

EIGHTEENMILE CREEK WATERSHED

LITERATURE SEARCH

Compiled by

Niagara County

Environmental Management Council

Water Resources Committee

1988

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## EIGHTEENMILE CREEK WATERSHED

### GENERAL DESCRIPTION

The Eighteenmile Creek Watershed Basin is centrally located within the bounds of Niagara County. It is the largest drainage basin found in Niagara County, covering an area of 58,056 acres within the towns of Newfane, Hartland, Royalton, Lockport, Cambria and Wilson.

The mainstream originates southeast of the City of Lockport in the vicinity of Keck and Chestnut Ridge Roads, and travels westerly and northwesterly through the city. Over the years the creek has become "tunnelled" and is completely underground from Vine Street (near Remick Parkway) to north of the canal (near Clinton Street). From its resurfacing north of the canal to its junction with "The Gulf" tributary (approximately one and one-half miles), Eighteenmile Creek cascades the Niagara Escarpment descending approximately 240 feet. It continues in a northerly direction through the Town of Newfane to its mouth at Olcott on Lake Ontario.

The Gulf tributary originates southwest of the City of Lockport in the vicinity of Hinman and Lockport Junction Roads. It travels in a northeasterly direction over the Niagara escarpment (a descent of approximately 60 feet) to its junction with Eighteenmile Creek near the City of Lockport's Waste Water Treatment Plant. This tributary flows through the skeletal remains of glacial Lake Tonawanda to glacial Lake Iroquois. A small waterfall is still visible east of Upper Mountain Road and the Harrison Radiator Plant.

The east branch of Eighteenmile Creek, also known as Red Creek, originates in the Town of Royalton near Lincoln Avenue and Gasport Road, travels northeasterly through Royalton Ravine Park (another ancient spillway) then under the canal at Telegraph and Bolton Roads to a point just east of Quaker Road and south of Ridge Road where it turns sharply and travels westerly, southwesterly and northwesterly through the towns of Hartland and Newfane to its junction with Eighteenmile Creek north of Route 104. It is joined by numerous sub-tributaries along its way.

Two other tributaries join Eighteenmile Creek from the west. (However, no accounting of these was found in our research.). One tributary, once known as Sherman Creek, originates in the Town of Cambria near Blackman and Upper Mountain Roads and travels in a northerly and easterly direction to its junction with Eighteenmile Creek near Purdy Road in the Town of Lockport. Numerous sub-tributaries are also evident. The other tributary originates in the southeast corner of the Town of Wilson and travels in an easterly and northerly direction to its junction with Eighteenmile Creek at Ide Road in the Town of Newfane. Numerous sub-tributaries are found along its way.

## Agricultural land

Various lands within the Eighteenmile Creek Watershed are dedicated to preserving agriculture per Agricultural Districting Legislation (Article 25AA, Chapter 69 of Laws of New York State).

Portions of Niagara County's Agricultural District Nos. 2, 5, 6 and 9 are found within the watershed. These districts are scheduled for eight year reviews in 1990, 1992, 1993, and 1989 respectively.

## Livestock Farms

The Niagara County Cooperative Extension has provided input which depicts the location of farms primarily engaged with livestock (dairy farms, beef cattle, horse, pig, etc.)

As mapped, approximately 71% of the farms are clustered in the East Branch of the Eighteenmile Creek sub-drainage basin.

## Installed Tile Drainage

The Soil and Water Conservation District has provided information which represents where Agricultural Tile Drainage has been installed.

This information noted the extent of acreage (2 to 100 acres) that each project was designed to affect. Ditching improvements and flow direction were also indicated.

The majority of the tile drainage is clustered in the Towns of Hartland and Royalton adjacent to the East Branch of Eighteenmile Creek and its tributaries. As mapped, it is estimated that 21% of tile drainage in this sub-basin affects 20 - 100 Acres; 24% affects 5 to 20 acres; 36% affect 2 to 5 acres; and 19% affects less than 2 acres.

This information also depicts proposed tile systems.

Map on file in EMC office. Eighteenmile Creek Watershed Project.

## Land Use/Zoning

In addition to lands dedicated to agriculture, the Council's Natural Resource Inventory depicts lands designated as industrial and residential within the Eighteenmile Creek Watershed. By far, agriculture constitutes the largest land use of the area within the watershed, followed by residential use.

## Waste Disposal Sites

Numerous inactive waste disposal sites are identified within the Eighteenmile Creek Watershed Basin. There is also one permitted active site and one site recently identified, which was operating without a permit. Niagara County operates the active, permitted sanitary landfill and the Town of Lockport has been operating the newly discovered, unpermitted site. Operations have ceased at this site and the Town of Lockport has consented to clean it up. The inactive waste disposal sites and their current status are listed below.

