

Upper East Fork Whitewater Steering Committee Meeting

Goals for today:

- Review inventory and determine
 - Do we need any additional data/did we miss anything
 - Should any of these items be added to our concerns list?
- 2002 Middle Fork (of the East Fork) Whitewater WMP concerns list review
- Inventory options
- Upcoming education and outreach events

Current DRAFT concerns list:

Water conservation is needed

Riparian restoration and conservation are needed

Water quality impacts to peoples' health and wildlife

Access to local resources should be preserved and improved

My kids play in the river, concerned if it is safe?

Recreation use impairments/safety concerns

Clean drinking water supply

Middle Fork Reservoir pollution impacting the City of Richmond water supply

Dairy farm impacts (noted farm on Smyrna at 277 just south of I70)

Agricultural runoff impacts to soil and water

Water quality is poor

Recreational development could threaten important habitat (Cerulean warbler nesting site near SPUR trail)

Invasive species impacts to riparian corridor

Brookville Reservoir signs regarding recreational contact limitations - is it safe to swim, boat or eat the fish?

Drinking water protection is needed

Runoff from nutrients or plant protection products

Excess sediment and nutrients in the water

Streambank erosion

Trash and other pollution

Ecological preservation and restoration is needed

Manage invasive species

Clean up trash along the river

Mitigate environmental impacts only with geographically appropriate native plants

Maintain and improve public access to the river

Increase opportunities for/enhance recreational opportunities

Brookville Reservoir water quality issues – how much impact does the Upper East Fork of the Whitewater have on Brookville Reservoir

Make Richmond a tourism destination

Harsh regulations

Sewer overflows

Excess nutrients cause toxic algal blooms in the Middle Fork Reservoir

Sediment accumulation in the Middle Fork Reservoir

Atrazine

E. coli levels are high

E. coli present throughout the watershed

Sources of E. Coli

Combined sewer overflows

Logjam (Greenway near Flatley/Tingler; Springwood at Waterfall Road)

Historic impact of Springwood Lake (superfund site?)

Lead and heavy metal impacts in Springwood Lake sediments/Whitewater River sediments

Boston Creek and Elkhorn Creek areas are beautiful, maintain/improve these areas

Taste and odor issues Middle Fork Reservoir

Algal blooms at Middle Fork Reservoir

Concerns about water quality in northeast watershed

Legal drain maintenance

Source water protection

Flooding, floodplain management

Cyanotoxin levels and their history – how have levels changed over time?

Impaired Waterbodies

Indiana:

50.4 miles impaired for E. coli

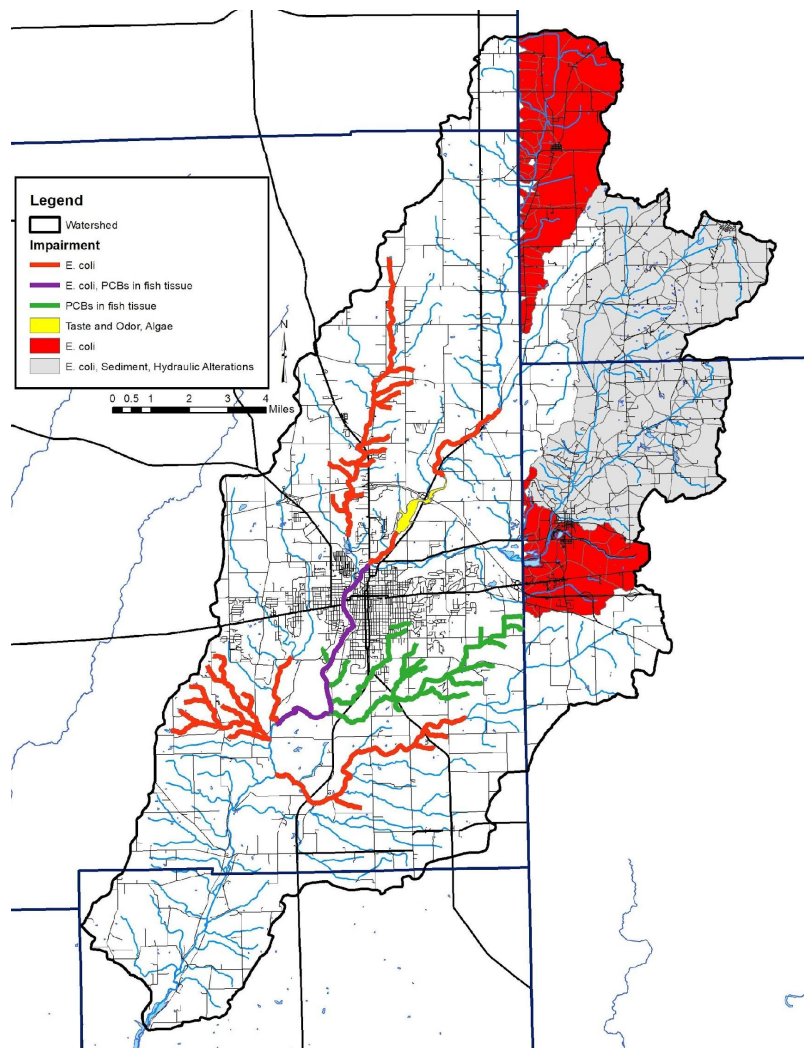
27.16 miles impaired for PCBs in fish tissue

