

GENERAL SITE INFORMATION, CHARACTERISTICS, AND STATUS

Project Name	<u>NEWBURGH LAKE</u>	ProjectID: 05-11
Last Updated:	03/19/02	
City:	Livonia	
County:	Wayne, Oakland	
State:	MI	
Country:	USA	
Bodies of Water:	Middle Branch Rouge River; Newburgh Lake	
US EPA Region:	V	
Status (Active, Complete, or Monitoring Only):	Complete	
Date On NPL:	N/A	
ROD/ESD Date:	N/A	
Operable Unit:	N/A	
Areas of Concern (length or acres):	Stream dimensions unknown; man-made lake of 105 acres.	
Other Characteristics of Water Body:	Drainage ditch from Evans Products and very small stream, one-quarter to one-half mile long discharging into the Middle Branch of the Rouge River; the Middle Branch discharges into Newburgh Lake	
Contaminants of Concern:	PCBs (1260)	
Source of Contamination:	Drainage ditch and surrounding soils associated with the Evans Products Ditch site.	
Contaminated Area	Stream sediments; sediments from flood plain; lake sediments	
Physical Characteristics:		
Type of Regulatory Action:	Federal Grant. Final.	
Overall Status Summary:	Sediment studies and remedial efforts in the Rouge River were funded from a several hundred million dollar grant in federal funds to Wayne County, MI. No consent decree. Cleanup of PCB-contaminated sediments in an impoundment opposite the defunct Evans Products facility was completed in April 1997; 1,800 cy of TSCA material was removed from a ditch and very small stream and 10,000 cy non-TSCA from a floodplain at a cost of \$500 K; was a source to Newburgh Lake. Draining of the lake was completed in May 1997 and took about one month. Due to elevated fish levels, an intentional fish kill was done in June in the portion of the lake through which the Middle Branch of the Rouge River continued to flow. Sediment removal was by use of a cutterhead dredge in the flooded (river) sector, a dragline 500 feet upstream into the Middle Branch, and earth moving equipment in the dry lake bottom. PCB levels were 1-10 ppm; the target was removal of PCBs to non-detect (0.3 ppm) and restoration/rehab of the lake depth. All removed material was transported by truck and disposed at a BFI landfill several miles away. Removals were completed in mid-September 1998, refilling of the lake commenced on September 18, and the lake was re-opened on October 16. A total of 588,000 cy was removed and landfilled. Total cost was about \$12.6 million.	
Remedial Action Planned:	<input checked="" type="checkbox"/>	
Risk Assessment:	<input type="checkbox"/>	
Remedial Action Implemented:	<input checked="" type="checkbox"/>	
Status of Dredging	<input type="checkbox"/>	

GENERAL SITE INFORMATION, CHARACTERISTICS, AND STATUS

Project Name **NEWBURGH LAKE**

ProjectID: 05-11

Last Updated: 03/19/02

PRPs: ☒

Contacts: ☒

References: ☒

Modeling: ☐

Fishing Advisory: ☒

Key Conditions: commercial landfill, dredging, fish harvesting

REMEDIAL ACTION PLANNED

Project Name	<u>NEWBURGH LAKE</u>	ProjectID: 05-11
Last Updated:	08/11/98	
Target Sediment Cleanup Standards (TSCS):	Newburgh Lake - ND (<0.3 ppm)	
How TSCS Established:		
Target Bank and Floodplain Cleanup Levels (if applicable):	At upstream source location, depth targets only -- 3 feet into natural till, 2 feet into each bank, 1-foot depth in floodplain; no bank and floodplain targets in lake	
Other Target:		
Environmental Sample Data References:	<ul style="list-style-type: none">• Sediment:• Water:• Fish:	
Estimated Target Volume:	Remove 400,000 cy from Newburgh Lake; also remediate 500 yards of the Middle Rouge at point it discharges into Newburgh Lake back upstream to Evans Products.	
Planned Disposal Method:		
Estimated Calendar Time to Implement Remedy:	about 15 months	
Estimated Time to Implement Remedy:	Impoundment clean up complete; targeted completion date for work in Newburgh Lake is 1997.	
Estimated Cost to Implement Remedy:	\$10 million	
Stated Remedial Action Objectives (and Source):		
Measures of Success to be Used:	Restoration of lake to specified depth (minimum 8 feet); some pre-remediation depths were as shallow as 6 inches; in the process, will remove low levels of PCBs in sediments (target is ND at 0.3 ppm); first, source removal from Evans Products drainage ditch and small tributary 1500 yards upstream from Newburgh Lake; finally, restocking of fish in lake after re-flooding.	
Planned Monitoring and Restoration:	Restoring depth in lake; creating fish habitats and shoals; will be performing extra excavation for contouring, and use same material for fill; aquatic vegetation will be planted; fish restocking.	
Agency Position on Sediment Removal (and Source):		

