

National Pollutant Discharge Elimination System (NPDES) Permit Program

F A C T S H E E T

Regarding an NPDES Permit To Discharge to Waters of the State of Ohio  
for **Thistledown Racetrack**

Public Notice No.: 10-10-044  
Public Notice Date: October 22, 2010  
Comment Period Ends: November 22, 2010

OEPA Permit No.: **3IK00005\*BD**  
Application No.: **OH0133558**

Name and Address of Applicant:

**Harrah's Ohio Acquisition Company LLC  
dba Thistledown Racetrack  
21501 Emery Road  
North Randall, Ohio 44128**

Name and Address of Facility Where  
Discharge Occurs:

**Same Address  
Cuyahoga County**

Receiving Water: **Unnamed Tributary of  
Mill Creek**

Subsequent  
Stream Network: **Mill Creek  
Cuyahoga River  
Lake Erie**

Introduction

Development of a Fact Sheet for NPDES permits is mandated by Title 40 of the Code of Federal Regulations, Section 124.8 and 124.56. This document fulfills the requirements established in those regulations by providing the information necessary to inform the public of actions proposed by the Ohio Environmental Protection Agency, as well as the methods by which the public can participate in the process of finalizing those actions.

This Fact Sheet is prepared in order to document the technical basis and risk management decisions that are considered in the determination of water quality based NPDES Permit effluent limitations. The technical basis for the Fact Sheet may consist of evaluations of promulgated effluent guidelines, existing effluent quality, instream biological, chemical and physical conditions, and the relative risk of alternative effluent limitations. This Fact Sheet details the discretionary decision-making process empowered to the Director by the Clean Water Act and Ohio Water Pollution Control Law (ORC 6111). Decisions to award variances to Water Quality Standards or promulgated effluent guidelines for economic or technological reasons will also be justified in the Fact Sheet where necessary.

Procedures for Participation in the Formulation of Final Determinations

The draft action shall be issued as a final action unless the Director revises the draft after consideration of the record of a public meeting or written comments, or upon disapproval by the Administrator of the U.S. Environmental Protection Agency.

Within thirty days of the date of the Public Notice, any person may request or petition for a public meeting for presentation of evidence, statements or opinions. The purpose of the public meeting is to obtain additional evidence. Statements concerning the issues raised by the party requesting the meeting are

invited. Evidence may be presented by the applicant, the state, and other parties, and following presentation of such evidence other interested persons may present testimony of facts or statements of opinion.

Requests for public meetings shall be in writing and shall state the action of the Director objected to, the questions to be considered, and the reasons the action is contested. Such requests should be addressed to:

**Legal Records Section  
Ohio Environmental Protection Agency  
Lazarus Government Center  
P.O. Box 1049  
Columbus, Ohio 43216-1049**

Interested persons are invited to submit written comments upon the discharge permit. Comments should be submitted in person or by mail no later than 30 days after the date of this Public Notice. Deliver or mail all comments to:

**Ohio Environmental Protection Agency  
Attention: Division of Surface Water  
Permits and Compliance Section  
Lazarus Government Center  
P.O. Box 1049  
Columbus, Ohio 43216-1049**

The OEPA permit number and Public Notice numbers should appear on each page of any submitted comments. All comments received no later than 30 days after the date of the Public Notice will be considered.

Citizens may conduct file reviews regarding specific companies or sites. Appointments are necessary to conduct file reviews, because requests to review files have increased dramatically in recent years. For requests to copy more than 250 pages, there is a five-cent charge for each page copied. Payment is required by check or money order, made payable to Treasurer State of Ohio.

## Background

The National Pollutant Discharge Elimination System (NPDES), created under the Clean Water Act of 1972, provides a means for monitoring, tracking, and preventing discharges of pollutants to waters of the states. Section 301 of the Clean Water Act and 40 CFR 122.1(b) requires NPDES permits for the discharge of pollutants from any point source into waters of the State. Pursuant to Section 502(14) of the Clean Water Act and 40 CFR 122.2, a Concentrated Animal Feeding Operation (CAFO) is listed in the definition of a point source. A discharge can be considered any addition of any pollutant or combination of pollutants to water of the United States. This includes runoff from feedlots, stock piled manure, silage bunkers, overflow from storage ponds, overflow from animal watering systems, and runoff from fields on which manure is not applied in accordance with proper agricultural practices.

