

## WHAT IS THE EIGHTEENMILE CREEK AREA OF CONCERN (AOC) ?

Local, state and federal officials identified a section of Eighteenmile Creek as one of 42 “Areas of Concern” (AOC) in the Great Lakes Basin. Eighteenmile Creek received this designation because of poor water quality and contaminated sediments present throughout the watershed. Eighteenmile Creek’s long history of use by major industries in the area, especially near the City of Lockport and Town of Newfane, has played a large role in the present condition of the creek.

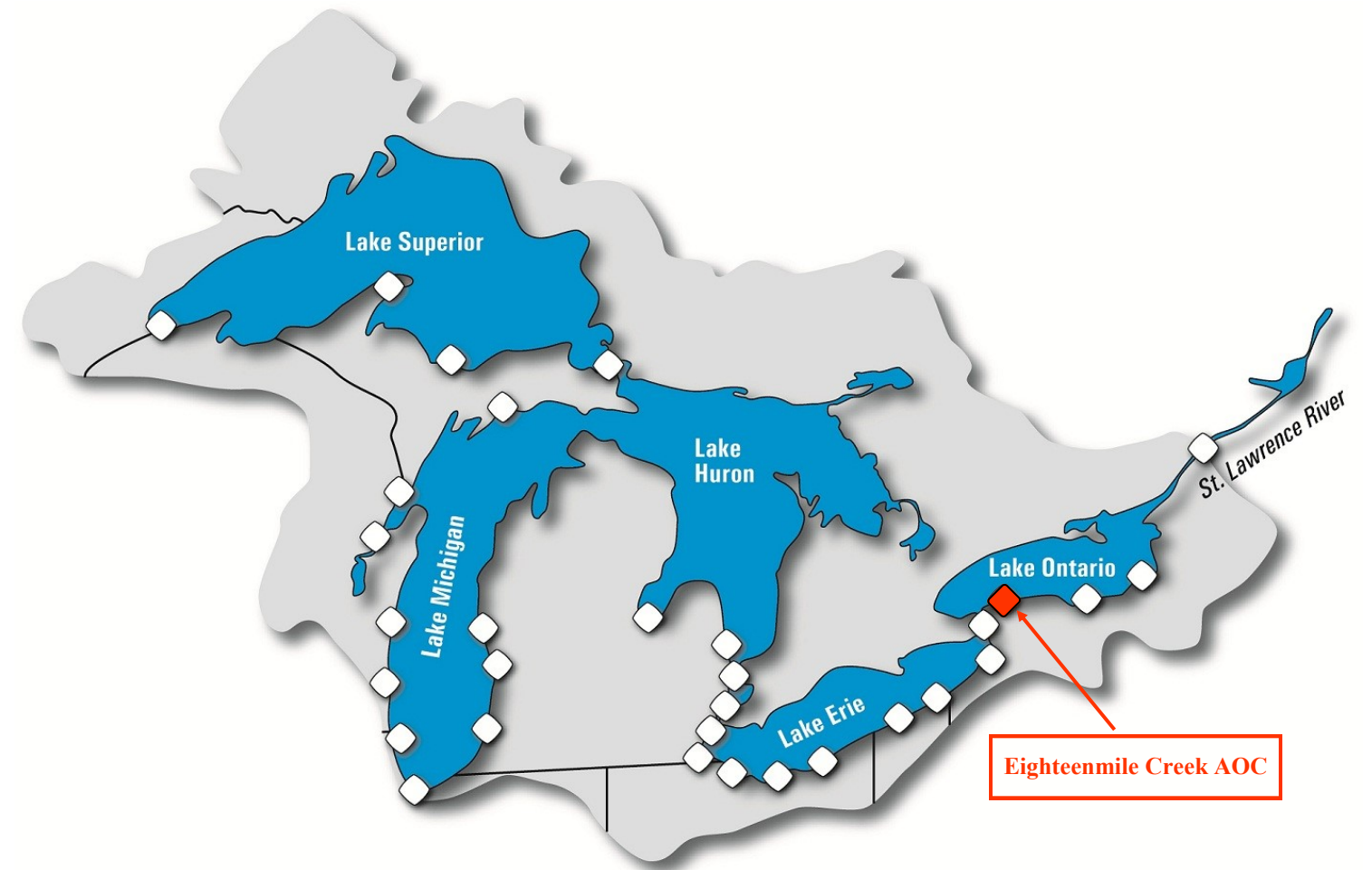
## WHAT IS THE EIGHTEENMILE CREEK REMEDIAL ACTION PLAN (RAP) ?

