



State Fiscal Year 2016

Annual Report



July 2016

Message from the Director

Since 2011, the State of Ohio has invested more than \$3.6 billion to improve water quality throughout the state by addressing nutrient runoff. These funds have been directed toward improving drinking water and wastewater facilities, monitoring water quality, planting cover crops, recycling dredge material, installing controlled drainage systems on fields and fixing faulty septic systems.

Governor Kasich has referred to Lake Erie as our crown jewel, and his administration has continually demonstrated commitment to improving the water quality of our Great Lake.

Improving Lake Erie is not a quick fix and the science is evolving. We don't have time to wait until all the science is in; we need to take action. And we are doing just that. I often compare this to building an airplane as we're taking off down the runway. It also takes collaboration with our state partners at the Ohio Department of Agriculture and Ohio Department of Natural Resources, as well as other states, U.S. EPA and Canada.

The adaptive management process is central to addressing nutrients. This means that water quality monitoring, sampling and nutrient management practices and processes will be developed, evaluated and adjusted as circumstances change in order to meet the state's goals.

At Ohio EPA, we focus on protecting public health and the environment. We spend a great deal of time monitoring our air, land and water to ensure environmental standards are met. In addition, we process high-priority, complex permits for new facilities or major expansions to retain and support Ohio businesses.

Ohio EPA continues to provide our customers with access to technical and financial resources that will help them achieve and maintain compliance and create new jobs and economic growth opportunities for Ohioans. We are always looking for ways to improve internally and to work more efficiently and effectively. Building on the achievements described in this annual report, we will continue to look for creative solutions to the challenges on the horizon.



A handwritten signature in black ink that reads "Craig W. Butler". The signature is written in a cursive, flowing style.

Craig W. Butler
Director

Innovation, Development and Compliance

Ensuring Compliance and Improving Customer Service

The Division of Environmental and Financial Assistance (DEFA) helped connect approximately 4,400 Ohio businesses and other external customers with compliance, pollution prevention and funding resources, conducted almost 200 site visits, distributed more than 3,400 publications and developed 15 new publications to help companies identify ways to prevent pollution and comply with environmental requirements. The division also conducted 52 presentations and training events and nine webinars, reaching almost 2,400 individuals.

Ohio EPA's Encouraging Environmental Excellence (E3) Program recognizes an organization's exceptional achievements in environmental stewardship. Any business, industry, trade association, professional organization or local government of Ohio can be recognized for their commitment to environmental excellence. The program has a three-level approach to provide recognition to Ohio organizations completing environmentally beneficial activities and escalates to higher levels of recognition for those who exceed regulatory requirements or commit to future environmental stewardship efforts. In SFY16, the program gained 16 Gold Level, eight Silver Level and 13 Achievement Level awardees.

In SFY16, the Special Investigations Unit conducted 137 investigations across the state, obtaining 25 convictions resulting in 24 felony counts and 20 misdemeanor counts. These convictions totaled approximately \$424,000 in fines and restitution; 30 days of jail time; 34 years of probation and 1,829 hours of community service.

Increasing Efficiency and Developing New Leaders

Ohio EPA uses the principles and methodology of Lean Six Sigma as a model for continuous process improvement. During SFY16, the Agency conducted 10 process improvement initiatives. The Agency continues to use these principles to evaluate and improve existing processes, implement change and maintain improvements to ensure current processes are as efficient as possible.

The Division of Surface Water (DSW) formed workgroups to develop recommendations for improving the current Total Maximum Daily Load (TMDL) process. The effort has three tiers: working toward a legislative change that would set up a new process to issue TMDLs as a final action of the director; streamlining the reports and current TMDL process to reduce length and revise report templates to improve consistency and predictability; and developing alternative approaches for certain pollutants that would better answer emerging questions and potentially save time and resources to develop the TMDL.

In January 2016, a new six-month leadership development program called Developing Excellent Agency Leaders was introduced to Ohio EPA employees. This program was designed to help managers and staff cultivate their leadership and management abilities. Training topics, which were identified from an Agency-wide needs assessment, focus on communications: including listening skills, interpersonal communication, coaching and holding difficult conversations; building trust; managing generational differences; team building; conducting effective meetings; change management; and project management.

Leveraging Technology

Working with the Office of Information Technology Services (ITS), the Division of Drinking and Ground Waters (DDAGW) implemented an electronic application and fee payment system for all operator certification examination and contact hour course applications. The system will increase efficiency significantly due to the reduced number of paper checks processed. The system also allows operators to renew their certifications electronically. New rule requirements being proposed in SFY17 require the use of the electronic renewal option. The system automatically conducts reviews, reducing the amount of staff time spent reviewing renewal applications.

