

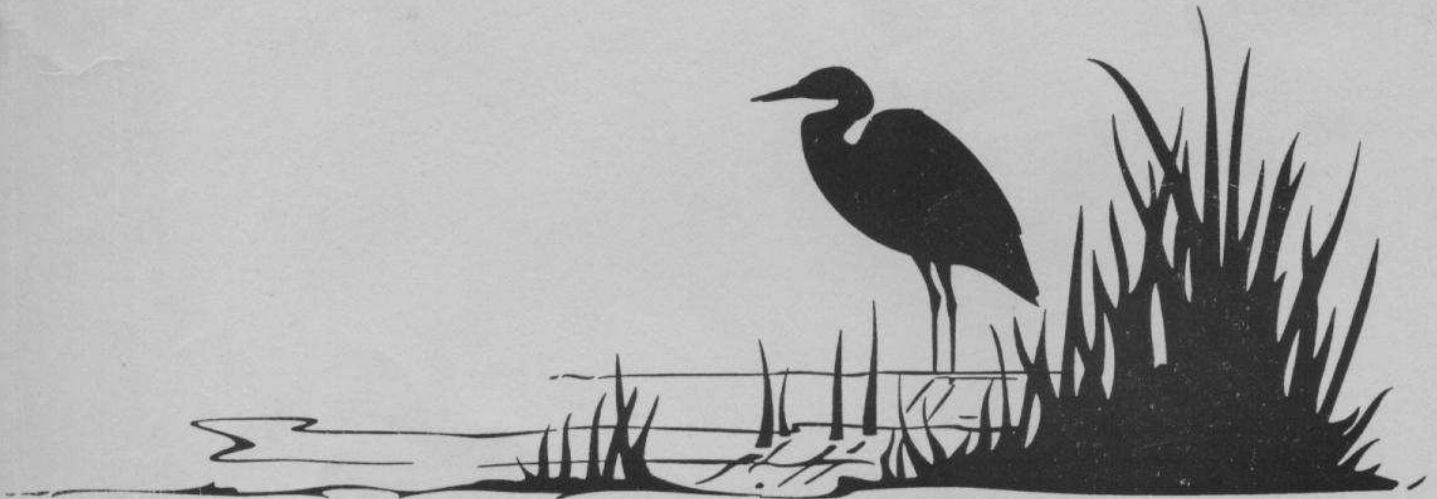


DEC

Division Water

**Eighteenmile Creek
Remedial Action Plan
*Status Report***

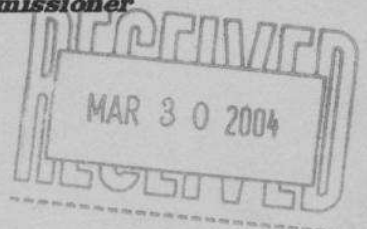
June 2001



New York State Department of Environmental Conservation

George E. Pataki, *Governor*

Erin M. Crotty, *Commissioner*



This Eighteenmile Creek Remedial Action Plan Status Report was prepared by the New York State Department of Environmental Conservation in cooperation with the Eighteenmile Creek Remedial Advisory Committee.

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EXECUTIVE SUMMARY

Eighteenmile Creek Remedial Advisory Committee

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EXECUTIVE SUMMARY

In August 1997 the Eighteenmile Creek Remedial Action Plan (RAP) was issued. A Remedial Advisory Committee (RAC) assists the DEC in the implementation of the RAP. The RAC is representative of concerned groups within the community that have an interest in Eighteenmile Creek.

The Remedial Action Plan contained initial agency commitments to implement the remedial action strategy. This report summarizes the accomplishments through March 2001 and identifies the activity projections for the period beginning April 2001.

Stream Water Quality Monitoring

- The New York State Department of Environmental Conservation (DEC) Division of Water monitors the overall health of New York's waterways under the Rotating Intensive Basin Survey (RIBS) program. This includes analyses of water and sediment samples for chemical contaminants as well as toxicity tests. RIBS also includes macroinvertebrate sampling for both chemical contamination and species diversity. Eighteenmile Creek is included as a RIBS site every five to six years.
- Suspended sediment sampling was undertaken both upstream and downstream of the Burt Dam near the upper end of the Area of Concern to determine if impoundment sediments were being transported and were impacting downstream water and sediment quality.

