

Ohio EPA

EHS Symposium

Cincinnati, OH

Mark Johnson, Ohio EPA
March 19, 2024



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H2Ohio

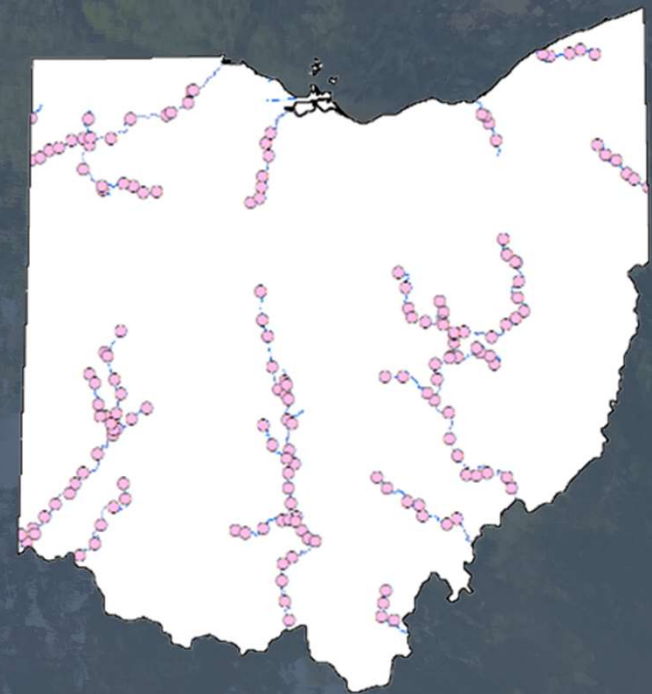
OHIO'S PLAN FOR CLEAN WATER

H2Ohio Rivers Initiative



Emerging contaminants assessment

- Ohio EPA contractors are collecting Fish tissue, Water Column, and Macroinvertebrate tissue samples for PFAS
- Sampling will re-start Spring 2024, completed Fall 2024
- 151 locations statewide, within our Large Rivers.



H2Ohio Rivers Initiative

Dam Removal/Habitat Restoration

- 2023 – \$3,500,000 Funded Troy Dam Removal and Habitat Restoration
- 2023 – \$1,500,000 Funded 2 Piqua Dam Removals

Future Projects?? Let us know!!



H2Ohio Rivers Initiative

Salt Equipment/Facility Upgrade Grants

- Applications closed January 31, 24
- Currently evaluating proposals
- > \$14,500,000 in request
- Awards anticipated Spring 2024



Rule Updates

- Water Quality Standards
- Permit To Install (PTI)
- NPDES
- Biosolids/Sewage Sludge
- Storm Water
- Credible Data
- More to come



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- Amendments to the 2023 Rule
- More Isolated Wetlands
 - Ohio Isolated Wetland Program (ORC 6111.02-6111.028)
- Deregulation of Ephemeral Streams
 - HB 175



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Wetland Category	Acres of Potential Wetland Impact	Public notice required?	Mandatory public hearing?	Review Period	Type of Permit
1 or 2	0.5 acres or less	No	No	30 days*	General Permit, Level 1
1	More than 0.5 acres	Yes	No	90 days*	Individual IWP, Level 2
2	More than 0.5 acres, up to 3 acres	Yes	No	90 days*	Individual IWP, Level 2
2	More than 3 acres	Yes	No	180 days*	Individual IWP, Level 3
3	Any impact	Yes	Yes	180 days*	Individual IWP, Level 3

Rulemaking to Incorporate Mitigation Guidance and Senate Bill 9

- July 21, 2024
- Wetland Water Quality Standards (OAC 3745-1-50 thru -54)
- 401 Rules (OAC 3745-32-01 through -04)
 - Stream Mitigation Rules
 - Ohio Stream Assessment Method (OSAM)



© TNC, November 3, 2022

Biosolids Rule Review

- Current rules: Ohio Administrative Code (OAC) 3745-40
 - Effective December 1, 2018
- Rules are reviewed every 5 years
- Early Stakeholder Outreach (ESO) ended on Nov. 29
- Currently drafting new rule language for Interested Party Review (IPR) this summer
- Get involved! <https://epa.ohio.gov/divisions-and-offices/surface-water/regulations>