A RAP is an integrated, whole ecosystem approach to remediating impaired water bodies. The RAP first identifies use impairments, their causes, and contaminant sources, using existing studies and data. Next, existing cleanup and regulatory programs which apply to the water body are identified. A coordinated cleanup strategy is then developed to eliminate the use impairments. The NYS Department of Environmental Conservation produced the Stage 1/2 RAP in 1997 in an effort to restore the integrity of the creek’s ecosystem.

## WHAT IS THE EIGHTEENMILE CREEK REMEDIAL ADVISORY COMMITTEE (RAC) ?

The Eighteenmile Creek RAC is comprised of a group of local, state and federal stakeholders, representing industries, organizations and local communities with a vested interest in the health of Eighteenmile Creek. The RAC is responsible for implementing the RAP, monitoring restoration efforts, and assessing ongoing needs and conditions. After a brief hiatus, the RAC reconvened in 2005 and is currently making progress in moving the RAP forward.

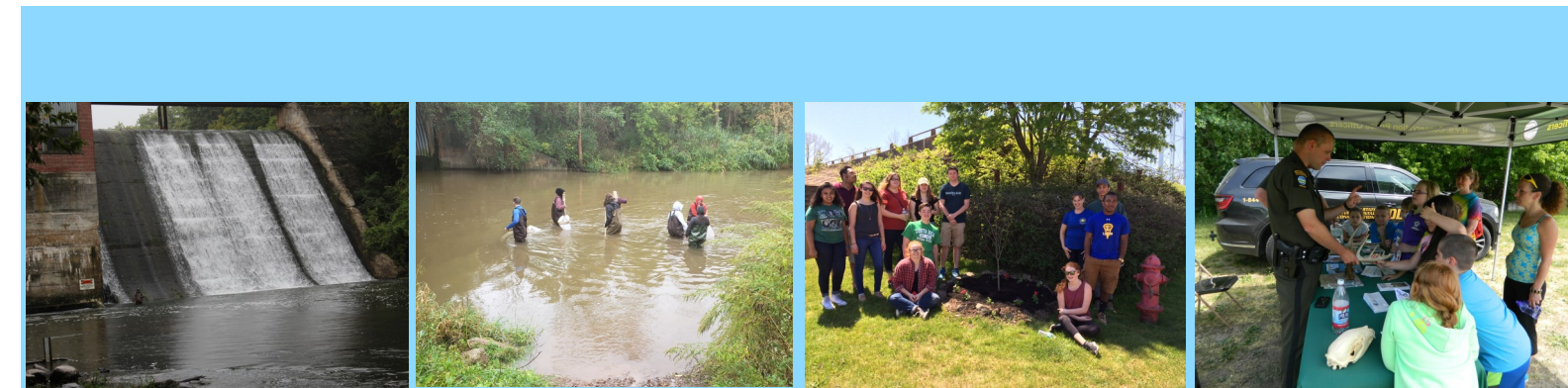
## EIGHTEENMILE CREEK AREA OF CONCERN



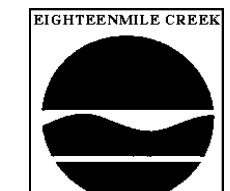
## 2019 REPORT CARD



**FOR MORE INFORMATION**  
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## A COMPILATION OF SUCCESSES, IMPROVEMENTS & CURRENT CONDITIONS



