

# 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 over the last 9 years.** The Eighteenmile Creek Watershed includes – The Gulf Tributary, East Branch 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 creek’s overall health. They are: 1) Water Quality; 2) Contamination; 3) Fish & Wildlife; 4) Public Access & Recreation; 5) Environmental Education & Public Involvement; and 6) Remedial Action Plan. The first three indicators are specifically addressed by the Remedial Action Plan (RAP) for the creek, while the fourth indicator assesses the overall plan. The remaining two indicators are important restoration factors not directly addressed by the RAP but are a component of a Comprehensive Watershed Management Plan currently in the planning stages.

Each indicator has been broken down further into several “categories.” Each category has been assigned a **letter grade** based upon past successes, current health and conditions, and trends over the past 9 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 on an annual basis.



| TRENDS                 | GRADING            |
|------------------------|--------------------|
| ↑ Conditions Improving | <b>A</b> Excellent |
| ↔ Conditions Unchanged | <b>B</b> Good      |
|                        | <b>C</b> Fair      |
|                        | <b>D</b> Poor      |
| ↓ Conditions Worsening | <b>F</b> Failure   |

|                            | CATEGORIES  | GRADE | SUCCESSES & IMPROVEMENTS   | CURRENT CONDITIONS  | TREND | STEPS NEEDED FOR PROBLEM RESOLUTION   |
|----------------------------|---|-------|--|---|-------|---|
| WATER QUALITY              | Overall Water Quality in the Creek                | D     | <ul style="list-style-type: none"> <li>Primary sources impacting water quality have been identified as industrial facilities, municipal practices and contaminated sediments.</li> <li>The NYS Barge Canal has also been identified a source impacting water quality.</li> </ul>   | <ul style="list-style-type: none"> <li>Using NYS DEC standards, the AOC is classified as a Class B/C stream.</li> <li>Numerous unremediated Inactive Hazardous Waste Sites continue to have the potential to affect water quality.</li> </ul>   | ↔     | <ul style="list-style-type: none"> <li>Existing contamination sources must be remediated.</li> <li>Measures must be taken to prevent future contamination occurrences.</li> <li>A dynamic water quality monitoring and protection program must be coordinated for the entire watershed.</li> <li>A trackdown of all possible sources must be implemented.</li> </ul>                                  |
|                            | Quality of Stormwater Entering the Creek          | C     | <ul style="list-style-type: none"> <li>The Western New York Stormwater Coalition was established in 2003.</li> <li>The City of Lockport has made progress eliminating existing Combined Sewer Overflows.</li> <li>The Soil &amp; Water Assessment Tool (SWAT) model has been developed to address non-point source pollution</li> </ul>  | <ul style="list-style-type: none"> <li>Runoff from a storm event could affect water quality in the creek.</li> <li>The City of Lockport sewer system periodically discharges overflow to the creek during high flow events.</li> </ul>  | ↑     | <ul style="list-style-type: none"> <li>Routine monitoring of stormwater discharges for physical and chemical parameters must be established.</li> <li>An overall assessment of the effects of stormwater and wastewater discharge on Eighteenmile Creek may need to be pursued.</li> </ul>  |
| CONTAMINATION              | Contaminated Sediments in the Creek               | F     | <ul style="list-style-type: none"> <li>Funding acquired to assess contaminant source in the area of the Flintkote Site.</li> <li>Sampling was conducted in the creek and the Barge Canal to further assess the levels of PCBs and other contaminants present.</li> </ul>   | <ul style="list-style-type: none"> <li>Sediments in the AOC exceed NYS standards for a variety of contaminants, including PCBs, lead, etc.</li> <li>Contaminated sediments behind the Burt Dam &amp; remnants of the Newfane Dam, within the NYS Barge Canal, and in the area of the Flintkote Plant Site, affect the health of the AOC.</li> </ul> | ↔     | <ul style="list-style-type: none"> <li>A full scale sediment investigation, assessing sources of contamination, extent of contamination and options for removal, is required for the entire watershed including the NYS Barge Canal and the sediments behind a number of dams and/or remnants of old dams.</li> <li>Utilize the USEPA’s Legacy Act to remediate the present contamination.</li> </ul> |