Bottom Sediments

- Sediment sampling of Eighteenmile Creek was undertaken to further assess the levels of PCBs and other parameters throughout the length of the waterway. The identification of potential sources of PCBs was also an objective of the sampling. Sediment sampling was also undertaken along the New York State Barge Canal in the City of Lockport.

Inactive Hazardous Waste Sites

- All Phase I and II investigations of sites in the Eighteenmile Creek basin have been completed.
- Remedial action was determined not to be required due to the absence of hazardous waste at the Norton Labs and Diamond Shamrock sites.

- Remedial investigations are underway at five sites: AKZO Chemical, Delphi Harrison TCE Site, Guterl Steel Landfill and Plant Site and the Flintkote Property (Williams Street Island Site). Three of the above sites were identified subsequent to the completion of the Remedial Action Plan (RAP). The Flintkote Property (Williams Street Island Site) was identified as a result of a PCB sampling program conducted by DEC.
- Remedial action has been completed at thirteen of the eighteen sites currently identified in the Eighteenmile Creek basin.

Municipal & Industrial Wastewater Facilities

- Discharge permit monitoring and renewal activities are ongoing to assure compliance with water quality standards and technology requirements.

Combined Sewer Overflows

- A combined sewer system assessment was initiated by the City of Lockport. The data collected provides for the evaluation of possible improvements in the sewer system to reduce combined sewer overflows.
- Plans for the construction of three projects within the City of Lockport sewer system have been developed and are being funded under the New York State Clean Water/Clean Air Bond Act for the reduction of combined sewer overflows. The three projects include two projects within the sewer collection system, involving the separation of stormwater from the combined sewer system to reduce overflows, and the addition of a clarifier at the wastewater treatment plant to increase the capability to treat wet weather flows.
- A sewer system sampling program was undertaken to determine if there are continuing sources of PCBs to the system.

Fish and Wildlife Habitat

- A plan to monitor contaminants in fish was developed and monitoring was undertaken to assess the current level of chlorinated organic compounds in fish flesh.
- A plan to assess phytoplankton and zooplankton populations was developed and an assessment was undertaken.

CHAPTER I INTRODUCTION

The Eighteenmile Creek Remedial Action Plan (RAP) was completed and issued in August 1997. To track implementation of the Remedial Action Plan, DEC issues status reports to illustrate remediation progress by listing accomplishments in the previous reporting period and describing commitments for the current period. This is the first status report to be issued since the completion of the RAP.

A Remedial Advisory Committee (RAC), representative of concerned groups within the community that have an interest in Eighteenmile Creek, assists the DEC in the remediation process. The groups include government, public interest groups (non-economic), economic interests and private citizens. In addition to RAC members, agencies at all levels of government are asked to participate and provide input in RAP implementation as needed.

DEC and other responsible agencies have been, and are currently carrying out remediation of environmental problems along Eighteenmile Creek. The remedial strategy outlined in the RAP included initial commitments to be undertaken to advance the remediation of Eighteenmile Creek. A summary of the status of these undertakings and an overview of current commitments is presented.

CHAPTER 2
ACCOMPLISHMENTS THROUGH 2001

An overview of accomplishments through 2001 which describes the objectives, responsible agency and status is shown in Table 1. A more detailed description follows. Under each accomplishment the "Next step:" heading denotes those actions needed to carry forward the overall RAP strategy.

A. Stream Water Quality Monitoring

1. Eighteenmile Creek Water Quality Monitoring

Continue to include Eighteenmile Creek as a Rotating Intensive Basin Study (RIBS) program watershed.

The NYS DEC Division of Water monitors the overall health of New York's waterways under the RIBS program. This includes analyses of water and sediment samples for chemical contaminants as well as toxicity tests. RIBS also includes macroinvertebrate sampling for both chemical contamination and species diversity. Eighteenmile Creek will be included as a RIBS site every five to six years.

Completion date: Ongoing

Responsible agency: DEC

Next step: Data from the RIBS sampling will be used for continuing assessment of the water quality in Eighteenmile Creek.

2. Determine if Sediment Transport from the Reservoir of the Burt Dam is Impacting Downstream Water and Sediment Quality.

Sample and analyze suspended sediments from the dam reservoir and at the turbine outlets for metals, PCBs and pesticides.

Sediment sampling conducted prior to the RAP suggested that flow through the Burt Dam may be mobilizing contaminated sediments from the reservoir into the Area of Concern. Higher contaminant concentrations in the suspended sediments from the water at the turbine outlet than that from upstream would indicate that this is occurring.