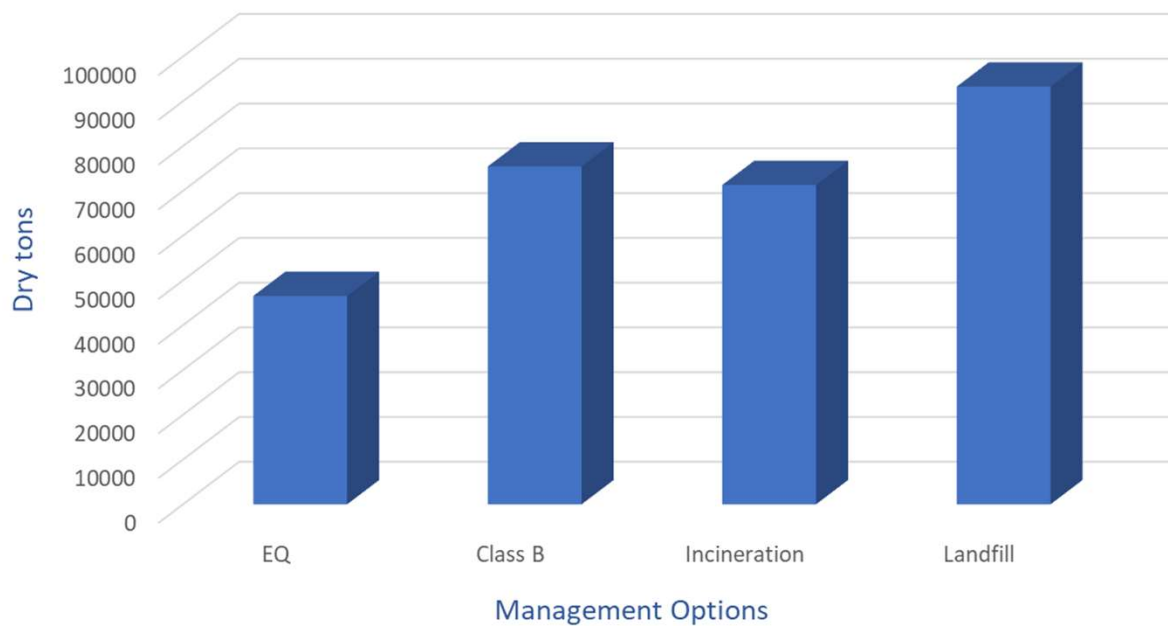




Ohio's Biosolids Program Goals

- Protect public health and the environment
- Encourage the beneficial reuse of biosolids
- Minimize the creation of nuisance odors

Sewage Sludge Management in Ohio - 2022



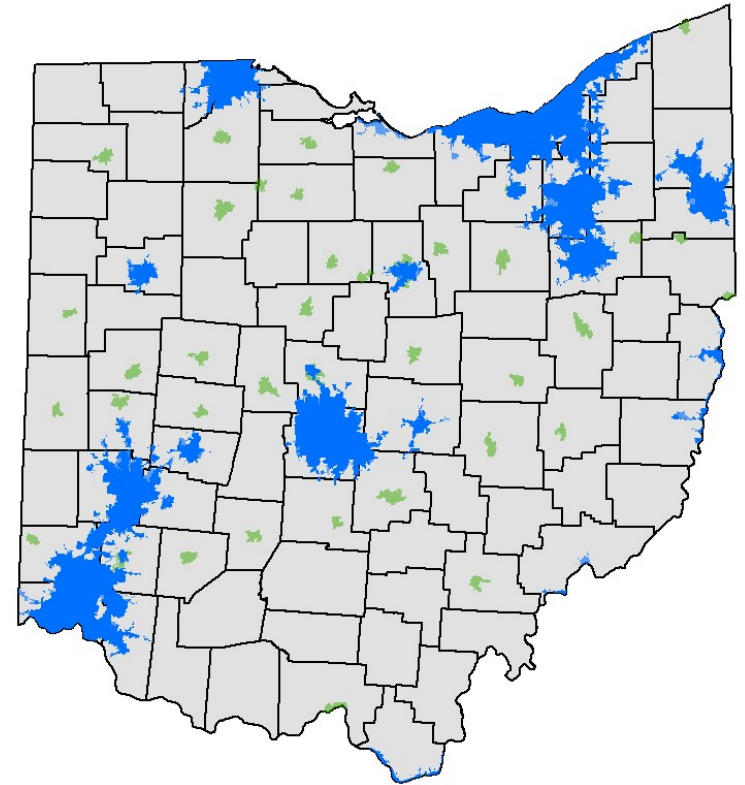
42% beneficial use
33% landfill
25% incineration



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NPDES MS4 Stormwater Program

- New regulated MS4 Map available:
<https://epa.ohio.gov/divisions-and-offices/surface-water/permitting/stormwater-program>
- New communities subject to the program will be contacted within next 2 months



EPA/State NPDES SNC National Compliance Initiative (NCI)

- **Primary Goal:** Reduce the national rate of NPDES Significant Non-Compliance (SNC) by **50% over five years** (FY2018 – FY2022).