Middle Fork Reservoir: Algae, taste

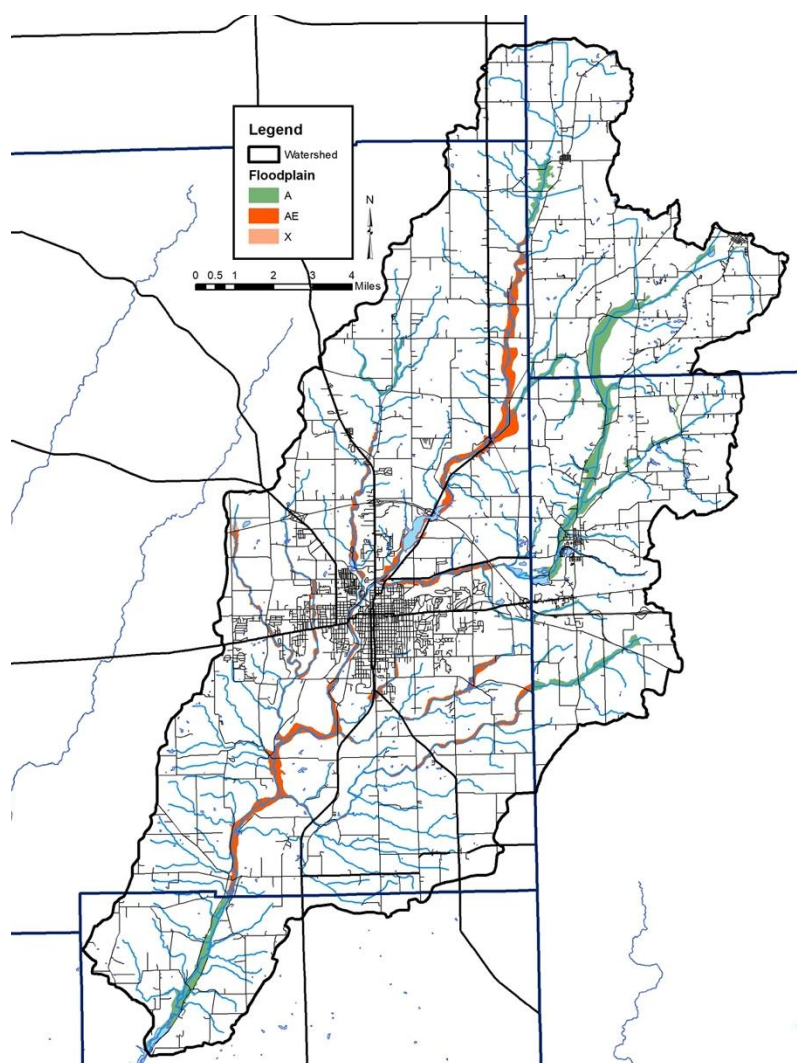
Ohio:

HUC 701, 702, 704 impaired for E. coli

HUC 702 impaired for aquatic life/warmwater habitat – listed as E. coli, sediment, hydraulic alterations



