

**MICHIGAN DEPARTMENT OF
ENVIRONMENT, GREAT LAKES, AND ENERGY
WATER RESOURCES DIVISION**

**SECTION 404 PROGRAM ANNUAL REPORT
FISCAL YEAR 2021**

GENERAL INFORMATION

Michigan's Section 404 Program Overview

The State of Michigan has administered the federal Section 404 Permit Program since approval of the state program by the United States Environmental Protection Agency (USEPA) in August 1984. The Michigan Department of Environment, Great Lakes, and Energy (EGLE) is responsible for the program, which is operated under agreements with the USEPA¹ and with the United States Army Corps of Engineers (USACE). Administration of the Section 404 Program at the state level provides for efficient processing of permit applications, encourages the integration of wetland management with other state and local resource programs, and makes effective use of state and federal staff resources.

Under Michigan's agreement with the USEPA, direct federal review is provided only for the largest projects and for those projects which have the potential to impact critical areas (e.g., threatened and endangered species habitat). About one to two percent of all Section 404 applications received are subject to direct federal review. Applications are processed as individual permit applications (public noticed) or through an expedited application process for minor project (MP) and general permit (GP) activities.

This report summarizes activities taken under Michigan's Section 404 Program during fiscal year (FY) 2021 (from October 1, 2020 to September 30, 2021) in accordance with the requirements of the USEPA's state program regulations.

Status of Section 404 Program Review by the USEPA

The final results of the USEPA's review of Michigan's Section 404 Program were published on July 31, 2008, in the Federal Register (FRL8697-3). The report was positive regarding EGLE's permit program administration; however, the report required a number of legal issues to be addressed in order to maintain consistency between state and federal Section 404 regulations. Since that report, EGLE has worked to

¹ A new Memorandum of Agreement (MOA) was signed by both agencies effective November 9, 2011, that revises the previous 1983 MOA.

address the identified issues required to maintain the state program and has completed most of the proposed corrective actions cited in USEPA's 2008 report.

In 2009, the Michigan Legislature created a Wetland Advisory Council (WAC) which was charged to evaluate Michigan's Wetland Program and provide recommendations to the Governor, the legislature, and EGLE. The WAC completed its final report in August 2012, including recommendations on the changes necessary to correct the identified deficiencies in Michigan's 404 Program. In follow-up to the WAC final report, EGLE created statutory amendment language to address the deficiencies. Michigan's Public Act 98 of 2013 was the result of the five year effort by Michigan to work with stakeholders, including business groups, drain commissioners, local, state and federal agencies, conservation and environmental protection groups, and other interested organizations, as well as the Michigan legislature, to develop amendments to address these issues.

The results of USEPA's review of Program Revisions to Michigan's Section 404 Program due to Michigan's Public Act 98 (PA 98) were published on December 13, 2016, in the Federal Register. USEPA found that the majority of revisions within PA 98 sections were consistent with the Clean Water Act (CWA) and approvable. There were some revisions found to be inconsistent with the CWA and not approvable, thus requiring additional corrective actions. EGLE has initiated corrective actions to address the findings of USEPA's review of PA 98, through coordination and outreach to stakeholders, and internal planning efforts, so that a legislative amendment language package can be pursued.

Summary of Changes in Program Operations or Procedures in FY 2021

On March 16, 2020, employees of the State of Michigan began working remotely due to the Covid-19 pandemic. The challenges faced in this program, and all other state programs, were significant including adjusting to remote work, temporary layoffs, reduced access to in-office work resources and co-workers, public health concerns, limitations on in-person meetings and events, etc. During this reporting period, state employees are still working primarily remotely, with some lifting of restrictions on field work, occasional working in the office, and meetings.

GP and MP Categories

On August 12, 2021, EGLE Water Resources Division (WRD), established updated MP and GP categories. The categories require that categories be public noticed and also approved by the USEPA prior to issuance. Categories for were improved for invasive species management, wetland habitat enhancement and restoration activities, replacement of existing seawalls, and utility line activities, and importantly, categories now include activities for Part 31, Floodplain Regulatory Authority where applicable.

Program Development

As of September 30, 2021, Michigan had 46 approved Wetland Mitigation Banks, three of which were approved during this reporting period, FY 2021. The three new banks established during this reporting period include Clyde Mitigation Bank in the Shiawassee River Watershed, Summerfield Mitigation Bank in the River Raisin Watershed, and Buck Creek Wetlands, LLC in the Grand River Watershed. EGLE's current Wetland Mitigation Bank Registry can be found at Michigan.gov/EGLE/About/Organization/Water-Resources/Wetlands/Mitigation-Banking.

