EIGHTEENMILE CREEK AREA OF CONCERN -



2024 REPORT CARD









A COMPILATION OF SUCCESSES, IMPROVEMENTS & CURRENT CONDITIONS











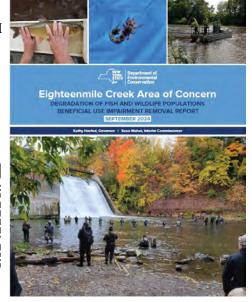
2024 AOC Newsletter Update

Progress has continued at Eighteenmile Creek Area of Concern (AOC) throughout 2024. In the past few years many studies have been completed to assess the status of each Beneficial Use Impairment (BUI). All of the studies or assessments have been posted the Eighteenmile Creek AOC website at http://eighteenmilerap.com/DATA.html.

Degradation of Fish and Wildlife Populations BUI Removal!

2024 brought another milestone for the Eighteenmile Creek AOC; We had our second BUI removal! Eighteenmile Creek's first BUI removal took place in 2020 with the Restrictions on Dredging Activities. The Degradation of Fish and Wildlife Populations BUI was removed in September 2024. This removal takes place after years of hard work drafting new removal criteria, completing new assessments, and putting together a removal recommendation highlighting why the assessments satisfy the removal criteria.

In order to remove the BUI there were three criteria that were addressed through environmental assessments. The first criteria compared fish community metrics (diversity, abundance, and condition) to a reference site (Oak Orchard Creek). The second criteria required benthic macroinvertebrate communities be healthy and similar to a reference area. The third criteria determined fish or other prey species did not carry enough PCB or other contaminants that would cause predators, such as mink, to reach acute toxicity (death). A copy of the final report that summarizes all these findings can be accessed using the QR code.



Superfund Update

USEPA is starting cleanup of the Creek Corridor. The Creek Corridor is the furthest upstream portion of the creek and contains the highest levels of PCB contamination. This includes properties like Upson Park, the former White Transportation Company, former Flintkote Property and other properties directly adjacent to Eighteenmile Creek. The agency's cleanup plan includes removing sediment in the Creek Corridor bank-to-bank, as well as removing contaminated soil from the former Flintkote property before installing a cap over the site.

In September 2024, the EPA began clearing trees in Upson Park and installed fencing to secure the area before significant construction begins. As part of the initial construction phase, this winter contractors will also move utility poles and install a bypass pipe to divert water from the creek so contaminated sediment and soil are dry and can be removed.

In September 2024 the EPA also started the cleanup of at least 33 residential properties near the Flintkote plant. The EPA's plan to clean up these residential properties is to remove and dispose of the contaminated soil off-site. EPA is continuing to study additional properties in this area that may need to be addressed.

The next phase of cleanup (OU3) is an area referred to as the Sediment Transition Area (STA). This stretch of creek begins where work on OU2 concludes near Harwood Street in Lockport and extends north 5.3 miles just past the convergence of the Eighteenmile Creek East Branch, in the Town of Newfane. Residential floodplain soils impacted by the creek adjacent to the STA are also included within this phase. The remedy chosen for the STA includes excavating contaminated sediment from the creek channel in addition to removing contaminated floodplain soil from the site. A Record of Decision for this phase was complete in 2024, and is expected to be in a remedial design phase for the next two years.



Degradation of Benthos BUI Removal Update

Removal of this BUI was partially delayed until a final report was complete for the benthic macroinvertebrate study. Niagara County SWCD and NYSDEC are drafting a removal report that will be ready for public view in 2025. In general, the final report highlights recent studies performed on Eighteenmile Creek that prove removal criteria are met. A public outreach event highlighting supporting studies can be expected in summer or fall 2025. Follow the Eighteenmile Creek AOC Facebook page for updates.

Benthic macroinvertebrates are small aquatic animals and larval stages of insects that are found near stream bottoms attached to sticks, stones or sediment. Common benthic macroinvertebrates are stonefly and dragonfly larvae, snails, worms, scuds, or beetles.