National
SNC Rate



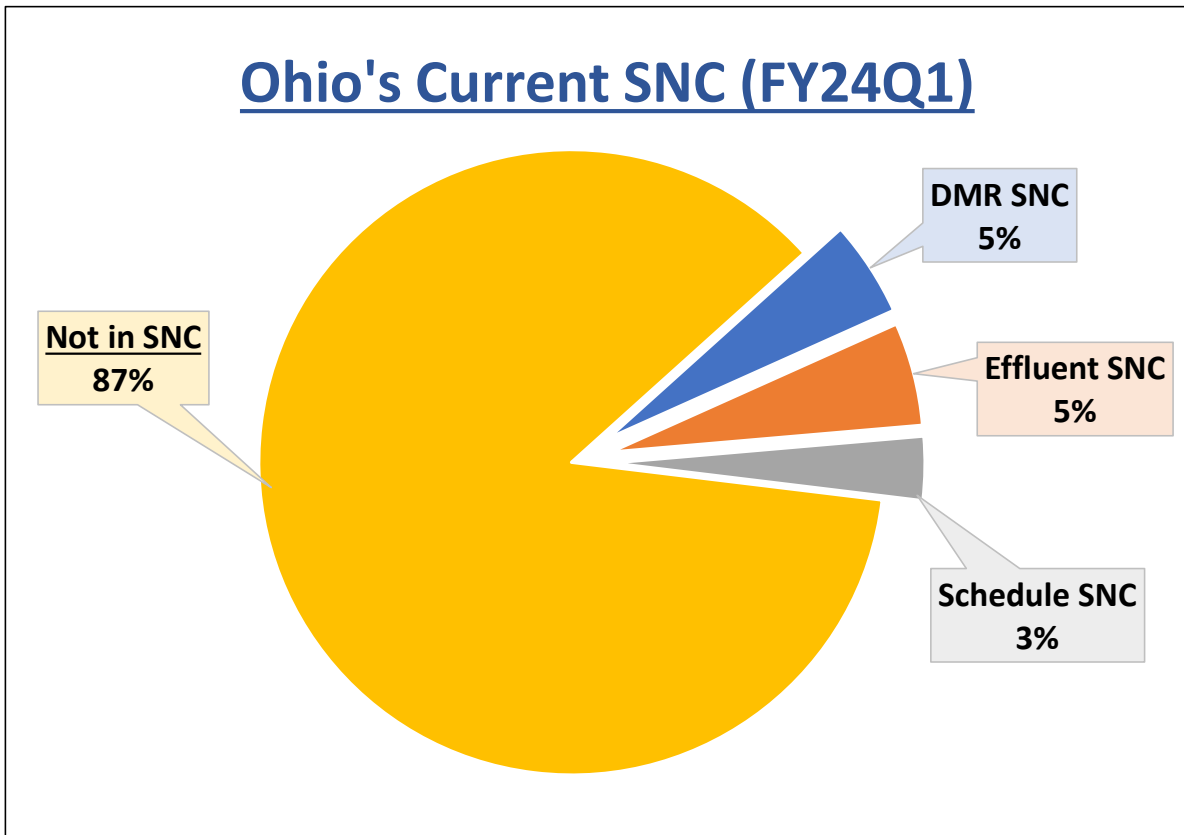
- Baseline = 20.3%
- Current = 10.4%

Ohio SNC Rate



- Baseline = 21.0%
- **Current = 13.6%**

Ohio's Current SNC (FY24Q1)



OH Current SNC Breakdown

Type of SNC	# of Facilities	%SNC
DMR SNC	157	5%
Effluent SNC	169	5%
Schedule SNC	104	3%
NOT in SNC	2,735	87%

Priority Projects – Region 5 Objections

- Ohio's NPDES universe includes **292 majors & 2,920 minors**
- Every year EPA, Region 5 selects around 10 permits to review in real time
- Euclid and Port Clinton were both on EPA's real time review list



Priority Projects – Region 5 Objections

- Ohio included a phosphorus limit of 1.0 mg/L in the permits for both Euclid and Port Clinton
- Specific objection from R5 for Euclid included a limit based on the facility achieving a phosphorus concentration of 0.007 mg/L, which is not technically feasible
- On February 29, 2024 Region 5 generally objected to the NPDES permit for Port Clinton, EPA has until April 24 to send a specific objection



Priority Projects – Euclid Objection Timeline

- US EPA Specific Objections to Euclid’s Proposed NPDES Permit Renewal
 - Received November 2, 2021
 - Hearing with R5 Administrator Shore was held June 7 & 8, 2022
 - Administrator Shore can withdraw the objection, modify it or uphold it
 - September 2023 Ohio EPA team met with Region 5 to negotiate a solution



Phosphorus Limits?

- No new initiatives on the immediate horizon to include new or lower phosphorus limits

Existing Permitting Strategy:

- New or lower phosphorus limits will be included in permits when there is non-attainment because of nutrients and point source reductions will result in meaningful improvement
- New or lower phosphorus limits will be included for new or expanding facilities when necessary to prevent degradation





Government Agencies Responsible for 208 Plans



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E-PLANS!

April 15, 2024!!

- Better customer service
- Faster review times
- Consistency statewide
- Transparency!



The screenshot shows the 'Plan Review' web application interface. At the top left is the 'hio' logo for the Ohio Environmental Protection Agency. The page title is 'Plan Review'. On the right side, there are navigation tabs for 'Projects', 'Settings', and 'Profile', along with a 'Sign Out' link. The main content area is divided into several sections:

- Start New Project:** Includes a 'Review Type' dropdown menu and a 'Select Review Type' dropdown menu, with an 'Add Project' button below.
- Divisions and Programs:** A list of various environmental programs and facilities, including:
 - Division of Materials and Waste Management (DMWM): Beneficial Use, Construction & Demolition Debris (C&DD) Landfills, Construction & Demolition Debris (C&DD) Processing.
 - Facilities: Industrial Manufacturing Waste (IMW), Municipal Solid Waste (MSW), Solid Waste Management Planning (SMWD).
 - Division of Surface Water (DSW): National Pollutant Elimination Discharge System (NPDES), Oil and Gas Storm Water, Surface Water Permit to Install.
 - Division of Environmental and Financial Assistance (DEFA): Water Pollution Control Loan Fund (WPCLF), Water Resource Restoration Sponsor Program (WRRSP), Water Supply Revolving Loan Account (WSRLA).
 - Division of Drinking and Ground Waters (DDAGW): Drinking Water, SWAP (Source Water Assessment and Protection).
- View:** A dropdown menu set to 'Within Last 6 Months'.
- Table:** A table with columns for Group, Identifier, Name, Create Date, Status, and Open. It contains three rows of data for plan submissions by Tony Nosko.

Group	Identifier	Name	Create Date	Status	Open
<None>	DSW-515	Tony Nosko	7/10/2023	Plan Submission	
<None>	DSW-507	Tony Nosko	5/25/2023	Plan Submission	
<None>	DSW-505	Tony Nosko	5/24/2023	Plan Submission	



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WWTP Regionalization Evaluation

WPCLF Loan Nominations

- *Evaluation of neighboring wastewater treatment plants and their existing capacities within a 10-mile radius of the edges of the existing collection system. If no neighboring treatment plants exist within 10 miles, provide the name of the closest WWTP beyond 10 miles and indicate the distance.*
- *Evaluation of potential package plant elimination with sewer extension and sewer extension to unsewered areas. These activities can benefit the local watershed by removing other sources of pollution while also increasing the rate payer base for the proposed project.*
- *Documentation of outreach to neighboring utilities including meeting dates, public forums, and technical details for a potential regionalization project for WWTP expansion or replacement and how those needs align with the nominated project.*
- *Evaluation of potential shared cost savings of operator employment, billing and collections, and reduced O&M costs for running one potential facility versus two.*
- *A proposed rate structure supporting loan repayment.*