Waters of the United States not only include rivers, streams, intermittent streams and lakes, but also irrigation ditches, laterals, canals, etc. which eventually flow into rivers, streams, and lakes.

Other federal regulations require concentrated animal feeding operations to acquire an NPDES permit. These include, but are not limited to the following:

- 40 CFR 122.3: Establishes concentrated animal feeding operations as “point sources subject to the NPDES permit program”.
- 40 CFR 122.21: States that all CAFOs that discharge or propose to discharge have a duty to seek coverage under an NPDES permit.
- 40 CFR 122.23: Details the fact that CAFOs are point sources that require NPDES permits for discharges or proposed discharges. Once an operation is defined as a CAFO, best management practices for CAFOs apply to all animals in confinement at the operation and all manure, litter and process wastewater generated by those animals or the production of those animals, regardless of the type of animal.

Based on 40 CFR 122.23, Thistledown Racetrack met the definition of a large CAFO and was required to obtain coverage under an NPDES permit. In the past, contaminated storm water from the horse race track was discharged into the city storm sewer system. This discharge did not occur as a result of a 25-year, 24-hour storm event.

This permit does not allow a discharge of manure except under extreme circumstances as specified in Part I, A of the permit. An extreme weather related discharge is defined as an overflow due to a 25-year, 24-hour (or greater) storm event or a chronic rainfall that is deemed excessive by the Ohio EPA. In the event of a severe storm and a discharge occurs, Ohio Water Quality Standards may not be violated by any discharge from the production area.

There are several pollutants associated with discharges from CAFOs, including: nutrients (particularly nitrogen and phosphorus), organic matter, solids, pathogens, and odorous/volatile compounds. Additional pollutants also include salts and trace elements and to a lesser degree antibiotics, pesticides, and hormones. These pollutants can enter the environment through a number of pathways, including: surface runoff and erosion, overflows from lagoons, spills and other dry-weather discharges, leaching into soil and groundwater, and volatilization of compounds and subsequent redeposition to the landscape. These discharges of pollutants can originate from animal confinement areas, manure handling and containment systems, manure stockpiles, and cropland where manure is applied. However, the NPDES permit will generally prohibit discharge of these to waters of the State.

## Location of CAFO/Receiving Water Use Classification

Thistledown Racetrack is located at 21501 Emery Road near North Randall, Ohio in Warrensville Township, Cuyahoga County. The nearest stream to the Thistledown Racetrack facility is an unnamed tributary of Mill Creek. The subsequent stream network includes Mill Creek, Cuyahoga River, and ultimately Lake Erie. Thistledown Racetrack is in the Erie Drift Plain Ecoregion. Figure 1 shows the approximate location of the facility and the surrounding area.

The unnamed tributary of Mill Creek has not been designated under Ohio Water Quality Standards (OAC 3745-1-26). However, Mill Creek has been designated for the following uses: Warmwater Habitat, Agricultural Water Supply, Industrial Water Supply, and Primary Contact Recreation.

## Facility Description

Thistledown Racetrack is a large Concentrated Animal Feeding Operation that is designed to house 1,720 thoroughbred race horses. The manure is removed from the barns and placed into storage carts. The carts are hauled to the covered manure storage building. The manure from the building is removed and hauled to mushroom farms in Pennsylvania. The washwater and other wastewaters generated at the facility are discharged into city sanitary sewers. The roads and walkways traveled by the horses are swept daily.