|                            | Spills, Discharges & Leaching of Contaminants     | D     | <ul style="list-style-type: none"> <li>13 of 18 identified inactive hazardous waste sites have been remediated and/or delisted.</li> <li>1 site has been referred to the Formerly Utilized Sites Remedial Action Program (FUSRAP)</li> <li>3 sewer projects in Lockport have separated stormwater from Combined Sewer Overflows.</li> </ul>  | <ul style="list-style-type: none"> <li>5 remaining sites still have the potential to contaminate the soil and water.</li> <li>Non-point source discharges may have a negative impact on the creek.</li> </ul>   | ↑     | <ul style="list-style-type: none"> <li>Completion of stormwater outfall mapping and sampling project by the Western New York Stormwater Coalition.</li> <li>Complete the remediation of all Inactive Hazardous Waste Sites in the watershed.</li> <li>Establish an illicit discharge detection program for all priority outfalls..</li> </ul>   |
| FISH AND WILDLIFE          | Restoration of Fish & Wildlife Habitat            | B     | <ul style="list-style-type: none"> <li>A .25 mile stretch of AOC in-stream habitat was enhanced and restored in 2003.</li> <li>50% of funds secured for a wetlands and in-stream habitat restoration project for 2006.</li> <li>Baseline habitat characterization completed.</li> </ul>  | <ul style="list-style-type: none"> <li>Phase I of AOC habitat restoration is complete. Funding for phase II is being secured.</li> <li>Available habitat influenced by restricted flow over the Burt Dam.</li> <li>Majority of habitat protected by steep banks in the AOC</li> </ul>   | ↑     | <ul style="list-style-type: none"> <li>Complete phase II of habitat restoration project &amp; define additional opportunities for specific restoration measures.</li> <li>Develop the protocol by which to monitor the success of the restoration.</li> <li>Protect existing critical in-stream and riparian habitat within the AOC.</li> </ul>   |
|                            | Fish & Wildlife Diversity & Populations           | C     | <ul style="list-style-type: none"> <li>Successful fish stocking program in Olcott Harbor by the NYSDEC.</li> <li>Salmon &amp; Trout fish raising project approved for Olcott by Niagara County Legislature.</li> <li>2006 DEC CREEL survey to include AOC.</li> </ul>  | <ul style="list-style-type: none"> <li>The AOC is identified as a known location of the Blanding’s Turtle, a NYS threatened species and a federal species of concern.</li> <li>Various invasive plant species inhabit the AOC, but none occur in dominant numbers.</li> </ul>   | ↔     | <ul style="list-style-type: none"> <li>An updated fish &amp; wildlife population survey is required for the AOC.</li> <li>An invasive species management plan based on Integrated Pest Management (IPM) is required to address overall restoration of the AOC.</li> <li>Continue with creating and enhancing AOC habitat.</li> </ul>  |
|                            | Contaminant Levels in Fish & Wildlife             | D     | <ul style="list-style-type: none"> <li>Determined that the plankton community in the AOC is not impacted by contaminants.</li> <li>In 2004, Macroinvertebrate populations were assessed as slightly impacted, an improvement from moderately impacted in 1990.</li> </ul>  | <ul style="list-style-type: none"> <li>Fish consumption advisories exist for the AOC and the watershed above the Burt Dam.</li> <li>In 2005, contaminants in the sediments in the Area of Concern were found to be bio-accumulative in laboratory samples.</li> </ul>   | ↔     | <ul style="list-style-type: none"> <li>A study assessing the prevalence of tumors in fish flesh is needed.</li> <li>A food web study assessing contaminant trends is required in the AOC.</li> <li>An assessment of bird/animal deformities in the AOC is needed.</li> <li>Upstream contamination sources and contaminated sediments require remediation.</li> </ul>                                  |
| PUBLIC ACCESS & RECREATION | Public Access to the Creek & Adjacent Areas       | B     | <ul style="list-style-type: none"> <li>Public access &amp; recreation use was enhanced in Fishermen’s Park to include a staircase, wider trails for easier access, and bank-side fishing points along the trail.</li> <li>Annually, 12,000 anglers visit the AOC to fish.</li> </ul>   | <ul style="list-style-type: none"> <li>Majority of AOC is secluded by steep banks not accessible for recreation.</li> <li>The AOC is accessible for anglers, canoe launching, and general recreation activities.</li> <li>Olcott Harbor is accessible for fishing and recreation.</li> </ul>  | ↑     | <ul style="list-style-type: none"> <li>Fishermen’s Park can be enhanced with additional recreation access.</li> <li>Additional Fishing access points should be identified and enhanced downstream of Fisherman’s Park.</li> </ul>   |