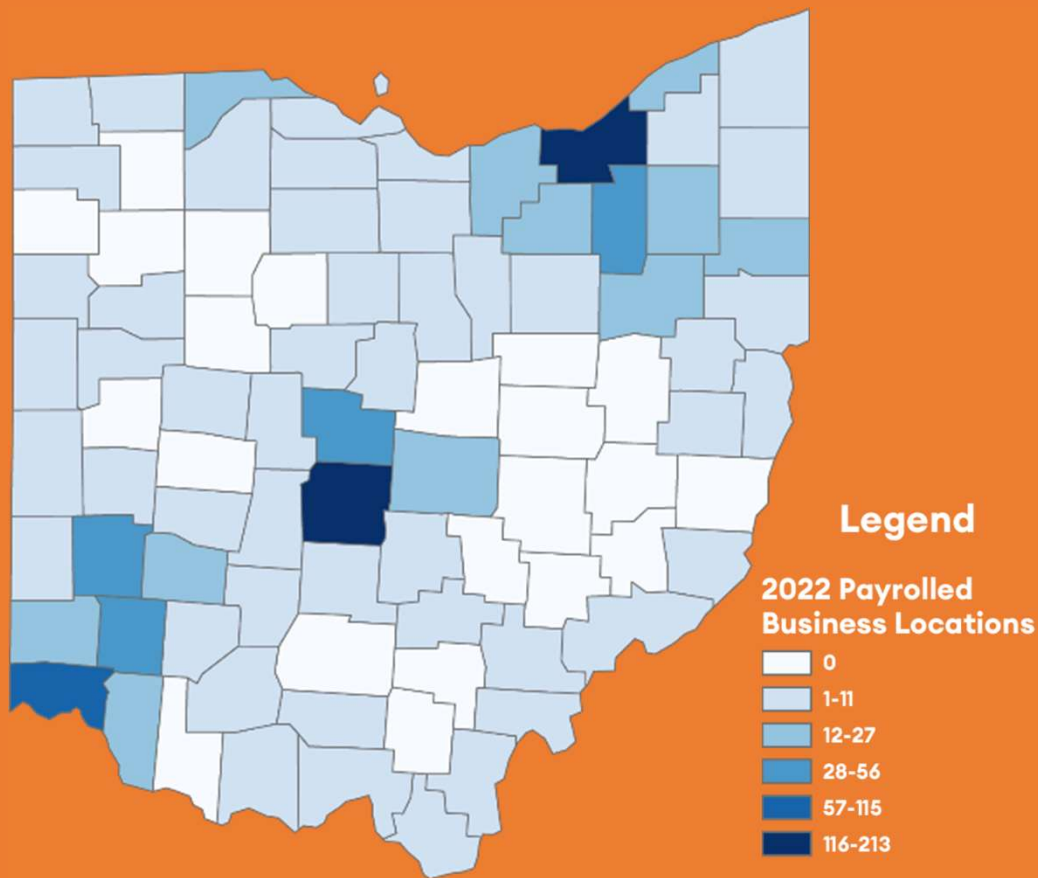
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PFAS Action Plan 2.0



- **MCL Rule Development**
- **Dupont / Washington Works Settlement**
- **H2Ohio Rivers**
- **Dayton Sewershed Source Investigation**
- **Statewide Source Investigation**
- **AFFF - Fire Fighting Foam - Take Back**
- **Fish Consumption Advisory Methodology**
- **Risk Communications**
- **Funding, etc**

Dramatic Growth in the Data Center Industry over the Past Decade



3X Data Center Growth

In 2011, Ohio had 379 data center locations -

Today, there are over 1,100



Source: Lightcast, 2022 Payrolled Business Locations in NAICS 51-8210: Data Processing, Hosting, and Related Services
This document is not a public record and its content should not be reprinted in any other document. Ohio Revised Code 149.43(A)(1)(bb) and 187.04(C)(1) and (2)



WWTP-Treated Effluent as Process Water







Ohio Water
Development Authority

Central Ohio 15-County Water Study

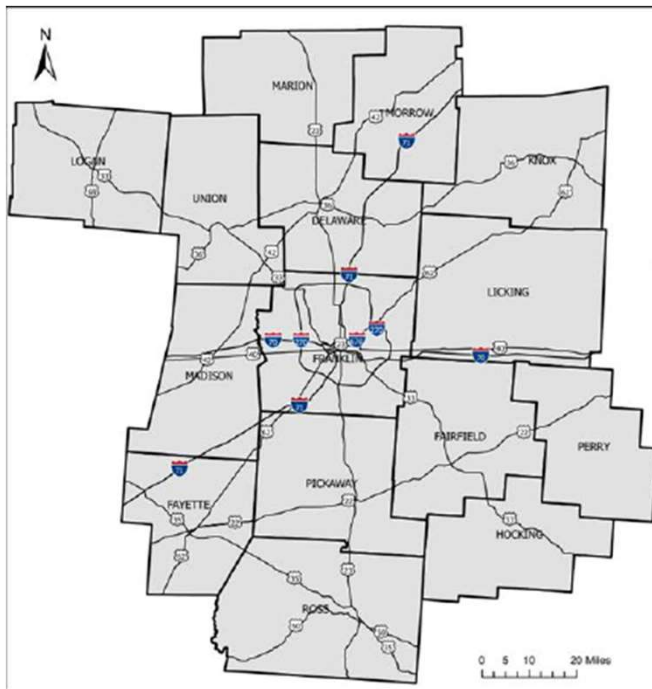


**Department of
Natural Resources**



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Request for Proposals - Scope



