

Chapter 8

Environmental Mitigation

Planning regulations specify that metropolitan transportation plans must include a discussion of potential environmental mitigation activities, to be developed in consultation with Federal, State and Tribal wildlife, land management, and regulatory agencies. The mitigation activities are to be at the policy and/or strategic-levels, not project specific. The Northeastern Indiana Regional Coordinating Council has prepared this chapter in consultation with the appropriate federal, state, and local agencies to address the environmental mitigation activities. This document maps the common environmental issues, discusses mitigation strategies, and includes some analysis of the number of specific projects near various features.

The Northeastern Indiana Regional Coordinating Council (NIRCC) is the lead agency for the development of the Transportation Plan for the Fort Wayne-New Haven-Allen County Metropolitan Planning Area. As part of the Participation Plan for the transportation planning process, NIRCC has identified environmental and cultural resource agencies that have been invited to consult on the environmental mitigation discussion. The agencies have been provided access to the 2040 Transportation Plan and proposed plan modifications. The additional information and discussion in this chapter has been provided to the resource agencies and the public for review and comment. NIRCC will consult with the agencies further to address any issues that may arise.

Methodology

There are three components to NIRCC's methodology to address the environmental mitigation requirement. First, through consultation with various agencies and staff review of published materials, maps of the most common environmental features have been developed. These maps display features from our area consistent with INDOT's Environmental Red Flag Investigation Template. Second, a discussion of these is provided including general strategies that are applied when a project is implemented that impacts a particular environmental resource or feature. Third, in aggregate, the number of projects that could impact the various resources have been summarized. It should be noted that the projects are very conceptual at the Transportation Plan stage and specific environmental mitigation strategies will occur as part of the environmental review and preliminary engineering activities. As projects advance to implementation, additional study and design will be conducted. For projects that use state or federal funds, environmental studies in compliance with NEPA and other state and federal requirements will be performed.

Common Environmental Issues

With following a similar format as INDOT's Red Flag Investigation Template NIRCC has identified five common groups of environmental issues for discussion in this 2040 Transportation Plan. The groups of environmental issues include:

- Water Resources
- Threatened and Endangered Species
- Section 4(f) Land
- Cultural Resources
- Other environmentally Sensitive Areas

The following sections provide a brief description of each of these issues, map the items for the NIRCC Metropolitan Planning Area, and discuss mitigation when projects may impact the environmental feature.

Streams and Wetlands

The NIRCC Metropolitan Planning Area (MPA) includes numerous water resources including rivers, streams and potential wetlands as shown in Figures 30 and 31. Two streams in the NIRCC MPA are identified on the Indiana Listing of Outstanding Rivers and Streams. The Cedar Creek in Northern Allen County is one of three streams in Indiana that made the list as a Natural, Scenic and Recreational River System and is considered to have outstanding ecological importance with high quality water. The Little River, as a tributary to the Wabash River, is part of the Wabash River Heritage Corridor. These waterways are designated on Figure 32. In addition to these designations other water resources that often require special considerations are INDR trout streams and USACE Section 10 streams. These water resources include the Little River (USACE Section 10), Maumee River – Hosey Dam in Fort Wayne (USACE Section 10), Schoaff Park (Trout 2017), and Spy Run Creek (Trout 2017).

The Indiana Department of Environmental Management (IDEM) maintains a list of impaired waters. Figure 32 displays the surface waters in Allen County identified by IDEM as impaired and Table 19 and Table 20 include a listing with the cause of impairment. Table 19 displays the 2010 303(d) list of impaired waters submitted to U.S. EPA and includes a “Target Date For TMDL (Total Maximum Daily Load)”. Table 20 displays the 2016 303(d) list of impaired waters revised and submitted to U.S. EPA but did not include the a column for “Target Date For Total Maximum Daily Load (TMDL)”. The Total Maximum Daily Load (TMDL) Program’s primary purpose is to assess streams, rivers and lakes that are considered impaired by the Indiana Department of Environmental Management and develop reports that identify the causes of the impairment, the reductions of pollutants needed, and the actions needed to improve water quality. Impaired waters do not meet designated water quality standards and do not support one or more designated uses, such as recreational, protection of aquatic life, drinking water, and fish consumption. Section 303(d) of the Clean Water Act established authority for the TMDL Program and guides states on how to develop these plans for waters that do not meet water quality standards.

Many transportation projects may cross or run alongside a stream or river or touch a wetland area. In these cases the goal is to avoid, to the fullest extent practicable, any activity that adversely impacts streams or wetlands during the design, construction, or maintenance of the transportation facility to protect water quality. As nearly all of the projects in the Transportation Plan will use state or federal funds, project design will follow state and federal design procedures and strive to achieve this goal.

Project design will take the appropriate action to avoid, minimize, and mitigate impacts as required by federal, state, and local law. In the event that impacts to streams and wetlands are unavoidable, a wide variety of mitigation strategies will be considered beginning with on-site mitigation opportunities. Once on-site opportunities are exhausted, the search for mitigation strategies will shift to off-site locations. Mitigation strategies may include but are not limited to: mitigation banking; stream and wetland creation; sediment/run-off control and water quality monitoring; restoration; and/or preservation. In general, the Indiana Department of Environmental Management requires that impacted wetlands be replaced with wetlands of the same type at specific mitigation ratios. Applicants may be allowed to create or restore a different type of wetland if it provides better water quality and/or habitat value. Where practical, wetland mitigation/replacement will occur close to the original site and within the same Hydrologic Unit Watershed (see Figure 33).

Impact analysis and mitigation are integral parts of the project development process. Early review and analysis of project alternatives by regulatory and resource agencies combined with effective inter-office coordination are required to develop successful transportation projects. Projects will follow guidelines for the development of mitigation as required by the U.S. Army Corps of Engineers (USACE), the Indiana Department of Natural Resources (IDNR), and the Indiana Department of Environmental Management (IDEM).

Mitigation may be needed if a construction project is likely to reduce or degrade an existing habitat in a floodway or floodplain according to the IDNR (see Figure 34). An information bulletin is provided for guidance in the assessment and determination of compensatory mitigation associated with an application to the IDNR for a permit under IC 14-28-1 (the "Flood Control Act") or under IC 14-29-1 (the "Navigable Waters Act"). These IDNR mitigation guidelines are outlined in their "Information Bulletin #17 Third Amendment".

The USACE mitigation guidelines are outlined in the latest USACE Regulatory Guidance Letter (RGL) 02-02, dated December 24, 2002. The US Army Corps of Engineers requested recognition of the flood control projects within the MPA. Transportation projects will be reviewed to insure they have no adverse effects on the flood control projects or affect water levels in the flood control project area. The flood control projects are displayed in Figure 34.