## Description of Land Application Procedures

At the Thistledown Racetrack, manure is managed through distribution and utilization. Thistledown Racetrack has developed a Manure Management Plan. This plan is available by contacting Ohio EPA. Please note that a portion of the Manure Management Plan conditions become effective upon permit coverage, such as monitoring and inspection requirements. See Section “Additional Effluent Limitations and Monitoring Requirements” below. Public comments should be submitted to Ohio EPA. As stated in Part II, I, Ohio EPA can notify Thistledown Racetrack at any time that the plan does not meet the minimum requirements of the permit and request plan modifications, which are required to be completed within 30 days of notification. It should be noted that comments regarding Manure Management Plan requirements contained in the permit conditions should be made during this public notice period of the draft permit.

## Receiving Water Quality / Environmental Hazard Assessment

Ohio EPA conducted a detailed chemical and biological water quality survey of the Cuyahoga River watershed in 1997. For additional information see the *Biological and Water Quality Study of the Cuyahoga River and Selected Tributaries. Geauga, Portage, Summit and Cuyahoga Counties, Ohio. Report Volume 1. Appendices, Volume 2.* The Mill Creek tributary was assessed in this study. The following are excerpts from the report that pertain to Mill Creek.

“Little Cuyahoga River (confluence RM 42.27; see Ohio EPA 1998), Sand Run (conf. RM 39.12), Tinkers Creek (conf. RM 16.36), Mill Creek (conf. RM 11.49), Big Creek (conf. RM 7.2) These watersheds were characterized by hardened urban landscapes which often included CSOs discharges (Mill Creek, Big Creek, Little Cuyahoga River), a predominance of effluent flow (Tinkers Creek), and marginal physical habitat, substrate, and riparian quality. Most experienced numerous chemical WQS criteria exceedences, pollutant spills and unauthorized discharges (Ohio EPA 1994), intermittent toxicity, and a legacy of historic environmental insults. Fish and macroinvertebrate communities were generally of poor quality and in non-attainment of WWH biocriteria.”

“No additional pollutant loadings should be permitted in the Mill Creek and Big Creek watersheds. A more comprehensive survey of the Big Creek subbasin is needed to specifically

identify problem areas and sources of impact. In Mill Creek, recent construction of a large chamber to store combined flow after rain events should reduce impacts to Mill Creek; those sources of impact that remain have been documented by the NEORSD.”

#### “Mill Creek - Surface Water Quality

Chemical samples were collected at RM 3.1 (adj to State Route 14) and at the mouth of Mill Creek (RM 0.1). At RM 3.1, Secondary Contact Recreation criterion violations for fecal coliform bacteria were detected under both wet and dry weather conditions (18,000 colonies/100ml on July 23 and September 17, respectively). The NEORSD and municipal sewer systems in the Maple Heights/upper Mill Creek area has had chronic problems with collapsed sewer lines, sewer line blockages, illegal tie-ins, etc. (NEORSD annual reports, 1992-96). The bacteriological results provided further evidence of the need for rehabilitation of the sewer system in this area.

Bacteriological sampling at RM 0.1 (Canal Road) also revealed a Secondary Contact Recreation criterion exceedence following the September 17 storm event (Table 5). The most likely source(s) were CSOs, common trench sewers, and urban runoff. The results still represent a positive change from the 1991 survey when extremely high coliform levels resulted from a blocked sewer line and raw sewage discharges near RM 0.4. A 1984 intensive survey revealed severe water quality impacts associated with dry-weather CSOs on Mill Creek. Rehabilitation of the sewers and elimination of CSOs in much of the Mill Creek watershed was considered largely responsible for improvements in 1996.

Ammonia-nitrogen concentrations near the mouth of Mill Creek were chronically elevated during 1996 (mean=0.8 mg/l). Leachate from the abandoned City of Cleveland Old Mill Creek Landfill located immediately upstream was considered a primary source. The landfill is situated on the banks of Mill Creek and the exposed solid wastes have entered the creek for decades. Since the 1996 survey, work was completed to remediate the landfill and eliminate waste erosion to the stream. Again, the 1996 results represent a positive change compared to 1991, when ammonia concentrations as high as 3.58 mg/l were associated with the CSOs, landfills and a raw sewage discharge in the lower basin.

No heavy metals WQS criteria exceedences were recorded in Mill Creek in 1996 but concentrations of most metals increased following the September 17 rain event. Lead levels at RM 0.1 (23 ug/l) approached the chronic WQS criterion on the same date.