Comprehensive Water Study

- Current availability
- Current demand
- Projected future demand 2030, 2040, & 2050
- Gap analysis
- Regionalization recommendations
- Water reuse opportunities
- Siting locations for new mega water users

Thank You



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Follow Ohio EPA on





Office of Water Quality (OWQ) 2024 Overview

Martha Clark Mettler
Assistant Commissioner



Paul Higginbotham
Deputy Assistant Commissioner



Indiana Department of Environmental Management

Protecting Hoosiers and Our Environment Since 1986



OWQ Leadership Team



OWQ Priorities



Water Quality Standards (WQS) 2024 Initiatives

- Complete next steps to revise downstate WQS methodologies
- Prepare water quality standards review information for public comment
- Review numeric nutrient criteria needs/options
 - Analyses to support development of numeric nutrient thresholds for Indiana streams under the Nutrient Scientific Technical Exchange Partnership Support (N-STEPS)
- Evaluate U.S. EPA criteria recommendations:
 - Ammonia; recreational use; Aluminum; neonicotinoids
 - It is important to understand the implementation challenges associated with each
- Track U.S. EPA draft criteria development work:
 - PFAS – ambient criteria and ELGs



Compliance & Enforcement Branch

2024 Initiatives

- Implement and conduct outreach on the new Wastewater Operator Certification Rule and Non-rule Policy Document
- Continue the development of an IDEM provided examination preparation course for prospective wastewater operators
- Complete all inspection commitments and deliver inspection reports within seven days, focusing more frequent compliance visits at large industrial facilities
- Continue to maintain Significant Noncompliance (SNC) rates at NPDES permitted facilities below 9%
- Begin the .NeT Overflow Reporting onboarding process with U.S. EPA
- Continue the training initiative on the ICIS and NeTDMR systems
- Develop a more defined process for escalation of enforcement matters
- Provide additional guidance for enforcement case manager on conducting settlement conferences



Drinking Water Branch

2024 Initiatives

Goal: Ninety-nine percent (99%) of the population served by Community Public Water Systems (PWSs) in Indiana receive water that meets all health standards

- Track and respond to proposed changes in federal statute/rule regarding lead and PFAS
- Prepare systems for lead service line inventory requirements – due October 16th, 2024
- Improve the Drinking Water Viewer website to make it more user-friendly
- Complete sanitary surveys on time at all PWSs - average turnaround time is two days
- Streamline our monthly report of operations (MROs) submission process
- Update permit forms - full construction permit application and NOI application
- Continue source water protection (SWP) efforts
- Continue PFAS sampling project at all CWSs – Phases 1 (medium), 2 (small) , and 3 (large) have all been completed. Working on Phase 4 (surface water sampling)
- Review and update water operator exam questions and study guides to help improve operator exam scores
- Promote cybersecurity best-practices and voluntary assessments at PWSs



Permits Branch

2024 Initiatives

- Continue training staff in NPDES permit writing/stream modeling and provide cross-training and mentorship opportunities
- Develop SOPs and work aides to reduce bottlenecks and achieve better consistency and continuity across the Branch
- Research/assess emerging wastewater treatment and collection technologies
- Continue external workgroups and combined sewer overflow (CSO) program development focused on post-long term control plan (LTCP) implementation.
- Integrate Municipal NPDES Permit writers into CSO program activities.
- Continue work on updates/rulemaking for NPDES applications as required to comply with U.S. EPA's NPDES Application and Program Updates Rule
- Complete revisions to existing Onsite Residential Discharging Disposal System NPDES master general permit to expand applicability State-wide
- Continue development of a new administrative NPDES master general permit (MGP) for coal mining and abandoned mine land (AML) activities to replace the existing, out-of-date permit-by-rule



Surface Water & Operations Branch 2024 Initiatives

- Stormwater
 - Assist with transition of coverage to new general permits for construction stormwater and MS4s
 - Update the online permit submittal system (nViro)
 - Finalize updates to the Industrial Stormwater General Permit
 - Do outreach and education on content and implementation of the new Industrial Stormwater General Permit
- Wetlands
 - Interpret and implement changes to the definition of Waters of the U.S.
 - Develop and implement a general permit for minimal impacts to non WOTUS wetlands
 - Continue the process for developing online application submittals
 - Encourage the use of the Indiana Waterways [?] Inquiry Request tool found at <https://www.in.gov/waterways/>





Watershed Assessment & Planning Branch

2024 Initiatives

- Distribute \$3 million in nonpoint source grant funds and manage 59 projects
- Complete work on the Big Raccoon TMDL
- Encourage use of online QAPP tool
- Update the Indiana Nonpoint Source Management Plan
- Complete the following surface water monitoring projects:
 - Fixed station at 165 sites across the state;
 - Probabilistic monitoring in the Upper Wabash basin;
 - Fish tissue contaminant monitoring in Lower Wabash and Upper Illinois River basins;
 - Watershed characterization monitoring in Indian Creek White River basin;
 - Cyanobacteria monitoring at 18 DNR lakes with 21 beaches and the Ft. Harrison dog park;
 - Reference site monitoring in watersheds across the state; and
 - Performance measures monitoring in targeted watersheds.
- Develop coolwater indices of biotic integrity for macroinvertebrates and fish
- Monitor three sites for US EPA's Stream Regional Monitoring Network
- Participate in Blue River Indian Creek project in the Ohio River basin to support the reintroduction of the state endangered Eastern Hellbender
- Analyze neonicotinoids at a subset of Fixed Station sites



Contact Information

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Kentucky Division of Water 2024 Update