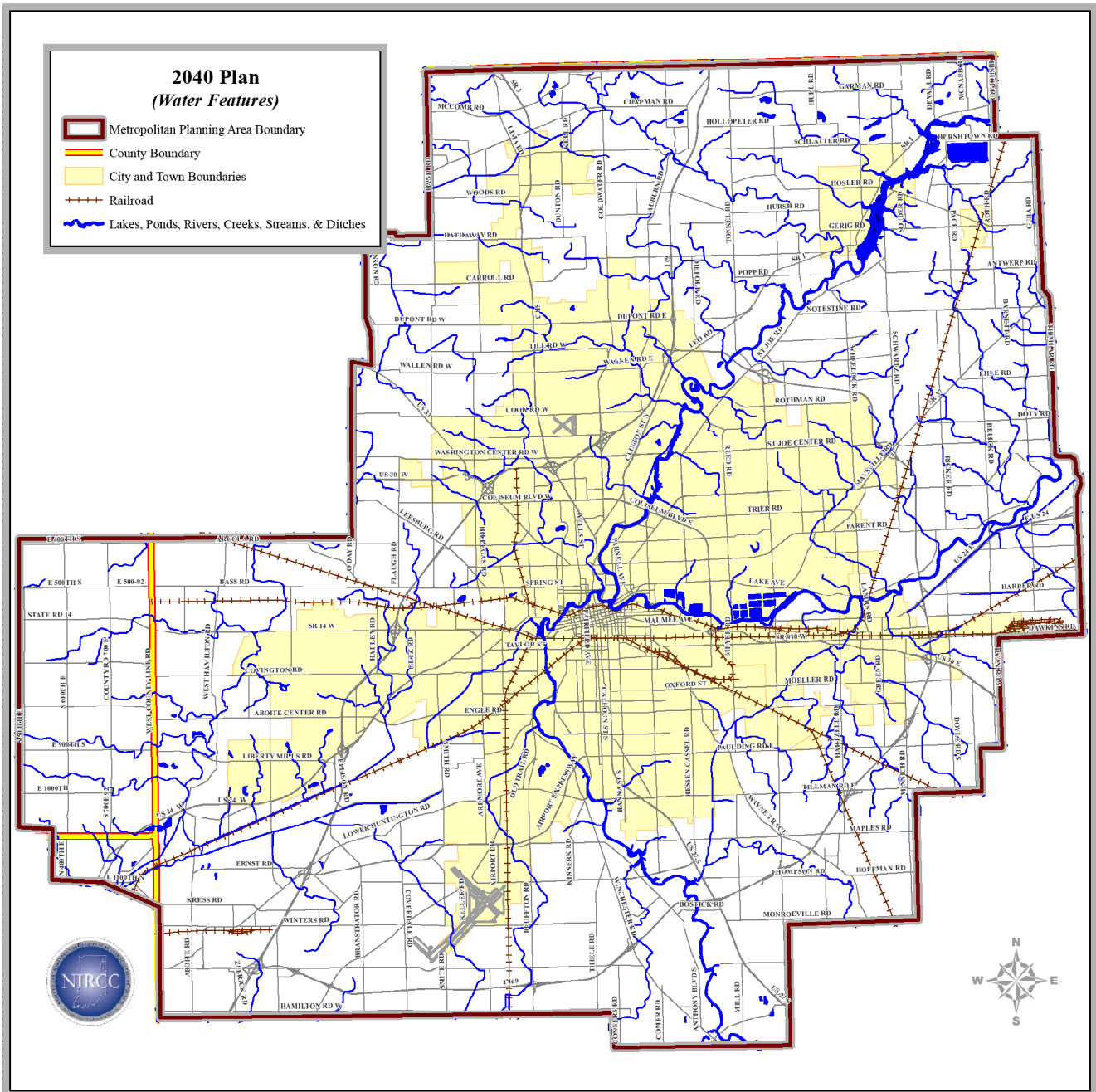


Figure 30
Water Features

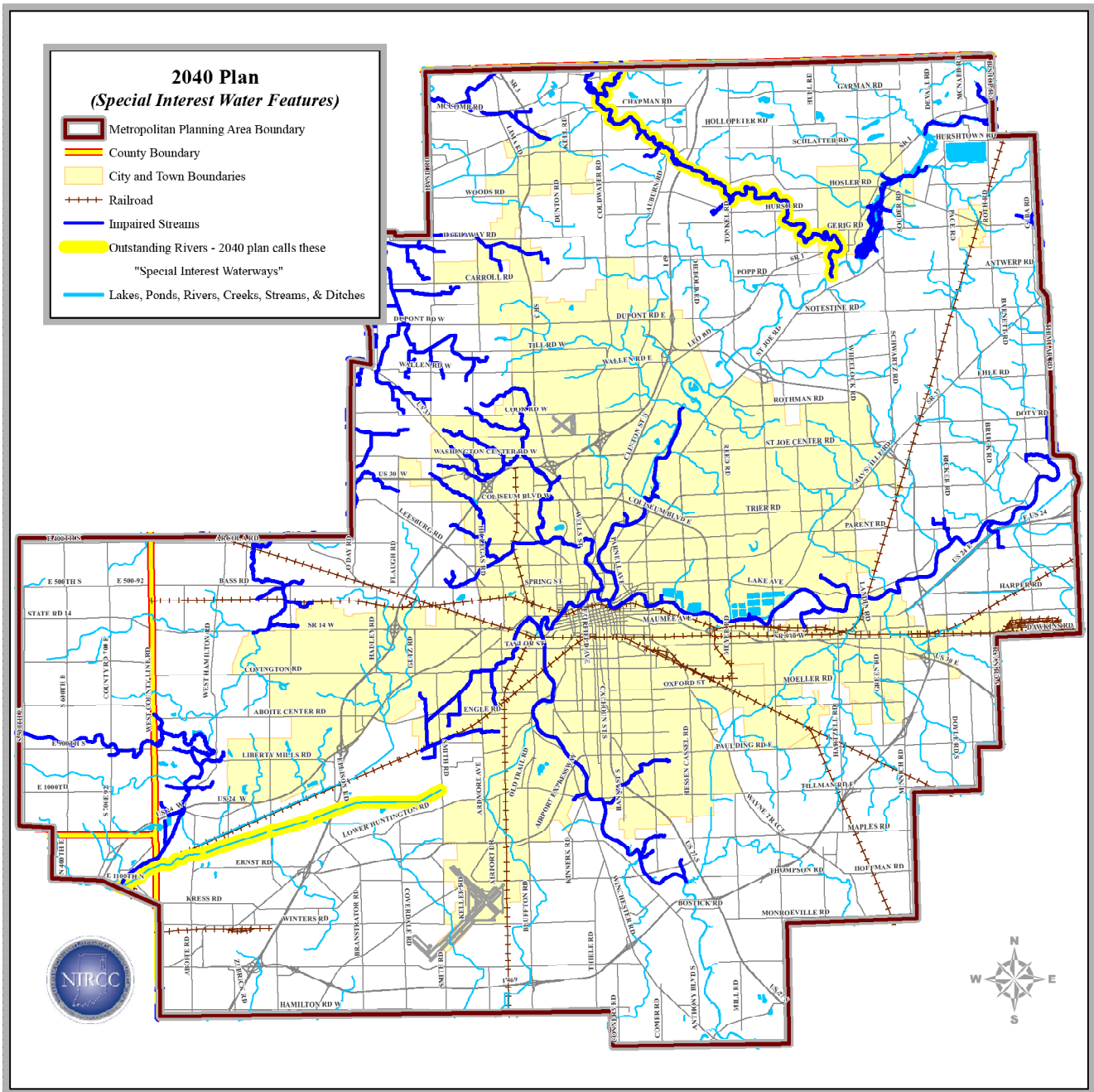


Figure 32
Water Features and Impaired Streams

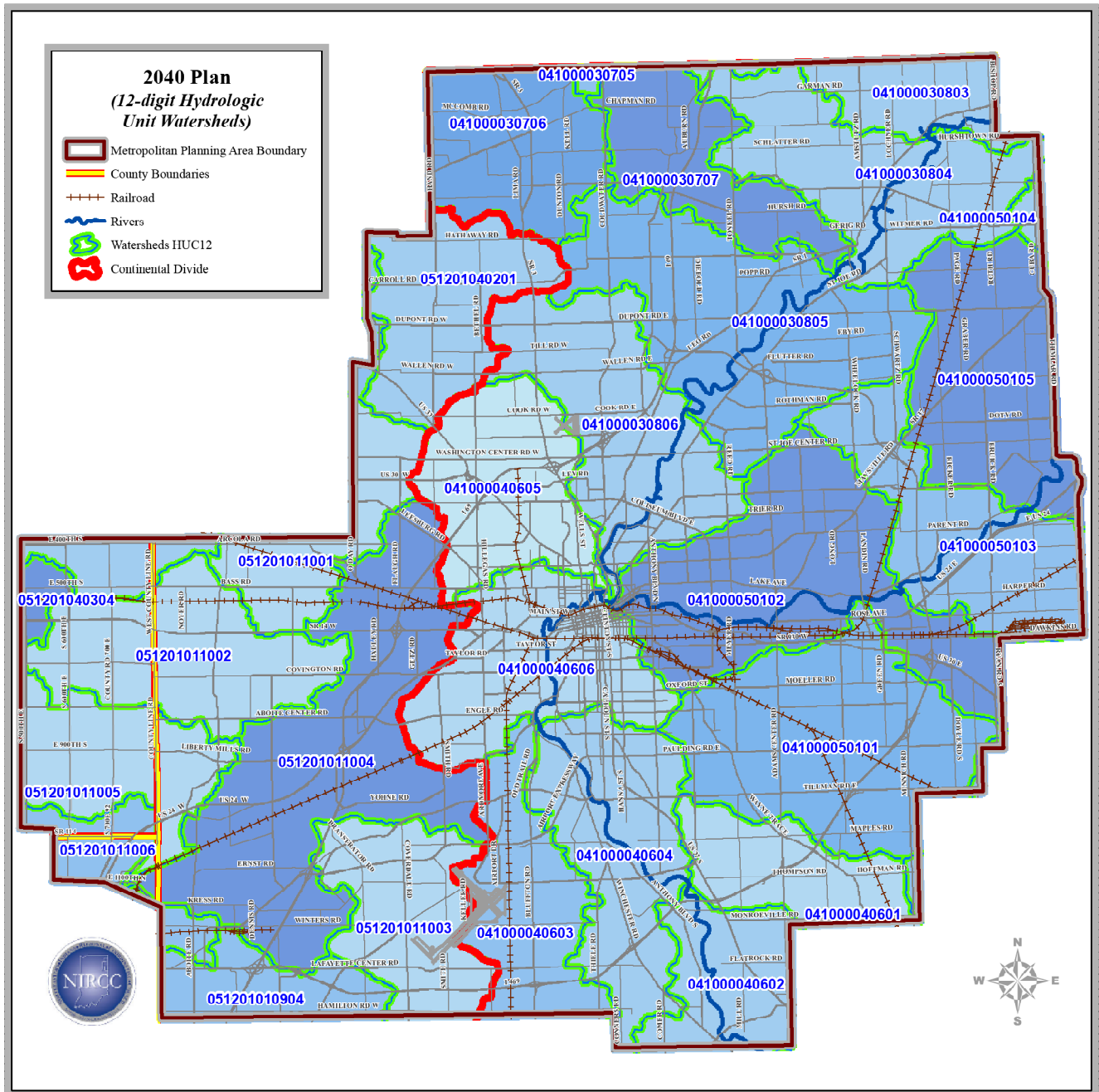


Figure 33
Watersheds

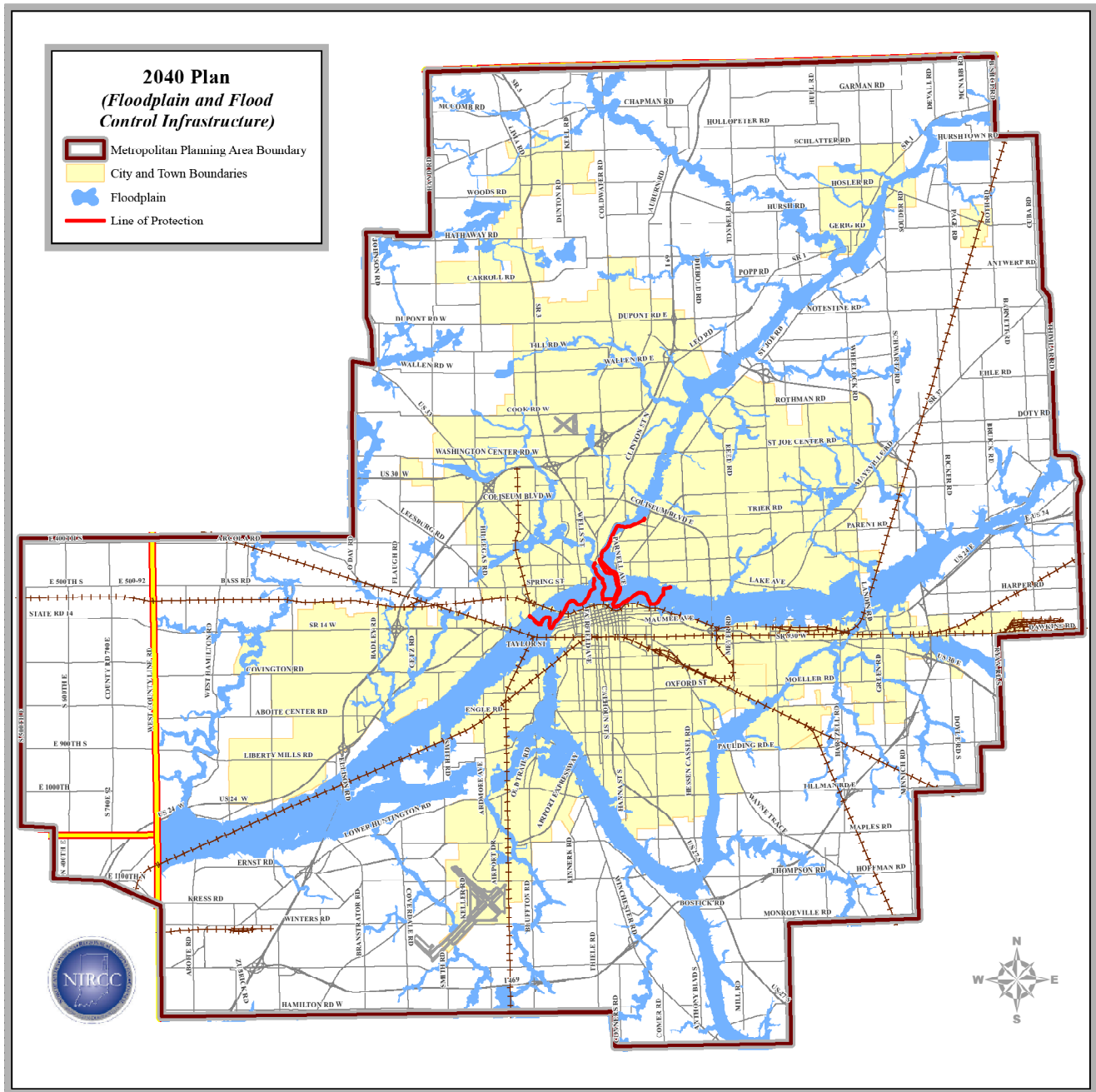


Figure 34
Flood Control Projects

Table 19. 2010 Impaired Waters in Allen County

2010 303(d) List of Impaired Waters Submitted to U.S. EPA

BASIN	ASSESSMENT UNIT NAME	CAUSE OF IMPAIRMENT	TARGET DATE FOR TMDL
GREAT LAKES	St Joseph River (Upstream of Metcalf Ditch)	E. COLI	2013
GREAT LAKES	St Joseph River (Downstream of Metcalf Ditch)	E. COLI	2013
GREAT LAKES	CEDAR CREEK	E. COLI	2011
GREAT LAKES	CEDAR CREEK	PCBS (FISH TISSUE)	2021
GREAT LAKES	WILLOW CREEK AND TRIB	E. COLI	2017
GREAT LAKES	CEDAR CREEK	PCBS (FISH TISSUE)	2011
GREAT LAKES	CEDAR CREEK	E. COLI	2011
GREAT LAKES	CEDAR CREEK	TOTAL MERCURY (FISH TISSUE)	2025
GREAT LAKES	ST. JOSEPH RIVER	PCBS (FISH TISSUE)	2011
GREAT LAKES	ST. JOSEPH RIVER	TOTAL MERCURY (FISH TISSUE)	2025
GREAT LAKES	CEDARVILLE RESERVOIR	E. COLI	2017
GREAT LAKES	CEDARVILLE RESERVOIR	PCBS (FISH TISSUE)	2017
GREAT LAKES	CEDARVILLE RESERVOIR	ALGAE	2021
GREAT LAKES	CEDARVILLE RESERVOIR	TASTE AND ODOR	2021
GREAT LAKES	ST. JOSEPH RESERVOIR	ALGAE	2013
GREAT LAKES	ST. JOSEPH RESERVOIR	E. COLI	2013
GREAT LAKES	ST. JOSEPH RESERVOIR	PCBS (FISH TISSUE)	2013
GREAT LAKES	ST. JOSEPH RESERVOIR	TOTAL MERCURY (FISH TISSUE)	2025
GREAT LAKES	ST. MARYS RIVER	E. COLI	2013
GREAT LAKES	ST. MARYS RIVER	IMPAIRED BIOTIC COMMUNITIES	2017
GREAT LAKES	ST. MARYS RIVER	NUTRIENTS	2017
GREAT LAKES	St. Marys River	NUTRIENTS	2013
GREAT LAKES	JUNK DITCH AND OTHER TRIBS	PCBS (FISH TISSUE)	2021
GREAT LAKES	JUNK DITCH AND OTHER TRIBS	TOTAL MERCURY (FISH TISSUE)	2025
GREAT LAKES	ST MARYS RIVER	PCBS (FISH TISSUE)	2013
GREAT LAKES	St. Marys River	NUTRIENTS	2013
GREAT LAKES	ST MARYS RIVER	TOTAL MERCURY (FISH TISSUE)	2025
GREAT LAKES	LOWTHER NEUHAUS DITCH	IMPAIRED BIOTIC COMMUNITIES	2025
GREAT LAKES	ST MARYS RIVER	PCBS (FISH TISSUE)	2017
GREAT LAKES	St. Marys River	NUTRIENTS	2017
GREAT LAKES	ST MARYS RIVER	TOTAL MERCURY (FISH TISSUE)	2025
GREAT LAKES	Maumee River	NUTRIENTS	2013
GREAT LAKES	MAUMEE RIVER	PCBS (FISH TISSUE)	2013
GREAT LAKES	MAUMEE RIVER	TOTAL MERCURY (FISH TISSUE)	2025
GREAT LAKES	Maumee River	NUTRIENTS	2013
GREAT LAKES	MAUMEE RIVER	PCBS (FISH TISSUE)	2013
GREAT LAKES	MAUMEE RIVER	TOTAL MERCURY (FISH TISSUE)	2025
GREAT LAKES	MAUMEE RIVER	FREE CYANIDE	2025
GREAT LAKES	MAUMEE RIVER	PCBS (FISH TISSUE)	2013
GREAT LAKES	MAUMEE RIVER	PCBS (FISH TISSUE)	2013
GREAT LAKES	MAUMEE RIVER	PCBS (FISH TISSUE)	2013
GREAT LAKES	Black Creek (Harlan, IN)	NUTRIENTS	2017
GREAT LAKES	Black Creek (Harlan, IN)	E. COLI	2017
GREAT LAKES	Black Creek (Harlan, IN)	ALGAE	2017
GREAT LAKES	Black Creek (Harlan, IN)	IMPAIRED BIOTIC COMMUNITIES	2017
GREAT LAKES	Oberhaltzer Ditch	E. COLI	2017
GREAT LAKES	Reichelderfer Ditch	E. COLI	2017
GREAT LAKES	Ward Lake Ditch	E. COLI	2017
GREAT LAKES	MAUMEE RIVER	NUTRIENTS	2013
GREAT LAKES	MAUMEE RIVER	PCBS (FISH TISSUE)	2013
GREAT LAKES	MAUMEE RIVER	PCBS (FISH TISSUE)	2013
GREAT LAKES	MAUMEE RIVER	NUTRIENTS	2013
GREAT LAKES	HAM INTERCEPTOR DITCH	IMPAIRED BIOTIC COMMUNITIES	2017
GREAT LAKES	HAM INTERCEPTOR DITCH	NUTRIENTS	2017
GREAT LAKES	Flatrock Creek (Upstream of Monroeville, IN)	E. COLI	2017
GREAT LAKES	Flatrock Creek (Downstream of Monroeville, IN)	IMPAIRED BIOTIC COMMUNITIES	2017
GREAT LAKES	Flatrock Creek (Downstream of Monroeville, IN)	E. COLI	2017
GREAT LAKES	Flatrock Creek - Unnamed Tributary (Illinois)	E. COLI	2017
GREAT LAKES	Flatrock Creek - Unnamed Tributary	E. COLI	2017

Table 19 Continued next page...

Table 19. 2010 Impaired Waters in Allen County Continued