## REPORT CARD

The Eighteenmile Creek Area of Concern (AOC) Report Card was created by the Eighteenmile Creek Remedial Advisory Committee (RAC). **The purpose of this Report Card is to give a brief overview of the health, improvements and current conditions of Eighteenmile Creek during 2019.** The Eighteenmile Creek Watershed includes – the main branch of Eighteenmile Creek, Gulf Creek Tributary, East Branch of Eighteenmile Creek (Red Creek), and augmented flow from the NYS Erie Barge Canal. Scientific data and research that was referenced during the development of this Report Card can be found at the Area of Concern website:

[WWW.EIGHTEENMILERAP.COM](http://WWW.EIGHTEENMILERAP.COM)

This Report Card offers six “indicators” related to the management of the creek’s overall health. They are: 1) Water Quality; 2) Contamination; 3) Fish & Wildlife; 4) Public Access & Recreation; 5) Remedial Action Plan; and 6) Environmental Education & Public Involvement.

Each indicator has been further divided into several “sub-categories” to assess how specific concerns are being addressed. Each sub-category has been assigned a **letter grade** based upon past successes, current health conditions, and trends over the past few years. The last column identifies action steps or immediate concerns to be addressed in order to meet restoration targets for the Area of Concern. This Report Card will be updated annually.

### BENEFICIAL USE IMPAIRMENTS

- 1) Fish & Wildlife Consumption - **Impaired**  
Delisting Targets → **Identified**
- 2) Degradation of Benthos- **Impaired**  
Delisting Targets → **Identified**
- 3) Dredging Restrictions - **Impaired**  
Delisting Targets → **Identified**
- 4) Animal Reproductive Issues - **Impaired**  
Delisting Targets → **Identified**
- 5) Fish & Wildlife Populations - **Impaired**  
Delisting targets → **Identified**