In October 2015, DSW launched STREAMS (Surface Water Tracking, Reporting and Electronic Application Management System) — a one-stop shop for online Notice of Intent (NOI) application submissions to facilities and sites that want to be covered under one of Ohio's 17 general permits. Implementation and use of the STREAMS service has reduced the time it takes to issue a coverage letter from 11 to three business days. Adoption of the service has grown, and now more than 20 percent of NOI applications are submitted through the online service.

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As of January 2016, municipal National Pollutant Discharge Elimination System (NPDES) permit holders are able to electronically submit their annual sludge report through STREAMS. The online biosolid reporting service allows facilities to review and potentially amend sludge-focused data submitted throughout the year through the electronic Discharge Monitoring Reporting (eDMR) service. Annual fees are automatically calculated based on type and volume of sludge removed from the facility, a revenue is created and the invoice is instantly emailed to the applicant. Using the ePay service, the facility can submit their fee payment and close out their annual sludge report permit obligations.

In SFY16, 98.5 percent of the annual sludge reports were received electronically through this system. The built-in validation and ability to draw from existing Agency data systems reduces the burden on the facility to submit accurate hand-calculated data and on Agency staff to process and handle corrections after submission. It is estimated that by eliminating the manual entry of these data elements, the division realized a savings of 300 work-hours.

Statewide Sample Data Sharing

In the past year, DSW has made significant progress importing and approving legacy chemistry data into the Ecological Assessment and Analysis Application (EA3). Once data is imported, water quality staff are responsible for reviewing and approving collected samples. Approved data is available for reports and can be shared with stakeholders. This year, DSW staff imported 27,461 samples and approved 17,881. Since the chemistry module of EA3 came online in 2013, 64,735 chemistry samples have been imported and 54,526 of those samples have been approved.

Balancing the Environment and Business

Ohio's oil and gas industry continues to grow. In northeastern Ohio, the Agency has been very active working on numerous related projects. The Agency has worked with the industry on the permitting and construction of gas processing facilities, gas pipelines and compressor stations to move product to market. In addition, the ready availability of natural gas has resulted in power plant conversions from coal to natural gas, as well as the permitting of the construction of new energy plants that utilize natural gas-fired combustion turbines.

Budget Review and Adoption

House Bill 512 – Ohio EPA Lead Mid-Biennium Review

House Bill 512, legislation resulting from Governor Kasich's Mid-Biennium Budget Review, will take effect on Sept. 8, 2016 and create new state standards to expedite public notice of lead contamination in drinking water and provide financial assistance to communities and schools to address lead in their drinking water. Some of the reforms outlined in House Bill 512 include:

- Public water systems must notify the volunteer homeowners who have their water sampled of their test results within two business days (the current requirement is 30 days).
- If the federal action level for lead is exceeded, public water systems are required to complete a system-wide notification within two business days and then complete a more in-depth public education in 30 days (the current requirement is 60 days).
- Ohio EPA, through the drinking water revolving loan fund program, will provide funds to conduct corrosion control studies and identify lead service lines. In addition, the loan funds can be used to replace lead service lines and fund capital infrastructure improvement projects at water treatment plants.
- Ohio Public Works Commission through the district Public Works Integrating Committees will offer grants and loan assistance to communities to replace lead service lines that pose a risk to water quality.
- Updates the Ohio EPA revolving loan programs with the changes to the Federal Water Resources Reform and Development Act. These changes will help counties and municipalities by extending the loan repayment terms from 20 years to 45 years and it will allow communities to structure their repayments unequally to help solve cash flow problems.

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[House Bill 390 – Funding for Lead Plumbing Fixture Replacement Assistance Grant Program](#)

House Bill 390, sponsored by Representative Tim Schaffer and Representative Wes Rutherford, was passed by the 131st General Assembly, signed by Governor Kasich, and becomes effective Sept. 27, 2016. House Bill 390 contained the appropriation language to provide financial assistance to schools to fight lead by authorizing the:

- Ohio Water Development Authority to have funds available for public schools to identify sources of lead in drinking water from outdated, lead-based water service fixtures;
- Ohio Facilities Construction Commission to have funds available for private schools to identify sources of lead and provide the funding to public and private schools to replace the outdated water fountains and water service fixtures.

Air

Ohio EPA regulates more than 15,150 facilities and 74,000 air pollution sources. During SFY16, the Division of Air Pollution Control (DAPC) issued more than 2,400 permitting actions and 1,150 permit-by-rule authorizations.