2010 303(d) List of Impaired Waters Submitted to U.S. EPA

BASIN	ASSESSMENT UNIT NAME	CAUSE OF IMPAIRMENT	TARGET DATE FOR TMDL
GREAT LAKES	Flatrock Creek - Unnamed Tributary	E. COLI	2017
GREAT LAKES	Brown Ditch	IMPAIRED BIOTIC COMMUNITIES	2017
GREAT LAKES	Brown Ditch	E. COLI	2017
GREAT LAKES	Brown Ditch - Unnamed Tributary	E. COLI	2017
GREAT LAKES	Brown Ditch - Unnamed Tributary	E. COLI	2017
GREAT LAKES	Scoff Ditch	E. COLI	2017
GREAT LAKES	GROMEAX DITCH	IMPAIRED BIOTIC COMMUNITIES	2017
UPPER WABASH	GELLER DITCH	IMPAIRED BIOTIC COMMUNITIES	2021
UPPER WABASH	BENWARD DITCH	IMPAIRED BIOTIC COMMUNITIES	2021
UPPER WABASH	SHOAF DAWSON DITCH	IMPAIRED BIOTIC COMMUNITIES	2021
UPPER WABASH	BOBAY DITCH	IMPAIRED BIOTIC COMMUNITIES	2021
UPPER WABASH	BENWARD DITCH-UNNAMED TRIBUTARY	IMPAIRED BIOTIC COMMUNITIES	2021
UPPER WABASH	JOHNSON DITCH	IMPAIRED BIOTIC COMMUNITIES	2021
UPPER WABASH	JOHNSON DRAIN (UPSTREAM OF CHURUBUSCO BRANCH)	IMPAIRED BIOTIC COMMUNITIES	2021
UPPER WABASH	EEL RIVER	IMPAIRED BIOTIC COMMUNITIES	2021
UPPER WABASH	EEL RIVER	PCBS (FISH TISSUE)	2021
UPPER WABASH	EEL RIVER	TOTAL MERCURY (FISH TISSUE)	2025
UPPER WABASH	JOHNSON DITCH-UNNAMED TRIBUTARY	IMPAIRED BIOTIC COMMUNITIES	2021
UPPER WABASH	DUGLAY DITCH	IMPAIRED BIOTIC COMMUNITIES	2021
UPPER WABASH	CHURUBUSCO BRANCH-UNNAMED TRIBUTARY	IMPAIRED BIOTIC COMMUNITIES	2021
UPPER WABASH	CHURUBUSCO BRANCH	IMPAIRED BIOTIC COMMUNITIES	2021

Table 20. 2016 Impaired Waters in Allen County

2016 303(d) List of Impaired Waters Revised and Submitted to U.S. EPA

BASIN	ASSESSMENT UNIT NAME	CAUSE OF IMPAIRMENT
GREAT LAKES	LITTLE CEDAR CREEK	E. COLI
GREAT LAKES	LITTLE CEDAR CREEK	IMPAIRED BIOTIC COMMUNITIES
GREAT LAKES	WILLOW CREEK	E. COLI
GREAT LAKES	WILLOW CREEK	E. COLI
GREAT LAKES	KRUMLAUF BRANCH	E. COLI
GREAT LAKES	CEDAR CREEK	E. COLI
GREAT LAKES	CEDAR CREEK	IMPAIRED BIOTIC COMMUNITIES
GREAT LAKES	CEDAR CREEK	PCBS (FISH TISSUE)
GREAT LAKES	ST. JOSEPH RIVER	E. COLI
GREAT LAKES	BOGER DITCH	E. COLI
GREAT LAKES	ST. JOSEPH RIVER	IMPAIRED BIOTIC COMMUNITIES
GREAT LAKES	ST. JOSEPH RIVER	PCBS (FISH TISSUE)
GREAT LAKES	ST. JOSEPH RIVER	PCBS (FISH TISSUE)
GREAT LAKES	ST. JOSEPH RIVER	PCBS (FISH TISSUE)
GREAT LAKES	CEDARVILLE RESERVOIR	ALGAE
GREAT LAKES	CEDARVILLE RESERVOIR	E. COLI
GREAT LAKES	CEDARVILLE RESERVOIR	PCBS (FISH TISSUE)
GREAT LAKES	CEDARVILLE RESERVOIR	TASTE AND ODOR
GREAT LAKES	ST. JOSEPH RESERVOIR	E. COLI
GREAT LAKES	ST. JOSEPH RESERVOIR	PCBS (FISH TISSUE)
GREAT LAKES	ST. MARYS RIVER	NUTRIENTS
GREAT LAKES	ST. MARYS RIVER	NUTRIENTS
GREAT LAKES	ST. MARYS RIVER	NUTRIENTS
GREAT LAKES	SPY RUN CREEK	IMPAIRED BIOTIC COMMUNITIES
GREAT LAKES	LOWTHER NEUHAUS DITCH	IMPAIRED BIOTIC COMMUNITIES
GREAT LAKES	ST. MARYS RIVER	NUTRIENTS
GREAT LAKES	ST. MARYS RIVER	NUTRIENTS
GREAT LAKES	ST. MARYS RIVER	PCBS (FISH TISSUE)
GREAT LAKES	ST. MARYS RIVER	NUTRIENTS
GREAT LAKES	ST. MARYS RIVER	PCBS (FISH TISSUE)
GREAT LAKES	ST. MARYS RIVER	NUTRIENTS
GREAT LAKES	ST. MARYS RIVER	PCBS (FISH TISSUE)
GREAT LAKES	ST. MARYS RIVER	NUTRIENTS
GREAT LAKES	ST. MARYS RIVER	PCBS (FISH TISSUE)
GREAT LAKES	ST. MARYS RIVER	NUTRIENTS
GREAT LAKES	ST. MARYS RIVER	PCBS (FISH TISSUE)
GREAT LAKES	ST. MARYS RIVER	NUTRIENTS
GREAT LAKES	ST. MARYS RIVER	PCBS (FISH TISSUE)
GREAT LAKES	ST. MARYS RIVER	NUTRIENTS
GREAT LAKES	ST. MARYS RIVER	PCBS (FISH TISSUE)
GREAT LAKES	ST. MARYS RIVER	NUTRIENTS
GREAT LAKES	ST. MARYS RIVER	PCBS (FISH TISSUE)
GREAT LAKES	MAUMEE RIVER	IMPAIRED BIOTIC COMMUNITIES
GREAT LAKES	MAUMEE RIVER	NUTRIENTS
GREAT LAKES	MAUMEE RIVER	PCBS (FISH TISSUE)
GREAT LAKES	MAUMEE RIVER	IMPAIRED BIOTIC COMMUNITIES
GREAT LAKES	MAUMEE RIVER	NUTRIENTS
GREAT LAKES	MAUMEE RIVER	PCBS (FISH TISSUE)
GREAT LAKES	MAUMEE RIVER	NUTRIENTS

Table 20 Continued next page...