	CATEGORIES	GRADE	SUCCESES & IMPROVEMENTS	CURRENT CONDITIONS	TREND	STEPS NEEDED FOR PROBLEM RESOLUTION
WATER QUALITY	Overall Water Quality	D	<ul style="list-style-type: none"> <li>Agricultural Environmental Management Program has been deployed to document and prioritize water quality impairments.</li> <li>The City of Lockport has completed combined sewer overflow (CSO) inspection checks and reports them to the DEC. Actions are also taken to address issues with CSOs in the city.</li> </ul>	<ul style="list-style-type: none"> <li>The impact AOC is a Class B/C stream indicating that the primary use is contact recreation and fishing.</li> <li>NYSDEC monitors water quality through the Rotating Intensive Basin Study (RIBS) program and USEPA Superfund has continued their investigation into the AOC and source areas.</li> <li>PCBs, heavy metals are suspended in the water column that exceed water quality standards that discharge into Lake Ontario.</li> </ul>	↔	<ul style="list-style-type: none"> <li>Contaminated sediments within the watershed must be remediated.</li> <li>Failures to waste water systems in Lockport and Newfane must be identified and addressed.</li> <li>Unknown sources of agricultural runoff must be identified.</li> <li>USEPA Superfunds investigation will create management actions to remediate the creek and improve water quality.</li> </ul>
	Quality of Storm Water	C	<ul style="list-style-type: none"> <li>The City of Lockport separated storm water from the sanitary sewer on High Street (2018).</li> <li>Lockport High school raised awareness about reducing stormwater pollution in Olcott, NY.</li> </ul>	<ul style="list-style-type: none"> <li>Combined Sewer Overflows still have the potential to discharge into Eighteenmile Creek and the Barge Canal.</li> <li>During storm events, degraded water quality negatively impacts Olcott Beach along Lake Ontario, causing beach closures.</li> </ul>	↔	<ul style="list-style-type: none"> <li>Remaining Combined Sewer Overflows must be eliminated.</li> <li>Continue to work with various partners to determine the sources which negatively impact Lake Ontario.</li> </ul>
CONTAMINATION	Spills, Discharges & Leaching of Contaminants	C	<ul style="list-style-type: none"> <li>Regulatory programs and monitoring by NYSDEC help reduce inputs to the creek.</li> <li>USEPA Superfund has continued to collect data to fully characterize the creek.</li> </ul>	<ul style="list-style-type: none"> <li>Inactive Hazardous Waste Sites in the watershed still have the potential to negatively impact the AOC.</li> </ul>	↔	<ul style="list-style-type: none"> <li>Continued progress from USEPA Superfund program to identify additional polluters within the watershed.</li> <li>Continue to remediate state and federal Inactive Hazardous Waste Sites and other sources of contamination.</li> </ul>
	Contaminated Sediment	D	<ul style="list-style-type: none"> <li>EPA has approved a Record of Decision for OU2 and OU4, contractors are working on a remedial design and construction is expected to begin in 1-3 years for both projects.</li> <li>EPA has continued their data gap analysis of OU3 and will create a baseline ecological and human health risk assessments.</li> </ul>	<ul style="list-style-type: none"> <li>Sediments in Eighteenmile Creek exceed NYS standards for a variety of contaminants, including PCBs, pesticides, lead, etc.</li> <li>Contaminated sediments within the watershed continue to influence the overall health of the AOC.</li> <li>A number of historic power generation structures and oxbow lakes present in the creek act as “sinks” for contaminated sediment to accumulate.</li> </ul>	↔	<ul style="list-style-type: none"> <li>Utilize Federal Superfund program to address the current sediment contamination source in Lockport.</li> <li>Remediate all upstream sources of contamination, including the Eighteenmile Creek Corridor Site and Old Upper Mountain Road Site.</li> <li>Continue to identify new funding sources for post remediation monitoring within the AOC.</li> </ul>
FISH & WILDLIFE	Contaminant Levels in Fish & Wildlife	D	<ul style="list-style-type: none"> <li>Fish tissue results obtained through a study in 2012 are the first data set collected for a portion of Eighteenmile Creek upstream of Newfane Dam, the results indicate impacts to fish.</li> <li>Mink prey survey is currently underway to determine if there is reproductive impairment.</li> </ul>	<ul style="list-style-type: none"> <li>Fish consumption advisories of “Eat no fish” exist for the entire creek, including below Burt Dam, the AOC.</li> <li>Beneficial uses affected by elevated levels of PCBs in fish continue to be impaired at Eighteenmile Creek.</li> </ul>	↔	<ul style="list-style-type: none"> <li>Remediate upstream sources and contaminated sediments.</li> <li>Continued fish monitoring throughout the remediation process to verify effectiveness and trends.</li> <li>Determine if bioaccumulation of contaminants is possible for any other fish or wildlife in the watershed.</li> </ul>