The WRD continues to progress in the development of the Michigan Wetland Monitoring Program (MIWM). The MIWM is in its second 5-year cycle, completing its sixth year of annual sampling of sites for the state's intensification project. In FY 2021, WRD participated in its second round of the National Wetland Condition Assessment (NWCA) sampling. Implementation of the NWCA sampling was funded with Section 106 Monitoring grant funding. WRD sampled 20 unique sites for NWCA, with two of those sites revisited for sampling in the 2021 season. WRD additionally sampled five state-only monitoring sites during this season. For 2021, EGLE and DTMB developed an app and purchased a Trimble to streamline data collection in the field. Directly entering the data into the app as it is collected, eliminated the need to transcribe lengthy paper field notes into the wetlands monitoring database for reporting. This app was used for data collection for the state-only sites, with the NWCA sites using EPA's app and provided iPad. WRD continued to partner with Central Michigan University (CMU) to collect water quality samples at the state monitoring sites, funded through the Wetland Program Development Grant. WRD also continued to participate with the Coastal Wetland Monitoring Project as a Principal Investigator, coordinating with various agencies and partners on the project.

The WRD completed a USEPA Wetland Program Development Grant, "Developing Tools to Protect and Restore Wetland Shorelines and Shallows, CD00E02070," during this reporting period. The grant funds supported improvement of the protection and restoration of wetland shorelines and shallows, natural shorelines, and the littoral zones of inland lakes through regulatory and non-regulatory efforts. Funding supported the

hiring of an Inland Lakes and Riparian Wetlands analyst in the Wetlands Lakes and Streams Unit to significantly grow this program, focusing on promoting Best Management Practices (BMPs) for shoreline management. The lead staff hired for this effort has provided technical support for regulatory staff, improving consistency in the reviews of projects. Updated General Permits (GP) and Minor Project (MP) categories included BMP updates for seawalls, riprap, bioengineering, beach sanding, Diver Assisted Suction Harvesting (DASH) and bioengineering, notably requiring BMPs to be incorporated into every seawall replacement application processed as an MP. This staff person also provided support both internally and to the regulated community in the MP changes and rollout through outreach, webinars, publications, and direct discussions with consultants, contractors, and legislative offices. A variety of outreach materials, technical resources, and tools were also developed, including the Inland Lake Fact Sheet series for Michigan's 404 Program, aquatic plant poster series, professional shoreline BMP illustration series, displays for the Michigan Natural Shoreline Partnership, development of a bioengineering storymap shoreline erosion calculator. Other areas of technical assistance include aquatic invasive species management, lake aeration, nutrient inactivation products, high water shore protection, benthic barriers, and drawdowns. This project significantly advanced Michigan's ability to address the challenges and improve protection of riparian wetlands on inland lakes statewide. It also led to improved understanding of the importance of these resources by landowners, shoreline professionals, and regulatory staff.

FY 2021 Permitting Activities

During the period from October 1, 2021 to September 30, 2022, EGLE received 4,434 permit applications for projects proposing impacts to inland lakes, streams, and wetlands subject to Michigan's Section 404 Program jurisdictions. These applications are processed under Part 301 and Part 303.

EGLE issued a total of 4,217 permits, and denied 77 applications, under Parts 301 and 303 during FY 2021. Of the Section 404 permit actions taken during this reporting period:

- 1,213, or 28%, were processed through the public notice process
- 2,598, or 61%, were processed as MPs under Parts 301 and 303
- 406, or 9%, were processed as GPs under Parts 301 and 303

The remainder of the applications received were either incomplete or awaiting final decision. Actions taken are summarized below:

Table 1 FY 2021 Section 404 Application and Permit Actions

	Public Notices	MPs	GPs	Total Actions
Issued	888	2263	367	3518
Issued - Modified or Revised	269	254	19	542
Issued ATF	63	85	20	168
Denied	-	-	-	77

Table 2 FY 2021 USEPA Comments on Section 404 Red Files

USEPA No Comment	11
USEPA No Objection Provided Certain Conditions Are Met	16
USEPA Objection	0
TOTAL	27

FY 2021 Permit Actions Having Impacts Greater Than One Acre

Pursuant to the Memorandum of Agreement (MOA) between EGLE and the USEPA, the following projects involved impacts in excess of one surface acre per project. Eleven (11) permits were issued impacting one acre or more of wetlands.

