

DRAFT Table: Ohio Domestic Action Plan – Major State Activities and Milestones

| Activity | Objectives | Resources | Responsible Parties | Target Date/Timeline | Milestones |
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| Programs/Projects | | | | | |
| Agricultural Land Management | | | | | |
| Edge of Field Monitoring and Research | Finalize and present results from edge-of-field monitoring and research, establish next steps | | ODA; with USDA-ARS, NRCS, OSU | | |
| Revisions to the Tri-State Fertility Guide | | | ODA; with OSU | Research due 2017 | |
| Revisions to Phosphorus Index | Develop timeline to adjust the Index, including changes pertaining to commercial fertilizer and manure | | ODA; with OSU | Ongoing | |
| Ohio Clean Lake Initiative - Impaired Watershed Restoration Program | Target four of the most impaired Watershed Assessment Units (WAU) in the Western Lake Erie Basin Watershed to reduce phosphorus loading, including dissolved phosphorus loading | | ODA - DSWC | | |
| Western Lake Erie Basin Technical Advisory committee | Subcommittee to the State Technical Committee to provide technical assistance specific to nutrient management issues | | ODA; with NRCS | | |
| Strengthen and | Provide incentives to | | ODA; with USDA | | Achieve its 2004 goal |

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| stimulate the Ohio Lake Erie Conservation Reserve Enhancement Program | farmers to voluntarily establish filter strips, riparian buffers, hardwood tree plantings, wildlife habitat, and field windbreaks. | | Commodity Credit Corporation | | of voluntarily establishing 67,000 acres of filter strips, riparian buffers, hardwood tree plantings, wildlife habitat, and field windbreaks. |
| Placement of Agricultural BMPs in Targeted Watersheds | Identify a suite of agriculture nonpoint BMPs to be promoted basin-wide but with a priority for placement in targeted watersheds. | Additional funds will be sought to provide cost incentives for implementing these BMPs. | ODA; with USDA-NRCS, OFSWCD, OSU | | To be developed in coordination with OSU SWAT model team. |
| Fertilizer and manure application restrictions and fertilizer certification requirements | Continue to educate producers. Implementation and enforcement of existing restrictions. | | ODA; with local SWCDs | | |
| Farm Stewardship Certification | Farmers that fully implement the 4Rs, including nutrient placement or nutrient application onto a living crop, will be eligible to receive this newly created certification. | | ODA; with local SWCDs | | |
| Drainage control | Identify existing programs and consider development of new programs to install | | ODA | | |

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| | practices that reduce or eliminate water quality impacts from agricultural drainage. | | | | |
| Streamline Agricultural Technical Assistance Programs | Encourage the establishment of streamlined processes, sign-up periods, and application requirements for various federal and state funding and technical assistance programs. | | ODA; with NRCS | | |
| Assessment of the scoring criteria for Farm Bill program eligibility | Ensure that those farmers in most need of technical and financial assistance are receiving higher consideration for assistance. | | ODA; with NRCS | | |
| Pilot Program for Voluntary Tracking of BMPs | Establish a pilot program with Wood and Henry County SWCDs to voluntarily track BMPs being implemented in select watersheds. | | ODA; with Wood and Henry County SWCDs | | |
| Ohio Applicator Forecast Website | The Forecast is designed to help nutrient applicators identify times when the weather-risk for | | ODA | Ongoing | |

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| | applying is low. | | | | |
| Stewardship Credit Program | Finalize a program to prevent nutrient loss and protect water quality through the purchase and retirement of Stewardship Credits. | | OEPA; with ODA, OFSWCD | | MOU to be signed in 2017 |
| Nutrient Trading in Lake Erie Watershed | Determine the feasibility for the establishment of a cross boundary nutrient trading program for portions of the Lake Erie watershed. | Ohio EPA; with OLEC and Great Lakes Commission | | | |
| Rules for Nuisance Manure | Amend water quality standards rule 3745-01-04 to address manure. | | OEPA with ODA | Ongoing | |
| Community-Based Nutrient Reduction | | | | | |
| Reduce phosphorus discharge from significant minor NPDES facilities without P limits | Evaluate and determine options on a facility by facility basis for reducing the phosphorus discharge level. | Existing permit development resources | OEPA | At a minimum, each facility will be evaluated as its permit is up for renewal | Complete by end of permit cycle |
| Major NPDES facilities to monitor ortho-P | Implement the requirement of SB1. | Existing permit development resources | OEPA | Completed December 31, 2016 | Data to be available water year 2017 |
| Evaluate Technology Solutions | Evaluate effectiveness of drinking and wastewater | | OEPA; with Battelle, others | Ongoing | |