REMEDIAL ACTION IMPLEMENTED

Project Name:	<u>NEWBURGH LAKE</u>	ProjectID: 05-11
Last Updated:	03/19/02	
Physical Target:	Drainage channel and very small stream from Evans Products to Middle Branch of Rouge River; 500 foot stretch of Middle Rouge from Evans Products to Newburgh Lake; 105-acre Newburgh Lake; lake bottom reportedly 20-inches of organic material, then sand, then underlying clay layer.	
Goals:	In drainage channel and small stream, 3 feet into natural till (and verify to <50 ppm PCBs), 2' into each bank, and one foot depth in floodplain; for 500 foot stretch of Middle Rouge, not known; Newburgh Lake ND (0.3 ppm PCBs)	
Primary Contractor:	John Carlow, Inc. (Detroit)	
Other Contractors:	CDM (Evans Products source removal); Environmental Consulting and Technology (Newburgh Lake)	
Generic Remediation Method:	Hydraulic dredging; dry excavation; dragline	
Equipment:	Sluice gate on Newburgh Lake dam had to be modified for controlled draining. In drainage channel and small stream, removal done in the dry with standard backhoes and dump trucks with inflated tires. In 500 foot stretch of Middle Branch, used a dragline. In flowing channel of lake and some intentionally flooded areas (diked areas), two 10 or 12-inch cutterhead dredges. John Carlow, Inc. bought the dredges and operated them with his own personnel. According to ECT, the dry excavation approach is preferred wherever practical vs. hydraulic dredging due to higher productivity. In the dry lake bed, conventional earth moving equipment; haul roads were built into lake, using broken-up concrete as a base, which had been stockpiled by contractor from other construction projects.	
Material Handling:	A 15-20 foot wide channel was created using a "marsh buggy", to accommodate the Middle Branch. This helped drain the lake, also. The flowing channel was subsequently dredged. Additionally, for the western end of the lake, a temporary dike was built across to raise the water level while the lake was draining. This area was hydraulically dredged rather than waiting for the lake to drain completely (which took one-plus months). Dredged slurry was pumped to containment cells on the lake bottom; excavated material from the rest of the lake bottom was loaded directly into trucks. Average production (rate based on tons delivered to the landfill) for the dry excavation of the lake bottom was 52,000-53,000 tons per month. The lowest month was zero due to trucking problems. The highest month was 93,000 tons. Four major loading points were established along the 1-1.25 miles of shoreline.	
Volume Removed:	For Evans Products ditch and stream, 1,800 cy TSCA material (all from drainage channel and stream), 10,000 cy non-TSCA. For Newburgh Lake, 588,000 cy. Lake sediments were lighter than estimated, consisting of light, unconsolidated material. These were originally estimated at 1.3 tons per cy; actually were 1.05-1.1 tons per cy.	
Calendar Time:	For Evans Products ditch and stream, not known; for Newburgh Lake and the 500 foot upstream stretch, April 1997 through September 1998. (Completion of the removal and recontouring work occurred in mid-September with reflooding of the lake completed on October 16, 1998).	
Time To Implement:	Same as calendar time; contractor worked sunrise to sunset, 7 days per week, straight through the winter (which was unusually mild).	
Total Cost:	Evans Products ditch and stream -- \$500,000 (\$42 per cy); Newburgh Lake -- \$12.6 million (\$21.40 per cy).	
Dredging Cost:	Excavation-only cost reportedly about \$7 million.	
Disposal of Sediment:	All removed material was transported by truck to a BFI landfill several miles away. Had to pass	

REMEDIAL ACTION IMPLEMENTED

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Paint Filter test to be transported. Typically 60% or greater percent solids were trucked away. Material at ND PCBs was accepted free and used for daily cover. The landfill limited input to 100 truckloads per day (nominal 18-22 tons per truck). Hauling was done five days per week.