Improving Efficiency

Ohio EPA continues to streamline and increase the efficiency of the air permit process for all types of applicants. As an example, the Agency finalized rules that: 1) exempted “insignificant” operations from permitting obligations as they are too small to have an adverse effect on air quality; 2) enhanced the permit-by-rule program; and 3) updated general permits, providing clarity and predictability to entities seeking permits. The Agency also continues significant streamlining of air permit processing to support Ohio’s oil and gas industry expansion. Across the state, permits were issued for 112 well sites, 56 compressor stations or similar facilities and nine gas processing-type facilities (fractionation facilities, condensate stabilization facilities and cryogenic gas processing facilities). At the same time, technical specialists continue to process complex permits for new and expanding facilities that retain and support Ohio businesses that include conditions that are protective of human health.

Ensuring Compliance with Asbestos Requirements

DEFA coordinated with the Ohio Department of Commerce to distribute information about the asbestos program to more than 300 building departments and 18,000 licensed contractors statewide. DEFA also conducted an asbestos webinar for more than 125 attendees, including contractors, businesses and consultants.

Attaining the 2008 Ozone Air Quality Standard

Ohio EPA operates one of the country’s most extensive air pollution monitoring networks, comprised of 264 ambient air monitors, including 48 ozone monitors. Based on air quality data collected through 2015, the state has met the 2008 ozone standard in the three urban areas of Columbus, Cincinnati and Cleveland metro areas, designated by U.S. EPA as not in attainment. Ohio EPA will develop maintenance plans and request redesignation status for these areas by August 2016.

Helping Ohioans Breathe Easier

Ohio EPA’s Clean Diesel School Bus grant program is celebrating the results of 10 years of grants to install pollution control equipment on school buses. During



Granville Local Schools Mechanic Joe Liff with one of the pre-heaters installed on 26 buses to reduce engine idling. Granville Transportation Superintendent Kim Clary says that, in the first year, they estimate saving 1,800 gallons of fuel that would have cost \$7,200, plus additional savings on electricity for not having to plug in the buses. “On a zero-degree day, we used to have to idle the buses more than three hours,” Clary said. “Now with the heaters, it is usually less than 30 minutes.” By circulating the antifreeze, the heaters also help heat the cabin and the windshield, which is a big plus to the district’s bus drivers.

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that time, more than \$8.5 million in grants was awarded to 176 school districts to retrofit 2,625 school buses with emission control equipment, retrofit 1,037 school buses with preheaters for idle reduction and replace 23 school buses with new clean diesel buses. Air quality improvements include the elimination of more than five tons of PM 2.5, 65 tons of carbon monoxide, 19 tons of hydrocarbons and 18 tons of nitrogen oxides.

These projects were funded from civil penalties collected by Ohio EPA for pollution violations, and grants to Ohio from U.S. EPA. Because there are few school buses still on the road that meet the age and remaining useful life eligibility requirements, the Clean Diesel School Bus program ended in December 2015. Ohio EPA will continue to fund a portion of the cost of replacement school buses through its Diesel Emission Reduction Grant (DERG) program. This year, the DERG program awarded 26 grants totaling just over \$15 million to install electric plug-ins at truck stops along two Ohio interstate highways, and to replace or retrofit pollution controls onto locomotives, tow boats, transit buses, school buses and trucks of all kinds.

Land

Mosquito Grants program

SFY16 is the first year for the Mosquito Control Grants program. The purpose of the program is to provide funding to health departments and related public entities for surveillance and application of mosquito control measures in support of the Ohio Department of Health's efforts to mitigate the potential for an outbreak of mosquito-borne viruses such as Zika, West Nile and La Cross Encephalitis. Collaborative efforts between health departments and other public entities were encouraged to stretch the grant dollars for the maximum benefit of the public.

Ohio EPA received spending authority to fund grants in April 2016, and the first grants were awarded in June 2016 — 18 health departments and municipalities received a total of \$253,252. Ohio EPA and the Ohio Department of Health held an event in Warren, Ohio on June 16 to highlight the awarding of the grants and the collaborative effort between the Trumbull County Combined Health District, the City of Cortland, the City of Warren, the City of Newton Falls, Bazetta Township, Champion Township and Howland Township.

Materials Management Advisory Council

Ohio House Bill 64 (SFY16–17 budget) established the new Materials Management Advisory Council to provide input to the director regarding waste and recycling issues. The council is a merger of the former Solid Waste Advisory Council, established in 1989, and the Recycling and Litter Prevention Advisory Council, established in 1994. The new 13-member council takes on the role of the two previous councils, primarily to review and update the State Solid Waste Management Plan and to establish eligibility for the grant programs. The council is also tasked with developing an annual report for the General Assembly, answering questions posed by the director, and fostering new relationships and partnerships. The council held its inaugural meeting on April 18, 2016 and will meet bi-monthly.



From left, Division of Materials and Waste Management Chief Terrie TerMeer, Adam Cummins, Holly Hillyer, Director Craig W. Butler, Alison Shockley and Northeast District Office Chief Kurt Princic at the June 16, 2016 award ceremony.