Melanie Arnold
Environmental Scientist Consultant

Water Quality Standards

Triennial Review

- Anticipating public engagement/meeting in 2024
- Evaluating
 - Human health criteria updates
 - Updates for Outstanding State Resource Waters
 - Clerical updates
 - Evaluation still ongoing

Water Quality Assessments & TMDLs

Clean Water Act 305(b) 303(d) Reporting

- 303(d) Public Notice in 2024
 - Updates to the list of impaired waters requiring a TMDL (Total Maximum Daily Load)
- 303(d)/305(b) Integrated Report
- Resources
 - Water Health Portal:
<https://watermaps.ky.gov/WaterHealthPortal>
 - 2022 Integrated Report Hub Site:
<https://integrated-report-site-kygis.hub.arcgis.com/>

TMDL

- Prioritization framework

KPDES Permitting

Updates

- Effluent Guidelines: Meat and Poultry Products 2024 Proposed Rule
- Wastewater treatment plant optimization program
 - [Kentucky Nutrient Reduction Strategy](#)
- Migrating from paper applications to eForms for individual permit applications
- 2022 EPA Memo:
[Addressing PFAS Discharges in NPDES Permits and Through the Pretreatment Program and Monitoring Programs](#)

PFAS

Regulatory

- Safe Drinking Water Act: Maximum Contaminant Levels
 - PFOA, PFOS, Mixture: PFHxS, PFNA, PFBS, HFPO-DA (Gen X chemicals)
- Clean Water Act: Water Quality Standards
 - Aquatic Life Criteria for PFOA and PFOS
 - Human Health Criteria
- Clean Water Act: Effluent Limitation Guidelines
 - Organic Chemicals, Plastics & Synthetic Fibers Category
 - Proposed Effluent Limit Guidelines for Metal Finishing and Electroplating Categories
- CERCLA Hazardous Substances
- Resource Conservation Recovery Act
- State Legislation

PFAS

Regulatory

Clean Water Act: Water Quality Standards

- Aquatic Life Criteria for PFOA and PFOS

Table 1. Draft Recommended Freshwater Aquatic Life Water Quality Criteria for PFOA and PFOS

Criteria Component	Acute Water Column (CMC) ¹	Chronic Water Column (CCC) ²	Invertebrate Whole-Body	Fish Whole-Body	Fish Muscle
PFOA Magnitude	49 mg/L	0.094 mg/L	1.11 mg/kg ww	6.10 mg/kg ww	0.125 mg/kg ww
PFOS Magnitude	3.0 mg/L	0.0084 mg/L	0.937 mg/kg ww	6.75 mg/kg ww	2.91 mg/kg ww
Duration	1-hour average	4-day average	Instantaneous ³		
Frequency	Not to be exceeded more than once in three years, on average	Not to be exceeded more than once in three years, on average	Not to be exceeded more than once in ten years, on average		

¹ Criterion Maximum Concentration.

² Criterion Continuous Concentration.

³ Tissue data provide instantaneous point measurements that reflect integrative accumulation of PFOA or PFOS over time and space in aquatic life population(s) at a given site.

<https://www.epa.gov/system/files/documents/2022-04/pfoa-pfos-draft-factsheet-2022.pdf>

- Human Health Criteria

PFAS

Regulatory

National Primary Drinking Water Regulations

- Final rule in 2024

Compound	Proposed MCLG	Proposed MCL (enforceable levels)
PFOA	0 ppt*	4.0 ppt*
PFOS	0 ppt*	4.0 ppt*
PFNA		
PFHxS	1.0 (unitless)	1.0 (unitless)
PFBS	Hazard Index	Hazard Index
HFPO-DA (commonly referred to as GenX Chemicals)		

The Hazard Index is a tool used to evaluate potential health risks from exposure to chemical mixtures.

*ppt = parts per trillion (also expressed as ng/L)

https://www.epa.gov/system/files/documents/2023-04/PFAS%20NPDWR%20Public%20Presentation_Full%20Technical%20Presentation_3.29.23_Final.pdf