Where are we at with the BUIs?

It's easiest to discuss these as their own separate topics.

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BUI 1.	Restrictions on Fish and Wildlife Consumption
Removal Criteria:	There are no AOC-specific fish and wildlife consumption advisories issued by New York State
Discussion:	A few years ago migratory fish such as trout and salmon had their advisories modified to allow one meal per month. This is an improvement, but resident fish above and below Burt Dam continue to have elevated levels of PCBs. An AOC consumption advisory is expected to remain in place until remedial work is complete and there has been a declining trend of contaminant levels in fish. Knowing Superfund remedial work will take years to complete so this BUI is unlikely to be removed in the near future.
BUI 3.	Degradation of Fish and Wildlife Populations
Removal Criteria:	Fish community metrics (e.g., diversity, abundance, biomass, and condition) are similar to reference site(s); AND
	Benthic macroinvertebrate community composition is within the range expected and similar to reference site condition; AND
	PCB concentrations in fish tissue and other prey are below thresholds likely to result in acute toxicity to fish or piscivorous wildlife (birds and mammals).
Discussion:	Removed! No work or further assessments are needed.
BUI 5.	Bird or Animal Deformities/Reproductive Problems
Removal Criteria:	PCB concentrations in fish tissue from comparable functional feeding groups are similar to reference site(s); OR
	PCB concentrations in fish and other prey are below tissue concentrations known to cause deformities or reproductive impairment in piscivorous wildlife.
Discussion:	It's well known that fish in the AOC have elevated levels of PCBs. Therefore, the first part of the BUI will not likely be met until after remediation is complete (see BUI 1 Discussion). The second criteria for deformities or reproductive impairment is also impaired based on the SUNY Brockport mink study.
BUI 6.	Degradation of Benthos
Removal Criteria:	Benthic macroinvertebrate communities are "non-impacted" or "slightly impacted" according to NYSDEC indices; OR
	Benthic macroinvertebrate community condition is similar to unimpacted control sites of comparable physical and chemical characteristics; AND
	Toxicity of sediment-associated contaminants is similar to unimpacted control sites of comparable physical and chemical characteristics.
Discussion:	The first criteria uses DEC guidelines as a measuring stick, which is a good starting point for assessment. Previous studies have shown that benthic macroinvertebrate at both Eighteenmile Creek and a suitable reference site are slightly to moderately impacted using DEC indices, requiring use of the second and third criteria for a chance at removal.
	Analysis of benthic macroinvertebrate community structure and sediment toxicity are generally similar between Eighteenmile and Oak Orchard Creek. As discussed earlier in this report card, this BUI is in the process of being removed. Over the next several months a thorough data review will occur, a removal recommendation report will be written, and a public comment period will be held before the BUI can be removed.

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. An update to the RAP was written in 2011 by Niagara County Soil and Water Conservation District.

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.

If you have a vested interest in Eighteenmile Creek and want to help advance the RAP, contact our office and we would be happy to speak with you!

GREEN Outreach and Clean Sweep

Through the Global Rivers Environmental Education Network (GREEN) we've teamed up with our local General Motors plant in Lockport to explore the Eighteenmile Creek watershed. The program allows students from Lockport, Newfane, and Niagara BOCES to visit streams within the Eighteenmile Creek watershed and county to investigate water quality issues. Throughout the school year classes discuss solutions to the issues found on their fall field trips. The classes implemented watershed improvement projects in spring 2024. Projects completed this year include expanding a pollinator habitat and building and installing bluebird boxes at Fisherman's Park. Be sure to look at these projects when visiting the area.

Our 2024 Clean Sweep event was successful thanks to Cub Scout Pack 4 among other volunteers. The team of 25 volunteers collected over 355 pounds of garbage at Fisherman's Park!