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Supporting Litter Prevention, Recycling and Market Development for Recycled Materials

During SFY16, Ohio EPA awarded approximately \$4 million in grants to support litter prevention, recycling and marketing development for recycled materials, including: 36 community development grants; 42 litter management grants; eight market development grants; and six special assistance grants. Activities and projects supported through these grant funds include community recycling projects, material recovery facilities, litter collection/clean-up projects, scrap tire collection, organics recycling, equipment purchases to increase glass, plastics and construction/demolition debris recycling and recycling/litter prevention related outreach and education activities.

Scrap Tire Cleanup

Scrap tires, if not properly managed, may become a breeding ground for mosquitoes. In 2014, the Logan County Health Department discovered more than 100,000 scrap tires on a property near Huntsville, Ohio. Neither the owner of the property nor the person responsible for placement of the tires had received proper authorization from Ohio EPA to operate a scrap tire facility. In 2015, Ohio EPA took action to compel first the operator, and then the owner to remove the tires from the property. In April 2016 when the parties still had not responded, Ohio EPA mobilized its contractor to remove the tires and send them for proper management off-site. The project, funded from the State's Scrap Tire Remediation Fund at a cost of just under \$310,000, was completed in early June. A lien will be placed on the property as a cost-recovery mechanism.

Through its recycling grant funds, DEFA helped sponsor and participated in a statewide scrap tire summit with a variety of stakeholders, including scrap tire recyclers, local law enforcement, health departments, solid waste management districts, tire retailers, tire wholesalers, green builders and rubber manufacturers to discuss strategies to reduce illegal dumping and increase scrap tire recycling.

Contaminated Site Closure and Corrective Action Program

The Division of Environmental Response and Revitalization (DERR) oversees the investigation and cleanup of contaminated sites that are subject to the Resource Conservation and Recovery Act (RCRA) program and provides oversight for all related remediation activities. Program responsibilities center on facility-wide corrective actions and the closure of land-based units that stored, treated or disposed of hazardous wastes.

In SFY16, DERR approved seven closure plans, received one previously approved plan for amendment, approved one amended plan and received seven certifications of closure. U.S. EPA has set a goal that 95 percent of facilities with RCRA corrective action obligations must achieve a remedy construction complete by the year 2020. Ohio EPA is on track with two of its three goals for its corrective action obligations. In SFY16, three Ohio sites achieved control of ground water contamination; six achieved control of human exposures; eight obtained remedy complete status and eight completed corrective action. Two notable sites made significant progress during SFY16.

Water

Protecting Drinking Water and Ensuring Safe Recreation

In SFY16, 98.5 percent of Ohio's community public water systems met all health-based water quality standards. For the second consecutive year, the Agency met the U.S. EPA/Ohio EPA shared goal of less than 10 percent of transient, non-community public water systems with significant monitoring violations. Through the Water Supply Revolving Loan Account, the division awarded 45 loans to 29 public water systems totaling \$148.3 million and offered \$4.1 million in principal forgiveness (subsidies). The Water Supply Revolving Loan Account (WSRLA) for drinking water improvements funded 44 loans and totaled \$150.7 million. The Water Pollution Control Loan Fund (WPCLF) for wastewater infrastructure and water quality improvements funded 82 projects and totaled \$829.9 million.

Preventing and Addressing Lead in Drinking Water

To meet public expectations concerning the timeframes for public notification and education when a public water system detects elevated levels of lead in drinking water, Ohio EPA implemented changes in its lead program procedures and requested public water systems take actions in accordance with those changes. These changes ensure consumers are provided more timely notice when an individual tap exceeds 15µg/L or an action level is exceeded.

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In addition, Ohio EPA reviewed the Lead and Copper Rule compliance process using principles of the Lean process, to develop improvements and make recommendations for process improvements. The review looked at the current resources and future goals to streamline the compliance determinations for lead and copper, especially as it relates to systems exceeding the action level.

Harmful Algal Bloom Prevention and Management

Harmful Algal Blooms (HABs) continue to be prevalent across Ohio with recurrent blooms on Lake Erie, various inland lakes and the Ohio River in SFY16. Ohio EPA worked to implement actions protecting against cyanobacteria and cyanotoxins as required by new state legislation. Passed in July 2015, Senate Bill 1 authorized Ohio EPA to serve as the coordinator of HAB management and response. New and amended rules became effective on June 1, 2016, establishing action levels for microcystins, cyanotoxin monitoring requirements for public water systems, treatment technique requirements, and public notification and reporting requirements.

A new HAB Section was established in DDAGW this year with dedicated staff resources to implement the new rules, provide technical assistance to public water systems for prevention and response, and to provide assistance for HABs in recreational waters. The new section also consolidates the Agency's HAB-related activities formerly spread over two divisions.