Table 20. 2016 Impaired Waters in Allen County Continued

2016 303(d) List of Impaired Waters Revised and Submitted to U.S. EPA

BASIN	ASSESSMENT UNIT NAME	CAUSE OF IMPAIRMENT
GREAT LAKES	MAUMEE RIVER	PCBS (FISH TISSUE)
GREAT LAKES	MAUMEE RIVER	NUTRIENTS
GREAT LAKES	MAUMEE RIVER	PCBS (FISH TISSUE)
GREAT LAKES	MAUMEE RIVER	NUTRIENTS
GREAT LAKES	MAUMEE RIVER	PCBS (FISH TISSUE)
GREAT LAKES	MAUMEE RIVER	IMPAIRED BIOTIC COMMUNITIES
GREAT LAKES	MAUMEE RIVER	PCBS (FISH TISSUE)
GREAT LAKES	BLACK CREEK	E. COLI
GREAT LAKES	BLACK CREEK	IMPAIRED BIOTIC COMMUNITIES
GREAT LAKES	BLACK CREEK	NUTRIENTS
GREAT LAKES	BLACK CREEK	E. COLI
GREAT LAKES	BLACK CREEK - UNNAMED TRIBUTARY	E. COLI
GREAT LAKES	MAUMEE RIVER	PCBS (FISH TISSUE)
GREAT LAKES	MAUMEE RIVER	NUTRIENTS
GREAT LAKES	MAUMEE RIVER	PCBS (FISH TISSUE)
GREAT LAKES	MAUMEE RIVER	NUTRIENTS
GREAT LAKES	MAUMEE RIVER	PCBS (FISH TISSUE)
GREAT LAKES	MAUMEE RIVER	NUTRIENTS
GREAT LAKES	MAUMEE RIVER	PCBS (FISH TISSUE)
GREAT LAKES	HAMM INTERCEPTOR DITCH	IMPAIRED BIOTIC COMMUNITIES
GREAT LAKES	HAMM INTERCEPTOR DITCH	NUTRIENTS
GREAT LAKES	HAMM INTERCEPTOR DITCH	IMPAIRED BIOTIC COMMUNITIES
GREAT LAKES	HAMM INTERCEPTOR DITCH	NUTRIENTS
GREAT LAKES	SOWERS DITCH	IMPAIRED BIOTIC COMMUNITIES
GREAT LAKES	SOWERS DITCH	NUTRIENTS
GREAT LAKES	JACKSON NUMBER TWO DITCH	IMPAIRED BIOTIC COMMUNITIES
GREAT LAKES	JACKSON NUMBER TWO DITCH	NUTRIENTS
GREAT LAKES	JACKSON DITCH	IMPAIRED BIOTIC COMMUNITIES
GREAT LAKES	JACKSON DITCH	NUTRIENTS
GREAT LAKES	HAMM DITCH	E. COLI
GREAT LAKES	KNAPP DITCH	IMPAIRED BIOTIC COMMUNITIES
GREAT LAKES	KNAPP DITCH	NUTRIENTS
GREAT LAKES	GROMEAX DITCH	IMPAIRED BIOTIC COMMUNITIES
GREAT LAKES	FLATROCK CREEK	IMPAIRED BIOTIC COMMUNITIES
GREAT LAKES	FLATROCK CREEK	DISSOLVED OXYGEN
GREAT LAKES	FLATROCK CREEK	IMPAIRED BIOTIC COMMUNITIES
GREAT LAKES	BROWN DITCH	IMPAIRED BIOTIC COMMUNITIES
GREAT LAKES	BROWN DITCH	IMPAIRED BIOTIC COMMUNITIES
UPPER WABASH RIVER	SEEGAR DITCH	DISSOLVED OXYGEN
UPPER WABASH RIVER	SEEGAR DITCH	E. COLI
UPPER WABASH RIVER	SEEGAR DITCH - UNNAMED TRIBUTARY	E. COLI
UPPER WABASH RIVER	SEEGAR DITCH - UNNAMED TRIBUTARY	E. COLI
UPPER WABASH RIVER	ABOITE CREEK	E. COLI
UPPER WABASH RIVER	EEL RIVER	IMPAIRED BIOTIC COMMUNITIES
UPPER WABASH RIVER	BENWARD DITCH	AMMONIA
UPPER WABASH RIVER	BENWARD DITCH	DISSOLVED OXYGEN

Table 20 Continued next page...

Table 20. 2016 Impaired Waters in Allen County - Continued

BASIN	ASSESSMENT UNIT NAME	CAUSE OF IMPAIRMENT
UPPER WABASH RIVER	BENWARD DITCH	IMPAIRED BIOTIC COMMUNITIES
UPPER WABASH RIVER	BENWARD DITCH	NUTRIENTS
UPPER WABASH RIVER	SHOAFF DAWSON DITCH	IMPAIRED BIOTIC COMMUNITIES
UPPER WABASH RIVER	EEL RIVER	IMPAIRED BIOTIC COMMUNITIES
UPPER WABASH RIVER	EEL RIVER	PCBS (FISH TISSUE)
UPPER WABASH RIVER	JOHNSON DITCH	DISSOLVED OXYGEN
UPPER WABASH RIVER	JOHNSON DITCH	IMPAIRED BIOTIC COMMUNITIES
UPPER WABASH RIVER	JOHNSON DITCH	DISSOLVED OXYGEN
UPPER WABASH RIVER	JOHNSON DITCH	IMPAIRED BIOTIC COMMUNITIES
UPPER WABASH RIVER	JOHNSON DITCH	NUTRIENTS
UPPER WABASH RIVER	JOHNSON DITCH - UNNAMED TRIBUTARY	DISSOLVED OXYGEN
UPPER WABASH RIVER	JOHNSON DRAIN	DISSOLVED OXYGEN
UPPER WABASH RIVER	JOHNSON DRAIN	IMPAIRED BIOTIC COMMUNITIES
UPPER WABASH RIVER	JOHNSON DRAIN	NUTRIENTS
UPPER WABASH RIVER	REHLING DITCH	DISSOLVED OXYGEN

Threatened and Endangered Species

The State of Indiana harbors a great diversity of wildlife and plant communities. Many species receiving federal or state protection are tied closely to their habitats. Land-use change has been the most common cause for decline in species range and diversity. Contamination and degradation of natural waters has also contributed to loss of habitat. The Indiana Natural Heritage Data Center lists over 50 species as endangered, threatened or rare within Allen County. These species include a variety of mammals, birds, reptiles, amphibians, mollusks, insects, fish and plants (see Table 21). Species included in the list as federally Endangered in Allen County include the White Catpaw mussel, Northern Riffleshell mussel, Clubshell mussel, and Rayed Bean mussel. Also in Allen County, the Rabbitsfoot mussel and Eastern Massasauga reptile species are listed as federally threatened. Species in Allen County that are candidates for potential future listing as either federally threatened or endangered include the Round Hickorynut mussel, Purple Lilliput mussel, Spotted Turtle reptile, Kirtland's Snake reptile, and Blanding's Turtle reptile. The Bald Eagle has been delisted as endangered but is still vulnerable. Due to the sensitive nature of identifying locations of threatened and endangered species, maps of these specific habitats are not provided. In general, small stream corridors with well-developed riparian woods, upland forested areas, wetlands and portions of the St. Joseph River have been identified as potential habitat sites to threatened and endangered species.

Projects going through the development process are planned and designed to comply with the National Environmental Policy Act, Endangered Species Act, Clean Water Act and appropriate Indiana rules and regulations. In the early coordination phase of a project, potential impacts to specific endangered or threatened species will be assessed. Avoidance and mitigation strategies will be developed for specific projects as needed. The mitigation strategies may include but are not limited to: restricting clearing of trees and vegetation; relocation of listed mussel and plant species from the construction site; strict erosion control; measures to allow terrestrial species to pass unharmed through construction areas; seasonal construction restrictions; limit construction noise; and limit hours of construction activity.

Table 21. Endangered, Threatened or Rare Species within Allen County

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02/05/2018

Indiana County Endangered, Threatened and Rare Species List

County: Allen

Species Name	Common Name	FED	STATE	GRANK	SRANK
Mollusk: Bivalvia (Mussels)					
Epioblasma obliquata perobliqua	White catspaw	LE	SE	G1T1	SX
Epioblasma torulosa rangiana	Northern Riffleshell	LE	SE	G2T2	S1
Lampsilis fasciola	Wavyrayed Lampmussel		SSC	G5	S3
Ligumia recta	Black Sandshell			G4G5	S2
Obovaria subrotunda	Round Hickorynut	C	SE	G4	S1
Pleurobema clava	Clubshell	LE	SE	G1G2	S1
Ptychobranchus fasciolaris	Kidneyshell		SSC	G4G5	S2
Quadrula cylindrica cylindrica	Rabbitsfoot	LT	SE	G3G4T3	S1
Toxolasma lividus	Purple Lilliput	C	SSC	G3Q	S2
Villosa fabalis	Rayed Bean	LE	SE	G2	S1
Insect: Odonata (Dragonflies & Damselflies)					
Gomphus fraternus	Midland Clubtail			G5	S2
Tachopteryx thoreyi	Gray Petaltail		wl	G4	S3
Fish					
Moxostoma valenciennesi	Greater Redhorse		SE	G4	S2
Percina evides	Gilt Darter		SE	G4	S1
Amphibian					
Acris blanchardi	Northern Cricket Frog		SSC	G5	S4
Ambystoma laterale	Blue-spotted Salamander		SSC	G5	S2
Hemidactylium scutatum	Four-toed Salamander		SSC	G5	S2
Lithobates pipiens	Northern Leopard Frog		SSC	G5	S2
Reptile					
Clemmys guttata	Spotted Turtle	C	SE	G5	S2
Clonophis kirtlandii	Kirtland's Snake	C	SE	G2	S2
Emydoidea blandingii	Blanding's Turtle	C	SE	G4	S2
Sistrurus catenatus catenatus	Eastern Massasauga	LT	SE	G3	S2
Bird					
Asio flammeus	Short-eared Owl		SE	G5	S2
Bartramia longicauda	Upland Sandpiper		SE	G5	S3B
Buteo lineatus	Red-shouldered Hawk		SSC	G5	S3
Buteo platypterus	Broad-winged Hawk		SSC	G5	S3B
Certhia americana	Brown Creeper			G5	S2B
Circus hudsonius	Northern Harrier		SE	G5	S2
Cistothorus palustris	Marsh Wren		SE	G5	S3B
Falco peregrinus	Peregrine Falcon		SSC	G4	S2B
Haliaeetus leucocephalus	Bald Eagle		SSC	G5	S2
Ixobrychus exilis	Least Bittern		SE	G5	S3B
Lanius ludovicianus	Loggerhead Shrike		SE	G4	S3B
Nyctanassa violacea	Yellow-crowned Night-heron		SE	G5	S2B

Indiana Natural Heritage Data Center
Division of Nature Preserves
Indiana Department of Natural Resources
This data is not the result of comprehensive county surveys.

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State: 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
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

Table 21 Continued next page...

Table 21. Endangered, Threatened or Rare Species within Allen County -Continued

Page 2 of 3
02/05/2018

Indiana County Endangered, Threatened and Rare Species List

County: Allen

Species Name	Common Name	FED	STATE	GRANK	SRANK
<i>Nycticorax nycticorax</i>	Black-crowned Night-heron		SE	G5	S1B
<i>Phalaropus tricolor</i>	Wilson's Phalarope		SSC	G5	SHB
<i>Setophaga cerulea</i>	Cerulean Warbler		SE	G4	S3B
<i>Sturnella neglecta</i>	Western Meadowlark		SSC	G5	S2B
<i>Tyto alba</i>	Barn Owl		SE	G5	S2
<i>Wilsonia citrina</i>	Hooded Warbler		SSC	G5	S3B
Mammal					
<i>Taxidea taxus</i>	American Badger		SSC	G5	S2
Vascular Plant					
<i>Andromeda glaucophylla</i>	Bog Rosemary		SR	G5T5	S2
<i>Armoracia aquatica</i>	Lake Cress		SE	G4?	S1
<i>Carex cephaloidea</i>	Thinleaf Sedge		SE	G5	S1
<i>Carex trichocarpa</i>	Hairy-fruit Sedge		WL	G4	S3
<i>Chelone obliqua</i> var. <i>speciosa</i>	Rose Turtlehead		WL	G4T3	S3
<i>Circaea alpina</i>	Small Enchanter's Nightshade		SX	G5	SX
<i>Coeloglossum viride</i> var. <i>virescens</i>	Long-bract Green Orchis		ST	G5T5	S2
<i>Crataegus succulenta</i>	Fleshy Hawthorn		SR	G5	S2
<i>Euphorbia obtusata</i>	Bluntleaf Spurge		SE	G5	S1
<i>Hydrastis canadensis</i>	Golden Seal		WL	G3G4	S3
<i>Panax quinquefolius</i>	American Ginseng		WL	G3G4	S3
<i>Phlox ovata</i>	Mountain Phlox		SE	G4	S1
<i>Platanthera psychodes</i>	Small Purple-fringe Orchis		SR	G5	S2
<i>Poa alsodes</i>	Grove Meadow Grass		SR	G4G5	S2
<i>Pyrola elliptica</i>	Elliptical-leaf Wintergreen		WL	G5	S3
<i>Scutellaria parvula</i> var. <i>parvula</i>	Small Skullcap		SE	G4T4	S1
<i>Spiranthes lucida</i>	Shining Ladies'-tresses		SR	G4	S2
<i>Spiranthes magnicamporum</i>	Great Plains Ladies'-tresses		SE	G3G4	S1
<i>Symphotrichum boreale</i>	Rushlike Aster		SR	G5	S2
High Quality Natural Community					
Forest - flatwoods black swamp	Black Swamp Flatwoods			GNR	S1
Forest - flatwoods central till plain	Central Till Plain Flatwoods		SG	G3	S2
Forest - floodplain mesic	Mesic Floodplain Forest		SG	G3?	S1
Forest - floodplain wet-mesic	Wet-mesic Floodplain Forest		SG	G3?	S3
Forest - upland dry Central Till Plain	Central Till Plain Dry Upland Forest			GNR	S1
Forest - upland dry-mesic Central Till Plain	Central Till Plain Dry-mesic Upland Forest			GNR	S2
Forest - upland mesic Central Till Plain	Central Till Plain Mesic Upland Forest			GNR	S3
Lake - pond	Pond		SG	GNR	SNR

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Table 21 Continued next page...