Since the 1996 survey, NEORSD began construction of a deep tunnel to store combined flow to reduce impacts to Mill Creek. Additional information on Mill Creek and the sewer project is available from the NEORSD.

#### Physical Habitat for Aquatic Life

Mill Creek is an urban influenced stream but retains many warmwater habitat attributes. Channel morphology was relatively well developed and sinuous, and original cobble and gravel substrates were present. Collectively, positive habitat attributes resulted in QHEI scores of 60.0 and 68.5 at RMs 0.2 and 4.4, respectively, suggesting habitat is not limiting to aquatic life. However, the creek is affected negatively by stormwater and urban runoff, as substrates were embedded and cover was sparse.

#### Fish Communities

Urban stormwater and CSOs combined to degrade fish communities in Mill Creek. Similar to Big Creek, the community lacked species sensitive to habitat disturbance, reflecting flow alteration. However, tolerant fishes composed most or all of the community, suggesting a higher degree of toxicity. CSO abatement was evident in the return of fish in the reach between RM 3.0 and 4.4 in 1996; no fish were collected in this reach in 1984.

## Macroinvertebrates

Macroinvertebrate community health in Mill Creek ranged from poor at RM 3.4 to fair at RM 0.2 (Table 7). In the upper watershed, urban runoff, flashy stream flow, and periodic, unauthorized sewage discharges were likely sources of impact. The stream was clear but a pronounced odor of raw sewage was detected in the margins. Pollution tolerant blackflies predominated the samples and populations densities, taxa richness (12), and EPT taxa richness (1) were all quite low. Collections at RM 3.4 still represented an improvement over a 1984 survey when macroinvertebrates from RMs 5.6 and 2.8 reflected very poor quality and the stream bottom was blanketed with raw sewage and sewage bacteria.

Sampling near the mouth in 1996 indicates gradual improvement over the poor and very poor conditions observed in 1991 and 1984, respectively (Table 7). The increase in EPT taxa richness 109 and QCTV scores during each sampling year was evidence of improving conditions.”

Mill Creek was included in the Lower Cuyahoga River TMDL finalized in September of 2003. Please see the *Total Maximum Daily Load (TMDL) for the Lower Cuyahoga River, Ohio* (Ohio EPA, Division of Surface Water) for more information. “Mill Creek has improved to the extent that the grossly polluted conditions associated with dry weather sanitary sewer overflows (SSOs) in the early 1980s have been largely eliminated. Substantial remediation of SSOs, CSOs and exposed landfills near the mouth has been conducted in the last decade and CSO control projects are ongoing. However, in addition to the remaining CSOs and the background urban landscape, sanitary sewer overflows (SSOs) from aging sewers, spills, and landfills continue to severely impact communities. In 1996 chemical samples were collected at RM 3.1 (adj. To State Route 14) and at the mouth of Mill Creek. At RM 3.1 Secondary Contact Recreation criterion violations for fecal coliform bacteria were detected under both dry weather and wet weather conditions. Municipal sewer systems in the Maple Heights/upper Mill Creek area have had chronic problems with collapsed sewer lines, sewer line blockages, illegal tie-ins, etc. (NEORSD annual reports 1992-1996). The bacteriological results provided further evidence of the need for rehabilitation of the sewer system in this area. Numerous biological surveys conducted by Ohio EPA and NEORSD since 1991 show fish and macroinvertebrate community health has ranged from poor (1991, 1996, 2000, 2001) to fair (1995, 1996, 2000) to marginally good (1999 NEORSD macroinvertebrates). Two large sewer line breaks in particular may have affected OEPA results in 1991 and 2000.” Major causes of impairment identified in the TMDL for Mill Creek include ammonia and organic enrichment. Items addressed in the TMDL for this stream include organic enrichment/dissolved oxygen, nutrients, siltation, habitat, and bacteria.