|                            | Aesthetics of the Creek & Adjacent Riparian Areas | B     | <ul style="list-style-type: none"> <li>The Soil &amp; Water Assessment Tool (SWAT) model has been developed to address non-point source pollution through proper land use planning.</li> <li>The Town of Newfane routinely police’s a portion of the AOC for litter and other debris.</li> <li>The improvements to Fisherman’s Park have included conservation seedings over barren areas and a general clean-up of the area.</li> </ul> | <ul style="list-style-type: none"> <li>Various debris including, litter, logs, and other floatables are conveyed over the Burt Dam on a regular basis.</li> <li>A large majority of the flow in the creek originates from a waste water treatment plant.</li> </ul>   | ↑     | <ul style="list-style-type: none"> <li>Establish a bi-annual AOC clean-sweep of Fishermen’s Park and properties adjacent to the creek.</li> <li>Educate and encourage recreational users of the creek to “Pitch-In” and promote a healthy ecosystem.</li> </ul>   |
| REMEDIAL ACTION PLAN       | RAP Management                                    | B     | <ul style="list-style-type: none"> <li>Management of the RAP was re-established in 2005 by the Niagara County Soil &amp; Water District</li> <li>Various grants have been applied for and acquired to progress initiatives of the RAP.</li> </ul>  | <ul style="list-style-type: none"> <li>RAP management is being included in overall watershed management planning.</li> <li>A status report to RAP has not been completed since 2001.</li> </ul>   | ↑     | <ul style="list-style-type: none"> <li>Adoption of a annual RAP/AOC Report Card.</li> <li>Annual status reports for the RAP and occasional updates should be completed.</li> <li>Additional grants funds should be applied for and acquired, including the U.S. EPA Legacy Act.</li> </ul>  |
|                            | RAC Management                                    | B     | <ul style="list-style-type: none"> <li>After a 3 year break, regular meetings of the Remedial Advisory Committee were reconvened in January of 2005.</li> </ul>  | <ul style="list-style-type: none"> <li>The RAC is comprised of a diverse group of original members and representatives from new interests.</li> <li>The RAC meets quarterly to discuss various initiatives of the RAP and to explore new opportunities in assisting with delisting the AOC.</li> </ul>  | ↑     | <ul style="list-style-type: none"> <li>The RAC should implement written Rules, Guidelines &amp; Participant Responsibilities.</li> <li>De-listing Criteria will need to be established by the RAC in 2006.</li> <li>Continued assessment of the Beneficial Use Impairments of the Creek is paramount.</li> </ul>  |
| ENVIRONMENTAL EDUCATION    | Public Awareness/ Appreciation of the Creek       | C     | <ul style="list-style-type: none"> <li>Despite the high levels of PCBs found in fish flesh, 12,000 recreational users take advantage of the creek annually.</li> <li>In 2005, a website was created for the creek and the AOC. A stakeholder network was also created to facilitate information sharing.</li> </ul>  | <ul style="list-style-type: none"> <li>The creek is home to numerous tours and classes led by various entities, including the U.S. Army Corps of Engineers.</li> <li>A large majority of users of the creek and adjacent landowners don’t know the creek is an AOC</li> </ul>   | ↑     | <ul style="list-style-type: none"> <li>Increased media attention regarding the state of our natural resources.</li> <li>An informational campaign should commence for the creek and the AOC, especially during the planning stage of an overall Watershed Management Plan.</li> <li>Keep stakeholders informed about progress in the AOC.</li> </ul>  |
|                            | Environmental Stewardship                         | C     | <ul style="list-style-type: none"> <li>The Town of Newfane hosts an annual Environmental Fair which educates numerous school children about conservation and water protection.</li> </ul>  | <ul style="list-style-type: none"> <li>There is a very limited amount of participation from the public with regards to RAP/AOC planning.</li> <li>The Environmental Field Days educates Niagara County students about Environmental Stewardship.</li> </ul>   | ↔     | <ul style="list-style-type: none"> <li>Establish a stewardship campaign that engages stakeholders and residents alike with activities including AOC Clean Sweep Days, education days and outreach events.</li> <li>Partner with various sportsmen clubs to assist in promoting environmental stewardship.</li> </ul>  |