Table 21. Endangered, Threatened or Rare Species within Allen County -Continued

County: Allen

Species Name	Common Name	FED	STATE	GRANK	SRANK
Prairie - dry-mesic	Dry-mesic Prairie		SG	G3	S2
Wetland - marsh	Marsh		SG	GU	S4
Wetland - swamp forest	Forested Swamp		SG	G2?	S2
Wetland - swamp shrub	Shrub Swamp		SG	GU	S2
Other Significant Feature					
Geomorphic - Nonglacial Erosional Feature - Water Fall and Cascade	Water Fall and Cascade			GNR	SNR

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Section 4(f) Mitigation

Section 4(f) of the Department of Transportation Act of 1966 requires that special effort be made to preserve public park and recreation land, wildlife and waterfowl refuges, and historic sites. In general, Section 4(f) specifies that federally-funded transportation projects requiring the use of land from a public park, recreation area, wildlife and waterfowl refuge or land of significant historical value can only occur if there is no feasible and prudent alternative. Using Section 4(f) land requires all possible planning to minimize harm. The Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU), provided the first substantive revision to Section 4(f) to simplify the process and approval of projects that have only de minimis impacts on lands impacted by Section 4(f). Under the new provisions, once the US DOT determines that a transportation use of Section 4(f) property results in a de minimis impact, analysis of avoidance alternatives are not required and the Section 4(f) evaluation process is complete.

The NIRCC Metropolitan Planning Area contains a number of local parks; wildlife and waterfowl refuges; and sites listed on the national registry and are identified on Figures 35, 36 and 37. Additional historic locations including local districts and the Wabash-Erie Canal alignment are also identified on Figures 36 and 37. It is important to acknowledge that the identification of historic and cultural resources is a dynamic process and is therefore impossible to identify an exhaustive list of sites. These sites are important to the environmental integrity and heritage of our communities. However, there are times when transportation projects impact Section 4(f) resources and require measures to minimize potentially adverse impacts. The development and implementation of such measures involve close coordination with officials that have jurisdiction of the specific resources.

Investigation of Section 4(f) resources and investigation of potential impacts occur throughout the project planning and development. The intent of evaluating resources near project development sites helps guide projects toward practical solutions while minimizing impacts. This also applies to situations where no feasible or prudent alternative exists. The availability of detail during the project development of the preferred alternative allows for closer examination of the potential for Section 4(f) impacts and a clearer determination of how impacts should be processed. Once this is known, project sponsors and officials that own the resources can follow a process for mitigation.

The development process for the Transportation Plan is cognizant of and accounts for regional Section 4(f) resources that are important for preservation and community cohesion. Other resources may not be well known, but are afforded the same protection under Section 4(f). While the transportation planning process can account for well known Section 4(f) resources that would pose a significant loss if impacted, it is premature to analyze individual impacts from projects at this stage in the planning process.

In cases where projects do have Section 4(f) impacts and there is no feasible and prudent alternative to avoid use of the resource, the project development process requires consideration of all possible actions to minimize harm. Minimization of harm may entail both alternative design modifications that lessen the impact and mitigation measures that compensate for

residual impacts. Minimization and mitigation measures should be determined through consultation with the official or agency owning or administering the resource. Neither the Section 4(f) statute nor regulation requires the replacement of Section 4(f) resources used for transportation projects, but this option is appropriate as a mitigation measure for direct project impacts.

Mitigation measures involving public parks, recreation areas, or wildlife and waterfowl refuges may involve a replacement of land and/or facilities of comparable value and function, or monetary compensation, which could be used to enhance the remaining land. Mitigation of historic sites usually consists of those measures necessary to preserve the historic integrity of the site. In any case, the cost of mitigation should be a reasonable public expenditure in light of the severity of the impact on the Section 4(f) resource in accordance with Federal requirements. Mitigation for common Section 4(f) resource impacts may include: landscaping or other screening techniques; context sensitive design refinements; maintenance of traffic accommodations to minimize impacts; minimize noise and/or limit duration of construction; and direct compensation for improvements to on-site resources.

Cultural Resources

Cultural resource reviews during the project development phase are designed to comply with the National Environmental Policy Act, the National Historic Preservation Act, the Department of Transportation Act and applicable Indiana codes and regulations. These laws and regulations require that cultural resources be considered during the development of transportation projects. An element of that consideration involves consulting with various entities including the Federal Highway Administration (FHWA), Advisory Council on Historic Preservation (ACHP), State Historic Preservation Office (SHPO), local historic preservation groups, local public officials, and the public.

Mitigation measures developed through a Section 106 Memorandum Of Agreement (MOA) consultation process provide ways to avoid, minimize, or mitigate adverse effects to historic properties impacted by projects. Historic properties include those listed, or are eligible for listing in the National Register of Historic Places (NRHP). These mitigation measures are carried through as environmental document commitments and must be completed and accounted for with SHPO and FHWA. The MOA will not be closed until all stipulations are fulfilled. A failure to meet all stipulations can potentially jeopardize a project sponsor's funding or other agreements or projects.

A plan for mitigating an adverse effect is site/property specific and requires a separate research design or approach for each historic property impacted by the project. It should be based on the context development and refinement through the environmental assessment and preliminary project design/engineering.

Mitigation measures may involve a variety of methods including, but not limited to: aesthetic treatments; avoidance; archaeological data recovery; creative mitigation; salvage and re-use of historic materials; informing/educating the public; and Historic American Buildings Survey (HABS)/Historic American Engineering Record (HAER) documentation. Approaches vary widely depending on the type of historic property, the qualities that enable the property to meet

the NRHP Criteria of Eligibility, the location of the historic property with respect to the project and other criteria specific to the site. Mitigation plans are developed in consultation with Indiana Department of Transportation, State Historic Preservation Office, Federal Highway Administration, local public officials, local historic preservation groups, and the public. In special circumstances consultation may include the Advisory Council on Historic Preservation.

Using INDOT's Red Flag Investigation Template NIRCC has identified a number of other cultural resources and infrastructure that may impact transportation projects. Figure 38 identifies the following sites, facilities, and infrastructure: Cemeteries, railroads, pipelines (containing natural gas, crude oil, and refined oil), airports, hospitals, religious centers, recreational facilities, museums, and schools. Further investigation at a project development stage needs completed in order to know if there will be issues that need addressed or some type of mitigation that may be required. Mitigation for these types of issues may include alternative alignments or treatments, context-sensitive design, noise barriers, or other enhancements depending on the affect and proximity of a project to these types of features.