Water quality sampling was conducted upstream and downstream of the Burt Dam during a high flow event. The sampling utilized a device called the Trace Organic Platform Sampler (TOPS). This instrument provides a highly sensitive method of sampling and quantifying extremely low concentrations of organic compounds in both the aqueous and adsorbed phase.

Completion date: Completed
Responsible agency: DEC

Next step: Impoundment sediments that are being transported and are impacting downstream water and sediment quality, would require the initiation of remedial measures.

B. Bottom Sediments

1. Criteria Development

Develop method for determining sediment contamination criteria that have scientific validity.

The US EPA has been developing and validating tests and associated acceptance criteria to allow decisions to be made relative to the likely environmental impacts of contaminated sediments.

Completion date: Ongoing
Responsible agency: USEPA

Next step: Once a criteria methodology has been developed by EPA, DEC will apply this methodology to Eighteenmile Creek sediments.

2. Trackdown Sampling for PCBs

Continue sampling of Eighteenmile Creek to determine the sources (or source areas) of PCBs.

Sampling data has indicated the presence of PCBs throughout the Eighteenmile Creek watershed. The data indicates the presence of a source between Olcott St. and N. Transit Rd. as well as the possibility of other smaller sources. Sediment remediation cannot proceed until all sources of PCBs are addressed.

Completion date: Completed
Responsible agency: DEC

Next step: The data will be used to guide further actions related to potential contaminant sources.

C. NY Barge Canal

1. Conduct Sediment Sampling in the NY Barge Canal

Conduct sampling of the sediments of the NY Barge Canal in the Lockport area to determine possible sources and the horizontal and vertical extent of contamination.

Sampling indicates that the sediments of the NY Barge Canal contain PCBs, dioxins and furans and that the canal is a source of these contaminants to Eighteenmile Creek. Before remediation of these sediments can begin, the sources as well as the horizontal and vertical extent of the contamination in the canal must be determined through sampling.

Completion date: Completed
Responsible agency: NYS Canal Corporation and DEC

Next step: Investigation of appropriate remedial measures.

D. Inactive Hazardous Waste Sites

1. Phase I Site Investigations

Conduct Phase I investigations involving existing data accumulation and assessment.

Phase I studies have been completed at each of the listed inactive hazardous waste sites in the Eighteenmile Creek drainage basin by the responsible parties or by DEC.

Completion date: Completed
Responsible agency: DEC

Next step: Once Phase I investigations have been completed, Phase II studies will be conducted.

2. Phase II Site Investigations

Conduct Phase II field investigations to fill data gaps to complete initial site assessments.

Phase II investigations have been completed at all of the significant sites in the Eighteenmile Creek drainage basin. A Phase II study was completed for the Diamond Shamrock site in the City of Lockport during this report period.

Completion date: Completed
Responsible agency: DEC

Next step: Upon completion of Phase II site investigations, the sites are ranked and DEC makes determinations of need for Remedial Investigation/Feasibility Studies (RI/FS). Once a determination is made that an RI/FS is required, action is implemented under a DEC consent order by the responsible party or by DEC in the absence of a known responsible party.

3. Remedial Investigation/Feasibility Studies

Conduct Remedial Investigation/Feasibility Studies to define contaminant pathways and assess alternative remedial measures.

Following completion of Phase II studies, the Norton Labs and Diamond Shamrock sites were delisted due to the absence of hazardous waste.

A Remedial Investigation/Feasibility Study is underway at the AKZO Chemical site.

Completion date: March 2002
Responsible agency: DEC

Next step: Once remedial investigation/feasibility studies are complete, site remedial measures can be designed.

4. Conduct investigation to locate the PCB source between Olcott St. and N. Transit Rd.

Collect soil and sediment samples from the William St. Island and analyze for PCBs.

DEC sampling indicates the presence of a source of PCBs to Eighteenmile Creek between Olcott St. and N. Transit Rd. Sediment sampling on and around an island in the creek at William St. has found PCBs. DEC will investigate this site to determine if it is a source of PCBs to the creek.

Completion date: Completed
Responsible agency: DEC

Next step: A Remedial Investigation Feasibility Study of the site will be initiated.

E. Municipal and Industrial Wastewater Facilities

1. Discharge permit monitoring and renewal

Continue discharge permit monitoring to achieve compliance with secondary treatment for municipal discharges and best available technology and best management practices for industrial discharges.

