-bract green orchid thern witchgrass un's panic-grass berg's witchgrass thern bush-honeysuckle on-leaved sundew cinquefoil itate spike-rush tk-fruited spike-rush ling arbutus egated horsetail row-leaved cotton-grass ted aster olina fimbry	re yellow lady's-slipper WL wy lady's-slipper ST g-bract green orchid SE thern witchgrass ST un's panic-grass SE berg's witchgrass ST thern bush-honeysuckle WL on-leaved sundew ST cinquefoil WL itate spike-rush ST the spikerush ST the spikerush ST thing arbutus ST tegated horsetail SE row-leaved cotton-grass ST ted aster ST tolina fimbry SE	e yellow lady's-slipper wy lady's-slipper g-bract green orchid se yellow lady's-slipper g-bract green orchid se G5 se G5 se GNR se GNR se G7 se G4 se G5 se GNR se G5 se G5 se GNR se G5 se

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Page 9 of 12 03/09/2020

Indiana County Endangered, Threatened and Rare Species List **County: Lake**



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Gentiana puberulenta	downy gentian		SE	G4G5	S1
Geranium bicknellii	Bicknell's northern cranesbill		SE	G5	S1
Glyceria borealis	small floating manna-grass		SE	G5	S1
Hudsonia tomentosa	sand-heather		ST	G5	S2
Hydrastis canadensis	golden seal		WL	G3G4	S3
Hypericum adpressum	creeping St. John's-wort		SE	G3	S1
Hypericum kalmianum	Kalm's St. John's-wort		WL	G4	S3
Juglans cinerea	butternut		ST	G3	S2
Iuncus articulatus	jointed rush		SE	G5	S 1
Iuncus balticus var. littoralis	Baltic rush		WL	G5T5	S3
Juncus pelocarpus	brown-fruited rush		SE	G5	S1
Iuncus scirpoides	scirpus-like rush		ST	G5	S2
Juniperus communis var. depressa	ground juniper		ST	G5T5	S3
Iuniperus horizontalis	creeping juniper		SX	G5	SX
Lathyrus japonicus	beach peavine		SE	G5	S1
Lathyrus venosus	smooth veiny pea		SE	G5	S1
Lechea stricta	upright pinweed		SX	G4?	SX
Liatris pycnostachya	cattail gay-feather		SE	G5	S1
Lilium philadelphicum	wood lily		WL	G5	SU
Linnaea borealis	twinflower		SX	G5	SX
Linum sulcatum	grooved yellow flax		ST	G5	S3
Liparis loeselii	Loesel's twayblade		WL	G5	S3
Lipocarpha drummondii	Drummond's hemicarpha		SE	G4G5	S1
Ludwigia sphaerocarpa	globe-fruited false-loosestrife		SE	G5	S1
Lycopodiella inundata	northern bog clubmoss		ST	G5	S2
Lycopodiella subappressa	northern appressed bog clubmoss		SE	G2	S1
Malaxis unifolia	green adder's-mouth orchid		SE	G5	S1
Matteuccia struthiopteris	ostrich fern		ST	G5	S3
Melampyrum lineare	American cow-wheat		SE	G5	S1
Mikania scandens	climbing hempweed		SE	G5	S1
Minuartia michauxii var. michauxii	Michaux's stitchwort		ST	G5T5	S2
Myosotis laxa	smaller forget-me-not		ST	G5	S2
Myriophyllum verticillatum	whorled water-milfoil		ST	G5	S3
Denothera perennis	small sundrops		ST	G5	S3
Oligoneuron album	prairie goldenrod		ST	G5	S3
Orobanche fasciculata	clustered broomrape		SE	G4G5	S1
Orthilia secunda	one-sided wintergreen		SX	G5	SX
Panax quinquefolius	American ginseng		WL	G3G4	S3
Perideridia americana	eastern eulophus		SE	G4	S 1
Persicaria careyi	Carey's smartweed		ST	G4	S2