During the past year, Ohio EPA has worked with public water systems to develop treatment optimization plans for susceptible systems, ensure HAB events are covered under their contingency plans, and maintain a data management/early warning system to provide HABs information to water systems and the public in a timely manner.

Ohio EPA is coordinating with partner agencies including the Ohio Department of Health (ODH) and the Ohio Emergency Management Agency to clarify roles during a HAB incident. The Agency began updating the *Ohio Public Water System Harmful Algal Blooms Response Strategy* based the new rules and availability of cyanobacteria screening data and worked with ODH and Ohio Department of Natural Resources to revise the *State of Ohio Harmful Algal Bloom Response Strategy for Recreational Waters*.

Ohio EPA continues to assist with state and federal legislative initiatives; provide funding for testing and infrastructure improvements; refine analytical methods; update treatment information; and coordinate with federal and state agencies, researchers, and public water systems.

Through the end of SFY16, \$83 million in loans has been allocated to public water systems to improve HAB response and prevention. These zero percent interest rate funds have a maximum term of 20 years. Also in SFY16, Ohio EPA received 34 initial grant applications for the purchase of cyanotoxin testing equipment. A total of \$775,000 in grants was reimbursed to public water systems in SFY16. Since August 2014, Ohio EPA has reimbursed a total of \$948,000 in grants to applicants.

Addressing Nutrients and Improving Water Quality in the Lake Erie Basin

On June 13, 2015, Lt. Governor Mary Taylor signed the Western Basin of Lake Erie Collaborative Agreement with the State of Michigan and the Province of Ontario, which commits both states and the province to reducing phosphorus loading to the western Lake Erie basin by 20 percent by 2020 and 40 percent by 2025. Ohio released its draft plan to implement the Collaborative Agreement in May 2016. This plan gives Ohio a two-year jump start on U.S. EPA's and Environment and Climate Change Canada's deadline to develop a state Domestic Action Plan required under the binational Great Lakes Water Quality Agreement.

Since 2011, the State of Ohio has invested more than \$2 billion in the Lake Erie watershed to improve drinking water and waste water facilities, monitor water quality, plant cover crops, recycle dredge material, install controlled drainage systems on fields, and fix faulty septic systems. In addition, Ohio has received more than \$11 million from the Great Lakes Restoration Fund for Lake Erie watersheds.

In July 2015, the Agency targeted \$50 million in addition to the \$50 million it provided in August 2014 for the planning, design and construction of infrastructure improvements at surface water treatment plants to address nutrients and HAB issues.

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U.S. EPA awarded Ohio EPA more than \$4.5 million in Section 319 grant funding to implement Ohio's approved Nonpoint Source Management Plan. Local governments and others received 11 subgrants totaling more than \$2.3 million to implement projects such as nutrient reduction activities, stream and wetland restoration and others. The division also received more than \$2.8 million for programming in Ohio's four Areas of Concern (AOC). These funds also included subgrants to local facilitating organizations in the Cuyahoga AOC and Maumee AOC.

Dealing with Dredged Materials

Lake Erie is one of Ohio's greatest assets. In August 2015, Ohio EPA established a new office to focus on improving Lake Erie's water quality. One of the issues this new office is addressing is management of dredged material. Much of the material dredged from Lake Erie is currently disposed into the open lake. Thanks to new state law, open lake disposal will end by July 1, 2020. Ohio is looking for new opportunities to use this valuable resource.

Working with the port authorities in Cleveland and Toledo, the state has invested more than \$10 million through the Healthy Lake Erie Fund to demonstrate innovative approaches and technologies to beneficially use dredged material. In Cleveland, the bedload interceptor project is anticipated to collect between 25,000 and 45,000 cubic yards of material from the Cuyahoga River bottom before it reaches the navigation channel. Also in Cleveland, 70,000 cubic yards of dredged material is processed at a facility constructed north of Burke Lakefront Airport designed to selectively separate and dewater the material for beneficial use. In Toledo, an experimental 16-acre agricultural field placement facility and edge-of-field treatment system has been constructed within the Riverside Confined Disposal Facility on the bank of the Maumee River to show how dredged material can be returned to agricultural fields.

As part of Ohio EPA's continuing efforts, the Agency held the *Digging Up Ideas* workshop on May 11. More than 150 experts from various disciplines gathered to brainstorm opportunities and solutions. Links to information about the workshop and other information about Ohio's Lake Erie Dredged Material Program can be found online at epa.ohio.gov/dir/dredge.

Compliance Assistance for Small Facilities and Local Health Departments

DEFA's Compliance Assistance Unit (CAU) offered on-site and telephone assistance to more than 100 publicly owned treatment works (POTWs), ranging from small package plant systems to larger municipal POTWs and assisted U.S. EPA in an energy audit project with four Ohio POTWs to examine energy usage and identify ways to save energy without sacrificing treatment capabilities.