Volume of Water:

**Method of Water
Treatment:**

Water Discharge Limit:

**Air Monitoring During
Remediation:**

**Water Monitoring During
Remediation:**

Outcome: Removals from Evans Products ditch and stream were to depth targets in bottom, banks, and floodplains and also to a verified <50 ppm PCBs in the ditch. In Newburgh Lake, a depth target was achieved to restore the lake depth and with the intent of achieving ND (0.3 ppm PCBs). Two intentional fish kills were accomplished in the flooded portion of the lake bottom (Middle Branch of Rouge River) before and after excavation, followed by restocking after flooding. Reportedly 22,000 pounds of fish were harvested, 78% of them carp. The first fish kill was accomplished in June 1997 by spraying Rotenone near the sheetpile cofferdam at the downstream end of the lake.

Restoration and Post-Monitoring: Recontouring of the lake bottom was accomplished to create topography beneficial for fish spawning and habitat; new docks and access points were constructed.

Site-Specific Difficulties:

- (1) The sluice gate area at the downstream dam was reworked; a sheetpile cofferdam was built around the entrance flume to allow placement of cross-timbers at various heights to control the draining and lake water-height. Last task was to clear debris and pour a concrete base. A diver was killed performing this task.
- (2) Some of the Rotenone went downstream by accident causing a downstream fish kill. About 5-6 tons of downstream fish were killed (90% carp).
- (3) One of the mildest winters on record actually slowed the winter work, since the lake bottom didn't freeze. Made access slow and treacherous.
- (4) Contractor being paid on a "tonnage into landfill" basis. However, since sediments are lighter than estimated, he has to remove same volume, but it is "worth" only 80-85% of the originally estimated tonnage that he based his bid on. That's one of the reasons that a 60-day extension with no penalty was negotiated.
- (5) Major problem maintaining adequate supply of trucks for transport -- sloppy, messed-up trucks. Difficult to get trucking contractors. John Carlow, Inc. finally helped an individual establish a trucking company in exchange for supporting this project.
- (6) The project was bid on the basis of it not being an "environmental project." The selected contractor would not be qualified to handle TSCA material (no TSCA material was identified). Some larger contractors did not bid when it became obvious that the project would be non-TSCA.
- (7) No protection against flooding or 100-year flood during implementation (however, no problem occurred).

REMEDIAL ACTION IMPLEMENTED

Project Name: **NEWBURGH LAKE**

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Monitoring Data

References:

- **Sediment**
- **Water:**
- **Fish:**

POTENTIALLY RESPONSIBLE PARTIES

Project Name **NEWBURGH LAKE**

ProjectID: 05-11

PRP Name: PRP INFORMATION NOT RELEASED

PRPID:

Street Address:

City:

State:

KEY CONTACTS

Project Name **NEWBURGH LAKE**

ProjectID: 05-11

Last Name: KEY CONTACT INFORMATION NOT RELEASED

Contact ID:

First Name:

Title:

Company:

Address:

City:

State:

Postal Code:

Work Phone # :

Other Phone #:

Fax # :

Email Address:

REFERENCES

Project Name NEWBURGH LAKE

ProjectID: 05-11

Reference Type: A
Title: *A Sediment Survey of the Rouge River Basin*
Location: AEM
Category: Contaminant Background Levels in Water and Sediments
Prepared by/Author: Michigan Department of Natural Resources,
Surface Water Quality Division
**Preparer/Author
Address:**
Prepared For:
Date Published: June 1992
**Key Words and
Phrases:**

ReferenceID: 8

Reference Type: A
Title: *Technical Report: Newburgh Lake Sediment Core Sampling and Analysis: RPO-NPS-TR04.00 (selected pages)*
Location: AEM
Category: Contaminated Sediments: Investigation/Delineation
Prepared by/Author: John M. O'Meara, V. Elliott Smith, Joseph E. Rathbun, Laura L. Huellmantel,
Dennis B. Prevo
**Preparer/Author
Address:**
Prepared For: Rouge River National Wet Weather Demonstration Project
Date Published: September 29, 1994
**Key Words and
Phrases:**