## Additional Effluent Limitations and Monitoring Requirements

Effluent limitations and monitoring requirements contained in Parts II and VII of the permit are based on 40 CFR Parts 122, 123, 412, OAC Chapters 901:10-2, United States Department of Agriculture Natural Resources Conservation Service (USDA-NRCS) Practice Standards, and best professional judgment.

The NPDES permit requires the development of a Manure Management Plan. The Manure Management Plan shall address the form, source, amount, timing, agronomic rate, and method of application of nutrients to each field to achieve compliance with Part I, A of the permit, assure appropriate agricultural utilization of the nutrients, and minimize movement of pollutants to surface waters.

The NPDES permit requires the submission of an annual report to Ohio EPA in Part II that shall include at a minimum the following information:

1. The number and type of animals confined in the previous year.
2. Estimated amount of manure generated in the previous year in gallons or tons.
3. Total amount of manure removed from the facility for land application and/or distribution or utilization in gallons or tons.
4. Total number of acres for land application covered by MMP.
5. Total number of acres under the control of the permittee that were used for land application in the previous year.
6. Manure distribution and utilization records.
7. Summary of the number of discharges from the production area and the number of discharges from land application areas that were not composed of agricultural storm water runoff for the past year, including date, time and approximate volumes.
8. Information on any non-compliance not previously reported to Ohio EPA. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.
9. A statement indicating if the MMP was developed by a certified manure management planner.
10. A copy of the training/seminar attendance documentation as required by Part II, F of this permit.

The NPDES permit requires specific monitoring and inspection requirements. The following table from Part VII of the permit contains the requirements along with the justification for inclusion of the requirements in the permit.

Table 1. Monitoring and Inspection Requirements

Action	Frequency	Record Keeping Requirements	Justification
Grab samples shall be taken of all discharges from the production area. Clean storm water that has been diverted does not need to be sampled.	Each time they occur	Date and time of sample, results of analysis, and the information required in Part III, 5 and 6.	Best Professional Judgment – To ensure compliance with Part I, A of the permit.
All discharges from the production area shall be recorded in the operating record.	Each time they occur	Cause, volume, and duration of discharge and any corrective actions needed and the dates those actions were taken.	40 CFR Part 122.42 and 40 CFR Part 412.37 requires these records to be maintained.
Representative samples of the manure to be distributed shall be taken from each source (e.g. each lagoon, storage tank, or permanent stockpile area must be sampled).	1/year	The information required in Part III, 5 and 6 and Part VII.	40 CFR Part 412.4 and 40 CFR Part 412.37 requires the sampling and records to be maintained.
Monitor operating level of all manure storage or treatment facilities.	1/week	Date and time of observation, manure level in each structure.	40 CFR Part 412.37 requires the inspections and record keeping.
Inspect manure storage or treatment facilities, including devices channeling contaminated storm water to the manure storage or treatment facility for evidence of erosion, leakage, animal damage or discharge.	1/week	Date and time of inspection, structural integrity, vegetation condition, and any corrective actions needed and the dates those actions were taken.	40 CFR Part 412.37 and Best Professional Judgment require the inspections and record keeping.
Inspect storm water diversion devices or runoff diversion structures.	1/week	Date and time of inspection, observations of flow quantity and color, structural integrity (e.g. signs of cracks, sparse or stressed vegetation, erosion, etc.), any corrective actions needed and the dates those actions were taken.	40 CFR Part 412.37 and Best Professional Judgment require the inspections and record keeping.
Inspect drinking and cooling water lines that are located above ground, readily visible or accessible for daily inspection.	Daily	Date and time of inspection, number of leaks, any corrective actions needed and the dates those actions were taken.	40 CFR Part 412.37 requires the inspections and record keeping.
Inspect manure handling equipment.	In accordance with MMP	List of equipment, date of inspections, corrective actions, calibration dates.	40 CFR Part 412.4 and Best Professional Judgment require the inspections and record keeping.

