Probabilistic Monitoring	2023	Parameters
Watershed or Waterbody Name(s)	Great Miami River Basin	*E. coli*, Aluminum, Antimony, Arsenic, Calcium, Cadmium, Chromium, Copper, Lead, Magnesium, Nickel, Selenium, Silver, Zinc, Alkalinity, Total Solids, Dissolved Solids, Total Suspended Solids, Sulfate, Chloride, Hardness, TKN, Ammonia-Nitrogen, Nitrate/Nitrite, Total Phosphorous, TOC, Dissolved Organic Carbon, Cyanide-Total, Cyanide-Weak Acid Dissociable, Chemical Oxygen Demand, Dissolved Oxygen, D.O. Saturation, pH, Specific Conductance, Temperature, Turbidity, Fish, Macroinvertebrates, Diatoms, and Habitat
Hydrologic Unit Code(s)	Upper Great Miami (05080001); Lower Great Miami (05080002); Whitewater (05080003)	
Laboratory Analytical Costs/Funding Source	Pace Analytical IDEM Mobile *E. coli* Lab IDEM Fish and Macroinvertebrate Lab for Specimen Identification Diatom Verification Macroinvertebrate Verification Fish Verification	

Reference Site Monitoring	Year: 2023	Parameters
Stream/River or Watershed(s)	Upper Wabash (05120101), Mississinewa (05120103), Tippecanoe (05120106), Upper White (05120201), Lower White (05120202), Driftwood (05120204), Lower East Fork White (05120208), and Patoka (05120209)	Aluminum, Antimony, Arsenic, Calcium, Cadmium, Chromium, Copper, Lead, Magnesium, Nickel, Selenium, Silver, Zinc, Alkalinity, Total Solids, Dissolved Solids, Total Suspended Solids, Sulfate, Chloride, Hardness, TKN, Ammonia-Nitrogen, Nitrate/Nitrite, Total Phosphorous, TOC, Dissolved Organic Carbon, Chemical Oxygen Demand, Dissolved Oxygen, D.O. Saturation, pH, Specific Conductance, Temperature, Turbidity, Fish, Macroinvertebrates, Diatoms, Habitat
Laboratory Analytical Costs/Funding Source	Pace Analytical IDEM Fish, Macroinvertebrate and Algal Lab for Specimen Identification Diatom Verification Macroinvertebrate Verification Fish Verification	
Fixed Station Monitoring	**Parameters**	
165 sites throughout all 9 watersheds: Divided into 16 routes sampled monthly Laboratory Analytical Costs/Funding Source ISDH/106	**CHEMISTRY** (dissolved vs. total metals at 12 selected sites geographically representative, Dissolved Organic Carbon): Alkalinity, Hardness, Calcium, Magnesium, Ammonia-N, Nitrate+Nitrite-N, Nitrogen-TKN, Phosphorous-Total, Phosphorus-Dissolved Reactive (select sites), COD, TOC, BOD, Solids-Total, Solids-Suspended, Solids-Dissolved, Fluoride, Chloride, Sulfate, Cyanide-Total, Cyanide-Free, Cyanide-Amenable, Arsenic (µg/l), Cadmium (µg/l), Chromium-Total (µg/l), Copper(µg/l), Iron (µg/l), Lead (µg/l), Manganese (µg/l), Nickel (µg/l), Potassium (µg/l), Sodium (µg/l), Zinc (µg/l), *E. coli*, **FIELD**: Turbidity, DO, pH, Temperature, Specific Conductance **ORGANICS/PESTICIDES** (select sites, drinking water intakes): Hexachlorocyclopentadiene, Desethylatrazine, Desisipropylatrazine, Hexachlorobenzene, Simazine, Atrazine, Cloazone, Pentachlorophenol, Lindane, Terbufos, Acetochlor, Alachlor, Heptachlor, Metolachlor, Chlorpyrifos, Cyanazine, Penimethalin, Heptachlor Epoxide, Ocychlordane, Gamm-Chlordane, Alpha-Chlordane, Trans-Nonachlor, endrin, Cis-Nonachlor, P,P'-DDT, Bis(2-Ethylhexyl)adipate, Methoxychlor, Bis(-Ethylhexyl)phthalate, Benzoapyrene, Trifluralin, Aldrin, Dieldrin, Propachlor	

Watershed Characterization Studies	Year: 2022-2023	Parameters
Watershed or Waterbody Name(s)	Big Raccoon Creek	**CHEMISTRY** monthly, Alkalinity (as CaCO3), Solids, Total Residue (TS), Solids, Nonfilterable Residue (TSS) Solids, Filterable Residue (TDS), Sulfate (Dissolved), Chloride, Hardness (as CaCO3), Nitrogen, as Ammonia, Nitrogen, Kjeldahl (TKN), Nitrogen, Nitrate-nitrite, Phosphorous, Total Organic Carbon (TOC), Chemical Oxygen Demand, Calcium, Magnesium **FIELD**: pH, DO, D.O saturation, Temperature, Turbidity, and Specific Conductance. ***E. coli*** Geometric Mean (5X sampling) complete, in addition to monthly samples during the recreational season. **Biological**: Fish, Macroinvertebrates, Habitat
Hydrologic Unit Code(s)	0512010815	
Laboratory Analytical Costs/Funding Source	IDEM Mobile *E. coli* Lab, IDEM Fish and Macroinvertebrate Lab for Specimen Identification Pace Analytical-Indy *E. coli* Macroinvertebrate Verification Fish Verification	
Fish Tissue Monitoring	**Year: 2023**	**Parameters**
Watershed or Waterbody Name(s)	Upper Wabash River Basin, Lake Michigan and West Boggs Lake (DNR request). 53 Sites	Percent Moisture, Percent Lipid, PCBs, Organochlorine-Pesticides, Cadmium, Selenium, Lead, Total Mercury, Methylmercury, Polychlorinated Biphenyl, and Per- and Polyfluoroalkyl substances
Hydrologic Unit Code(s)	05120104, 05120105, 05120106, 05120107, 05120102, 05120103, 05120101; Indiana waters of Lake Michigan and will coordinate with District Biologists for obtaining samples from lakes of interest.	
Laboratory Analytical Costs/Funding Source	Pace/Lab Account	