ReferenceID: 775

Reference Type: A
Title: *Task Product Memorandum: Analysis for Newburgh Lake Sediment Demonstration Activities: RPO-NPS-TPM20.00*
Location: AEM
Category: Contaminated Sediments: Remedial Options/Guidance
Prepared by/Author: Jennifer Bokovoy and John O'Meara
**Preparer/Author
Address:**
Prepared For: Rouge River National Wet Weather Demonstration Project
Date Published: December 14, 1994
**Key Words and
Phrases:**

ReferenceID: 776

REFERENCES

Project Name NEWBURGH LAKE

ProjectID: 05-11

Reference Type: A

ReferenceID: 777

Title: *EPA Fact Sheet: Rouge River Area of Concern*

Location: AEM

Category: Contaminated Sediments: Management Issues

Prepared by/Author: US EPA Region V

**Preparer/Author
Address:**

Prepared For: General Public

Date Published: March 16, 1999

**Key Words and
Phrases:**

Reference Type: A

ReferenceID: 778

Title: *Wayne County Fact Sheet: Newburgh Lake: Project Summary*

Location: AEM

Category: Site Update

Prepared by/Author: T.K Ruse, Wayne County

**Preparer/Author
Address:**

Prepared For: General Public

Date Published: August 1999 (circa)

**Key Words and
Phrases:**

Reference Type: A

ReferenceID: 779

Title: *Wayne County Fact Sheet: How Newburgh Lake Has Changed*

Location: AEM

Category: Site Update

Prepared by/Author: T.K Ruse, Wayne County

**Preparer/Author
Address:**

Prepared For: General Public

Date Published: August 1999 (circa)

**Key Words and
Phrases:**

REFERENCES

Project Name NEWBURGH LAKE

ProjectID: 05-11

Reference Type: A

ReferenceID: 780

Title: **Wayne County Fact Sheet: Newburgh Lake Restoration Plan**

Location: AEM

Category: Site Update

Prepared by/Author: T.K Ruse, Wayne County

**Preparer/Author
Address:**

Prepared For: General Public

Date Published: August 1999 (circa)

**Key Words and
Phrases:**

Reference Type: B

ReferenceID: 764

Title: **Realizing Remediation I - Great Lakes Contaminated Sediments
Newburgh Lake
(see Reference A-905)**

Location: AEM

Category: Dredging: Remedial (Contaminated Sediments)

Prepared by/Author: US EPA Great Lakes National Program Office (GLNPO)

**Preparer/Author
Address:** 77 West Jackson Boulevard (G-17J)
Chicago, IL 60604

Prepared For: General Public

Date Published: August 1, 2002

**Key Words and
Phrases:**

Reference Type: B

ReferenceID: 820

Title: **Realizing Remediation II - Updated Summary:
Rouge River - Newburgh Lake
(see Reference A-907)**

Location: AEM

Category: Dredging: Remedial (Contaminated Sediments)

Prepared by/Author: US EPA Great Lakes National Program Office (GLNPO)

**Preparer/Author
Address:** 77 West Jackson Boulevard (G-17J)
Chicago, IL 60604

Prepared For: General Public

Date Published: July 2000

**Key Words and
Phrases:**

REFERENCES

Project Name NEWBURGH LAKE

ProjectID: 05-11

Reference Type: C

ReferenceID: 583

Title: *Sediment Remediation Can Improve Great Lakes Water Quality*

Location: AEM

Category: Miscellaneous

Prepared by/Author: (1) John H. Hartig, (2) Lisa Maynard, (3) Michael A. Zarull, (4) Gail Krantzberg

Preparer/Author (1) Greater Detroit American Heritage River Institute

Address: Detroit, MI

(2) International Joint Commission

Windsor, Ontario, Canada

(3) National Water Research Institute

Burlington, Ontario, Canada

(4) Ontario Ministry of Environment

Prepared For: Water Environment & Technology (WE&T)

Date Published: October 1999

**Key Words and
Phrases:**

Reference Type: D

ReferenceID: 49

Title: *Newburgh Lake: It has new life; let's work to keep it that way*

Location: AEM

Category: Site Update

Prepared by/Author:

Preparer/Author

Address:

Prepared For: The Detroit (MI) Free Press

Date Published: October 16, 1998

**Key Words and
Phrases:**

Reference Type: D

ReferenceID: 50

Title: *Newburgh Lake looks brand new*

Location: AEM

Category: Site Update

Prepared by/Author: Christopher M. Singer

Preparer/Author

Address:

