REPORT CARD		CATEGORIES	GRADE	SUCCESSES & IMPROVEMENTS	CURRENT CONDITIONS	TREND	STEPS NEEDED FOR PROBLEM RESOLUTION
The Eighteenmile Creek Area of Concern Report Card was created by the Eighteen- mile Creek Remedial Advisory Committee (RAC). The purpose of this Report Card is to give a brief overview of the health, im- provements and current conditions of Eighteenmile Creek during 2013. The	WATER QUALITY	Overall Water Quality	С	<ul> <li>Agricultural Environmental Management Program has been deployed to document and prioritize water quality impairments.</li> <li>The City of Lockport has begun repairs on a failing sewage interceptor line which has been spilling sewage into Gulf Creek for an undetermined amount of time.</li> </ul>	<ul> <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 State Pollutant Discharge Elimination System (SPDES) program.</li> <li>Some pollutants (PCBs, heavy metals) are suspended in the water column and exceed water quality standards.</li> </ul>	<b>†</b>	<ul> <li>A citizen water quality campaign should be deployed within the watershed.</li> <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 impairments must be identified.</li> </ul>
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.	LITY	Quality of Storm Water	С	• A number of Combined Sewer Overflows that exist within the City of Lockport wastewater system are scheduled to be closed in the near future.	<ul> <li>5 Combined Sewer Overflows still could discharge to the creek.</li> <li>During storm events, degraded water quality negatively impacts Olcott Beach along Lake Ontario, causing beach closures.</li> </ul>	\$	<ul> <li>Remaining Combined Sewer Overflows must be eliminated.</li> <li>Continue to work with various partners to determine the sources which negatively impact Olcott Beach and the Lake.</li> </ul>
Scientific data and research that was refer- enced during the development of this Report Card can be found at the Area of Concern website:	CONTAMINATION	Spills, Discharges & Leaching of Contaminants	С	<ul> <li>Regulatory programs and monitoring by NYSDEC help reduce inputs to the creek.</li> <li>14 of 20 inactive hazardous waste sites have been sealed or remediated.</li> </ul>	• 5 Inactive Hazardous Waste Sites in the watershed still have the potential to negatively impact the AOC.	\$	<ul> <li>Continue to assist farms in the watershed via the NYS Agricultural Environmental Management (AEM) program.</li> <li>Continue to remediate Inactive Hazardous Waste Sites and other sources of contamination.</li> </ul>
WWW.EIGHTEENMILERAP.COM This Report Card offers six "indicators" relat- ed to the management of the creek's overall health. They are: 1) Water Quality; 2) Con- tamination; 3) Fish & Wildlife; 4) Public Ac- cess & Recreation; 5) Remedial Action Plan; and 6) Environmental Education & Public Involvement.		Contaminated Sediment	D	<ul> <li>A study assessing the use of Powdered Activated Carbon on creek sediments showed favorable results that would indicate the use of PAC during remediation as a viable clean up option.</li> <li>EPA has finalized a plan to clean up residential properties in Lockport impacted by contaminated creek sediments.</li> </ul>	<ul> <li>Sediments in the AOC exceed NYS standards for a variety of contaminants, including PCBs, 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 present in the creek act as "sinks" for contaminated sediment.</li> </ul>	Î	<ul> <li>Utilize Federal and State Superfund programs to address the current sediment contamination.</li> <li>Remediate all upstream sources of contamination, including the Eighteenmile Creek Superfund Site and Old Upper Mountain Road Site.</li> <li>Continue to identify new funding sources.</li> </ul>
Each indicator has been further divided into several "sub-categories" to assess how spe- cific concerns are being addressed. Each sub-category has been assigned a <b>letter</b> <b>grade</b> based upon past successes, current	FISH & WILDLIFE	Contaminant Levels in Fish & Wildlife	D	• 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. However, the results indicate impacts to fish throughout the creek.	<ul> <li>Fish consumption advisories exist for the AOC, upper watershed and Lake Ontario.</li> <li>Beneficial uses affected by elevated levels of PCBs in fish continue to be impaired at Eighteenmile Creek.</li> </ul>	+	<ul> <li>Remediate upstream sources and contaminated sediments.</li> <li>Continue to monitor contaminant levels in fish and wildlife in an attempt to establish trends and build upon baseline data.</li> <li>Conduct additional benthic population investigations in 2014 to support a possible removal of the "Benthics" BUI.</li> </ul>