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Page 10 of 1 03/09/2020

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Phemeranthus rugospermus	prairie fame-flower		SE	G3G4	S1
Pinus banksiana	jack pine		ST	G5	S3
Pinus strobus	eastern white pine		ST	G5	S3
Plantago cordata	heart-leaved plantain		SE	G4	S1
Platanthera aquilonis	leafy northern green orchid		ST	G5	S2
Platanthera ciliaris	yellow-fringe orchid		SE	G5	S1
Platanthera flava var. herbiola	pale green orchid		WL	G4?T4Q	S3
Platanthera hookeri	Hooker's Orchid		SX	G4	SX
Platanthera lacera	green-fringe orchid		WL	G5	S3
Platanthera leucophaea	prairie white-fringed orchid	LT	SE	G2G3	S1
Platanthera psycodes	small purple-fringe orchid		ST	G5	S3
Pogonia ophioglossoides	rose pogonia		ST	G5	S3
Polygonum articulatum	eastern jointweed		ST	G5	S3
Polytaenia nuttallii	prairie parsley		SE	G5	S 1
Populus balsamifera	balsam poplar		SE	G5	S 1
Potamogeton pulcher	spotted pondweed		ST	G5	S2
Potamogeton pusillus	slender pondweed		WL	G5	S2
Potamogeton richardsonii	redheadgrass		ST	G5	S3
Potamogeton robbinsii	flatleaf pondweed		ST	G5	S3
Potamogeton strictifolius	straight-leaf pondweed		ST	G5	S2
Potentilla anserina	silverweed		ST	G5	S2
Prenanthes aspera	rough rattlesnake-root		ST	G4?	S3
Prunus pensylvanica	fire cherry		ST	G5	S3
Pyrola americana	American wintergreen		ST	G5	S2
Rhus aromatica var. arenaria	beach sumac		ST	G5T3Q	S3
Rhynchospora macrostachya	tall beaked-rush		ST	G4	S3
Rhynchospora recognita	globe beaked-rush		SE	G5?	S1
Rhynchospora scirpoides	long-beaked baldrush		ST	G4	S3
Rorippa aquatica	lake cress		SE	G4?	S1
Rubus setosus	small bristleberry		SE	G5	S1
Salix cordata	heartleaf willow		SE	G4	S1
Sceptridium rugulosum	ternate grapefern		SX	G3	SX
Schoenoplectiella hallii	Hall's bulrush	С	SE	G2G3	S1
Schoenoplectiella smithii	Smith's Bulrush		ST	G5?	S2
Schoenoplectus subterminalis	water bulrush		ST	G5	S3
Schoenoplectus torreyi	Torrey's Bulrush		SE	G5?	S1
Scleria reticularis	reticulated nutrush		ST	G4	S2
Selaginella apoda	meadow spike-moss		WL	G5	S1
Selaginella rupestris	ledge spike-moss		SE	G5	S1
Shepherdia canadensis	Canada buffalo-berry		SX	G5	SX