Prepared For: The Detroit (MI) News

Date Published: October 1, 1998

**Key Words and
Phrases:**

REFERENCES

Project Name NEWBURGH LAKE

ProjectID: 05-11

Reference Type: D

ReferenceID: 73

Title: *EPA: Cleanup Complete at Evans Product Ditch*

Location: AEM

Category: Site Update

Prepared by/Author: US EPA Region V

**Preparer/Author
Address:** Chicago, IL

Prepared For: General Public

Date Published: May 22, 1997

**Key Words and
Phrases:**

Reference Type: D

ReferenceID: 230

Title: *Newburgh Lake almost clean enough - Benefits of \$15 million
cleanup to be reaped next year, some say*

Location: AEM

Category: Site Update

Prepared by/Author: Sheri Hall

**Preparer/Author
Address:**

Prepared For: The Detroit (MI) News

Date Published: June 24, 2001

**Key Words and
Phrases:**

FISH ADVISORIES

Project Name **NEWBURGH LAKE**

ProjectID: 05-11

Advisory: Rouge River, Middle Branch ***AdvisoryID:*** 1020
Extent: Downstream from Phoenix Lake
Pollutant: PCBs (total)
Species: bass-largemouth
Population: NCSP
Population Definition: No Consumption-Subpopulation(s): Advises against consumption for populations that are potentially at greater risk, e.g., pregnant or nursing women, and small children.
Advisory Type: River ***Advisory Number:*** 280
Status (Active or Rescinded): Active ***Date Rescinded:***
Contact Name: David R. Wade ***Contact Number:*** 517-335-8834

Advisory: Rouge River, Middle Branch ***AdvisoryID:*** 1021
Extent: Downstream from Phoenix Lake
Pollutant: PCBs (total)
Species: bass-smallmouth
Population: NCSP
Population Definition: No Consumption-Subpopulation(s): Advises against consumption for populations that are potentially at greater risk, e.g., pregnant or nursing women, and small children.
Advisory Type: River ***Advisory Number:*** 280
Status (Active or Rescinded): Active ***Date Rescinded:***
Contact Name: David R. Wade ***Contact Number:*** 517-335-8834

Advisory: Rouge River, Middle Branch ***AdvisoryID:*** 1022
Extent: Downstream from Phoenix Lake
Pollutant: PCBs (total)
Species: carp-common
Population: NCSP
Population Definition: No Consumption-Subpopulation(s): Advises against consumption for populations that are potentially at greater risk, e.g., pregnant or nursing women, and small children.
Advisory Type: River ***Advisory Number:*** 280
Status (Active or Rescinded): Active ***Date Rescinded:***
Contact Name: David R. Wade ***Contact Number:*** 517-335-8834

FISH ADVISORIES

Project Name **NEWBURGH LAKE**

ProjectID: 05-11

Advisory: Rouge River, Middle Branch ***AdvisoryID:*** 1023
Extent: Downstream from Phoenix Lake
Pollutant: PCBs (total)
Species: catfish
Population: NCSP
Population Definition: No Consumption-Subpopulation(s): Advises against consumption for populations that are potentially at greater risk, e.g., pregnant or nursing women, and small children.
Advisory Type: River ***Advisory Number:*** 280
Status (Active or Rescinded): Active ***Date Rescinded:***
Contact Name: David R. Wade ***Contact Number:*** 517-335-8834

Advisory: Rouge River, Middle Branch ***AdvisoryID:*** 1024
Extent: Downstream from Phoenix Lake
Pollutant: PCBs (total)
Species: pike-northern
Population: NCSP
Population Definition: No Consumption-Subpopulation(s): Advises against consumption for populations that are potentially at greater risk, e.g., pregnant or nursing women, and small children.
Advisory Type: River ***Advisory Number:*** 280
Status (Active or Rescinded): Active ***Date Rescinded:***
Contact Name: David R. Wade ***Contact Number:*** 517-335-8834

Advisory: Rouge River, Middle Branch ***AdvisoryID:*** 1025
Extent: Downstream from Phoenix Lake
Pollutant: PCBs (total)
Species: sucker
Population: NCSP
Population Definition: No Consumption-Subpopulation(s): Advises against consumption for populations that are potentially at greater risk, e.g., pregnant or nursing women, and small children.
Advisory Type: River ***Advisory Number:*** 280
Status (Active or Rescinded): Active ***Date Rescinded:***
Contact Name: David R. Wade ***Contact Number:*** 517-335-8834

FISH ADVISORIES

Project Name **NEWBURGH LAKE**

ProjectID: 05-11

Advisory: Rouge River, Middle Branch ***AdvisoryID:*** 161
Extent: Downstream from Phoenix Lake
Pollutant: PCBs (total)
Species: all fish except banned species
Population: RGP
Population Definition: Restricted Consumption-General Population: Advises the general population to restrict the size of the organisms and/or the frequency of meals consumed.