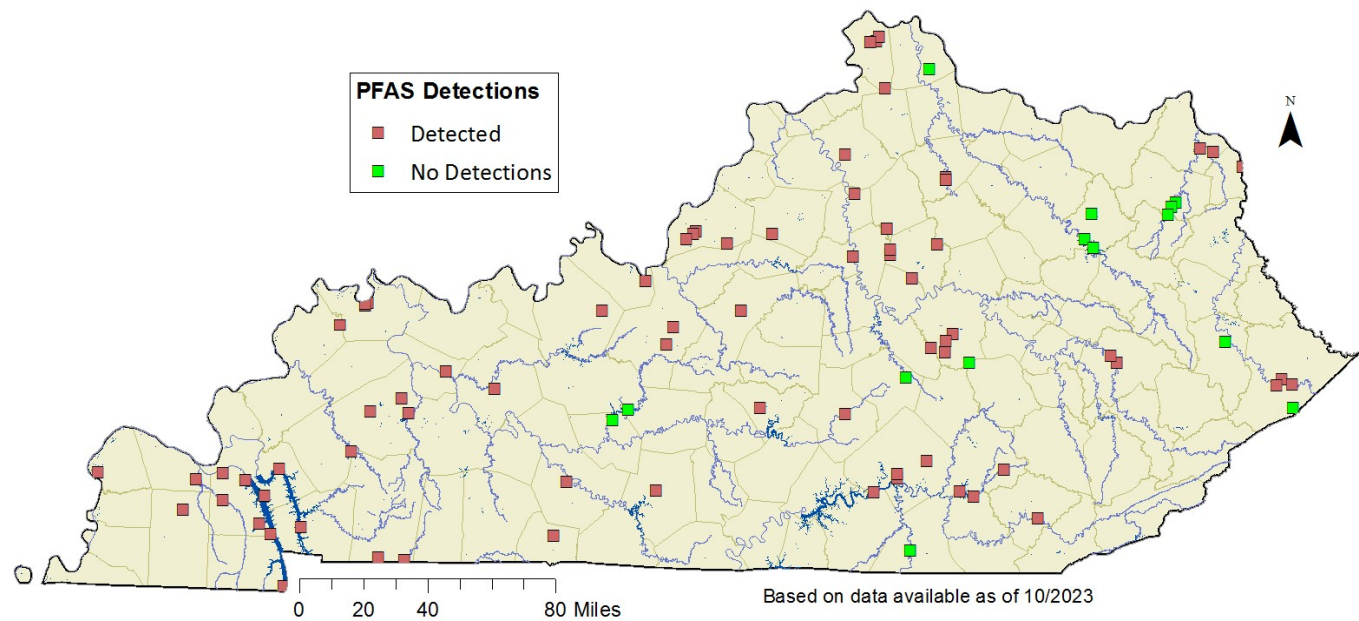
PFAS

PFAS Sampling

- Drinking Water
- Surface Waters
- Groundwater
- Fish Tissue
- Biosolids
- Former release sites
 - Dry cleaners
 - Orphan landfills
 - Plating operations

PFAS

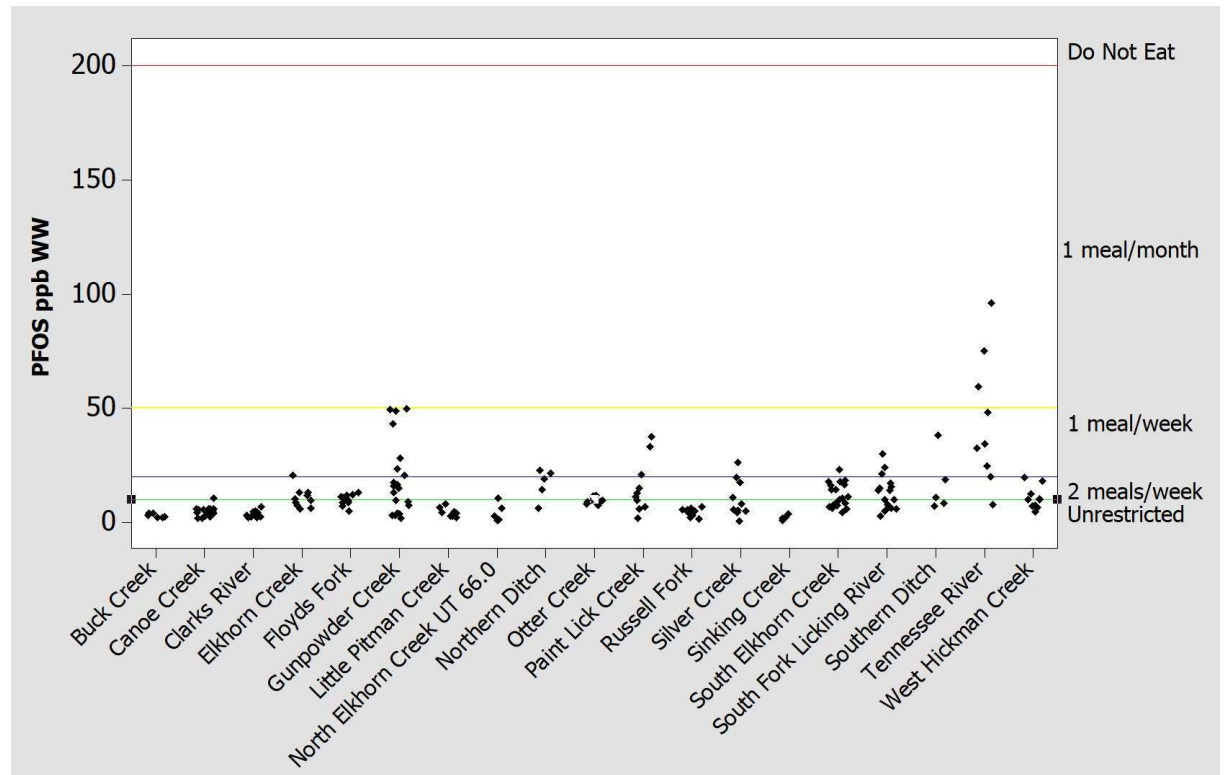
PFAS Sampling: Surface Water Results



(Data from one-time sampling events primarily)