Under the 2016 Water Pollution Control Loan Fund program management plan, DEFA will award 57 local health departments a total of up to \$13.3 million dollars to address failing home sewage treatment systems in their communities.

DEFA worked in collaboration with the DSW and the Ohio Water Development Authority to launch an initiative focused on helping small package plants achieve and maintain compliance. The strategy included a hands-on workshop, process control tools and access to a library of equipment. To date, training has been conducted in Northwest and Southwest Ohio with more than 80 operators attending. Three more workshops covering the rest of the state are being planned.

Addressing Combined Sewer Overflows in Northeast Ohio

The Northeast Ohio Regional Sewer District (NEORS) Euclid Creek Tunnel construction was completed in 2015. The 18,000 feet, 24 feet diameter tunnel, which is expected to come online in July 2016, will provide a maximum 65 million gallons of storage capacity and is expected to prevent 360 million gallons of contaminated water from being released to the environment annually. This is the one of several tunnels to be built by NEORS to address their combined sewer overflow issues and comply their Federal consent agreement.

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Water Quality Standards

Major progress was made in reviewing and processing many administrative rules dealing with the state's Water Quality Standards (WQS) adopted pursuant to the Clean Water Act. The 23 rules that identify specific beneficial uses for individual streams and rivers in Ohio were divided into four groups. The first group of 10 rules underwent internal review and public comment, and the revised rules were approved by U.S. EPA in March 2016. A second group of eight use designation rules is in the final stages of public review and comment and is expected to be adopted in August 2016. The remaining use designation rules are in various stages of internal review and initial public input.

DSW also adopted new or revised recreation criteria designed to ensure safe swimming at beaches and recreation in all waters of the state. Other work in progress includes drafting nutrient criteria for streams. This effort has benefited from the review and input of a Technical Advisory Group comprised of stakeholders from industry, municipalities, farm groups and environmental groups. These nutrient rules should be available for review by the general public when the Agency begins the review of all WQS rule content as required by the CWA every three years.

Water Quality Monitoring and Improvement

Overall, abundance and diversity of aquatic life in Ohio's rivers and streams remain on a positive trajectory as measured by Ohio's biological monitoring and assessment tools. The 2020 aquatic life use goals that will be reported in the 2016 Integrated Report document stable fish and invertebrate communities in Ohio's largest rivers with nearly all miles supporting expected biotas and continued, steady improvement in those smaller but significant streams and rivers that were assessed over the last 10 years.

Intensive biological, chemical and physical habitat surveys were collected from nearly 350 sites in watersheds of the St. Marys River basin, selected direct tributaries to the Maumee and Ohio rivers and selected direct Lake Erie tributaries between Lorain and the Pennsylvania state line. Additional samples were collected from more than 100 other sites around Ohio in support of various programs and grants including Section 319, Surface Water Improvement Fund, Great Lakes Restoration Initiative and 106 Supplemental projects.

In conjunction with U.S. Geological Survey (USGS), the Agency continued to conduct enhanced tributary monitoring to improve measurement of phosphorus loads into Lake Erie watersheds at 12 sites within five targeted watersheds. The work included collecting samples for 11 different storm events (over 12 months) and utilized a method developed by Ohio EPA that keeps the water in sampler bottles chilled to 60° C for an extended period, needed in order to properly preserve samples which occur over an extended period of time.

Nutrient loads (total phosphorus and total nitrogen) and their major sources were computed for water years 2013 and 2014 for the seven largest watersheds in Ohio. Four watersheds enter the Lake Erie system (Maumee, Portage, Sandusky and Cuyahoga) and three watersheds enter the Ohio River system (Great Miami, Scioto and Muskingum) which encompasses approximately 63 percent of Ohio's land area.

Biological and water quality survey reports were completed for several projects sampled and assessed in prior years including: 2012-14 Tiffin River basin; 2013 St. Joseph River basin; 2013 Bokes Creek basin; and 2013 baseline or post-project monitoring and assessment for eight 319/GLRI/SWIF projects.