health conditions, and trends over the past few years. The last column identifies action steps or immediate concerns to be ad- dressed in order to meet restoration targets for the Area of Concern. This Report Card will be updated annually.		Fish & Wildlife Diversity & Populations	В	• The results of a study assessing benthic popula- tions indicate that macroinvertebrate communi- ties in riffle and pool habitats are either not impaired or slightly impaired according to NYSDEC indices.	• Large concentrations of Coho and Chinook salmon and brown trout migrate from Lake Ontario each fall. The area also supports the natural reproduction of bass, northern pike and black crappie.	Î	<ul> <li>Continue to support Olcott Pen Rearing Project.</li> <li>NYSDEC should continue is fish stocking program.</li> <li>Contaminated sediments affecting fish &amp; wildlife require special attention.</li> </ul>
BENEFICIAL USE IMPAIRMENTS	PUBLIC ACCESS & REMEDIAL ACTION PLAN RECREATION	Public Access to the Creek & Adjacent Areas	A	• Access to Eighteenmile Creek via Fisherman's Park continues to be maintained by the Town of Newfane.	<ul><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>	+	• Investigate options for public access improvements to the creek in the City and Town of Lockport, NY.
<ol> <li>Fish &amp; Wildlife Consumption - Impaired Delisting Targets → Identified</li> <li>Degraded Benthic Populations - Impaired</li> </ol>		Aesthetics of the Creek & Adjacent Riparian Areas	В	• The Town of Newfane continually polices Fishermen's Park for trash and other debris.	<ul> <li>The Eighteenmile Creek 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>	<b></b>	<ul> <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>
<ul> <li>Delisting Targets → Identified</li> <li>3) Dredging Restrictions -Impaired Delisting Targets → Identified</li> <li>4) Animal Reproductive Issues - Impaired Delisting Targets → Identified</li> </ul>		RAP Management	В	• In 2013, NCSWCD began the 2nd year of a new 5 year workplan which includes: continued coordination of all RAP initiatives development of new projects; education and outreach activi- ties and; various projects to assess current im- pairments.	<ul> <li>EPA Region 2 has funded Niagara County SWCD to oversee the Eighteenmile RAP through the end of 2016.</li> <li>New York AOCs have begun to collaborate as a group to identify common challenges and goals to AOC recovery.</li> <li>Eighteenmile Creek is on a path to be delisted as an Area of Concern by 2020.</li> </ul>	+	<ul> <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>Grant fund acquisition should continue to be ongoing.</li> <li>Continue oversight of all AOC activities and projects.</li> </ul>
<ul> <li>5) Fish &amp; Wildlife Populations - Impaired Delisting targets → Identified</li> </ul>		RAC Management	В	• The RAC continues to address various aspects of the Remedial Action Plan and has provided input on Federal and State Superfund designa- tion for the creek.	<ul> <li>The RAC is comprised of a diverse group of original members and representatives from newer interests.</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> <li>Focus on monitoring needs and protocols to effectively assess progress post remediation.</li> <li>Continue to assess the status of active BUIs.</li> <li>Utilize the updated Stage 2 RAP as a plan for the future.</li> </ul>
TRENDSGRADINGConditions ImprovingA Excellent B Good	ENVIRONMENTAL EDUCATION	Public Awareness	A	<ul> <li>The recent Superfund designation has brought the creek to the forefront of public media.</li> <li>A number of student classes visit the AOC to learn about critical AOC issues.</li> </ul>	<ul> <li>Despite a fish consumption advisory, the AOC is visited by 13,000+ anglers annually.</li> <li>Every year the AOC is utilized as an "outside classroom" for elementary, secondary and college level classes.</li> </ul>	<b>†</b>	• Continue to engage the public utilizing educational tools like the annual report card, various education events, internet map- ping database, AOC website, newsletters and press releases.