PFAS

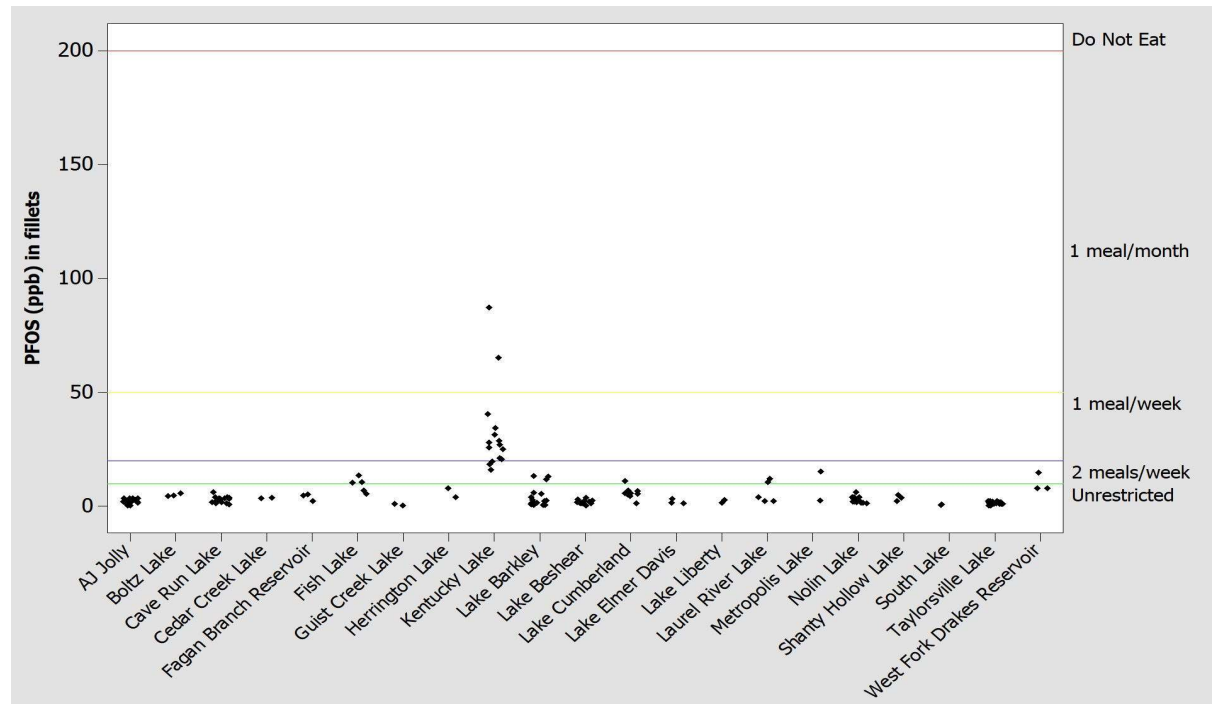
PFAS Sampling: Fish Tissue Results



Great Lakes Consortium PFOS consumption thresholds added for reference
<https://www.health.state.mn.us/communities/environment/fish/docs/consortium/bestpracticepfos.pdf>

PFAS

PFAS Sampling: Fish Tissue Results



Great Lakes Consortium PFOS consumption thresholds added for reference

<https://www.health.state.mn.us/communities/environment/fish/docs/consortium/bestpracticepfos.pdf>

More information: <https://eec.ky.gov/PFAS>

PFAS

Outreach

Drinking Water

- Proposed National Primary Drinking Water Regulations
- Treatment options and source water characterization
- Communication with the public/customers

Wastewater Treatment Plants

- Sampling assistance

Bipartisan Infrastructure Law Grant Funding

Clean Water Act and Safe Drinking Water Act
Infrastructure Funding



Thank you!

Melanie Arnold

Environmental Scientist Consultant

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Kyle Girouard

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A litigation attorney in Dickinson Wright's Lexington office, Kyle Girouard focuses his practice on environmental law with a particular emphasis on mining, oil, gas, and water law. Kyle comes to the firm from the Kentucky Energy & Environmental Cabinet where he provided legal counsel on complex, technical cases related to natural resources, air, waste, and water regulation. Prior to his work at the Cabinet, Kyle gained trial experience as an insurance defense attorney.

In his spare time, Kyle enjoys camping, woodworking, volunteering, and relaxing with his wife and two dogs.

Prominent Assignments

- Mark Moody v. State Farm Mutual Automobile Insurance Company, 21-CI-00070, (Woodford County Circuit Court, September 28, 2022).

Areas Of Practice

- Mining, Oil, and Gas
- Site Remediation
- Wetlands and Water Law
- Commercial & Business Litigation
- Environmental Litigation

Education & Credentials

Education

Bar Admission

WWW.DICKINSONWRIGHT.COM

Kent State University

Kentucky

B.A.

- *Cum Laude*

University of Kentucky College of Law

J.D.

- Kentucky Law Journal, Notes Editor
- Award for Best Source and Cite

Professional Involvement

- Kentucky Bar Association

Court Admissions

- United States District Court for the Eastern District of Kentucky
- United States District Court for the Western District of Kentucky
- The United States Court of Appeals for the Sixth Circuit

Biographical Information



Mark S. Johnson, Jr.
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Mark Johnson was appointed Chief, Division of Surface Water in August 2023.

Johnson joined Ohio EPA in 2012 and has worked in the Division of Surface Water, Division of Drinking and Ground Waters, and Division of Environmental Response and Revitalization. Johnson has years of experience in oversight of staff, environmental regulations, environmental enforcement, environmental remediation, Brownfield redevelopment, and ecological restoration.

Prior to his appointment as Chief, Division of Surface Water, Johnson served as the Assistant Director since August 2022 and prior to that he served as the Deputy Director of Business and Regulatory Affairs for Ohio EPA. As deputy director for business and regulatory affairs, Johnson was the primary contact for regulated entities to help coordinate permitting activities within the Agency, particularly for complex projects requiring multiple permits.

Johnson graduated from Kent State University with a Bachelor of Science degree in Conservation Biology.



Paul Higginbotham, Deputy Assistant Commissioner
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Degree: Bachelor of Arts in Biology, with a minor in Criminal Justice, from Anderson University.

Experience: Paul has been with IDEM since 1992. He was Branch Chief of the Permits Branch in the Office of Water Quality for nine years and also served as the Solid Waste–Underground Storage Tank Enforcement Section Chief in the Office of Land Quality.

Biographical Information

Melanie Arnold, Environmental Scientist Consultant
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Melanie Arnold is an Environmental Scientist Consultant in the Director's Office at the Kentucky Division of Water. She is responsible for supporting the implementation of the Kentucky Department for Environmental Protection's PFAS strategy within the Division, as well as working on other water quality priorities. Over the past eleven years with the Division she has been responsible for overseeing surface water monitoring, water quality assessments, water quality standards, and TMDL development.