

REPORT CARD

The Eighteenmile Creek Area of Concern 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 2007.** 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

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 and conditions, and trends over the past 12 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.

EIGHTEENMILE CREEK BENEFICIAL USE IMPAIRMENTS

- 1) Fish & Wildlife Consumption - **Impaired** Delisting Targets → **Identified**
- 2) Degredation of Benthic Populations - **Impaired** Delisting Targets → **Identified**
- 3) Restrictions on Dredging Activities - **Impaired** Delisting Targets → **Identified**
- 4) Bird/Animal Reproductive Problems - **Likely** Delisting Targets → **Under Review**
- 5) Fish Tumors or Other Deformities - **Unknown** Delisting Targets → **None**
- 6) Fish & Wildlife Populations - **Unknown** Delisting targets → **None**

TRENDS GRADING

↑ Conditions Improving	A Excellent B Good C Fair D Poor F Failure
↔ Conditions Unchanged	
↓ Conditions Worsening	

	CATEGORIES	GRADE	SUCSESSES & IMPROVEMENTS	CURRENT CONDITIONS	TREND	STEPS NEEDED FOR PROBLEM RESOLUTION
WATER QUALITY	Overall Water Quality in the Creek	C	<ul style="list-style-type: none"> The NYSDEC is currently studying contaminant loadings to Lake Ontario from the Creek. NCSWCD has completed a 2 year study assessing baseline and storm event nutrient and sediment loads from the creek. 	<ul style="list-style-type: none"> The AOC is a Class B/C stream indicating that the primary use is contact recreation and fishing. NYSDEC monitors water quality through the Rotating Intensive Basin Study (RIBS) program and State Pollutant Discharge Elimination System (SPDES) program. 	↔	<ul style="list-style-type: none"> A citizen water quality campaign should be deployed within the watershed. Contaminated sediments within the watershed must be remediated. “Clean-Sweep” events should occur throughout the watershed. Unknown sources of water quality impairment must be identified.
	Quality of Stormwater Entering the Creek	C	<ul style="list-style-type: none"> FEMA and NYSDEC are expected to update and modernize area flood maps through it joint floodplain mapping program. Local MS4 communities have made progress adopting local storm water ordinances. 	<ul style="list-style-type: none"> Between 2003 and 2005, the mean storm event concentrations of phosphorus and total suspended solids were more than double than the mean concentrations during nonevent conditions. 12 Combined Sewer Overflows remain in Lockport. 	↔	<ul style="list-style-type: none"> All storm water outfalls to the creek must be mapped and monitored on an ongoing basis. Remaining Combined Sewer Overflows must be eliminated. Conduct a storm water education campaign.
CONTAMINATION	Contaminated Sediments in the Creek	D	<ul style="list-style-type: none"> NYSDEC has completed a supplemental investigation of the Eighteenmile Creek Corridor Site. Contaminated sediments upstream of the Burt Dam are eligible for Legacy Act assistance. 	<ul style="list-style-type: none"> Sediments in the AOC exceed NYS standards for a variety of contaminants, including PCBs, lead, etc. Contaminated sediments within the watershed continue to influence the overall health of the AOC. 	↔	<ul style="list-style-type: none"> Funding for a full scale sediment investigation, assessing extent of contamination and options for removal must be secured. Utilize Legacy Act to remediate the present contamination. Update and improve the Eighteenmile Creek Pollutant Generator Database.
	Spills, Discharges & Leaching of Contaminants	C	<ul style="list-style-type: none"> 2 farms in the watershed have received funding to rectify water quality issues. Funding has been acquired to establish a storm-water system illicit discharge detection project. 	<ul style="list-style-type: none"> 5 Inactive Hazardous Waste Sites in the watershed still have the potential to negatively influence the AOC. Unknown nonpoint source discharges negatively affect the creek. 	↑	<ul style="list-style-type: none"> Assist farms in the watershed through the NYS Agricultural Environmental Management (AEM) program. All storm water outfalls to the creek must be mapped and monitored on an ongoing basis.
FISH AND WILDLIFE	Restoration of Fish & Wildlife Habitat	A	<ul style="list-style-type: none"> Phase II habitat restoration project was completed in the summer of 2007. Baseline habitat characterization completed. 	<ul style="list-style-type: none"> The AOC flows through a steep wooded gorge where habitat disturbance are minimal. Existing habitat is influenced by the restricted flow of the Burt Dam. 	↑	<ul style="list-style-type: none"> Protect existing in-stream and riparian habitat. Utilize volunteers for future garbage “Clean-Sweep” projects in the AOC and the upper watershed.
	Fish & Wildlife Diversity & Populations	C	<ul style="list-style-type: none"> A project assessing fish and wildlife populations in the AOC was initiated in 2007. 100,000+ fish stocked by NYSDEC in 2007. Watershed wetlands are being monitored by Bird Studies Canada’s Marsh Monitoring Program. 	<ul style="list-style-type: none"> The status of the “Degradation of Fish & Wildlife Populations” Beneficial Use is currently unknown. Large concentrations of salmon and brown trout migrate from Lake Ontario into the creek each fall. 	↑	<ul style="list-style-type: none"> An invasive species management plan based upon Integrated Pest Management principles is required to address overall restoration of the AOC. Continue to support Olcott Harbor Pen Rearing project. Monitor wetland bird and amphibian populations through the Marsh Monitoring Program.