Floodplain

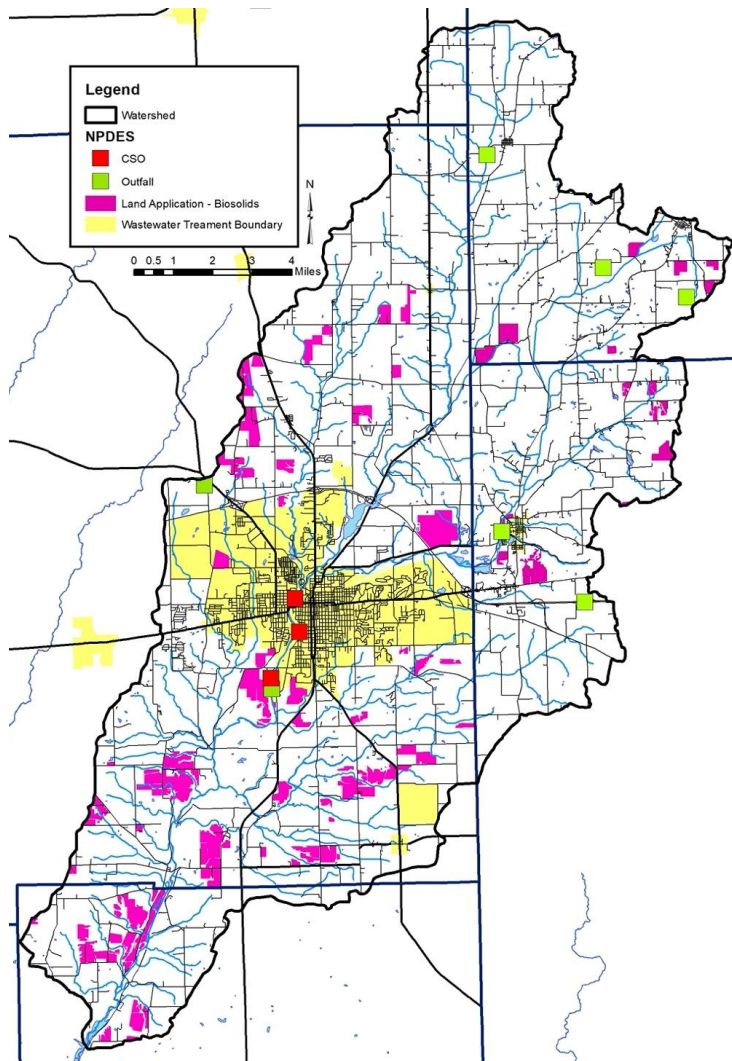


4% of the watershed (5,544 acres) in the 100 year floodplain

1,012 acres in Zone A: no base elevation established

4,500 acres in Zone AE: base elevations established

32 acres in Zone X: outside of 100 & 500 year floodplains but 1% chance of flooding to depth of 1 foot



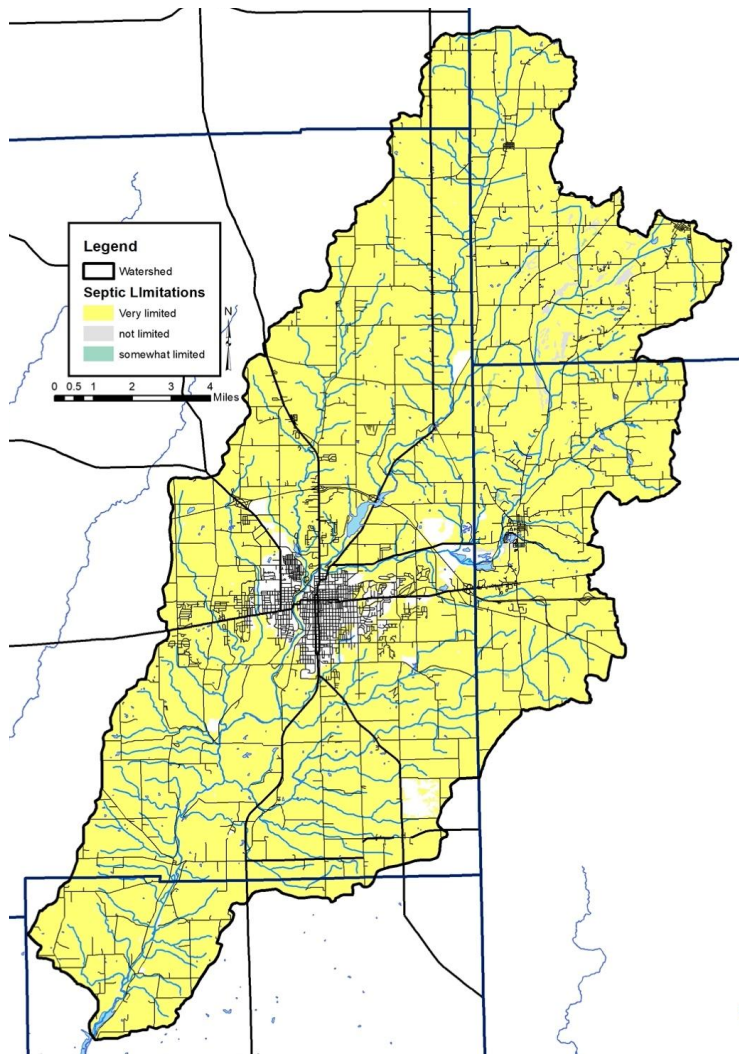
NPDES - WWTP

7:

- Richmond WWTP (3 CSOs listed as active)
- Richmond Mobile Home Park
- New Paris WWTP
- New Madison WWTP
- Palestine-Hollansburg Join Sewer District WWTP
- Arrowhead Campground
- ODOT Parks 8-39 and 8-40 WWTP