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Rules Summary (7/1/15 — 6/30/16)

The attached table contains those rules which were filed with the Joint Committee on Agency Rule Review this fiscal year. This includes all rules adopted, amended, rescinded, and filed as no change within the summary timeframe, the number of rules in the rule package, a brief description of the rule package, and an indication of whether or not the rules were reviewed under the five-year rule review provision, and whether or not the rules went through the Common Sense Initiative Office.

| Division | Rule Package | Rule Package Description | # of Rules | 5YRR | CSIO Review | Effective Date |
|----------|--|--|------------|------|-------------|----------------------------|
| DAPC | General Air Pollution Provisions | These rules contain the general provisions on air pollution control for the Ohio EPA, including: the authority of the director of Ohio EPA to request the collection and submission of emission information, the measurement of emissions of air contaminants, the requirements for the determination of a “De Minimis” source of air pollution, the requirements in the event of equipment shut down caused by malfunction or maintenance, air pollution nuisances, and other administrative rules. | 8 | Y | Y | 07/20/15 |
| DAPC | General Air Pollution Provision | This rule contains the requirements for the measurement of emissions of air contaminants. | 1 | Y | Y | No-change - Not applicable |
| DAPC | Accidental Releases Prevention | This rule contains the requirements for submitting trade secret information. | 1 | Y | Y | 07/20/15 |
| DSW | Use Designations (3745-1-14, 15, 16, 18, 27) | Covers streams and rivers in the following drainage basins: Black River, Little Beaver Creek, Ashtabula River, Southeast Ohio Tributaries, and Little Miami River. | 5 | Y | Y | 11/30/15 |
| DSW | Use Designations (3745-1-08, 20, 22, 26, 28) | Covers streams and rivers in the following drainage basins: Cuyahoga River, Vermilion River, Hocking River, Rocky River, and Chagrin River. | 5 | Y | Y | No-change - Not applicable |
| DSW | Recreation (1-07) | Removed the primary contact recreation subdivisions and condensed them into a single primary contact recreation use. | 1 | Y | Y | 01/04/16 |
| DAPC | Volatile Organic Compounds (3745-21) | Set limits as well as monitoring and reporting requirements for emissions of volatile organic compounds (VOCs) from manufacturing processes. | 24 | Y | Y | 10/15/15 |
| DAPC | Volatile Organic Compounds (21-06) | Set limits as well as monitoring and reporting requirements for emissions of volatile organic compounds (VOCs) from manufacturing processes. | 1 | Y | Y | No-change - Not applicable |
| DSW | Storm Water (39-01) | Addresses the regulations for small municipal separate storm sewer systems (MS4s). | 1 | Y | Y | 11/01/2015 |

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| Division | Rule Package | Rule Package Description | # of Rules | 5YRR | CSIO Review | Effective Date |
|----------|--|--|------------|------|-------------|----------------------------|
| DSW | Storm Water (39-02 and -03) | Addresses the regulations for small municipal separate storm sewer systems (MS4s). | 2 | Y | Y | No-change - Not applicable |
| DMWM | Hazardous Waste (Set L) | Updated the Ohio RCRA C Hazardous Waste rules to address the following federal registers: 73 FR 77954; 73 FR 33712; 75 FR 78918; 75 FR 79304; 76 FR 34147; 77 FR 29758; 78 FR 46447; 79 FR 358 | 112 | Y | Y | 10/31/2015 |
| DAPC | Sulfur Dioxide Regulations (1-hr standard) | Assists with the demonstration for attainment of the 1-hour sulfur dioxide standard in nonattainment areas State Implementation Plan (SIP). | 5 | Y | Y | 10/23/2015 |
| DDAGW | Miscellaneous Rules (3745-91 and 3745-95) | Approves certain types of plans from a political subdivision or public utility that have been certified by a licensed professional engineer; outlines requirements for a backflow prevention and cross-connection control program; and implements of the federal Consumer Confidence rule. | 9 | Y | Y | 10/26/2015 |
| DSW | General NPDES Permits (38-01 and -02) | Covers definitions and administrative requirements for the development of and management of general NPDES permits. | 2 | Y | Y | 12/01/2015 |
| DAPC | Open Burning (19-03 and -04) | Amended to address the requirements for performing open burning in restricted and unrestricted areas in the state of Ohio. | 2 | N | Y | 11/10/2015 |
| DAPC | Non-Methane Organic Compounds (NMOC) | Requires control of non-methane organic compounds (NMOC) emissions from existing landfills. | 12 | Y | Y | No-change - Not applicable |
| DDAGW | Plan Approval and Consumer Confidence Reports | Define the requirements for plan specifications, data sheets, supporting information, and submittal letters for public water systems. | 6 | Y | Y | No-change - Not applicable |
| DMWM | Construction and Demolition Debris (C&DD) Ground Water Fee | Rescinded the ground water monitoring fee at C&DD Landfills. | 1 | Y | Y | 04/01/16 Rescinded |
| Agency | Confidential Personal Information | Contains the Agency's requirements for handling confidential personal information. | 5 | Y | N | 02/15/16 |