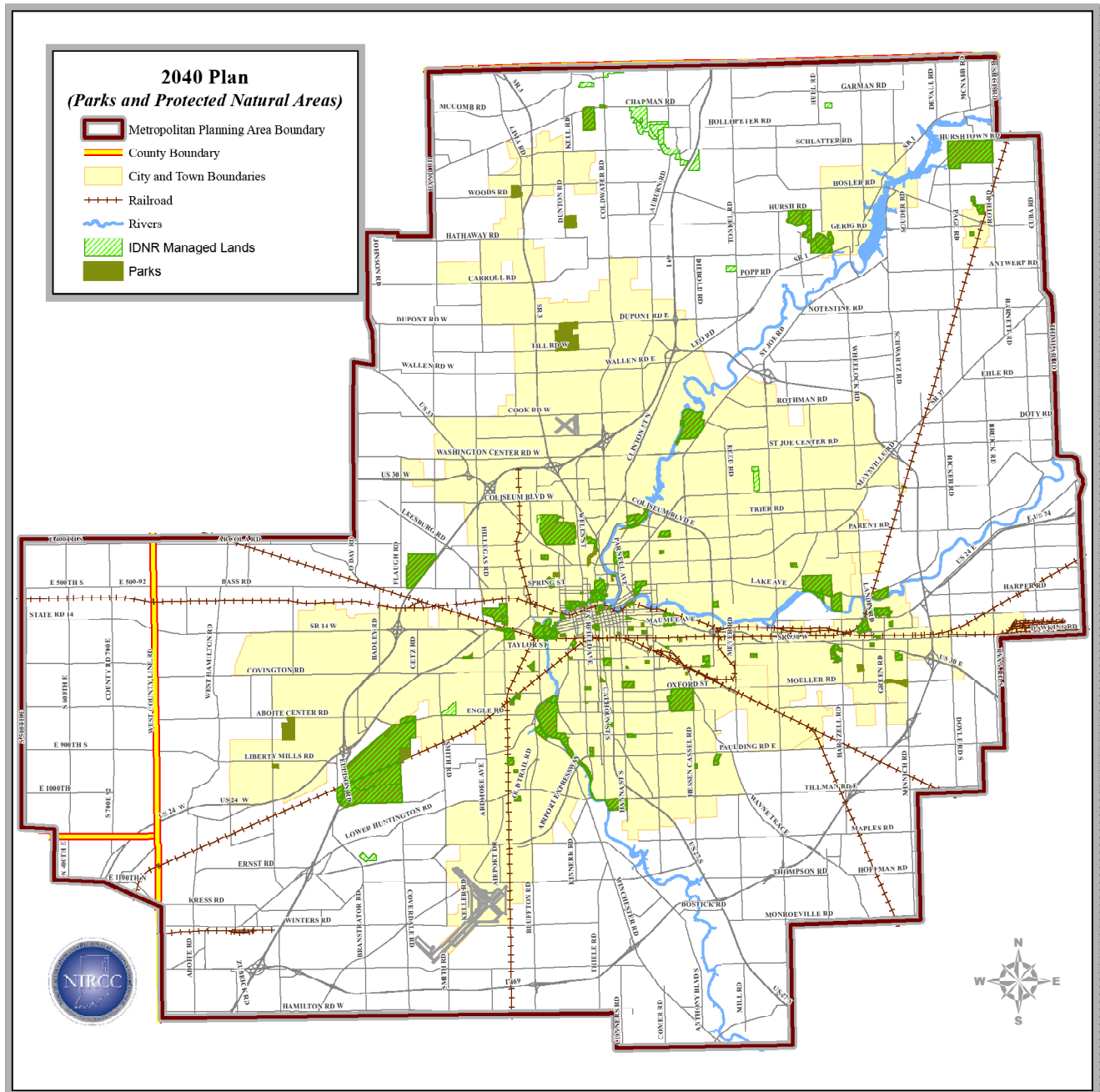


Figure 35
Parks and Significant Protected Natural Areas

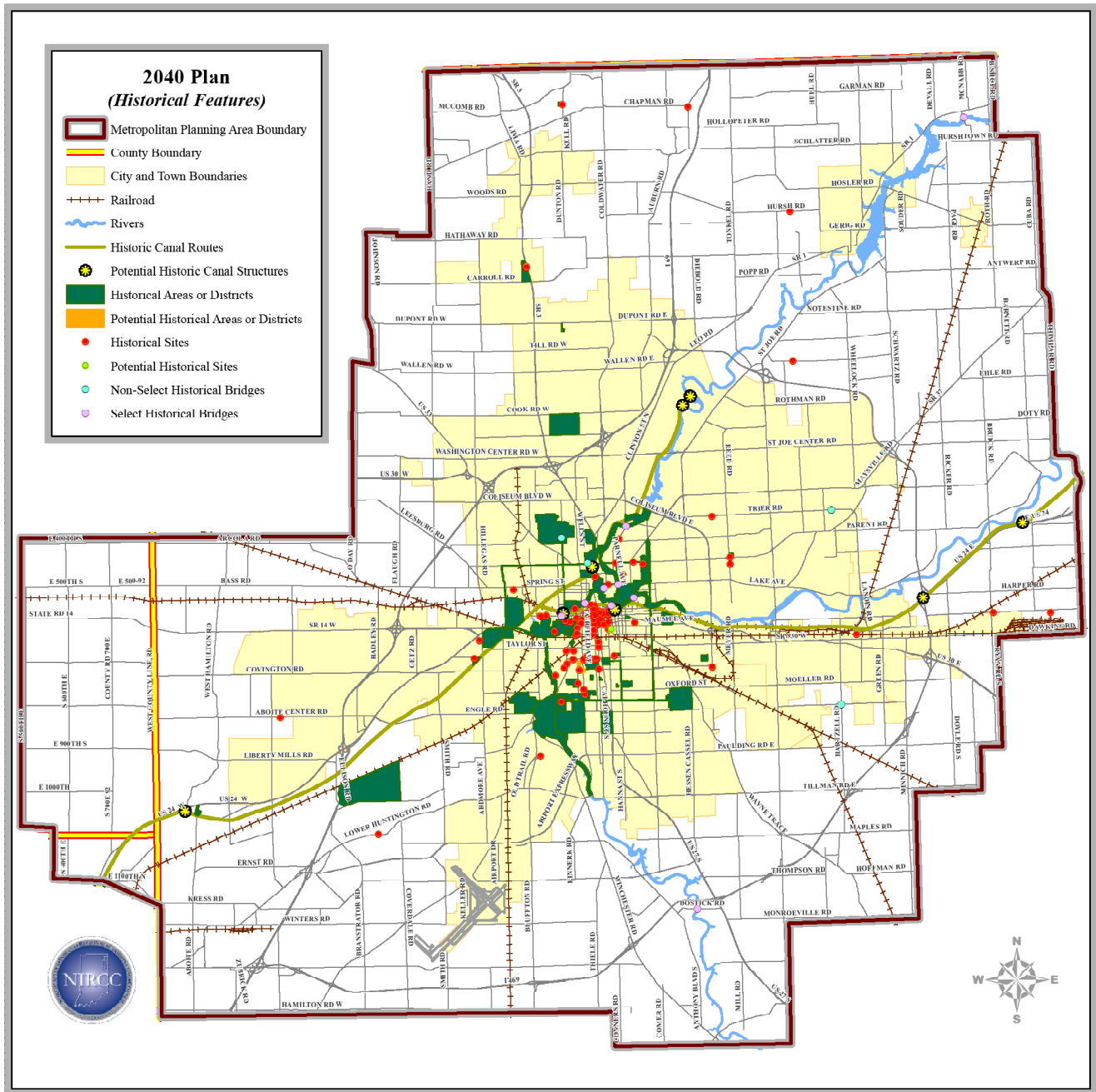
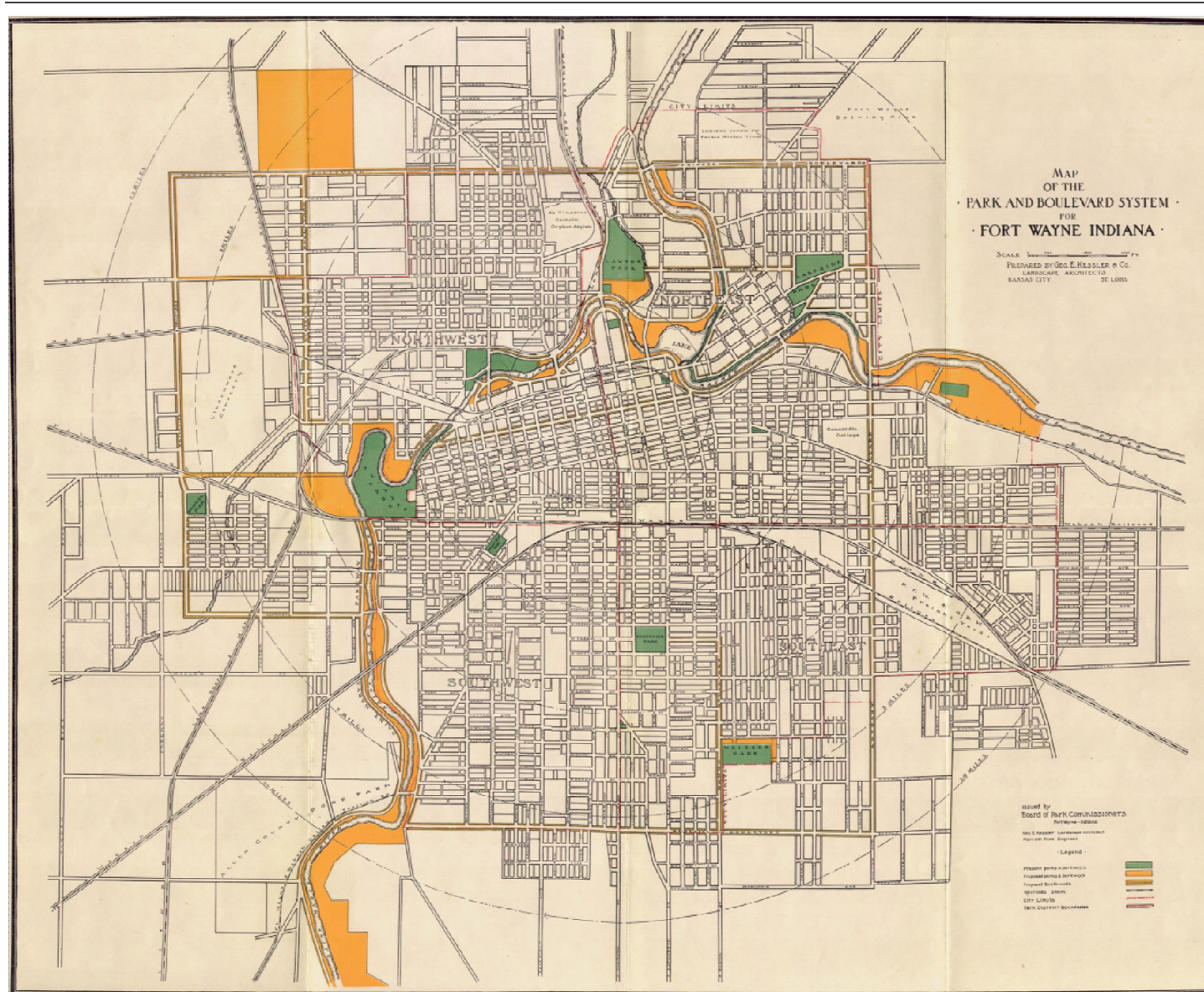


Figure 36
Historic Features



Attachment

2

Multiple Property Document

Map of the
Park and Boulevard System
City of Fort Wayne, Indiana
George Kessler, 1912

PREPARED BY:
**TINA JONES
CHRISTOPHER BAAS
MALCOLM CAIRNS**

PREPARED FOR:
ARCH
437 EAST BERRY
STREET, SUITE 204
FORT WAYNE,
INDIANA 46802

(260)426-5117



Figure 37

Kessler Plan - Park and Boulevard System

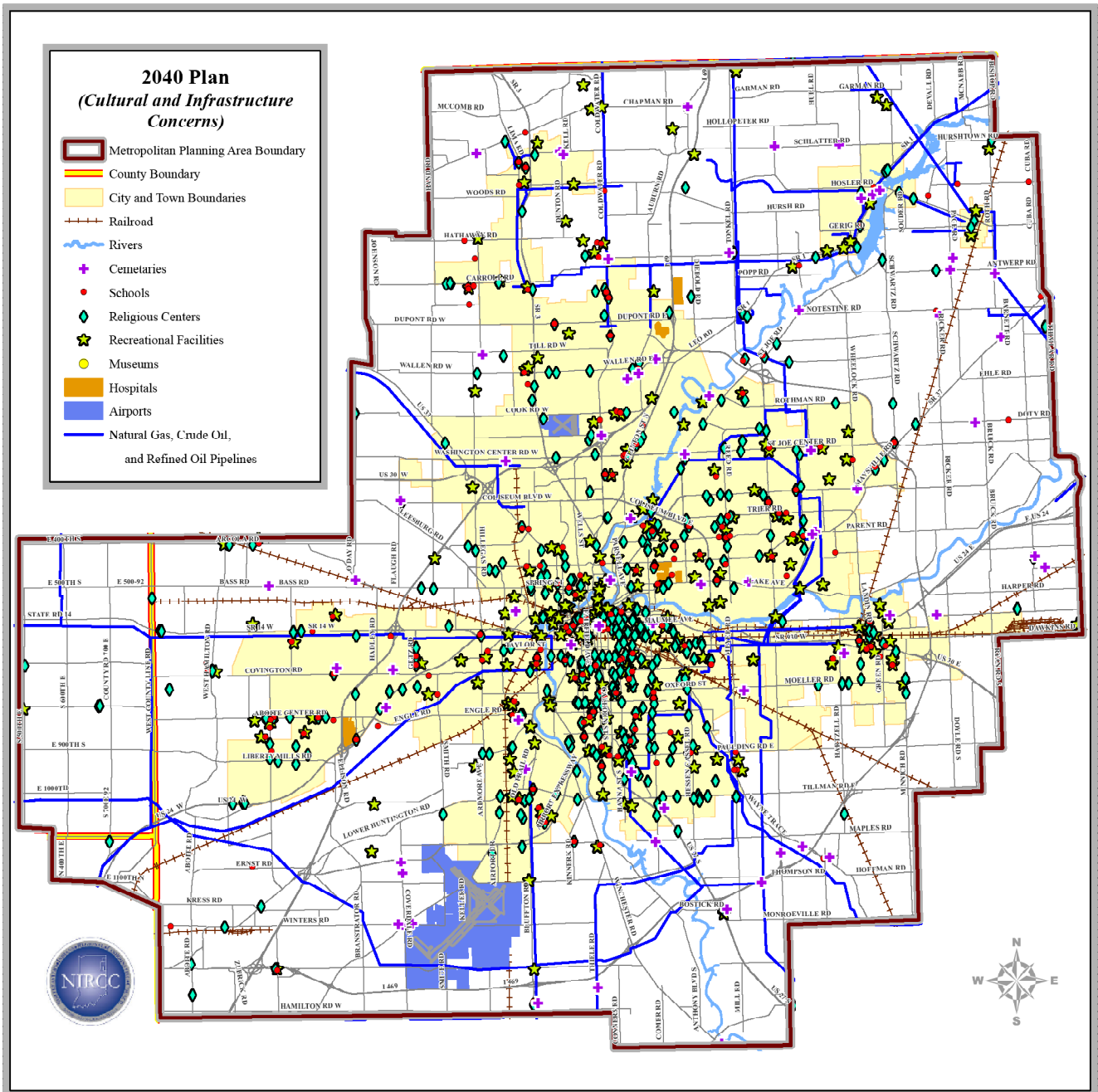


Figure 38
Cultural and Infrastructure Concerns

Other Environmentally Sensitive Sites

The Northeastern Indiana Regional Coordinating Council has identified other potential sites that have varying degrees of environmental sensitivity and may impact project development. Using a similar format as INDOT's Red Flag Investigation Template NIRCC has identified the following environmentally sensitive sites (see Figures 39 through 42): Confined feeding operations, industrial waste sites, waste treatment storage and disposal sites, septage waste sites, tire waste sites, construction and demolition waste sites, solid waste sites active and permitted, NPDES (National Pollutant Discharge Elimination System) facilities and pipes, corrective action sites, Superfund sites, brownfield sites, cleanup sites, VRP (Voluntary Remediation Program) sites, institutional controls, underground storage tanks, and manufactured gas plants. These locations will be treated on a project by project basis by avoidance or mitigation strategies. Projects impacting these sites will incur additional expense to dispose or treat contaminated soils and materials.

Public water source wellhead protection/influence areas are not displayed due to security issues. Several methods are available for evaluating potential impacts from specific projects or groups of projects. Based on historical public well field information, NIRCC can identify most sites within the Metropolitan Planning Area. NIRCC is also working with the Indiana Department of Environmental Management to evaluate major projects in the 2040 Transportation Plan. Appropriate mitigation activities will be implemented in wellhead influence areas as deemed necessary by IDEM. Mitigating, controlling and containing highway run-off and potential hazardous roadway spills are examples of strategies to protect wellhead sites.