Biosolids land applied: 1,863 acres

Ohio+6,074 acres Indiana or 7,937 acres



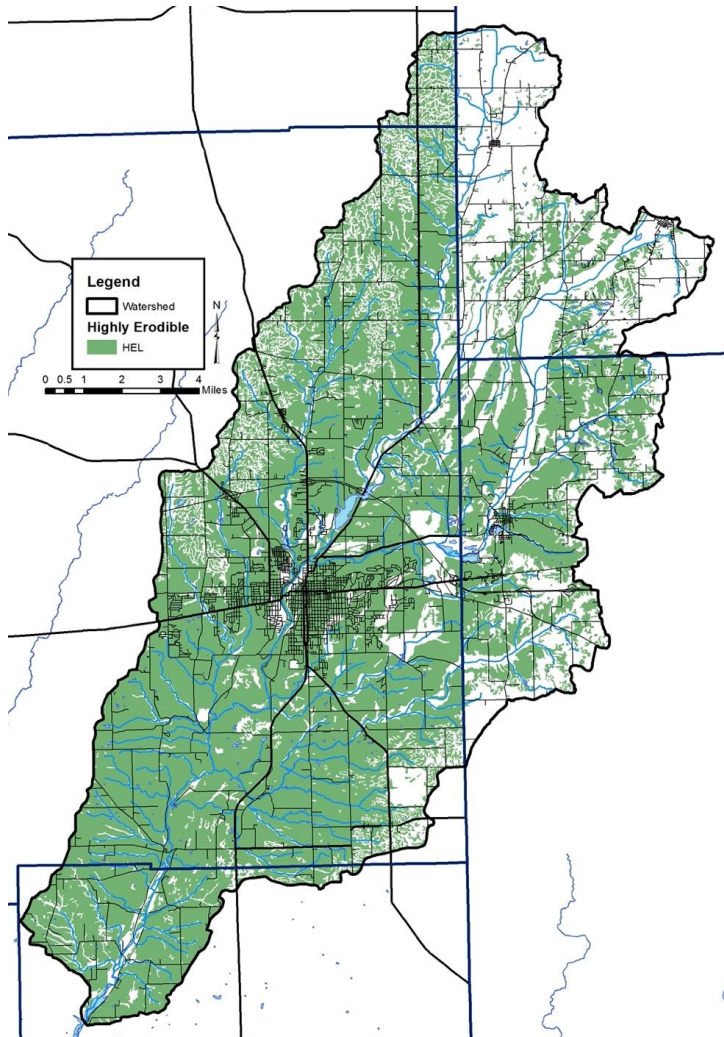
Soils: Septic Limitations

Very Limited: 131,100 acres or 95%

Somewhat Limited: 156 acres or <1%

Not Limited: 681 acres or <2%

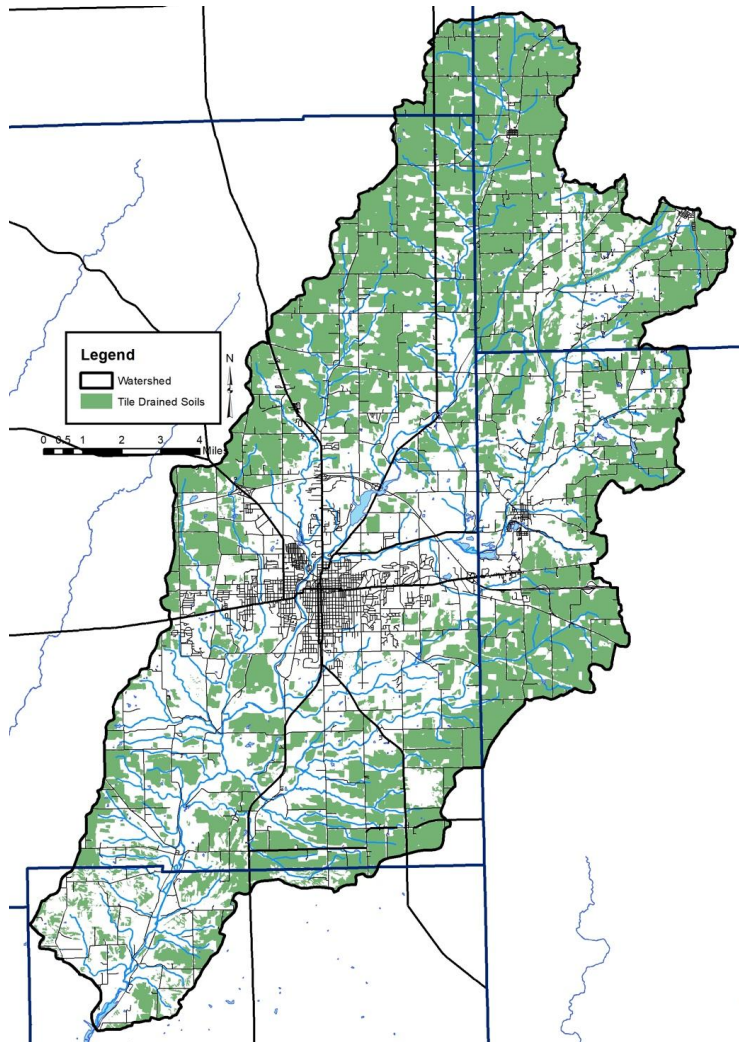
Not rated: 6,775 acres or 5%



Highly Erodible Land (HEL) as rated by NRCS

Based on an erodibility index which is determined by dividing the potential average annual rate of erosion by the soil unit's soil loss T value or tolerance value. The T value is the maximum annual rate of erosion that can occur for a particular soil type without causing a decline in long-term productivity.