Conditions Unchanged C Fair D Poor F Failure		Watershed Stewardship	В	• 18 Cub Scouts participated in a "Clean-Sweep" of the AOC which yielded the collection of 125 lbs of trash from creek banks/riparian areas.	<ul> <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>	1	<ul> <li>Partner with sportsmen to promote AOC stewardship.</li> <li>Continue with annual AOC "Clean-Sweep" and education events to keep youth interested and active.</li> </ul>

Γ		CATEGORIES	ATEGORIES GRADE SUCCESSES & IMPROVEMENTS		CURRENT CONDITIONS		STEPS NEEDED FOR PROBLEM RESOLUTION
5	WATER QUALITY	Overall Water Quality	С	<ul> <li>Agricultural Environmental Management Program has been deployed to document and prioritize water quality impairments.</li> <li>The City of Lockport has begun repairs on a failing sewage interceptor line which has been spilling sewage into Gulf Creek for an undetermined amount of time.</li> </ul>	<ul> <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 State Pollutant Discharge Elimination System (SPDES) program.</li> <li>Some pollutants (PCBs, heavy metals) are suspended in the water column and exceed water quality standards.</li> </ul>	\$	<ul> <li>A citizen water quality campaign should be deployed within the watershed.</li> <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 impairments must be identified.</li> </ul>
lf ile	LITY	Quality of Storm Water	С	• A number of Combined Sewer Overflows that exist within the City of Lockport wastewater system are scheduled to be closed in the near future.	<ul> <li>5 Combined Sewer Overflows still could discharge to the creek.</li> <li>During storm events, degraded water quality negatively impacts Olcott Beach along Lake Ontario, causing beach closures.</li> </ul>	$ \Longleftrightarrow $	<ul> <li>Remaining Combined Sewer Overflows must be eliminated.</li> <li>Continue to work with various partners to determine the sources which negatively impact Olcott Beach and the Lake.</li> </ul>
t	CONT	Spills, Discharges & Leaching of Contaminants	С	<ul> <li>Regulatory programs and monitoring by NYSDEC help reduce inputs to the creek.</li> <li>14 of 20 inactive hazardous waste sites have been sealed or remediated.</li> </ul>	• 5 Inactive Hazardous Waste Sites in the watershed still have the potential to negatively impact the AOC.	\$	<ul> <li>Continue to assist farms in the watershed via the NYS Agricultural Environmental Management (AEM) program.</li> <li>Continue to remediate Inactive Hazardous Waste Sites and other sources of contamination.</li> </ul>
CONTAMINATION		Contaminated Sediment	D	<ul> <li>A study assessing the use of Powdered Activated Carbon on creek sediments showed favorable results that would indicate the use of PAC during remediation as a viable clean up option.</li> <li>EPA has finalized a plan to clean up residential properties in Lockport impacted by contaminated creek sediments.</li> </ul>	<ul> <li>Sediments in the AOC exceed NYS standards for a variety of contaminants, including PCBs, 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 present in the creek act as "sinks" for contaminated sediment.</li> </ul>	Î	<ul> <li>Utilize Federal and State Superfund programs to address the current sediment contamination.</li> <li>Remediate all upstream sources of contamination, including the Eighteenmile Creek Superfund Site and Old Upper Mountain Road Site.</li> <li>Continue to identify new funding sources.</li> </ul>
H&W	FISH & W	Contaminant Levels in Fish & Wildlife	D	• 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. However, the results indicate impacts to fish throughout the creek.	<ul> <li>Fish consumption advisories exist for the AOC, upper watershed and Lake Ontario.</li> <li>Beneficial uses affected by elevated levels of PCBs in fish continue to be impaired at Eighteenmile Creek.</li> </ul>	+	<ul> <li>Remediate upstream sources and contaminated sediments.</li> <li>Continue to monitor contaminant levels in fish and wildlife in an attempt to establish trends and build upon baseline data.</li> <li>Conduct additional benthic population investigations in 2014 to support a possible removal of the "Benthics" BUI.</li> </ul>
	<b>ILDLIFE</b>	Fish & Wildlife Diversity & Populations	В	• The results of a study assessing benthic popula- tions indicate that macroinvertebrate communi- ties in riffle and pool habitats are either not impaired or slightly impaired according to NYSDEC indices.	• Large concentrations of Coho and Chinook salmon and brown trout migrate from Lake Ontario each fall. The area also supports the natural reproduction of bass, northern pike and black crappie.	1	<ul> <li>Continue to support Olcott Pen Rearing Project.</li> <li>NYSDEC should continue is fish stocking program.</li> <li>Contaminated sediments affecting fish &amp; wildlife require special attention.</li> </ul>
	PUBLIC لا RECRE	Public Access to the Creek & Adjacent Areas	Α	• Access to Eighteenmile Creek via Fisherman's Park continues to be maintained by the Town of Newfane.	<ul> <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>	+	• Investigate options for public access improvements to the creek in the City and Town of Lockport, NY.