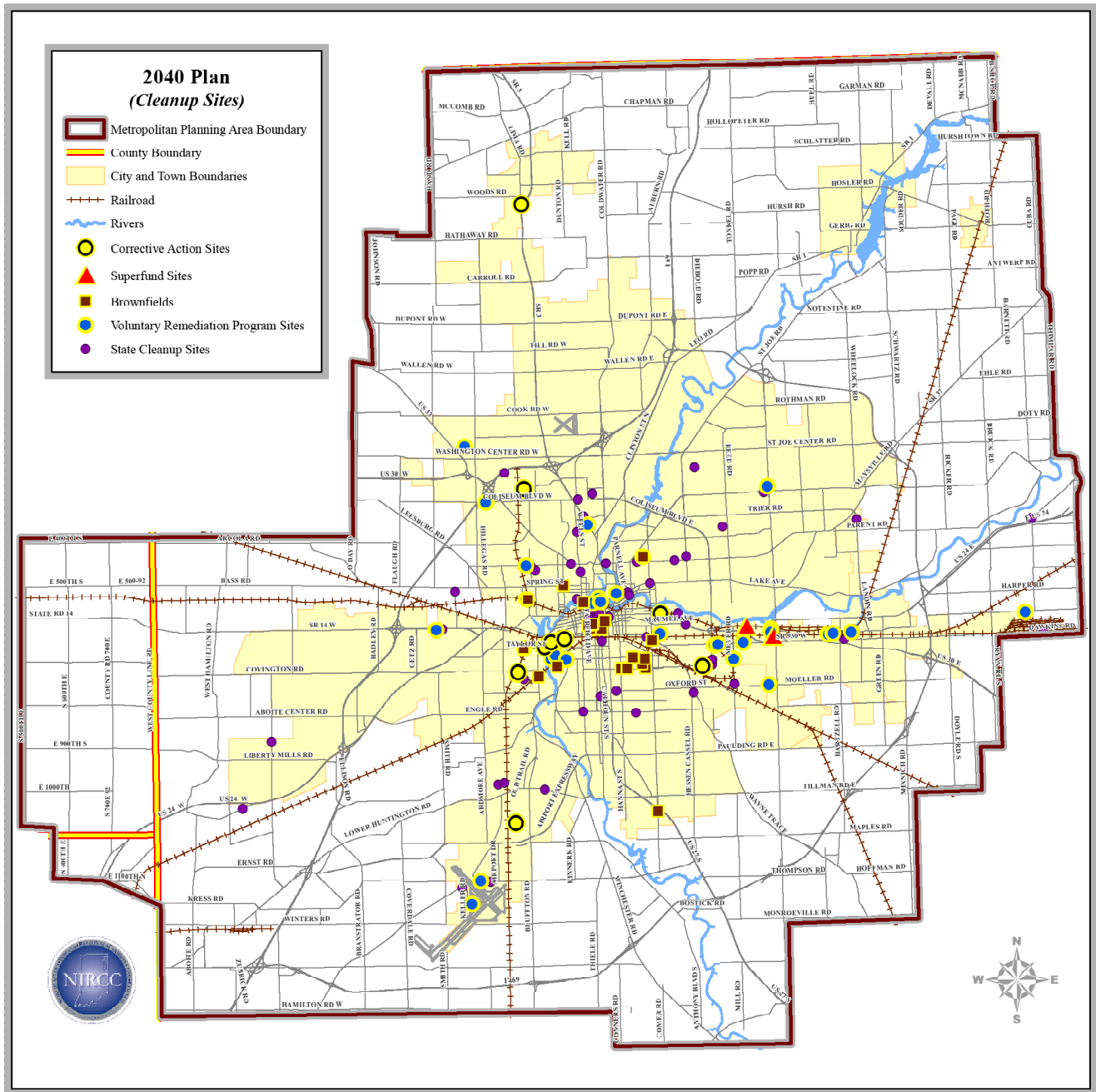


Figure 39
Cleanup Sites

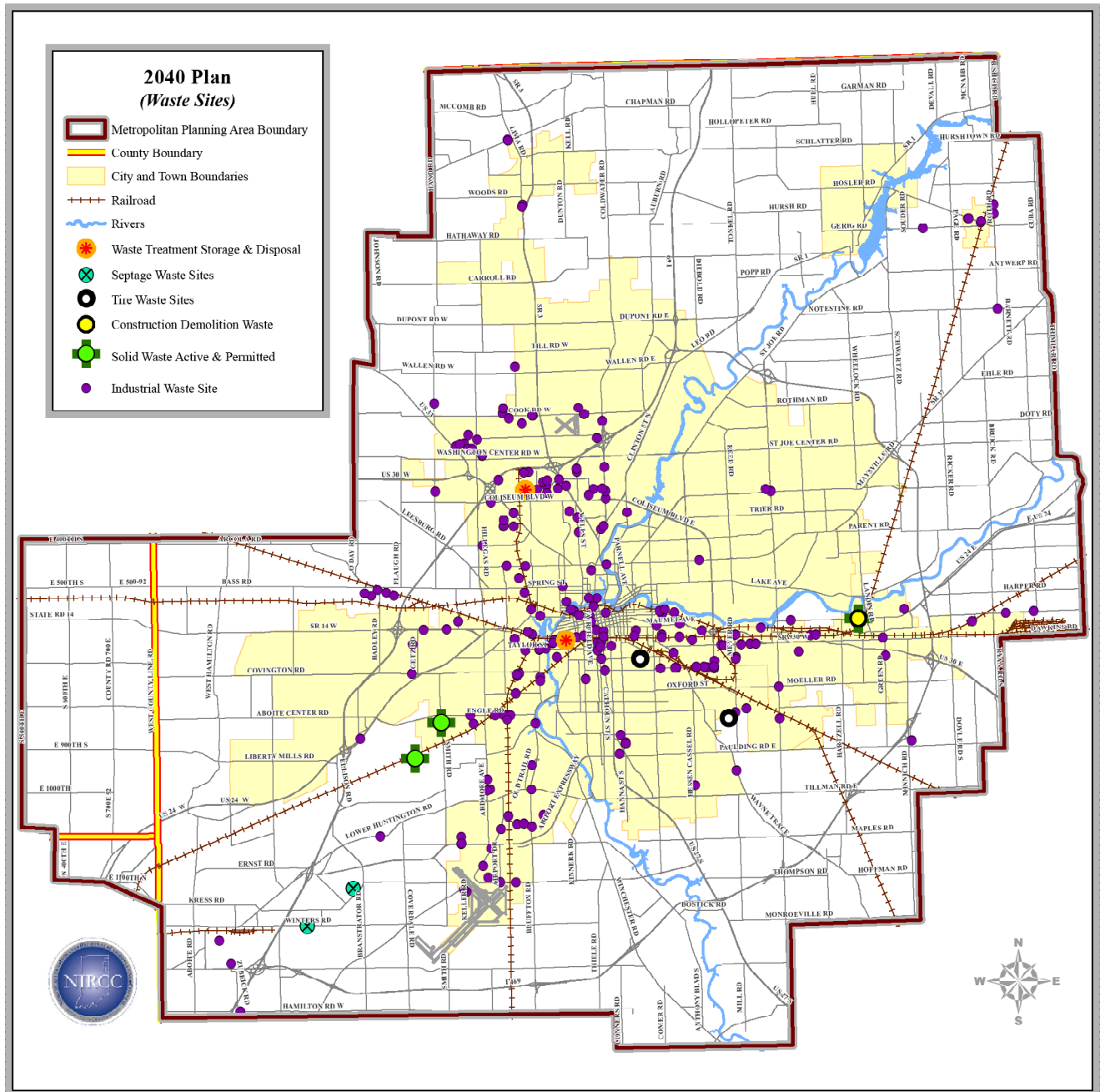


Figure 40
Waste Sites

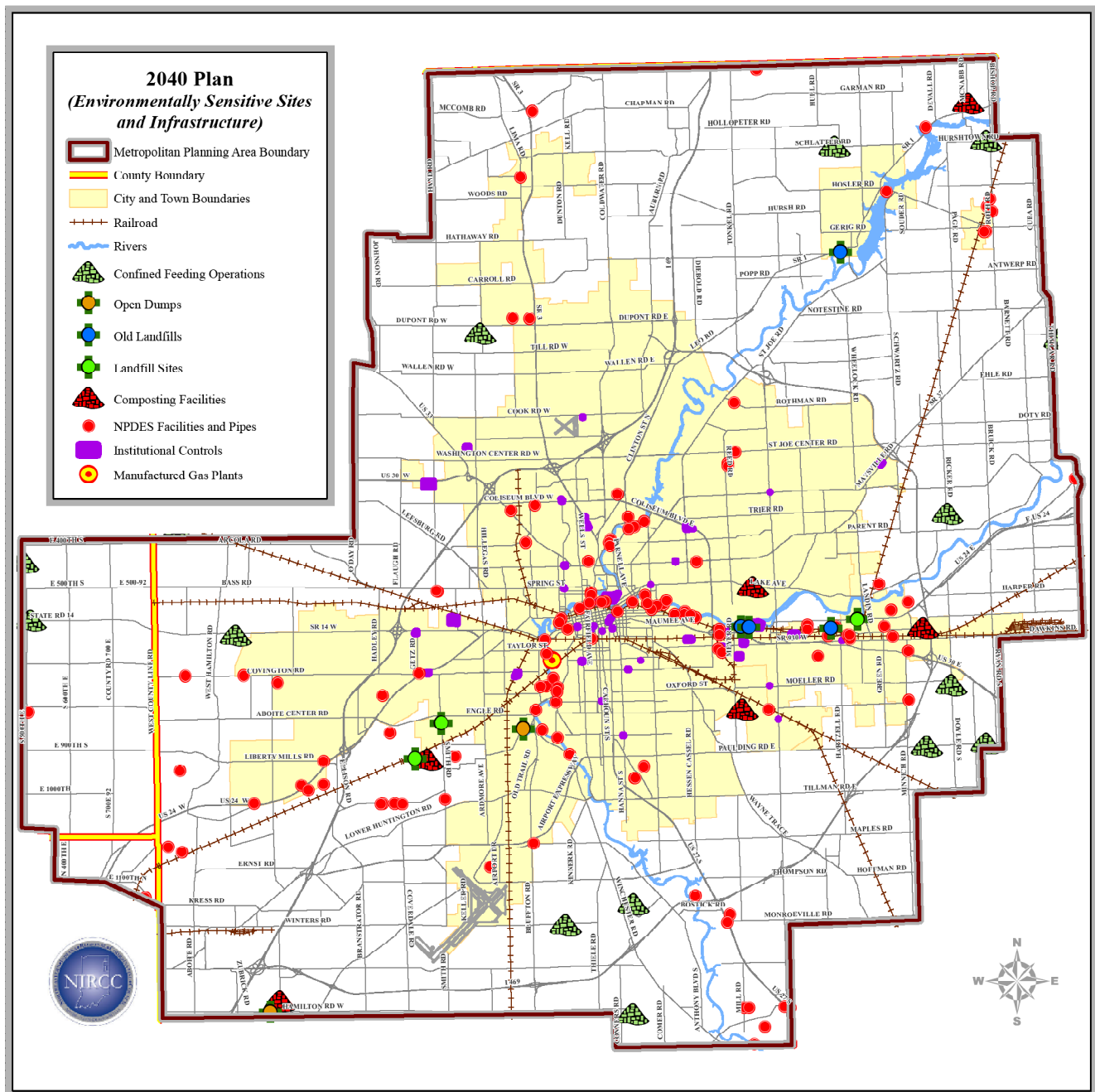


Figure 41
Environmentally Sensitive Sites And Infrastructure

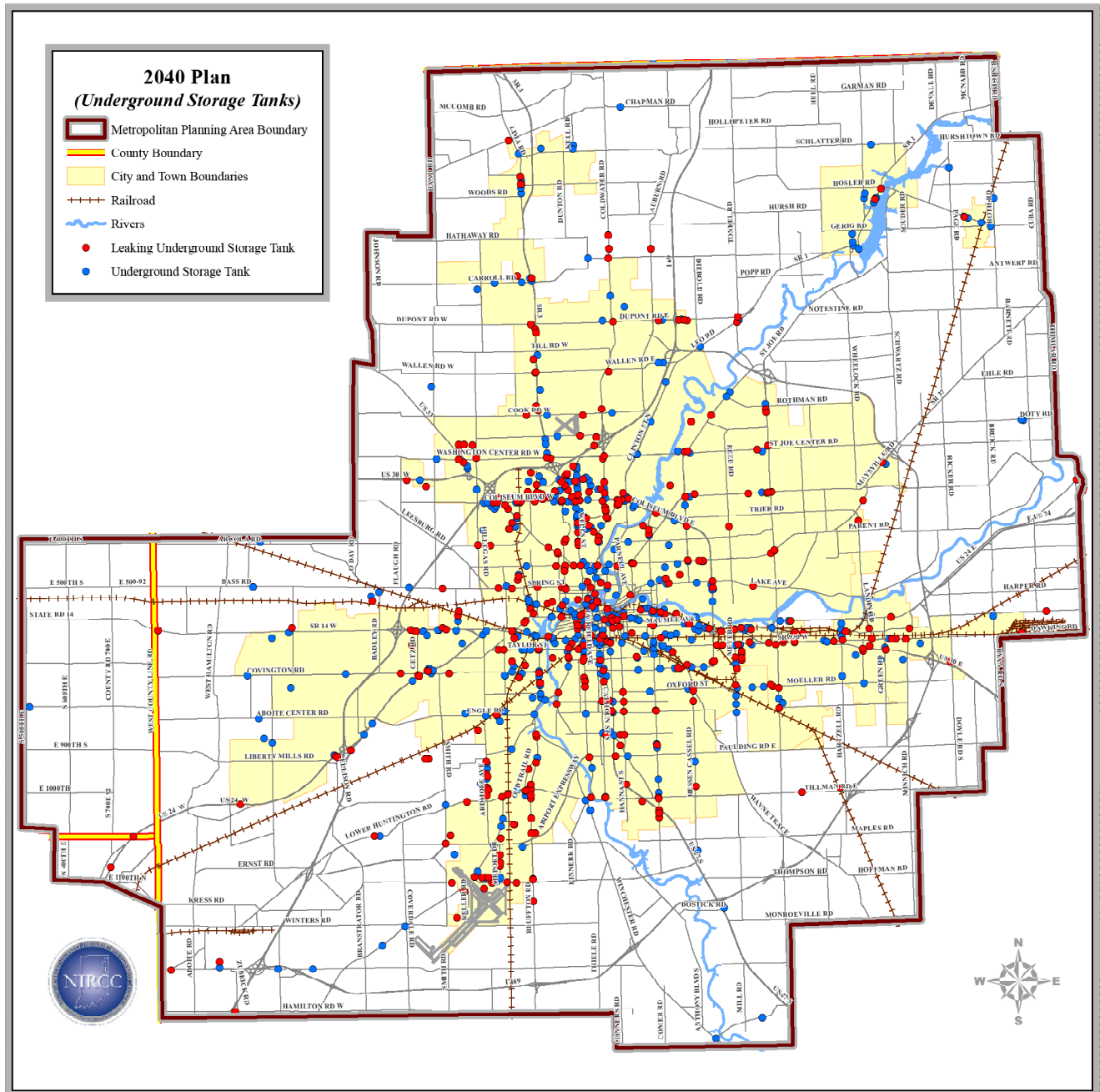


Figure 42
Underground Storage Tanks

Transportation Plan Analysis Summary

The maps provided in this document show the locations of various environmentally sensitive sites within the NIRCC Metropolitan Planning Area. The 2040 Transportation Plan includes 99 individual projects throughout the region. This section summarizes how many of these projects are near the environmentally sensitive locations. This information is only provided to show how common it is that an environmental issue is expected to be addressed and mitigated as projects from the Transportation Plan progress through the project development process.

The following method was used to summarize the number of projects near common environmental issue locations. Buffers were developed around the transportation projects at 100 feet, 500 feet, and 1,000 feet. Depending on the environmental issue and the limited certainty of some site locations or area boundaries, the 1,000 foot buffer distance may be the best option for knowing the potential needs of addressing impacts to a project. Features like high capacity wellhead influence areas and special interest waterways are examples of projects that may need to use these 1,000 foot buffer distances because locations may be approximate and because the environmental sensitivity to these areas may not be well known. Other environmental issues identified such as parks and significant natural areas, historic sites, potential wetlands, brownfields, landfills, Superfund sites, etc. may be adequately served by the 100 foot and 500 foot buffers.

Table 19 summarizes the number of projects from the 2040 Transportation Plan that are near each type of environmental issue within the selected buffer criteria. All Environmental Document Data Citations are listed in Appendix L.

Table 22. Summary of number of Projects within Environmental Points of Interest

Environmental Points of Interest Near Transportation Projects	Number of Projects within 100 ft	Number of Projects within 500 ft	Number of Projects within 1,000 ft
Hazmat Concerns			
Confined Feeding Operations	0	0	0
Waste Sites (industrial waste sites, waste treatment storage and disposal sites, septage waste sites, tire waste sites, construction and demolition waste sites, solid waste sites active and permitted)	15	23	30
Landfill Sites (composting facilities, open dumps, old landfill sites, landfill sites)	2	2	3
NPDES (National Pollutant Discharge Elimination System) (NPDES facilities and pipes)	3	7	14
Cleanup Sites (corrective action sites, superfund sites, brownfield sites, cleanup sites, VRP sites)	8	14	24
Institutional Controls	6	8	17
Underground Storage Tanks (underground and leaking underground storage tanks)	44	65	74
Manufactured Gas Plants	0	0	0
Water Resources			
Water Features (lakes, ponds, creeks, streams, ditches)	45	64	70
Wetlands (wetland areas, wetland streams, wetland points)	38	59	83
Floodplain	52	60	67
Line of Protection	8	10	11
Special Interest Water Features/Resources (impaired lakes and streams, national river inventory (NRI, NPS), Outstanding Rivers, high capacity wells or wellhead protection/influence areas)	27	36	42
Infrastructure			
Cemeteries	6	19	24
Railroads	17	22	25
Pipelines	24	30	39

Table 22 Continued next page...

Table 22. Summary of number of Projects within Environmental Points of Interest - Continued

Environmental Points of Interest Near Transportation Projects	Number of Projects within 100 ft	Number of Projects within 500 ft	Number of Projects within 1,000 ft
Airports and Hospitals	3	4	4
Cultural and Recreational Facilities (religious centers, recreational facilities, museums)	30	44	58
Schools	26	34	41
Historical Features, Parks, and Significant Protected Natural Areas			
Historical Canal (potential historic canal routes and structures)	10	13	17
Historical Bridges (select and Non-Select)	1	5	8
Historical Sites and Districts	21	26	28
Parks and Significant Protected Natural Areas	16	21	26

List of Consulting Agencies

ARCH - Historic Preservation
Allen County Parks Department
Allen County Soil and Water Conservation District
Department of the Army, Detroit District, Corps of Engineers Environmental
Department of the Army, Detroit District, Corps of Engineers Environmental - Analysis Branch
Department of the Army, Louisville Corps of Engineers
Federal Highway Administration - Indiana Division
Fort Wayne Community Development-Historic Preservation
Fort Wayne Parks Department
Indiana Department of Environmental Management
Indiana Department of Natural Resources
Indiana Department of Natural Resources - Division of Fish and Wildlife
Indiana Department of Natural Resources - Division of Historic Preservation and Archaeology
Indiana Department of Natural Resources - Division of Nature Preserves
Indiana Department of Natural Resources - NE Region Ecologist
Indiana Department of Transportation - Fort Wayne District
Indiana Department of Transportation - Central Office
Indiana Geological Survey
Indiana Natural Resources Conservation Services
Maumee River Basin Commission
U.S. Department of Housing and Urban Development
U.S. Department of the Interior, National Park Service - Regional Director
U.S. Environmental Protection Agency - Region V
U.S. Environmental Protection Agency - Region V-Superfund
U.S. Fish and Wildlife Service

Input on the 2040 Transportation Plan by the Consulting Agencies