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| Division | Rule Package | Rule Package Description | # of Rules | 5YRR | CSIO Review | Effective Date |
|----------|---|---|------------|------|-------------|----------------------------|
| DDAGW | Operational Requirements and Operator Certification | Established definitions, classifications and staffing requirements for public water system (PWS) or treatment plant and distribution systems. Outlined operational practices for PWSs to ensure optimal water quality including disinfection requirements, approval of chemicals being used, minimum pressure requirements, operational analyses and reporting requirements. | 3 | Y | Y | 03/04/16 |
| DDAGW | Revised Total Coliform Rules | Adopted changes to the state's primary drinking water standards and relevant portions of U.S. EPA's Revised Total Coliform Rule (RTCR) under the Safe Drinking Water Act (SDWA). | 20 | Y | Y | 04/01/16 |
| DAPC | Volatile Organic Compounds (21-07) | This rule sets limits as well as monitoring and reporting requirements for emissions of volatile organic compounds (VOCs) from manufacturing processes. | 1 | Y | Y | 04/08/16 |
| DAPC | Permit to Install and Operate (3745-31) | Included requirements for installation, modification and operation of new and existing air contaminant sources at facilities that are not subject to OAC 3745-77 and the requirements for installation and modification of air contaminant sources at facilities that are, or will be, subject to OAC 3745-77 including the requirements to apply and receive a permit-to-install or permit-to-install and operate. | 8 | Y | Y | 05/01/16 |
| DDAGW | Harmful Algal Blooms | Establishes requirements for action levels for cyanotoxin microcystins; sets cyanobacteria screening, and microcystins monitoring and reporting for surface water public water systems. | 14 | N | Y | 06/01/16 |
| DDAGW | Turbidity | Adopted changes to the state's primary drinking water standards and relevant portions of U.S. EPA's Revised Total Coliform Rule (RTCR) under the Safe Drinking Water Act (SDWA). | 1 | Y | Y | 05/12/16 |
| DSW | Water Quality | Water quality standards are state regulations or rules that protect lakes, rivers, and streams and other surface water bodies from pollution. | 5 | Y | Y | 08/10/16 |
| DERR | Voluntary Action Program | This review was conducted to correct errors that were inadvertently in the rules as a part of the last five-year rule review. | 11 | N | Y | 05/26/16 |
| DDAGW | Escrow | Contains the requirements for community water systems to establish and maintain an escrow deposit. | 6 | Y | Y | No-change - Not applicable |
| DSW | Water Quality (1-31 and 1-36) | Water quality standards are state regulations or rules that protect lakes, rivers, and streams and other surface water bodies from pollution. | 2 | Y | Y | No-change - Not applicable |
| DDAGW | Well Standards and Plan Approval | Established well standards and public water system (PWS) plan approvals. | 13 | Y | Y | 06/13/16 |

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|----------|---|---|------------|------|-------------|-----------------------------|
| DMWM | Transfer Facilities | Includes moving the Municipal Solid Waste Transfer facilities to a new chapter and organization using multi-program rules. | 45 | Y | Y | Jurisdiction ends 07/08/16 |
| DAPC | Reid Vapor Pressure (RVP) Fuels | Contains the requirements for the use of low RVP fuels in the Cincinnati/Dayton/Springfield area during the ozone season, June 1 to Sept. 15. | 8 | Y | Y | Jurisdiction ends 06/24/16 |
| DDAGW | Secondary Contaminant Standards and Emergency Loans (82-01 and 86-01) | Provides a definition which is related to the secondary drinking water standards and outlines the application process for a public water system to apply for an emergency loan. | 2 | Y | Y | Jurisdiction ends 05/26/16 |
| DDAGW | Secondary Maximum Contaminant Levels (82-03 and -04) | Amending the Secondary Maximum Contaminant Levels rules to separate the fluoride-specific requirements from the general requirements. | 2 | Y | Y | Jurisdiction ends 07/09/16 |
| DMWM | Construction and Demolition Debris (C&DD) | Covers the siting, design, and operation of existing C&DD landfills and the use of clean hard fill. | 5 | Y | Y | Jurisdiction ended 05/18/16 |
| DAPC | State Emergency Response Commission (SERC) | Covers SERC admin processes, facilities subject to 3750-30-01, LEPCs & local political subdivisions. | 17 | Y | Y | Jurisdiction ends 06/28/16 |
| DAPC | SERC | Covers SERC admin processes, facilities subject to 3750-30-01, LEPC's & local political subdivisions. | 2 | Y | Y | Jurisdiction ends 07/10/16 |
| DAPC | Non-Methane Organic Compounds (NMOC) | Requires control of NMOC emissions from existing landfills. | 2 | Y | Y | Jurisdiction ends 07/31/16 |
| DAPC | Total Reduced Sulfur | Contains the requirements for the control of emissions of total reduced sulfur from kraft pulp mills. | 2 | Y | Y | Jurisdiction ends 08/06/16 |