DEC reviews self monitoring reports from dischargers, inspects operating facilities and independently samples effluent to check on the validity of self monitoring data. Significant violations of permit conditions trigger compliance or enforcement measures.

Completion date: Ongoing
Responsible agency: DEC

Next step: As new standards or technologies are developed, each permit will be reassessed to assure that updated water quality standards and technology requirements are applied.

F. Combined Sewer Overflows

1. Combined Sewer Assessment

Develop a CSO Assessment for the City of Lockport Sewer System

The SPDES permit for the City of Lockport Sewer System contains provisions that the city develop an assessment of its combined sewer system. This study will include measurements of the volume, duration and impact of CSOs on the receiving body.

Completion date: December 2003

Responsible agency: City of Lockport

Next step: The data collected will be used to assess possible improvements in the sewer system to reduce or eliminate combined sewer overflows.

2. PCB Sampling in Sewer System

Conduct sampling for PCBs in the sewer system to determine if there are continuing sources of PCBs to the system.

PISCES and pressure filtration sampling in the City of Lockport sewer system indicate that CSOs may be a source of PCBs to the creek. Sampling has been undertaken to determine if there are sources of these contaminants entering the system.

Completion date: October 2001

Responsible agency: DEC

Next step: If continuing PCB sources to the system are indicated, follow-up investigation of the sources will be initiated.

G. Fish and Wildlife

1. Contaminant Monitoring in Fish

Develop a plan for contaminant monitoring in fish.

This plan describes fish collections and analyses necessary to determine the current levels of chlorinated organic compounds in both adult and young-of-the-year fish in Eighteenmile Creek.

Completion date: Completed

Responsible agency: DEC

Next step: With completion of this plan, fish collections and analyses were undertaken and will be ongoing.

2. Fish, Wildlife and Plankton Sampling

Develop study plans for fish, wildlife and plankton to determine the status of the Degradation of Fish and Wildlife Populations, Fish Tumors and other Deformities and the Degradation of Phytoplankton and Zooplankton Population impairment indicators.

The status of the Fish and Wildlife Populations, Fish Tumors and other Deformities and the Degradation of Phytoplankton and Zooplankton Populations impairment indicators is currently unknown. A study plan to assess plankton populations was developed.

Completion date: Completed

Responsible agency: DEC

Next step: Once the plan was developed, DEC obtained funding for implementation of a Phytoplankton and Zooplankton population assessment.

TABLE 1
EIGHTEENMILE CREEK REMEDIAL ACTION PLAN
ACCOMPLISHMENTS THROUGH 2001

<u>Objective</u>	<u>Target Completion Date</u>	<u>Responsible Agency</u>	<u>Status</u>	<u>Projected Completion Date</u>
A. Stream Water Quality Monitoring				
1. Continue monitoring Eighteenmile Creek through RIBS program	Ongoing	DEC	Ongoing	Ongoing
2. Determine if sediment transport from the Burt Dam Reservoir is impacting water and sediment quality	1998	DEC	Complete	
B. Bottom Sediments				
1. Develop methods for determining sediment criteria	Ongoing	EPA	Ongoing	Ongoing
2. Continue sampling of Eighteenmile Creek to determine sources of PCBs	1998	DEC	Complete	
C. NY Barge Canal				
Conduct sediment sampling in the Barge Canal	1998	DEC & NYS Canal Corp.	Complete	

**TABLE 1 (Continued)
EIGHTEENMILE CREEK REMEDIAL ACTION PLAN
ACCOMPLISHMENTS THROUGH MARCH 2001**

<u>Objective</u>	<u>Target Completion Date</u>	<u>Responsible Agency</u>	<u>Status</u>	<u>Projected Completion Date</u>
D. Inactive Hazardous Waste Sites				
1. Conduct Phase II site investigations				
• Diamond Shamrock	1997	DEC	Complete	
2. Conduct Remedial Investigation/ Feasibility Studies				
• AKZO Chemical	1997	DEC	Ongoing	March 2002
3. Conduct Sampling at William St Island to locate source of PCBs between Olcott St. and N. Transit Rd.	1998	DEC	Complete	
E. Municipal and Industrial Wastewater Facilities				
Continue discharge permit monitoring	Ongoing	DEC	Ongoing	Ongoing