	Fish & Wildlife Diversity & Populations	B	<ul style="list-style-type: none"> <li>Fish community survey completed in June 2019 by USGS. Further analysis is needed, but fish communities appear to be similar to Oak Orchard Creek.</li> </ul>	<ul style="list-style-type: none"> <li>Coho and Chinook salmon and brown trout migrate from Lake Ontario each fall. The area also supports the reproduction of bass, northern pike and black crappie.</li> </ul>	↑	<ul style="list-style-type: none"> <li>Continue to support Olcott Pen Rearing Project.</li> <li>NYSDEC should continue its fish stocking program.</li> <li>Contaminated sediments may affect wildlife populations.</li> <li>A mink contaminant study should be completed before 2021.</li> </ul>
PUBLIC ACCESS & RECREATION	Public Access to the Creek & Adjacent Areas	A	<ul style="list-style-type: none"> <li>Access to Eighteenmile Creek via Fisherman’s Park and Olcott Harbor continues to be maintained by the Town of Newfane.</li> </ul>	<ul style="list-style-type: none"> <li>The AOC is accessible for anglers and general recreation activities from Fisherman’s Park and Olcott Harbor.</li> <li>A majority of the creek is secluded by a steep ravine.</li> </ul>	↔	<ul style="list-style-type: none"> <li>Investigate options for public access improvements to the creek in the City and Town of Lockport, NY.</li> </ul>
	Aesthetics of the Creek & Adjacent Riparian Areas	B	<ul style="list-style-type: none"> <li>The Town of Newfane Marina Director has been active in keeping the AOC clean of trash and a new fishing line recycling program has been implemented.</li> </ul>	<ul style="list-style-type: none"> <li>The Eighteenmile Creek AOC Corridor is pristine to the naked eye, displaying no visual Beneficial Use Impairments.</li> <li>Some abandoned industrial sites are adjacent to the creek area.</li> </ul>	↑	<ul style="list-style-type: none"> <li>Continue with annual AOC “Clean-Sweep” events.</li> <li>Educate recreational users and encourage them to “Pitch-In” and promote a healthy creek ecosystem.</li> </ul>
REMEDIAL ACTION PLAN	RAP Management	B	<ul style="list-style-type: none"> <li>US Army Corps of Engineers are looking to compile all data in the AOC and determine what data gaps are present.</li> <li>Before the end of 2020 two more BUI removal criteria may be modified.</li> </ul>	<ul style="list-style-type: none"> <li>Eighteenmile Creek is a long term Area of Concern due to it’s complexity. A management action list is to be completed.</li> <li>Continue to work with federal and state partners to determine future needs of the AOC.</li> </ul>	↔	<ul style="list-style-type: none"> <li>Regular status reports and updates should continue to be completed.</li> <li>Focus on monitoring needs and protocols to effectively assess progress post remediation.</li> <li>Continue oversight of all AOC activities and projects.</li> </ul>
	RAC Management	B	<ul style="list-style-type: none"> <li>The RAC continues to address various aspects of the Remedial Action Plan and has provided input on Federal and State Superfund designation for the creek.</li> </ul>	<ul style="list-style-type: none"> <li>The RAC is comprised of a diverse group of members and representatives from different interest areas.</li> <li>The RAC meets to discuss various aspects of the RAP and to explore new opportunities to de-list the AOC.</li> </ul>	↔	<ul style="list-style-type: none"> <li>Focus on monitoring needs and protocols to effectively assess progress post remediation.</li> <li>Finalize BUI 1 and BUI 6 removal criteria.</li> <li>Develop a management action list to act as project checklist.</li> </ul>
ENVIRONMENTAL EDUCATION	Public Awareness	A	<ul style="list-style-type: none"> <li>Superfund remediation projects have brought the creek to the forefront of public media.</li> <li>A number of student classes and trips visit the AOC to learn about critical AOC issues.</li> </ul>	<ul style="list-style-type: none"> <li>Despite a fish consumption advisory, the AOC is visited by 10,000+ anglers annually.</li> <li>Every year the AOC is utilized as an “outside classroom” for elementary and secondary classes.</li> </ul>	↑	<ul style="list-style-type: none"> <li>Continue to engage the public utilizing educational tools like the annual report card, various education events, AOC website, newsletters, Facebook, and press releases.</li> </ul>
	Watershed Stewardship	B	<ul style="list-style-type: none"> <li>122 students from Newfane High School, Niagara Orleans BOCES, and Lockport High School participated in the “GREEN” Program.</li> </ul>	<ul style="list-style-type: none"> <li>There is an increasing but still limited amount of participation from the public related to the AOC.</li> <li>Superfund activity has increased public participation/awareness.</li> </ul>	↑	<ul style="list-style-type: none"> <li>Continue GREEN program with Lockport GMCH.</li> <li>Keep the public active with outreach and educational events.</li> <li>Continue to update the website and social media.</li> </ul>

### TRENDS

Conditions Improving ↑  
 Conditions Unchanged ↔  
 Conditions Worsening ↓

### GRADING

A Excellent  
 B Good  
 C Fair  
 D Poor  
 F Failure