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Page 11 of 1 03/09/2020

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Sisyrinchium montanum	strict blue-eyed-grass	S	SE .	G5	S1
Solidago simplex var. gillmanii	sticky goldenrod	S	ST	G5T3?	S2
Sparganium androcladum	branching bur-reed	S	T	G4G5	S2
Sparganium natans		S	\mathbf{X}	G5	SX
Spiranthes lucida	shining ladies'-tresses	S	ST	G4	S3
Spiranthes magnicamporum	Great Plains ladies'-tresses	S	EΕ	G3G4	S1
Strophostyles leiosperma	slick-seed wild-bean	V	VL	G5	S3
Styrax americanus	American snowbell	S	T	G5	S3
Symphyotrichum boreale	rushlike aster	S	T	G5	S2
Symphyotrichum sericeum	western silvery aster	S	ST	G5	S2
Thuja occidentalis	northern white cedar	S	EΕ	G5	S1
Triantha glutinosa	false asphodel	S	ST	G5	S2
Trichostema dichotomum	forked bluecurl	V	VL	G5	S3
Triglochin palustris	marsh arrow-grass	S	T	G5	S2
Utricularia cornuta	horned bladderwort	S	EΕ	G5	S1
Utricularia intermedia	flatleaf bladderwort	V	VL	G5	S3
Utricularia minor	lesser bladderwort	S	T	G5	S1
Utricularia purpurea	purple bladderwort	S	T	G5	S3
Utricularia resupinata	northeastern bladderwort	S	EΕ	G4	S1
Utricularia subulata	zigzag bladderwort	S	T	G5	S2
Vaccinium myrtilloides	velvetleaf blueberry	S	EΕ	G5	S1
Valerianella chenopodiifolia	goose-foot corn-salad	V	VL	G4	S3
Viburnum opulus var. americanum	highbush-cranberry	S	EΕ	G5T5	S1
Viola pedatifida	prairie violet	S	T	G5	S2
High Quality Natural Community				~-~	
Forest - floodplain wet	Wet Floodplain Forest		G	G3?	S3
Forest - floodplain wet-mesic	Wet-mesic Floodplain Forest		SG	G3?	S3
Forest - upland dry Northwestern Morainal	Northwestern Morainal Dry Upland Forest	S	SG	GNR	S1
Forest - upland dry-mesic Northwestern Morainal	Northwestern Morainal Dry-mesic Upland Forest	S	SG	GNR	S1
Forest - upland mesic Northwestern Morainal	Northwestern Morainal Mesic Upland Forest	S	SG	GNR	S1
Lake - pond	Pond	S	G	GNR	SNR
Prairie - dry-mesic	Dry-mesic Prairie	S	SG	G3	S2
Prairie - mesic	Mesic Prairie	S	G	G2	S2
Prairie - sand dry	Dry Sand Prairie	S	SG	G3	S2
Prairie - sand dry-mesic	Dry-mesic Sand Prairie	S	SG	G3	S3
Prairie - sand mesic	Mesic Sand Prairie	S	G	GNR	SNR
Prairie - sand wet	Wet Sand Prairie	S	SG	G3	S3
Prairie - sand wet-mesic	Wet-mesic Sand Prairie	S	SG .	G1?	S2
Indiana Natural Heritage Data Center Fed: Division of Nature Preserves State:	LE = Endangered; LT = Threatened; C = candida SE = state endangered; ST = state threatened; SR SY = state outlineated; SG = state significant; WI	= state rare; SS			pecial concern;

Division of Nature Preserves Indiana Department of Natural Resources This data is not the result of comprehensive county

surveys.

GRANK: Global Heritage Rank: G1 = critically imperiled globally; G2 = imperiled globally; G3 = rare or uncommon globally; G4 = widespread and abundant globally but with long-term concerns; G5 = widespread and abundant globally; G? = unranked; GX = extinct; Q = uncertain rank; T = taxonomic subunit rank

SE = state endangered; ST = state threatened; SR = state rare; SSC = state species of special concern;

SX = state extirpated; SG = state significant; WL = watch list

Page 12 of 1 03/09/2020

Indiana County Endangered, Threatened and Rare Species List **County: Lake**



Species Name	Common Name	FED	STATE	GRANK	SRANK
Prairie - wet	Wet Prairie		SG	G3	S1
Primary - dune lake	Foredune		SG	G3	S1
Savanna - mesic	Mesic Savanna		SG	GNR	SNR
Savanna - sand dry	Dry Sand Savanna		SG	G2?	S2
Savanna - sand dry-mesic	Dry-mesic Sand Savanna		SG	G2?	S2S3
Savanna - sand mesic	Mesic Sand Savanna		SG	GNR	SNR
Wetland - fen	Fen		SG	G3	S3
Wetland - marsh	Marsh		SG	GU	S4
Wetland - meadow sedge	Sedge Meadow		SG	G3?	S1
Wetland - panne	Panne		SG	G2	S1
Wetland - swamp shrub	Shrub Swamp		SG	GU	S2
Other Significant Feature Migratory Bird Concentration Area	Migratory Bird Concentration Site		SG	G3	SNR

Indiana Natural Heritage Data Center Division of Nature Preserves

Indiana Department of Natural Resources

This data is not the result of comprehensive county surveys.

State:

LE = Endangered; LT = Threatened; C = candidate; PDL = proposed for delisting Fed:

SE = state endangered; ST = state threatened; SR = state rare; SSC = state species of special concern;

SX = state extirpated; SG = state significant; WL = watch list

GRANK: Global Heritage Rank: G1 = critically imperiled globally; G2 = imperiled globally; G3 = rare or uncommon globally; G4 = widespread and abundant globally but with long-term concerns; G5 = widespread and abundant

globally; G? = unranked; GX = extinct; Q = uncertain rank; T = taxonomic subunit rank