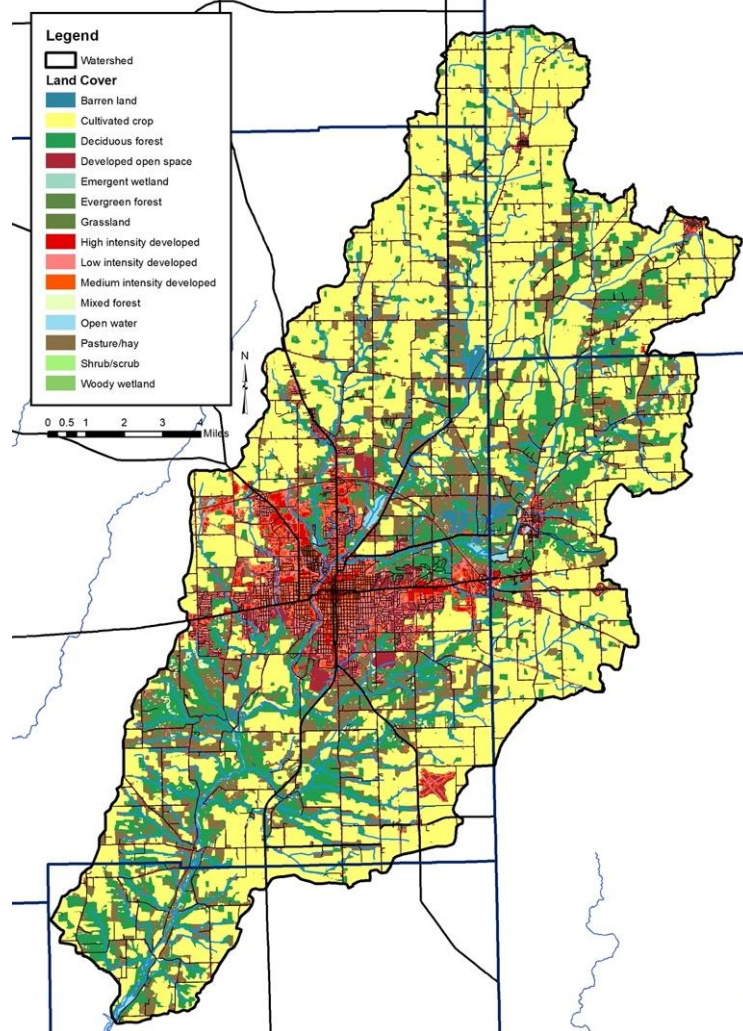
92,277 acres
(67% of the watershed)



Tile Drained Soils (estimated)

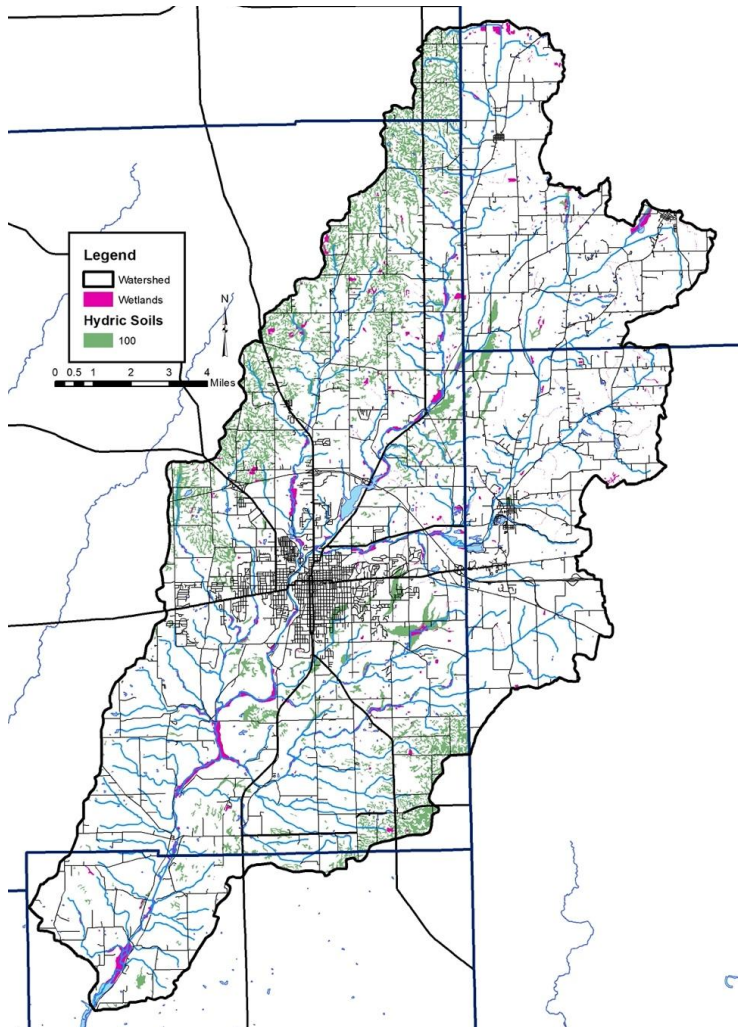
Hydrologic soil groups: C, D as well
as A/D, B/D, C/D on agricultural row
crop land