	ACCESS & ATION	Aesthetics of the Creek & Adjacent Riparian Areas	В	• The Town of Newfane continually polices Fishermen's Park for trash and other debris.	<ul> <li>The Eighteenmile Creek 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> <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 AC	RAP Management	В	• In 2013, NCSWCD began the 2nd year of a new 5 year workplan which includes: continued coordination of all RAP initiatives development of new projects; education and outreach activities and; various projects to assess current impairments.	<ul> <li>EPA Region 2 has funded Niagara County SWCD to oversee the Eighteenmile RAP through the end of 2016.</li> <li>New York AOCs have begun to collaborate as a group to identify common challenges and goals to AOC recovery.</li> <li>Eighteenmile Creek is on a path to be delisted as an Area of Concern by 2020.</li> </ul>	1	<ul> <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>Grant fund acquisition should continue to be ongoing.</li> <li>Continue oversight of all AOC activities and projects.</li> </ul>
	ACTION PLAN	RAC Management	В	• The RAC continues to address various aspects of the Remedial Action Plan and has provided input on Federal and State Superfund designa- tion for the creek.	<ul> <li>The RAC is comprised of a diverse group of original members and representatives from newer interests.</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> <li>Focus on monitoring needs and protocols to effectively assess progress post remediation.</li> <li>Continue to assess the status of active BUIs.</li> <li>Utilize the updated Stage 2 RAP as a plan for the future.</li> </ul>
	ENVIRONMENT. EDUCATION	Public Awareness	Α	<ul> <li>The recent Superfund designation has brought the creek to the forefront of public media.</li> <li>A number of student classes visit the AOC to learn about critical AOC issues.</li> </ul>	<ul> <li>Despite a fish consumption advisory, the AOC is visited by 13,000+ anglers annually.</li> <li>Every year the AOC is utilized as an "outside classroom" for elementary, secondary and college level classes.</li> </ul>	<b></b>	• Continue to engage the public utilizing educational tools like the annual report card, various education events, internet map- ping database, AOC website, newsletters and press releases.
	MENTAL ATION	Watershed Stewardship	В	• 18 Cub Scouts participated in a "Clean-Sweep" of the AOC which yielded the collection of 125 lbs of trash from creek banks/riparian areas.	<ul> <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>	Î	<ul> <li>Partner with sportsmen to promote AOC stewardship.</li> <li>Continue with annual AOC "Clean-Sweep" and education events to keep youth interested and active.</li> </ul>

### 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.



FOR MORE INFORMATION **Contact:** Niagara County Soil & Water Conservation District **U.S.D.A.** Service Center 4487 Lake Avenue Lockport, NY 14094 Phone: (716) 434-4949 Ext. 4 Fax: (716) 433-1070 Website: www.eighteenmilerap.com





# 





# **A COMPILATION OF** SUCCESSES, IMPROVEMENTS & CURRENT CONDITIONS





2013 REPORT CARD -