TABLE 1 (Continued)
EIGHTEENMILE CREEK REMEDIAL ACTION PLAN
ACCOMPLISHMENTS THROUGH MARCH 2001

<u>Objective</u>	<u>Target Completion Date</u>	<u>Responsible Agency</u>	<u>Projected Completion Status</u>	<u>Date</u>
F. Combined Sewer Overflows				
1. Conduct assessment of conveyance capacity and enhanced in-system storage	Ongoing	City of Lockport	Ongoing	Dec. 2003
2. Conduct PCB sampling in sewer system	1998	DEC	Ongoing	Oct. 2001
G. Fish and Wildlife Habitat				
1. Develop fish contaminant monitoring plan	1997	DEC	Complete	
2. Develop fish & wildlife population study plan	1997	DEC	Ongoing	
3. Develop fish tumor study plan	1997	DEC	Ongoing	
4. Develop plankton study plan	1997	DEC	Complete	

CHAPTER 3 COMMITMENTS

The following is a description of 2001 commitments describing objectives, time for completion and responsible agency. An overview of agency commitments is shown in Table 2.

A. Stream Water Quality Monitoring

1. Eighteenmile Creek Water Quality Monitoring

Continue to include Eighteenmile Creek as a Rotating Intensive Basin Study (RIBS) program watershed.

The NYS DEC Division of Water monitors the overall health of New York's waterways under the RIBS program. This includes analyses of water and sediment samples for chemical contaminants as well as toxicity tests. RIBS also includes macroinvertebrate sampling for both chemical contamination and species diversity. Eighteenmile Creek will be included as a RIBS site every five to six years.

Completion date: Ongoing
Responsible agency: DEC

Next step: Data from the RIBS sampling will be used for continuing assessment of the water quality in Eighteenmile Creek.

B. Bottom Sediments

1. Criteria Development

Develop method for determining sediment contamination criteria that have scientific validity.

The US EPA has been developing and validating tests and associated acceptance criteria to allow decisions to be made relative to the likely environmental impacts of contaminated sediments. This work will be brought to a conclusion with a report on recommended tests and criteria.

Completion date: Ongoing
Responsible agency: USEPA

Next step: Once a criteria methodology has been developed by EPA, DEC will apply this methodology to Eighteenmile Creek sediments.

C. Inactive Hazardous Waste Sites

1. Phase I & II Site Investigations

Conduct Phase I & II investigations involving existing data accumulation and assessment.

Phase I & II studies have been completed at each of the listed inactive hazardous waste sites in the Eighteenmile Creek drainage basin by the responsible parties or by DEC.

Completion Date: Completed
Responsible agency: DEC

Next step: Upon completion of Phase II site investigations, the sites are ranked and DEC makes determinations of need for the Remedial Investigation/Feasibility Studies (RI/FS). Once a determination is made that an RI/FS is required, action is implemented under a DEC consent order by the responsible party or by DEC in the absence of a known responsible party.

2. Remedial Investigation/Feasibility Studies

Conduct Remedial Investigation/Feasibility Studies to define contaminant pathways and assess alternative remedial measures.

A Remedial Investigation/Feasibility Study is underway at the AKZO Chemical Site, as well as three new sites identified since completion of the RAP including: Delphi Harrison- TCE Site, Guterl Steel-Plant Site and Flintkote Property (Williams Street Island Site).

Completion date: 2003
Responsible agency: DEC

Next step: Once Remedial Investigation/Feasibility Studies are complete, site remedial measures are designed.

D. Municipal and Industrial Wastewater Facilities

1. Discharge Permit Monitoring and Renewal

Continue discharge permit monitoring to achieve compliance with secondary treatment for municipal discharges and best available technology and best management practices for industrial discharges.

DEC reviews self monitoring reports from dischargers, inspects operating facilities and independently samples effluent to check on the validity of self monitoring data. Significant violations of permit conditions trigger compliance or enforcement measures.

Completion date: Ongoing
Responsible agency: DEC

Next step: As new standards or technologies are developed, each permit will be reassessed to assure that updated water quality standards and technology requirements are applied.

E. Combined Sewer Overflows

1. Combined Sewer Assessment

Develop a Combined Sewer Overflow Assessment for the City of Lockport Sewer System.

The SPDES permit for the City of Lockport Sewer System contains provisions that the city develop an assessment of its combined sewer system. This study includes measurements of the volume, duration and impact of CSOs on the receiving body.

Completion date: December 2003
Responsible agency: City of Lockport

Next step: The data collected is being used to assess possible improvements in the sewer system to reduce or eliminate combined sewer overflows.