61,332 acres or 44%



Land Cover

62% Agriculture (13% pasture, 62% row crop)
17% Urban
20% Forest/wetland/grassland
<1% Open water

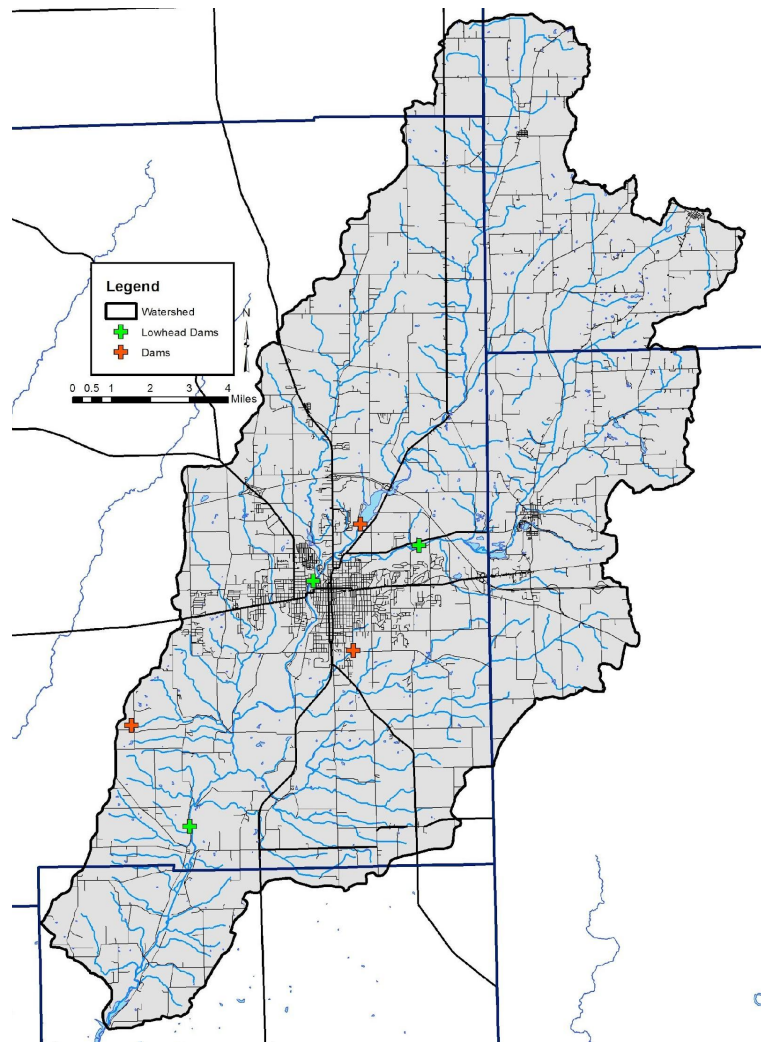


Wetlands

4,474 acres including lakes (3% of watershed)