Table 3 FY 2021 Section 404 Permits for Wetland Impacts Exceeding 1 Acre

Permits with >1 acre Permanent Impact	Total Permanent Impact
WRP008832	13.1
WRP022544	44.1
WRP023475	17.9
WRP025603	4.38
WRP026484	3.4
WRP026806	4.26
WRP027947	1.47
WRP028965	1.09
WRP029543	5.75
WRP030486	3.95
WRP030616	12.65

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Table 4 Section 404 Permits for Wetland Impacts in Excess of 1 Acre and Mitigation Total

Fiscal Year	# of Permits	Acres of impact	Acres of mitigation
2021	11	99.95	198.7

Table 5 FY 2021 Section 404 Permanent Permitted Impacts by Waterbody Type

Waterbody Type	Requested Acres	Permitted Acres	Requested Linear Feet	Permitted Linear Feet
Wetland	173	168	NA	NA
Inland Lake	1,602	696	121,595	120,028
Stream	NA	NA	113,707	102,604

Table 6 FY 2021 Section 404 Restoration and Temporary Impacts

Type	Acres	Linear Feet
Wetland Restoration	98	NA
Temporary Wetland Impacts	1,037	NA
Wetland Conversion Only Impacts	26.4	NA
Stream Temporary Impacts	NA	37,801
Lake Temporary Impacts	876	1,784

Table 7 FY 2021 Section 404 Mitigation

Waterbody Type	Acres Permitted Requiring Mitigation	Linear Feet Permitted Requiring Mitigation	Acres of Mitigation Required	Acres of Preservation as Mitigation	Linear Feet Mitigation Required	Number of Permits Requiring Mitigation
TOTAL WETLAND	129.34	NA	212.64	64.64	NA	91
Wetland - Forested	70.63	NA	117.54	48.82	NA	51
Wetland – Scrub Shrub	12.84	NA	18.77	9.71	NA	30
Wetland - Emergent	43.40	NA	63.98	6.11	NA	52
Wetland – Rare and Imperiled	2.47	NA	12.35	0	NA	1
TOTAL STREAM	NA	4,039	NA	NA	4,150	2

FY 2021 Compliance and Enforcement Activities

EGLE enters complaints which represent suspected violations of wetlands, lakes and streams regulations. The nature of these complaints varies, but they are entered if it is suspected that the activities include dredging, filling, placement of structures, draining, diminishing or enlarging, or other activities that require a permit under Part 301 and/or Part 303.

During the period from October 1, 2020 to September 30, 2021, EGLE received 335 complaints representing suspected violations under Parts 301 and 303, and took compliance enforcement actions on a total of 331 complaints and violations of Parts 301 and 303. Impact totals for violations are not entered in consistent fields in the database at this time and are therefore not able to be queried and reported in a reliable manner for this FY 2021 report. However, there are database enhancements underway which will address this gap in the database reporting functions in future reports.

Table 8 FY 20 Section 404 Compliance Actions

Number of Complaints Closed/Resolved Part 301	161
Authority No Violation	34
Lack of Information	6
No Authority	13
Low Priority	36
Compliance and Enforcement (District and Central combined, detailed below)	71
Referred to Other Agency	1
Number of Complaints Closed/Resolved Part 303	207
Authority No Violation	30
Lack of Information	10
No Authority	12
Low Priority	47
Compliance and Enforcement (District and Central Combined, detailed below)	107
Referred to Other Agency	1
Total Compliance Enforcement Actions Taken (All legal Parts)	
Compliance communication sent	8
Enforcement Notice	8
Violation Notice (VN) Civil Liability	36
VN request for Information	98
SVN request for Information	3
VN	13
VN Order to restore	102
Second Violation Notice (SVN) Order to restore	20
VN After the Fact Permit	23
SVN After the Fact Permit	3

Administrative Consent Agreement	11
Civil Litigation	4
Criminal Referral	2

Cumulative Impacts

Michigan's wetland law requires that "the probable impact of each proposal in relation to the cumulative effect created by other existing and anticipated activities in the watershed," be considered in determining whether a permit should be issued. A permit allowing wetland losses may be issued only when it has been shown that there is no feasible and prudent alternative to the project as proposed, and that the project will not result in an unacceptable disruption to the aquatic resources. Cumulative impacts are addressed broadly through consideration of other permitted impacts in the vicinity of a proposed project, and also through mitigation measures including the use of conservation easements.