	Contaminant Levels in Fish & Wildlife	D	<ul style="list-style-type: none"> Fish contaminant level and tumor prevalence assessments began in 2007. An angler survey assessing consumption habits and knowledge of consumption advisories was begun in 2007. 	<ul style="list-style-type: none"> Fish consumption advisories exist for the AOC and the upper watershed. Contaminated sediments within the AOC are extremely bio-accumulative. 	↔	<ul style="list-style-type: none"> Remediate upstream sources and contaminated sediments. Implement a food web study in the AOC to assess contaminant trends.
PUBLIC ACCESS & RECREATION	Public Access to the Creek & Adjacent Areas	A	<ul style="list-style-type: none"> Fisherman’s Park was improved with additional angler access to the creek through the completion of the Phase II habitat restoration. 	<ul style="list-style-type: none"> The AOC is accessible for anglers and general recreation activities from Fisherman’s Park and Olcott Harbor. Majority of the AOC is secluded by a steep ravine. Limited access to boaters in the upper watershed. 	↑	<ul style="list-style-type: none"> Investigate the options for land acquisition and conservation easements for properties adjacent to the AOC.
	Aesthetics of the Creek & Adjacent Riparian Areas	B	<ul style="list-style-type: none"> Cub Scouts from Lockport and Newfane participated in a “Clean-Sweep” of the AOC which yielded the collection of 32 lbs of trash. Phase II of the habitat restoration project included the introduction of 100 native tree and shrub plantings to the riparian area of the AOC. 	<ul style="list-style-type: none"> The Town of Newfane routinely polices the Fisherman’s park for litter and other debris. A large majority of the creek flow originates from the City of Lockport Waste Water Treatment Plant, causing an excess of submerged aquatic vegetation within the AOC. 	↔	<ul style="list-style-type: none"> Continue with annual AOC “Clean-Sweep” events. Educate adjacent landowners in proper shoreline stewardship. Educate and encourage recreational users of the creek to “Pitch-In” and promote a healthy ecosystem. Continued storm water education and outreach to various communities in the watershed.
REMEDIATION ACTION PLAN	RAP Management	B	<ul style="list-style-type: none"> A 2006 Status Report to the RAP was completed. With assistance from USACE, a State of the Basin Report was completed in 2007. 	<ul style="list-style-type: none"> EPA Region 2 has funded NCSWCD to manage the Eighteenmile RAP until 2011. 	↑	<ul style="list-style-type: none"> Regular Status Reports and updates should continue to be completed. Grant fund acquisition should continue to be ongoing.
	RAC Management	B	<ul style="list-style-type: none"> Draft de-listing criteria was developed for all known Beneficial Use Impairments. A project was initiated in 2007 to investigate the status of all remaining unknown Beneficial Use Impairments. 	<ul style="list-style-type: none"> The RAC is comprised of a diverse group of original members and representatives from newer interests. The RAC meets to discuss various initiatives of the RAP and to explore new opportunities that will assist in de-listing the AOC. 	↔	<ul style="list-style-type: none"> Develop final de-listing criteria for all impaired beneficial uses by December 31, 2008. Continue the assessment of Beneficial Uses for the creek.
ENVIRONMENTAL EDUCATION	Public Awareness/ Appreciation of the Creek	A	<ul style="list-style-type: none"> An angler survey completed in 2007 has raised public awareness of the creek’s status as an AOC. Ongoing events like the Newfane Environmental Field Days have educated scores of students. 	<ul style="list-style-type: none"> The AOC is utilized as an educational tool for elementary, secondary and collegiate education activities. Despite a fish consumption advisory, the AOC is visited by 12,000 anglers annually. 	↑	<ul style="list-style-type: none"> Continue to engage the public utilizing educational tools like this Report Card. Increased media attention regarding the state of local natural resources.
	Environmental Stewardship	B	<ul style="list-style-type: none"> The AOC “Clean-Sweep” educated numerous individuals in environmental stewardship. The Marsh Monitoring Program has attracted 50+ people who are environmental stewards. 	<ul style="list-style-type: none"> There is an increasing but still limited amount of participation from the public in regards to watershed issues and planning. Lack of opportunity for landowners to get involved. 	↑	<ul style="list-style-type: none"> Partner with sportsmen clubs and local residents to promote stewardship. Continue with annual AOC “Clean-Sweep” and education events to keep youth interested in stewardship.

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

Local, state and federal officials identified a section of Eighteenmile Creek as one of 43 "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 REPORT CARD 2007



FOR MORE INFORMATION ABOUT THE EIGHTEENMILE CREEK AOC

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