Advisory Type: River ***Advisory Number:*** 280

Status (Active or Rescinded): Active ***Date Rescinded:***

Contact Name: David R. Wade ***Contact Number:*** 517-335-8834

Advisory: Rouge River, Middle Branch ***AdvisoryID:*** 162
Extent: Downstream from Phoenix Lake
Pollutant: PCBs (total)
Species: bass-largemouth
Population: NCGP
Population Definition: No Consumption-General Population: Advise against consumption by the general population.

Advisory Type: River ***Advisory Number:*** 280

Status (Active or Rescinded): Active ***Date Rescinded:***

Contact Name: David R. Wade ***Contact Number:*** 517-335-8834

Advisory: Rouge River, Middle Branch ***AdvisoryID:*** 163
Extent: Downstream from Phoenix Lake
Pollutant: PCBs (total)
Species: bass-smallmouth
Population: NCGP
Population Definition: No Consumption-General Population: Advise against consumption by the general population.

Advisory Type: River ***Advisory Number:*** 280

Status (Active or Rescinded): Active ***Date Rescinded:***

Contact Name: David R. Wade ***Contact Number:*** 517-335-8834

FISH ADVISORIES

Project Name **NEWBURGH LAKE**

ProjectID: 05-11

Advisory: Rouge River, Middle Branch ***AdvisoryID:*** 164
Extent: Downstream from Phoenix Lake
Pollutant: PCBs (total)
Species: carp-common
Population: NCGP
Population Definition: No Consumption-General Population: Advise against consumption by the general population.

Advisory Type: River ***Advisory Number:*** 280

Status (Active or Rescinded): Active ***Date Rescinded:***

Contact Name: David R. Wade ***Contact Number:*** 517-335-8834

Advisory: Rouge River, Middle Branch ***AdvisoryID:*** 165
Extent: Downstream from Phoenix Lake
Pollutant: PCBs (total)
Species: catfish
Population: NCGP
Population Definition: No Consumption-General Population: Advise against consumption by the general population.

Advisory Type: River ***Advisory Number:*** 280

Status (Active or Rescinded): Active ***Date Rescinded:***

Contact Name: David R. Wade ***Contact Number:*** 517-335-8834

Advisory: Rouge River, Middle Branch ***AdvisoryID:*** 166
Extent: Downstream from Phoenix Lake
Pollutant: PCBs (total)
Species: all fish except banned species
Population: NCSP
Population Definition: No Consumption-Subpopulation(s): Advises against consumption for populations that are potentially at greater risk, e.g., pregnant or nursing women, and small children.

Advisory Type: River ***Advisory Number:*** 280

Status (Active or Rescinded): Active ***Date Rescinded:***

Contact Name: David R. Wade ***Contact Number:*** 517-335-8834

FISH ADVISORIES

Project Name **NEWBURGH LAKE**

ProjectID: 05-11

Advisory: Rouge River, Middle Branch

AdvisoryID: 167

Extent: Downstream from Phoenix Lake

Pollutant: PCBs (total)

Species: pike-northern

Population: NCGP

Population Definition: No Consumption-General Population: Advise against consumption by the general population.

Advisory Type: River

Advisory Number: 280

Status (Active or Rescinded): Active

Date Rescinded:

Contact Name: David R. Wade

Contact Number: 517-335-8834

Advisory: Rouge River, Middle Branch

AdvisoryID: 168

Extent: Downstream from Phoenix Lake

Pollutant: PCBs (total)

Species: sucker

Population: NCGP

Population Definition: No Consumption-General Population: Advise against consumption by the general population.

Advisory Type: River

Advisory Number: 280

Status (Active or Rescinded): Active

Date Rescinded:

Contact Name: David R. Wade

Contact Number: 517-335-8834