Toxic Algae Monitoring	Year: 2023	Parameters
Waterbody Name(s)	**Designated swimming beaches in the lakes at the following state owned parks or managed recreation areas:** Potato Creek, Pokagon (2 beaches), Chain-o-Lakes, Mississinewa, Salamonie, Ouabache, Summit Lake, Raccoon Lake (aka Cecil M. Harden Reservoir), Monroe (2 beaches), Hardy, Whitewater, Brookville (2 beaches), Deam Lake, Starve Hollow, Cagles Mill, Patoka Lake, Ferdinand Lake, Lincoln Lake, Ft. Harrison State Park Dog Park Lake	Cyanobacterial Identification and Cell Enumeration, Microcystin, Cylindrospermopsin, Anatoxin a, and Saxotoxin toxin analysis
Laboratory Analytical Costs/Funding Source	Pace/IDEM Algal Lab/Lab Account	

Performance Measure Monitoring	Year: 2023	Parameters
Watershed or Waterbody Name(s)	Black Creek, Pigeon Creek, Page Ditch, Iroquois River, Burnette Creek, Elliott Ditch, Rogers Ditch, Big Branch, Little Creek, Big Creek	**FIELD**: pH, DO, D.O. saturation, temperature, turbidity, and specific conductance. **Biological**: Fish, Macroinvertebrates, Habitat
Hydrologic Unit Code(s)	041000050104, 040500011001, 040500011105, 071200020405, 051201080202, 051201080104, 051201111511, 051201111504, 051201130706, 051201130709	
Laboratory Analytical Costs/Funding Source	IDEM Fish and Macroinvertebrate Lab for Specimen Identification	

Special Project	Year: 2023	Parameters
Stream Regional Monitoring Network Laboratory Analytical Costs/Funding Source	**3 Stream sites with USGS stream gages also sampled monthly by the IDEM Fixed Station Program:** Vernon Fk. Muscatatuck River @ CR 60 S (WEM070-0001,VF-38); Weather Station deployed on April 19, 2023 Blue River @ US 150 (OBS140-0004, BLW-57); Weather Station deployed on May 1, 2023 Tippecanoe River @ SR 18 (WTI150-0011, TR-9); Weather Station deployed on ? ISDH/106 for water chemistry IDEM Fish and Macroinvertebrate Lab for Specimen Identification	**CHEMISTRY:** Alkalinity, Hardness, Ammonia-N, Nitrate+Nitrite-N, Nitrogen-TKN, Phosphorous-Total, COD, TOC, Solids-Total, Solids-Suspended, Solids-Dissolved, Chloride, Sulfate, Arsenic (µg/l), Cadmium (µg/l), Chromium-Total (µg/l), Copper(µg/l), Iron (µg/l), Lead (µg/l), Nickel (µg/l), Zinc (µg/l), Turbidity, Dissolved Oxygen, D.O. Saturation, pH, Specific Conductance Water temperature (°C) year-round at 30-minute intervals or less*; Air temperature (°C) year-round at 30 minute intervals or less; Precipitation; Time series photos with Reconyx field cameras **Biological:** Fish, Macroinvertebrates, and Habitat *Sensors may be removed during winter months if freezing will result in damage to the equipment.

Special Project	Year: 2023	Parameters
Lake Monitoring	Lakes also sampled by the IU SPEA Clean Lakes Program: • Ferdinand State Forest Lake in Dubois Co. • Deam Lake in Clark Co. State Forest • Bixler Lake in Noble Co.; E. edge of Kendallville • Eagle Lake in Noble Co.; 2 mi N. of Kimmel • Smalley Lake in Noble Co.; 3.5 mi E. of Wilmot • Sand Lake in Noble Co.; Chain 'O Lakes State Park • Shipshewana Lake in LaGrange Co.; 1 mi W. of Shipshewana • Appleman Lake in LaGrange Co.; 2.5 mi N. of Elmira • Emma Lake in LaGrange Co.; S. edge of Emma • Center Lake in Kosciusko Co.; Warsaw • Summit Lake in Henry Co.; Summit Lake State Park • Westwood Park Reservoir in Henry Co.; 2.5 mi W. of New Castle	**Biological:** Fish, Macroinvertebrates, Macrophytes, and Habitat
Special Project	Year: 2023	Parameters
AutoSampler DRP Samples are going to IDOH Autosampler samples are going to Pace		**Chemical: DRP Samples will be collected weekly from April – October** **AutoSampler will collect daily composite samples from April-October**