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| | treatment system products and processes for nutrient and/or microcystin management, treatment, or control. | | | | |
| Biosolids/Manure Rules Consistency | Make nutrient/manure management plans and the Biosolid Land Application and Management Plans rules more consistent. | Existing Rules development resources | OEPA and ODA | Ongoing | Rules process complete in 2017 |
| Watershed Implementation and NPS-IS Plans | Focus development of new plans in watersheds not already covered. | Re-allocation of existing dollars or new funding; GLRI | OEPA; with ODA-DSWC | Ongoing | Funding in hand for 13 plans to be done within the Maumee AOC ag-dominated watersheds. |
| Water Infrastructure Upgrades | Direct funding at priority CSO separation projects, wastewater treatment plant upgrades, storm water management, and home sewage treatment systems. | State Revolving Loan Fund dollars and coordinate with other infrastructure funding programs | OEPA | Ongoing | |
| Numeric P Limit in Statute | Propose legislation that will limit all treatment works discharging waste water containing phosphorus to achieve at least a | Existing legislative liaison resources | OEPA | Ongoing | Legislation to be proposed by (next session?) |

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| | monthly average effluent concentration of 1 mg/L phosphorus. | | | | |
| Incorporate Nutrient Reduction into Storm Water Management Program | Investigate opportunities to utilize storm water management in addressing hydrologic factors that influence nutrient loading into Lake Erie. | Existing Storm Water Program resources | OEPA | By end of 2018 | Rainwater Manual revision due 2018 |
| Review CSO LTCPs for Nutrient Reduction Opportunities | Evaluate the existing long term control plans for CSOs and the impacts on nutrient loading. | | OEPA; with NEORS and other local authorities | | |
| Microcystin Recreational Use Standard and Advisory Protocol, Open Waters | Establish a recreational use standard and advisory protocol for microcystin for the open waters of Lake Erie. | | OEPA; with USEPA | | |
| Point Source Reduction BMPs | Track the installation of point source nutrient reduction BMPs installed since 2008. | | OEPA; with local authorities | | |
| Operations and Maintenance of HSTS | Implementation of local Operation and Maintenance Tracking programs. | | ODH; with local authorities | | |

Restoration and Support of Ecosystem Services

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| Sandusky Bay Initiative | Fund and complete engineering and design work for potential in-water coastal wetland restoration projects (12 planned). | Ohio Clean Lake funds | ODNR; with OEPA and OLEC | Design work is underway for three projects; two projects to be constructed by June 2019 | Projects constructed starting in 2018 |
| Coastal Wetland and Shoreline Projects | Identify opportunities to restore coastal wetlands and nature-based shorelines. | | ODNR; with OEPA, USACE, other federal | Six projects tentatively identified for Western Basin, 21 for central basin; three constructed; two western basin projects in design phase | Projects constructed starting in 2018 |
| Coordinate with USFWS/NOAA Upper Midwest and Great Lakes Landscape Conservation Cooperative (LCC) Coastal Conservation Workgroup | Identify potentially restorable coastal wetlands. | | ODNR; with USFWS/NOAA Upper Midwest and Great Lakes Landscape Conservation Cooperative (LCC) | | |
| Two coastal wetland pilot demonstration projects | Develop and implement tools to identify potentially restorable wetlands for the western basin | GLRI | ODNR; with USFWS/NOAA Upper Midwest and Great Lakes Landscape Conservation Cooperative (LCC) | | |
| Coastal Wetland Research | Fund projects to investigate and quantify nutrient processing and | CMAG? | ODNR; with Ohio Sea Grant, NOAA, Old Woman Creek NERR | | |

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| | reduction benefits of coastal wetlands. | | | | |
| Private Lands Program Opportunities | Develop projects that include water quality benefits. | | | | |
| Explore Statewide Conservation Land Tax | Evaluate a pilot Statewide Conservation Land Tax as an incentive to landowners to place land into long-term conservation programs. | Lake Erie Protection Fund | OLEC | | |
| Evaluate Conservancy District Model | Meet with the Maumee Conservancy District to evaluate their role related to the design, construction, funding and management of storm water management including water retention/detention options. | | OLEC; with Ohio EPA, ODA, ODNR, Maumee Conservancy District | | |
| Monitoring, Tracking, and Support | | | | | |
| Monitoring Water Quality and Tracking Progress | | | | | |
| Water Quality Monitoring Network | Tracking progress toward meeting the requirements of the Ohio's Domestic Action Plan and Annex 4 | Restructuring of existing resources | OEPA | Changes implemented in 2017 field season; will evaluate initial results each year through 2019 to determine if further adjustments | Stations have been relocated and resources reallocated; evaluations to occur in winter 2018 and winter 2019 |