Opportunity to comment on the Environmental Mitigation Activities was afforded to the consulting agencies on two separate occasions. Input from this process was used to modify and improve this section of the Transportation Plan. Comments were received from the Indiana Department of Natural Resources, State Historical Preservation Office; Indiana Department of Natural Resources, Division of Fish and Wildlife; Indiana Department of Transportation, Environmental Services, Fort Wayne District; Architecture and Community Heritage-ARCH, Incorporated or Fort Wayne; and United States Department of Army, Detroit District, Corps of Engineers. The comments and reactions to the comments are provided below.

United States Department of Army, Detroit District, Corps of Engineers

Comment: A portion of the Metropolitan Planning Area (west of I-69) is within the boundaries of the Corps Louisville District. When individual projects are coordinated, please send those projects within the Louisville District to: U.S. Army Corp of Engineers, Louisville District, ATTN: Chief Regulatory Branch (CELRL-OR-L), P.O. Box 59, Louisville, Kentucky 40201-0059. Please send projects within the Detroit District area to: U.S. Army Corp of Engineers, Detroit District, Planning Office-Environmental Analysis Branch, 477 Michigan Avenue, Detroit, Michigan 48226-2550.

Comment: The Detroit District Corps has a major flood control project in Fort Wayne that several of the projects in the transportation plan will intersect. These include:

New Construction: Spring Street –Wells Street to Spy Run Avenue

Road Widening: State Boulevard-Clinton Street to Cass Street

In addition projects upstream and downstream could affect water levels in flood control project area. We will need to review more specific information for these projects that directly affect or may indirectly affect the Flood Control Project in order to ensure that the project plans do not compromise the Flood Control Project.

Comment: Many of the Transportation Plan projects cross waterways, we recommend that you coordinate with local officials and with the Indiana Department of Natural Resources regarding the applicability of a floodplain permit prior to construction. This coordination would help insure compliance with local and state floodplain management regulations and acts, such as the Indiana Flood Control Act (IC 13-2-22). Additionally, the Federal Emergency Management Agency Flood Insurance Rate Maps provide a good source of floodplain information. If you obtain any information that any part of you project would in fact impact the flood plain, you should consider other sites. This would be consistent with current Federal policy to formulate projects that, to the extent possible, avoid or minimize adverse impacts associated with use of the floodplain.

Indiana Department of Natural Resources, State Historical Preservation Office

Comment: Pursuant to the National Environmental Policy Act, Section 6002 of the Safe, Accountable, Flexible, and Efficient Transportation Equity Act, and Section 106 of the National Historic Preservation Act, the staff of the Indiana State Historic Preservation Officer (“Indiana SHPO”) has reviewed your letter dated October 4, 2012 and received on October 9, 2012 regarding the development of a transportation plan for the New Haven-Fort Wayne-Allen County Metropolitan Area in Allen, Huntington and Whitley counties, Indiana. Thank you for the notification of updates to the 2030-II Transportation Plan and invitation to discuss and consult on the plan development.

It is our understanding that cultural resource reviews will be conducted as necessary during the project development phase. The Indiana SHPO wished to consult on the specific projects for which our office has jurisdiction, as they develop under the plan.

Indiana Department of Natural Resources, Division of Fish and Wildlife

The agency responded with acknowledgement of receiving the request to participate and would review the draft document. No additional comments were submitted from the IDNR-Division of Fish and Wildlife.

Architecture and Community Heritage-ARCH, Incorporated or Fort Wayne

NIRCC staff met on several occasions with representative of ARCH during the development of the Transportation Plan. ARCH was extremely helpful in identifying existing and potential historic and cultural resources within the metropolitan planning area. Work continues on developing an updated inventory of historic resources within Allen County. NIRCC will continue to meet with ARCH representatives as the inventory is completed to update maps with the best available information. NIRCC intends to include ARCH representatives in the review process for Environmental Red Flag Surveys to gain their input at the earliest stages of project development. ARCH did not submit any formal comments, but provided valuable information and has agreed to work with NIRCC on the Red Flag Analyses.

Indiana Department of Transportation, Environmental Services, Fort Wayne District

In addition to the inclusion of “Indiana Listing of Outstanding Rivers and Streams,” you could include IDNR trout stream and USACE Section 10 stream, which usually require special considerations. The following is a list of the rivers which fall in these categories:

Cedar Creek from river mile 13.7 to St. Joseph River (IDNR Scenic; IDEM)

Cedar Creek (IDNR Outstanding)

Little River (IDNR Outstanding; Sect 10)

Maumee River- Hosey Dam in Ft. Wayne (USACE Sect 10)

Shoaff Park (Trout 2017)

Spy Run Creek (Trout 2017)

Wabash from IN/OH line to Ohio River (IDNR Outstanding)

In the last paragraph under the Streams and Wetland sections, I believe it would be useful to include IDNR and their mitigation requirements as well. If a project is taking place in an IDNR regulated floodplain, then mitigation specific to the IDNR may be required. I see that this was also a comment from the United States Department of Army, Detroit District, Corps of Engineers. IDNR’s mitigation guidelines are outlined in their “Information Bulletin #17 Third Amendment.”