2. Combined Sewer System Overflow Improvements

Reduction of Combined Sewer Overflows

Three projects within the City of Lockport sewer system have been developed and are being funded by the New York State Clean Water/Clean Air Bond Act for the reduction of combined sewer overflows. The three projects are:

- a. Vine-North Sewer Project. New sanitary sewers have been installed in this northeastern portion of the City resulting in the separation of stormwater from the combined sewer system in this area with the associated reduction of system overflows.

Completion date: Completed
Responsible agency: City of Lockport

- b. Ohio-Simonds Sewer Project. New storm sewers will be constructed in this west central portion of the City resulting in the separation of stormwater from the combined sewer system in this area with the associated reduction of system overflows.

Completion date: July 2002
Responsible agency: City of Lockport

- c. Wastewater Treatment Plant Improvement Project. A new clarifier will be constructed at the wastewater treatment plant to increase the capability to treat wet weather flows from the combined sewer system.

Completion date: December 2002
Responsible agency: City of Lockport

3. PCB Sampling in Sewer System

Conduct sampling for PCBs in the sewer system to determine if there are continuing sources of PCBs to the system.

PISCES and pressure filtration sampling in the City of Lockport sewer system have indicated that CSOs may be a source of PCBs to the creek. Sampling has been undertaken to determine if there are sources of these contaminants entering the system.

Completion date: October 2001

Responsible agency: DEC

Next step: If continuing PCB sources to the system are indicated, follow-up investigation of the sources will be initiated.

F. Fish and Wildlife

1. Contaminant Monitoring in Fish

Develop a plan for contaminant monitoring in fish.

This plan describes fish collections and analyses necessary to determine the current levels of chlorinated organic compounds in both adult and young-of-the-year fish in Eighteenmile Creek.

Completion date: Completed

Responsible agency: DEC

Next step: Upon completion of this plan, fish collections and analyses were undertaken and will be ongoing.

2. Fish, Wildlife and Plankton Sampling

Develop study plans for fish, wildlife and plankton to determine the status of the Degradation of Fish and Wildlife Populations, Fish Tumors and other Deformities and the Degradation of Phytoplankton and Zooplankton Population impairment indicators.

The status of the Fish and Wildlife Populations, Fish Tumors and other Deformities and the Degradation of Phytoplankton and Zooplankton Populations impairment indicators was unknown at the time of completion of the RAP. Funding for a study of plankton populations was obtained from the USEPA and an assessment was undertaken.

Completion date: October 2001

Responsible agency: DEC

Next step: Identify funding sources for remaining impairment evaluations.

TABLE 2
EIGHTEENMILE CREEK REMEDIAL ACTION PLAN
2001 COMMITMENTS

<u>Objective</u>	<u>Target Completion Date</u>	<u>Responsible Agency</u>
A. Stream Water Quality Monitoring		
1. Continue monitoring of Eighteenmile Creek through RIBS program	Ongoing	DEC
B. Bottom Sediments		
1. Develop methods for determining sediment criteria	Ongoing	EPA
C. Inactive Hazardous Waste Sites		
1. Conduct Remedial Investigation/ Feasibility Studies		
• AKZO Chemical	March 2002	DEC
• Delphi Harrison-TCE Site	June 2002	DEC
• Guterl Steel - Landfill	July 2003	DEC
• Guterl Steel - Plant Site	July 2003	DEC
• Flintkote Property - (Williams Street Island Site)	March 2003	DEC

TABLE 2 (Continued)
 EIGHTEENMILE CREEK REMEDIAL ACTION PLAN
 2001 COMMITMENTS

<u>Objective</u>	<u>Target Completion Date</u>	<u>Responsible Agency</u>
D. Municipal and Industrial Wastewater Facilities		
Continue discharge permit monitoring	Ongoing	DEC
E. Combined Sewer Overflows		
1. Continue combined sewer overflow assessment	December 2003	City of Lockport
2. Reduction of combined sewer overflows		
• Ohio-Simonds sewer project	July 2002	City of Lockport
• Wastewater treatment plant - clarifier project	December 2002	City of Lockport
3. Conduct sampling for PCBs in sewer system	October 2001	DEC
F. Fish & Wildlife Habitat		
1. Conduct contaminant monitoring in fish	Ongoing	DEC
2. Conduct phytoplankton and zooplankton population assessment	October 2001	DEC

APPENDIX

INACTIVE HAZARDOUS WASTE SITE REMEDIATION

At the time of preparation of the Record of Decision Plan, 10 sites were identified. A. INACTIVE HAZARDOUS WASTE SITE REMEDIATION have been deposited. New information obtained as a result of work undertaken from 1997 to the present is summarized in Table A-1. Site investigation and remediation program progress in the Massachusetts Creek basin is shown in Table A-2.