Administrative rules outlining mitigation requirements under Part 301, Inland Lakes and Streams, and Part 303, Wetlands Protection, of the NREPA, require compensatory mitigation for inland lake and stream and wetland impacts as necessary to offset losses resulting from proposed projects.

Compensatory wetland mitigation can include restoration of former wetland, creation of wetland, or in certain circumstances preservation of existing wetland. Mitigation ratios are defined by administrative rule, with the minimum being 1.5 to 1. Compensatory mitigation for impacts for permits issued during this year are reported above.

In addition to preservation of high-quality wetlands to mitigate for wetland impacts, EGLE staff may accept preservation of remaining wetlands onsite to minimize cumulative and secondary impacts associated with issuance of a permit. This type of preservation is not counted as mitigation credit but is included in the total preservation acreage numbers.

EGLE uses conservation easements as a tool to provide permanent, long-term protection both for compensatory wetland mitigation sites and for preservation of remaining undeveloped wetlands on a project site. In the latter instance, the protection of wetlands is viewed as a means of avoiding cumulative impacts; that is, in some instances, a permit may be issued in part based on the assurance that cumulative future impacts will be avoided by protection of remaining wetlands under a permanent conservation easement.

Table 9 Total Acreage Under Easement per year

Year	# of Recorded CE Agreements	Total Acreage Under Easement
1980-89	30	373
1990	18	210
1991	16	186
1992	34	526
1993	27	577
1994	37	727
1995	20	122
1996	25	661
1997	16	117
1998	14	185
1999	49	482
2000	91	935
2001	119	1,596
2002	154	1,145
2003	132	1,676
2004	148	3,601
2005	201	2,447
2006	136	2,269
2007	139	1,891
2008	102	882
2009	91	1,320
2010	46	1151
2012	43	835
2013	34	1947
2014	34	759
2015	47	773
2016	50	970
2017	38	418
2018	45	523
2019	28	1,028
2020	42	1,125
2021	40	2,363
Total	2,046	33,820

Status and Trends of Michigan's Wetlands

EGLE has analyzed wetland inventories from three time periods, 1978 to 1981, 1997 to 1999, and 2000 to 2005, to evaluate wetland trends over the last 30 years in Michigan. Based on the analysis of these inventories, Michigan currently has approximately 6,465,109 million acres of wetlands. Michigan originally contained approximately 10.7 million acres of wetland prior to European settlement, but by 1978, that number had dropped to approximately 6,506,044 million acres. Since the passage of Michigan's wetland protection law in 1979, the rate of wetland loss has declined dramatically. The total decline of wetland since 1978 is estimated at 41,000 acres, with the rate of decline slowing between the periods 1978-1998 (loss of approximately 1,642 acres per year) and 1998-2005 (loss of approximately 1,157 acres per year). More information on this analysis can be found in EGLE's report [Status and Trends of Michigan's Wetlands: Pre-European Settlement to 2005](#).

The Wetland Status and Trends Tool, incorporated into EGLE's Wetlands, Lakes and Streams Map Viewer, provides users the ability to compare historic wetland data to current information. It also allows statistical data to be generated for acreage and a variety of wetland functions where available. The information can be provided at the watershed, City/Township, or County level.

In the last five years, EGLE has received substantial state funding and contracted with Ducks Unlimited to update the National Wetland Inventory for Michigan utilizing 2015 high resolution imagery and topography. This effort is being completed in partnership with US Fish and Wildlife Service, and will meet all USFWS NWI specifications and standards before publishing. In FY 2021, we completed NWI updates for 16 counties. The draft data is currently in USFWS Quality Assurance review and will likely be published on the agency's NWI Map Viewer, as well as EGLE's Wetlands, Lakes and Streams Map Viewer, in 2024. Upon statewide completion of the 2015 NWI, EGLE staff will produce Wetland Status and Trends information examining the time period between 2005-2015, complimenting the original Status and Trends report published by EGLE in 2015 which examined the time period between 1978 and 2005. EGLE's goal is to update the NWI and Status and Trends report approximately every ten years on an ongoing basis to continue reassessing Michigan's wetland baseline acreage and examining the causes and geospatial locations of wetland conversion.