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| | | | | are necessary | |
| Track Water Quality Improvements (HUC12) | Monitor and track water quality improvements resulting from nutrient reduction practices and BMPs at the HUC 12 level. | | Ohio EPA; with Heidelberg University's National Center for Water Quality Research and USGS | Ongoing | |
| Additional Water Quality Targets | Publish a Water Quality Target for each Annex 4 priority watershed and major western Lake Erie basin HUC 8 Maumee River subwatershed. | | Ohio EPA; with OLEC and USEPA | Methodology development due April 2018 with targets for Tiffin and St Joseph Rivers; schedule for other targets dependent on methodology needs | Methodology finished April 2018; targets for first 2 due April 2018; targets for all to be completed by 2020 or sooner if feasible |
| Consistent Protocols | Ensure a consistent sampling and lab testing protocol is in place and being followed by all agencies. | | Ohio EPA; with member entities on the Annex 4 Monitoring Task Team (Ohio, Indiana, Michigan and Ontario) and USEPA | | |
| Open Water Monitoring System | Establish a western Lake Erie open water monitoring system for the presence and amount of harmful algae and microcystin. | Existing monitoring resources | Ohio EPA; with federal and university-based research partners | Discussions are underway in 2017; changes to existing monitoring activities to begin implementation in 2018 field season | Publish monitoring plan by start of 2018 field season |
| DNA Analysis of Sources | Establish a DNA analysis methodology for differentiating nutrients from | | OEPA; with ODH | | |

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| | manure and human waste. | | | | |
| Improve CSO Nutrient Load Estimates | Coordinate with local authorities to evaluate the total nutrient load resulting from combined sewer overflows. | | OEPA; with NEORS and other local authorities | Conduct studies during 2018 | Improved estimates for next Nutrient Mass Balance Study due December 2018 |
| Water Quality Status Reports | Annual update to the Ohio legislature and general public on nutrient reductions in Ohio's Lake Erie watershed. | | OLEC and member agencies; with Heidelberg University's National Center for Water Quality Research and USGS | Annually each spring once flow data are complete | Publication of report on OLEC website |
| Tracking Funding and Practices | | | | | |
| Fiscal Operations Plan | Establish a guide for identifying short-term and long-term funding needs and potential funding sources including the re-allocation as well as new local, state and federal funding opportunities. | | OLEC; with member agencies, federal partners and the Great Lakes Commission (Blue Accounting) | | |
| Coordination with Funding Sources | Seek cooperation, request coordination, and review funding requests made to federal or state agencies for funding related to Lake Erie | | OLEC | Ongoing | |

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| | watershed projects. | | | | |
| Tracking Funding | Establish methods for tracking the amount of all funds expended in Ohio for nutrient reduction to Lake Erie. | | OLEC | | |
| Tracking Funding for Practices | Institute a tracking program by county showing the total public dollars allocated for nutrient management and/or reduction practices in Annex 4 priority watersheds. | | Ohio EPA; with OLEC and ODA | | |
| Maumee Sub-basin HUC12 Priority Watersheds | Continue to develop a process to identify and revisit and revise as necessary the Maumee sub-basin priority watersheds at the HUC 12 level (Appendix C). | | OEPA; with university researchers | Research underway, expected to complete in 2018 | Map revisions if necessary in later edition of Ohio DAP |
| Programmatic Support | | | | | |
| Ohio DAP Lead Agency | Ensure there is annual coordination between state and federal agencies for identifying priority programs, priority areas, and timelines related to Lake Erie and the Lake Erie | | OLEC | Ongoing | |

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| | Basin. | | | | |
| DAP Advisory Committee | Establish DAP Advisory Committee to provide further input and evaluation to the Commission on the progress of DAP implementation | | OLEC | Late 2017 | Periodic meetings |
| Federal Farm Bill Recommendations | Coordinate inter-agency engagement and recommendations for federal Farm Bill | | OLEC; with member agencies and Great Lakes Commission | | Submit Ohio's recommendations to Great Lakes Commission for combined Great Lakes input |
| Adaptive Management Process "trigger mechanism" | Coordinate the development of an Adaptive Management Process "trigger mechanism" which would cause a change of program, practice or policy if the goals are not reached or if no measurable progress is observed toward achieving the goals. | | OLEC; with member agencies | | |