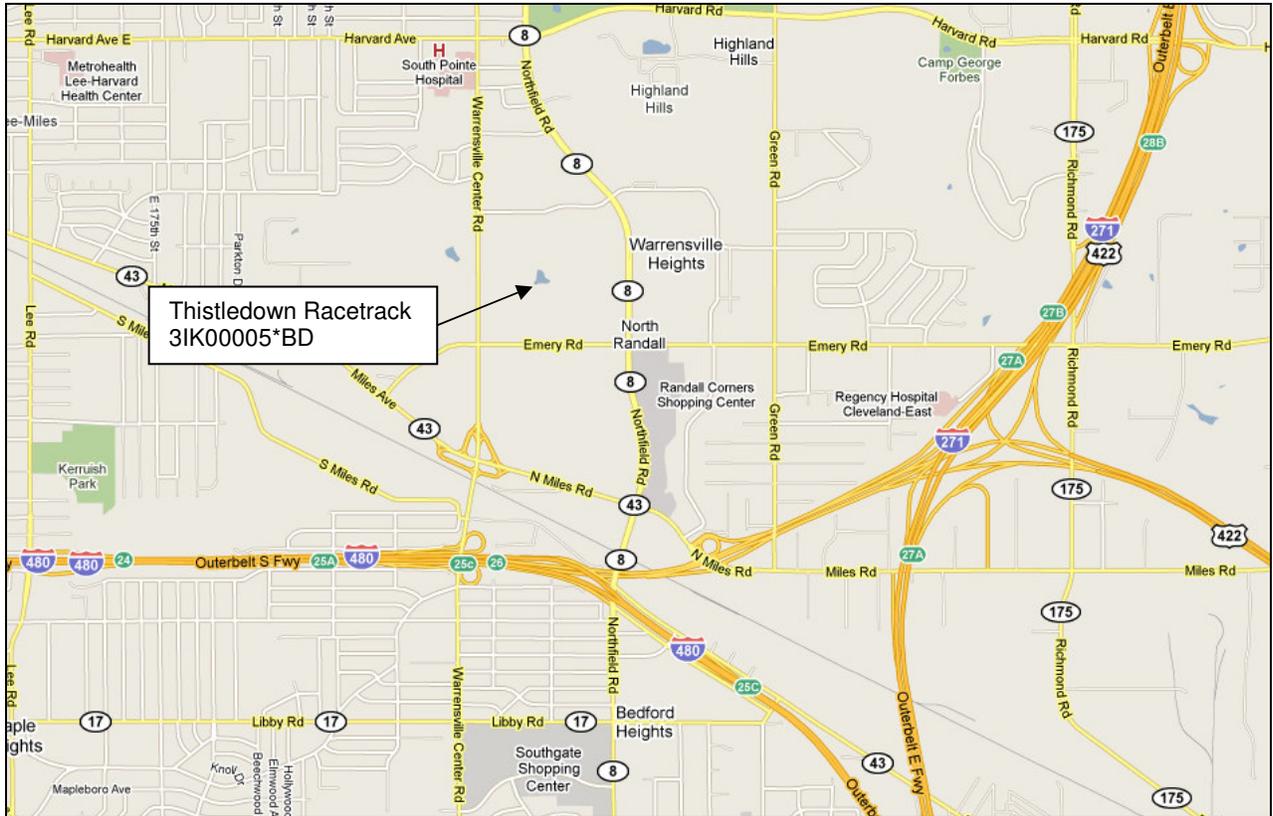


Figure 1. Location of Thistledown Racetrack

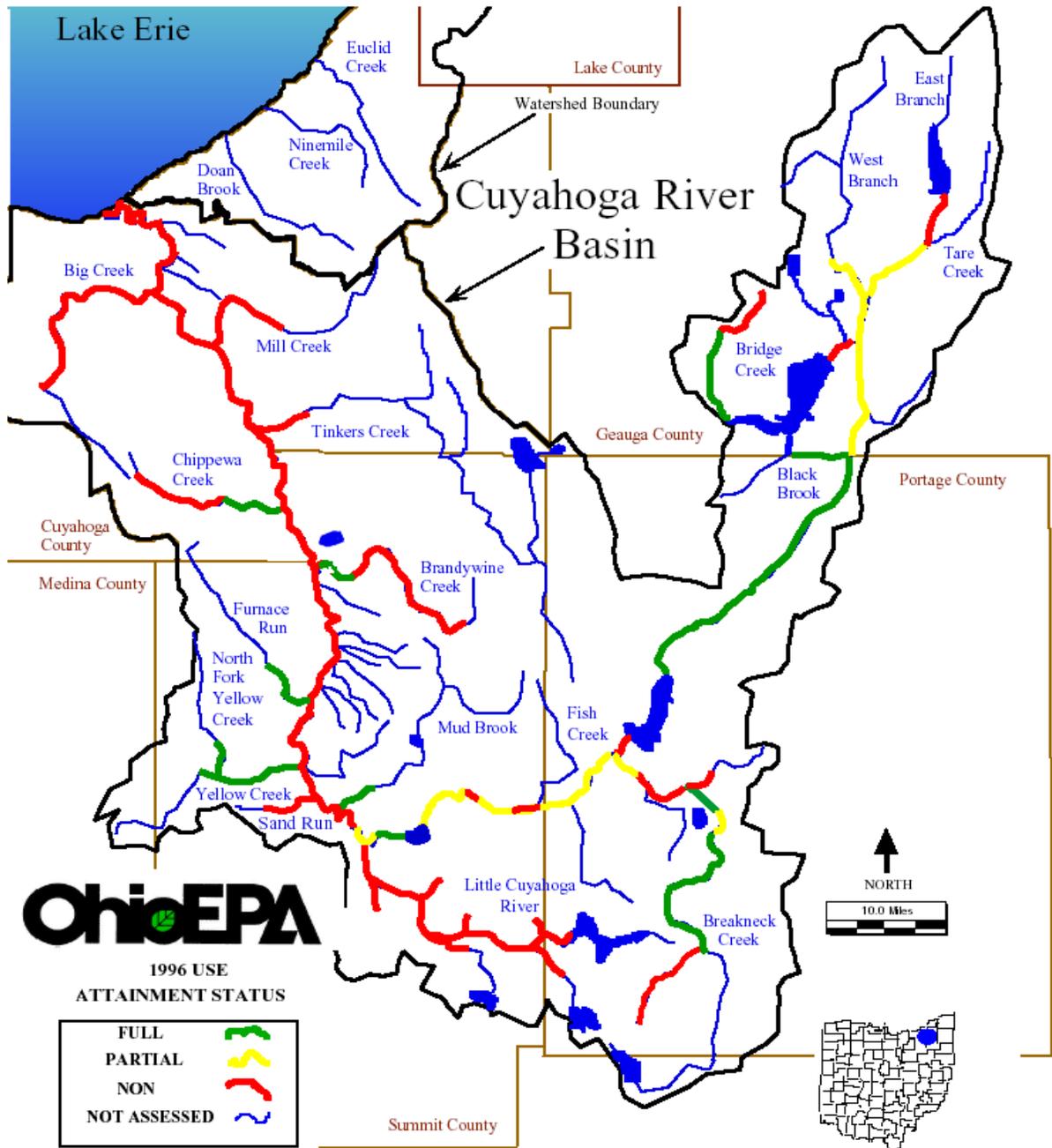


Figure 2. Warmwater habitat (WWH) attainment status of streams sampled within the 1996 Cuyahoga River basin study area.

Figure 2. Graphic of Cuyahoga River Watershed

Table 2. Mill Creek Attainment Status

MAS/1997-12-4		Cuyahoga River Basin TSD			August 15, 1999	
Table 1. (continued).						
RIVER MILE Fish/Invert.	Modified IBI	MIwb	ICI <sup>a</sup>	QHEI <sup>b</sup>	Attainment Status <sup>c</sup>	Comment
<i>Mill Creek (1996)</i>						
<i>Erie/Ontario Lake Plain - WWH Use Designation</i>						
4.3H/3.4	<u>20</u> *	NA	<u>P</u> *	68.5	<b>NON</b>	Urban
0.2H/0.2	<u>18</u> *	NA	<u>F</u> *	60.0	<b>NON</b>	Dst Landfills, CSOs, urban