Hydric Soils: 10,920 acres

71% of the wetlands lost



Dams

South Q Street Dam

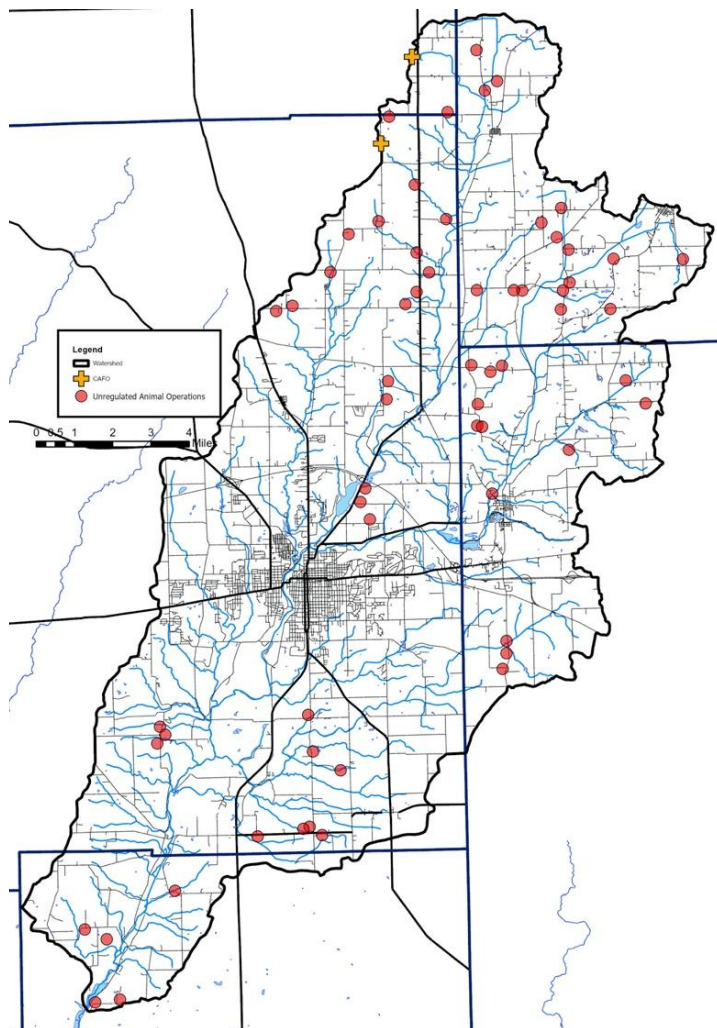
Middle Fork Reservoir

Glen White Dam

Richmond Water Works (lowhead)

Wapa-nipi Nature Preserve (lowhead)

Whitewater Gorge Dam (lowhead)



Unregulated Farms & CAFOs/CFOs

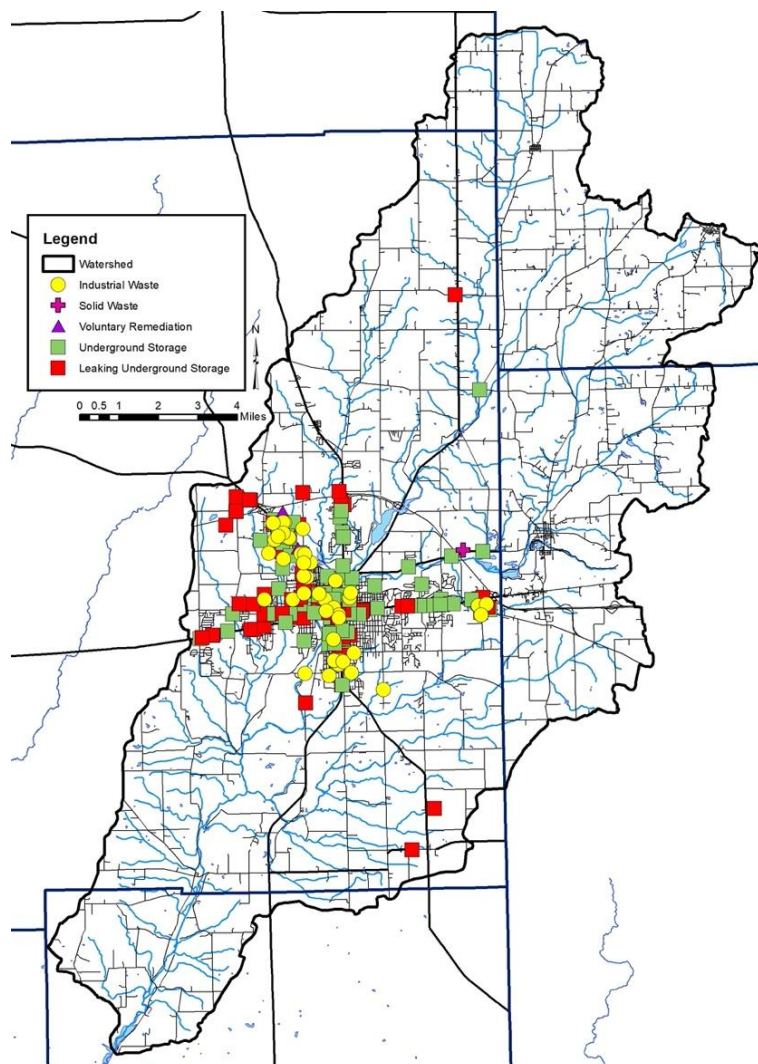
2 CAFO: 8,800 hogs, 1,050 dairy cattle, 70 calves (permitted)

Unregulated (observed): 480 cows, 10 hogs, 30 sheep housed on 62 facilities

Annual Estimate:
69,800 lb manure
131,215 lb N
93,082 lb P
3.71E+15 col E coli

Legacy Pollutants

5 voluntary remediation site
46 industrial waste facilities
1 solid waste (New Paris Landfill)
192 total underground tanks; 80 listed as
leaking underground tanks
0 Superfund (Sprinwood Lake Dump has a
superfund number but is not on the
National Priority List OR mapped by
Indiana as active)