These new sites were identified in the Massachusetts Creek basin since the completion of the RAO. These sites have been added to the above listings.

INACTIVE HAZARDOUS WASTE SITE REMEDIATION

At the time of preparation of the Remedial Action Plan fifteen sites were identified in the Eighteenmile Creek basin where hazardous wastes may have been deposited. New information obtained as a result of work undertaken from 1997 to the present is summarized in Table A-1. Site investigation and remediation program progress in the Eighteenmile Creek basin is shown in Table A-2.

Three new sites were identified in the Eighteenmile Creek basin since the completion of the RAP. These sites have been added to the above listings.

TABLE A-1
REMEDIATION STATUS
HAZARDOUS WASTE SITES
EIGHTEENMILE CREEK WATERSHED
AS OF MARCH 2001

Site Number	Site Name	Site Code	Time in Service	Site Size	Status	Site Contents	Contaminant migration Concerns
932010	Lockport City Landfill	4	1950s-1976	30 acres	Remedial construction complete <u>Long term operation and maintenance underway.</u>	Metal sludge; industrial waste; wood starch Contaminated with Peroxide paste, keetox And oxylite; PCBs	On the Gulf tributary. Site contaminants were found in the ground-water and creek sediments.
932011	Diversified Manufacturing	D	U		Delisted. No significant contamination found at the site.	Waste oil and solvents Spread on parking lot to keep down the dust	1.5 mi from Eighteen-mile Creek. No hazardous waste found.
932012	Dussalt Foundry	D	Prior to 1987	5+ acres	Delisted. DEC sampling found no hazardous waste at this site.	Foundry sand, drums of unknown materials	1.5 mi from Eighteen-mile Creek. No Hazardous waste found.
932017	Harrison Radiator/ Landfill	<u>D</u>	1978-1985	10+ acres	<u>Delisted. Remedial action complete; no hazardous waste remains at site</u>	Metal hydroxides, calcium fluoride	On the Gulf tributary.
932024	Niagara County Refuse Disposal District	4	U	35+ acres	Landfill closed in 1994. <u>Long term operation, maintenance and monitoring underway</u>	Heavy metal sludge, phenol resin solids, molding compounds, WWTP sludge	500 ft to the Gulf. Leaching of contaminants into groundwater terminated.
932029	Norton Labs	<u>D</u>	Prior to 1976		<u>Delisted. DEC investigation found no consequential amounts of hazardous waste on site.</u>	Waste lubricating oil, polyester based plastics, phenol based plastics	1 mile from Eighteenmile Creek. No data on contaminata migration.
932030B	AKZO Chemical	3	Prior to 1978	1 acre	Remedial investigation completed, feasibility study ongoing under RCRA program.	Benzoyl peroxide sludge and other organic residues	1500 ft from Eighteenmile Creek. No data contaminant migration.