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

In 1994, 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.

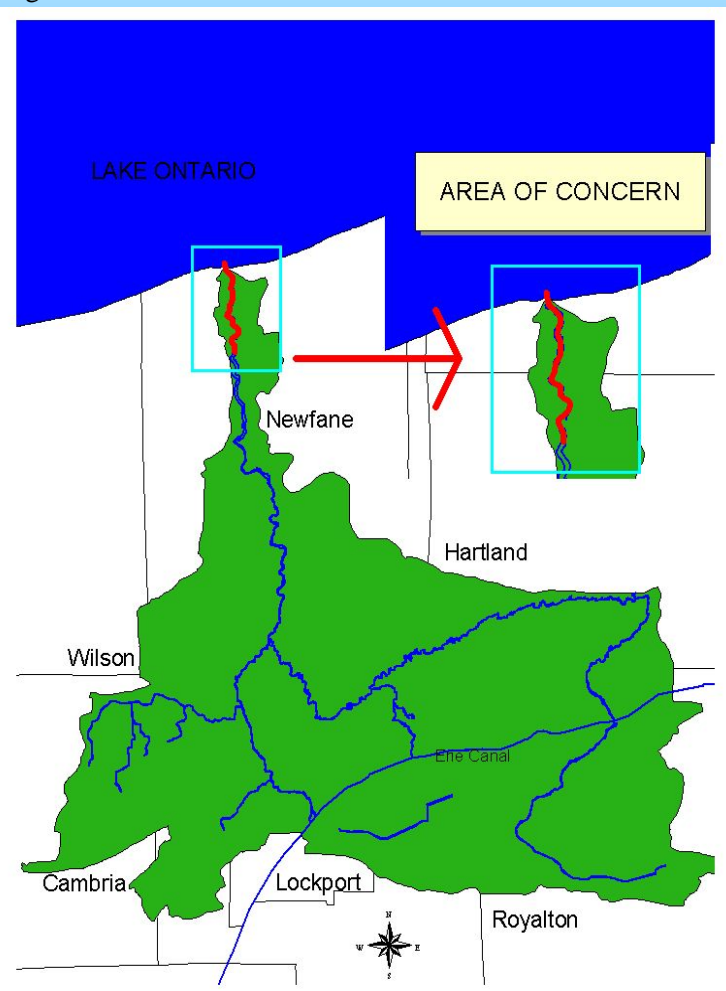
**WHAT IS THE EIGHTEENMILE CREEK REMEDIAL ACTION PLAN (RAP) ?**

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 re-convened in 2005 and is currently making progress in moving the RAP forward.

**EIGHTEENMILE CREEK AREA OF CONCERN  
REPORT CARD  
2005**



- EIGHTEENMILE CREEK BENEFICIAL USES OF CONCERN**
- 1) Restrictions on Fish & Wildlife Consumption - Impaired
  - 2) Degredation of Benthic Populations - Impaired
  - 3) Restrictions on Dredging Activities - Impaired
  - 4) Bird/Animal Deformities or Reproductive Problems - Likely
  - 5) Fish Tumors or Other Deformities - Unknown
  - 6) Degradation of Fish & Wildlife Populations - Unknown



**FOR MORE INFORMATION ABOUT THE  
EIGHTEENMILE CREEK AOC  
OR ITS REMEDIAL ACTION PLAN**

**Contact:**  
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