- \* Wilson, Cambria and Newfane Sanitary Landfill (NYSDEC No. 932069): contained, groundwater monitoring maintained
- \* Harrison Radiator (NYSDEC No. 932017): sludge removed to SCA Chemical Waste Management, groundwater monitoring maintained
- \* City of Lockport (NYSDEC No. 932010): currently under evaluation for clean-up procedures
- \* Niagara County Refuse Disposal District (NYSDEC No. 932024):
- \* Niagara Materials Company (NYSDEC No. 932073)
- \* Buterl Specialty Steel Corporation (NYSDEC No. 932032)
- \* Diamond Shamrock (NYSDEC No. 932071)
- \* Diversified Manufacturing (NYSDEC No. 932011)
- \* Dussault Foundary (NYSDEC No. 932012)
- \* Flintkote (NYSDEC No. 932072): barrels labeled PCB's removed; site no longer listed
- \* Van de Mark Chemical Co. (NYSDEC No. 932039)
- \* Town of Lockport (NYSDEC No. 932077)
- \* Noury Chemicals (NYSDEC No. 932030 and 932030c)
- \* Norton Labs (NYSDEC No. 932029)
- \* Lockport NYSEG Substation (NYSDEC No. 932098)



## Road Salt Storage Areas

The Water Resources Committee sent inquiries to those municipalities within the Eighteenmile Creek Watershed requesting the location of their road salt storage, the manner in which it is stored and the maximum amount stored. Their responses have been compiled and mapped and are on file in the EMC office. No responses were received from the Towns of Royalton and Cambria.

Niagara County stores a maximum of 1800 tons at 225 South Niagara Street, Lockport; 400 ton at 2896 Transit Road, Newfane; and 400 tons at 5316 Royalton Center Road, Middleport. All storage locations are three sided buildings. The City of Lockport stores 400 tons year-round, outside in sheltered piles. The Town of Hartland stores 1,000 tons during the winter season inside at Wruck Road approximately 1/4 mile south of Route 104. The Town of Newfane stores 500 tons, December through February at 6176 McKee Street, outside in a sheltered pile. The State of New York Department of Transportation stores its salt (no quantity provided) inside at 400 West Avenue, Lockport. Also, a stockpile of sand treated with salt has been stored over the years across from the intersection of Routes 93 and 31. This pile is in the process of being depleted and has not been treated with salt for at least three years.

## Dam Locations

Eighteenmile Creek was once one of America's most famous "Old Mill Streams". Numerous millraces and millponds provided power for a variety of industries that located along its banks in the 1800's.

In the City of Lockport engineering ingenuity, utilizing the power of the canal as it traveled down the escarpment, resulted in an underground cave raceway on the north side of the canal and an extensive millrace area on the south side of the Canal. These millraces joined Eighteenmile Creek as it traveled through the city and provided power for pulp mills, grist mills, tanneries and saw mills. Many millraces ran through buildings. The most unique was the famous "Electric Building" where the raceway ran through the "7th floor". Beyond the clustered mill districts of Lockport numerous other industries utilized the power of Eighteenmile Creek as it cascaded down the escarpment, including flour mills, rolling mills, paper mills, and the Cowels Electric Smelting and Aluminum Company - a pioneer in the aluminum industry.

Where the topography of the land somewhat "leveled out", dams were constructed to provide millrace power in and near the Hamlet of Newfane and the Town of Royalton.

"Burt Dam", built in 1924, is located approximately two miles south of the mouth of the creek. It creates a 95 acre reservoir within the Creek gorge for approximately two miles upstream. Electricity was produced at this dam until the mid 1950's, and has recently been restored (1988) to produce electricity for the Burt Dam Power Company. Close monitoring of the effects of this restoration on the sediments behind the dam is a permit requirement, as is the development of public access for fishing.

A few miles upstream from the Burt Dam, the remains of a dam exist near Ide Road in the Hamlet of Newfane. This was built in the 1850's by D. VanHorn to operate a saw mill and generate electricity for Newfane Electric Company. The dam may be viewed from the site of the Lockport Felt Company.

A dam located near the end of McKee Street and Ewings Road was built in the 1830's to create a millrace to power various mills in the "Mill District" of Newfane.

There was also a dam site at Condren Road in Newfane, circa 1875, built for another saw and grist mill area.

Two dams were built in the 1850's to operate numerous mills in the mill district of Royalton. Millponds and ruins are still visible in the area north of Slayton-Settlement Road. One dam continued to be utilized for power to operate a grist mill until the late 1960's. This wooden dam is visible today from Slayton-Settlement Road at the southern terminus of Quaker Road.

Numerous millponds and millraces are evident on maps of the City of Lockport, dated 1875. These are located in the mill district located along the Erie Canal, Market, Mill and Exchange Streets.

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