TABLE A-1
 REMEDIATION STATUS
 HAZARDOUS WASTE SITES
 EIGHTEENMILE CREEK WATERSHED
 AS OF MARCH 2001

Site Number	Site Name	Site Code	Time in Service	Site Size	Status	Site Contents	Contaminant migration Concerns
932032	Guterl Steel Landfill	2	U	8.6 acres	Phase II site assessment complete. Negotiations for Remedial Investigation of the site has been initiated.	Slag, bag house, dust, foundry sand, grinding dust, waste oil and grease	1.5 mi from Eighteen-mile Creek. No data on migration potential. Heavy metal contamination found in landfill groundwater.
932039	Van DeMark	4	1968-1982	5+ acres	Landfill closed and groundwater monitoring ongoing.	Silicon tetrachloride, Chlorosisiloxane	Adjacent to Eighteen-mile Creek.
932069	Wilson-Cambria-Newfane Sanitary Landfill	4	1960-1984	50 acres	Closure completed groundwater monitoring ongoing.	Peroxides, keetox and Oxylite	4 miles from Eighteen-mile Creek.
932071	Diamond Shamrock	D	Present	1923-5 acres	<u>Delisted.</u> No consequential amounts of hazardous waste were found on site. A clay barrier was installed to bedrock to prevent groundwater migration off site.	<u>Delisted.</u> No consequential bottom sludge from sodium mile Creek. silicate tanks.	Boiler cinders and fly ash, 1.5 mi from Eighteen-mile Creek.
932072	Flintkote/Plant Building	D	U	≈1 acre	<u>Delisted.</u> No evidence of release to the environment found.	7 drums of waste trans-former oil with PCBs detected at <2.0 mg/l	Adjacent to Eighteen-mile Creek.
932073	Niagara Materials	D	2 yrs during 1950s	≈1 acre	<u>Delisted.</u> A Phase 2 investigation did not reveal significant contamination of soil, surface or groundwater.	Hexachloro-di-siloxane PAHs, phenolics, halogenated organics, carbon disulfide, arsenic, selenium, hazardous waste found. manganese	2000 ft from the Gulf tributary to Eighteen-mile Creek. No

TABLE A-1 (Continued)
REMEDIATION STATUS
HAZARDOUS WASTE SITES
EIGHTEENMILE CREEK WATERSHED
AS OF MARCH 2001

Site Number	Site Name	Site Code	Time in Service	Site Size	Status	Site Contents	Contaminant migration Concerns
932077	Town of Lockport Landfill	D	1948-1961	18.5 acres	Delisted. No hazardous waste found.	No hazardous waste found.	3.6 mi from Eighteenmile Creek.
932098	NYSEG Substation	D	U		Delisted. The materials disposed of at this site do not meet the regulatory criteria for hazardous waste. Containment is ongoing.	Manufactured gas processing wastes, PAHs and cyanides	3000 ft from Eighteenmile Creek Adjacent to Barge Canal.
Sites Identified Subsequent to RAP Completion							
932113	Delphi Harrison/TCE Site	3	1970-1980s	2 acres	Remedial Investigation underway.	TCE from leaking tank. Plume remains on site.	300+/- feet from plume to Gulf. Groundwater migration to Gulf.
Pending	Guterl Steel/Plant Site	Pending	U	70 acres	Site sampling investigation for chemical contamination conducted by DEC. FUSRAP investigation underway.	Heavy metals, radioactivity and PCBs in soils.	Site adjacent to Barge Canal
Pending	Flintkote Property (Williams St. Island Site)	Pending	U	6 acres	Site sampling investigations conducted by DEC in 1996 and 1999. Investigations included William St. Island. Extensive ash fill found throughout site.	Ash fill, PAHs, PCBs and metals.	Groundwater/leachate from ash fill discharges to Eighteenmile Creek.

U - Unknown

TABLE A-1 (Continued)
REMEDIATION STATUS
HAZARDOUS WASTE SITES
EIGHTEENMILE CREEK WATERSHED
AS OF MARCH 2001

SITE CODES

Classification 1 - causing or presenting an imminent danger of causing irreversible or irreparable damage to the public health or environment -- immediate action required;

Classification 2 - significant threat to the public health or environment -- action required;

Classification 2a - temporary classification assigned to sites for which there is inadequate data to assign them to the other classifications;

Classification 3 - does not present a significant threat to the public health or environment -- action may be deferred;

Classification 4 - site properly closed -- requires continued management;

Classification 5 - site properly closed, no evidence of present or potential adverse impact -- no further action required;

Classification D - site delisted, no hazardous waste present on site.

**Table A2
Inactive Hazardous Waste Site
Remediation Program Progress
Eighteenmile Creek**

Site Name	Phase I	Phase II	Remedial Investigation / Feasibility Study	Remedial Design	Remedial Const	Remediation Complete or Not Required
Lockport City Landfill						
Diversified Manufacturing						
Dussalt Foundry						
Harrison Radiator / Landfill						
Niagara County Refuse Disposal District						
Norton Labs						
AKZO Chemical Inc.						
Guterl Steel / Landfill Site						
Van DeMark						
Wilson-Cambria-Newfane Sanitary Landfill						
Diamond Shamrock						
Flintkote / Plant Building						
Niagara Materials						
Town of Lockport Landfill						
NYSEG Substation						
Sites Identified Subsequent to RAP Completion						
Delphi Harrison Thermal Systems/ TCE site						
Guterl Steel / Plant site						
Flintkote Site / Property (Williams St Island)						

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