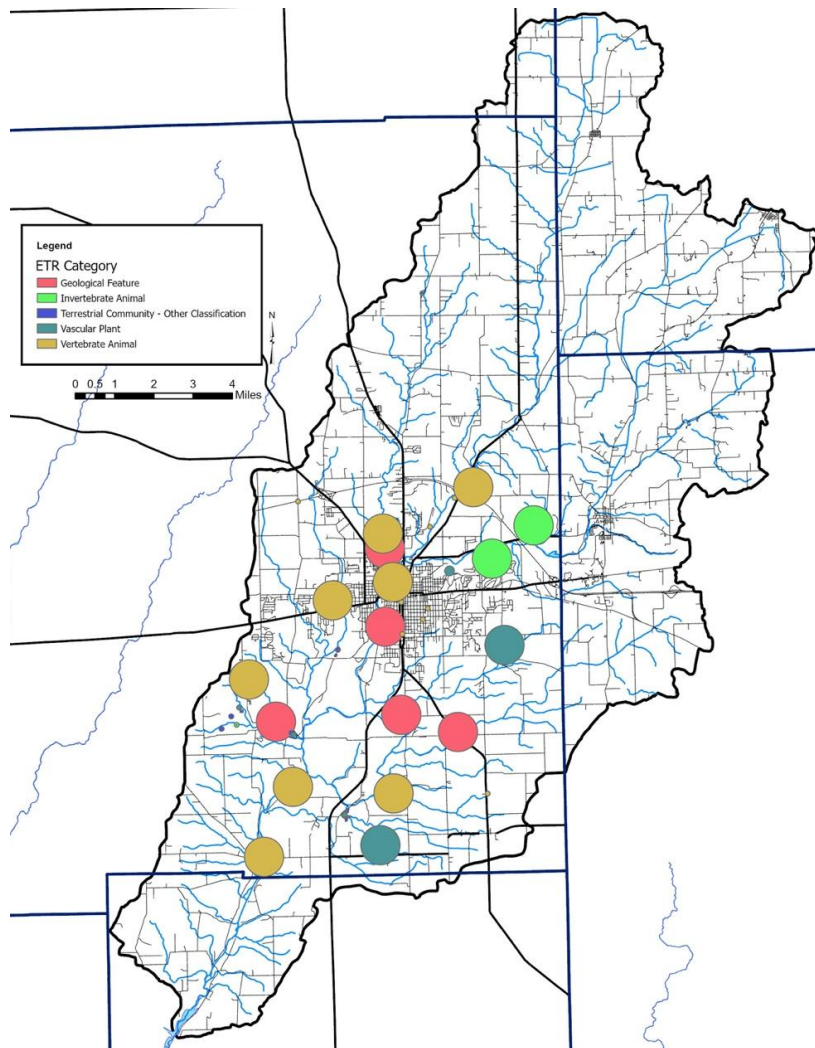
Superfund Site Information

SPRINGWOOD LAKE DUMP (EPA ID: IND982070724)

Site Information

[Site Info](#) | [Aliases](#) | [Operable Units](#) | [Contaminants](#) | [Contacts](#)
[Administrative Records](#) | [Reports and Documents](#)

Site Name: SPRINGWOOD LAKE DUMP
Street: 64 WATERFALL ROAD
City / State / ZIP: RICHMOND, IN 47374
NPL Status: Not on the NPL
Non-NPL Status: NFRAP-Site does not qualify for the NPL based on existing information
EPA ID: IND982070724
EPA Region: 05
County: WAYNE
Federal Facility Flag: Not a Federal Facility
Incident Category: N



ETR Species

Indiana

Upland sandpiper

Black-crowned Night-heron

King rail

Barn owl

Cobblestone tiger beetle

Northern casemaker caddisfly

Kirtland's snake

Geologic Features:

Waterfall/cascades at Elkhorn Falls,

Blue Clay Falls, Falls on Short Creek,

Falls at G Street, Thistlewaite Falls

Ohio

Darke County:

Lilypad forktail

Western creek chubsucker

Least darter

Slippershell mussel

Wavy-rayed lampmussel

Creek heelsplitter

Kidneyshell

Preble County:

Blanchard's cricket frog

Cerulean warbler

Slender baskettail

Blue corporal

Western creek chubsucker

Least darter

Kidneyshell

Queensnake

2002 WMP Concerns List (Middle Fork Reservoir):

- Bacterial contamination
 - Human sources from failing septic systems
 - Livestock sources from stream access
- Manure applications to fields
 - Is it done properly?
- Visual degradation of the river
- Sedimentation problems
 - High turbidity
 - Cut banks
 - Siltation
 - Streambank erosion
- Suburban landowner contribution to pollution
 - Oil, fertilizer, herbicide, etc
- Barrett Paving Materials effect on water quality
- Ohio impact on water quality
- Forest land – timberstand improvement, tree plantings needed
- Livestock access to the Whitewater and its tributaries
- Lack of septic systems/failing septic systems

Inventory Needs

