

Chapter 2 - Environment

Overview

Review of the natural resources in Montmorency County indicates the environment is currently in good shape, however these resources are extremely sensitive to change. The environmental features of the county are an important asset to the area and need continued protection. It is the abundance and quality of natural resources that draw people to live and recreate in Montmorency County. That same abundance of woodlands, wetlands, water and wildlife drew pioneers here well over 100 years ago and Native American's here 1000's of years ago. Today, public lands form a foundation of green space within the County.

Overall, Montmorency County has good water quality. However, the available data does indicate certain materials of human origin have entered the groundwater. This, along with past history of ground water contamination in the community of Atlanta illustrates vulnerability of groundwater to contamination. At known sites of contamination, chemicals such as trichloroethylene, benzene, toluene, tylen, nitrates, dichloroethane, lead and perchloroethylene have been discovered in the county's groundwater. The presence of these chemicals along with high nitrate concentrate from some wells indicate contaminants are moving from the land surface to the ground water.

Climate

Table 2.1 gives data on temperature and total precipitation for the area as recorded at Gaylord, Michigan in the period of 1981 to 2010. The climate in Montmorency County is humid continental and is not strongly influenced by climate moderation typical of areas nearer the Great Lakes. The most noticeable lake influence is increased cloudiness and snowfall during fall and winter months. Temperature data show a mean annual temperature of 44.3. Moderately warm temperatures with an average of five days exceeding 90 degrees dominate summers. On average, 93% of days between November to March are 32 °F or below, with 20 days a year experiencing below zero temperatures. Precipitation is well distributed throughout the year with an annual average of 27.7 inches of precipitation (including snowfall). Average annual snowfall is 70 to 80 inches. Snowfall is heaviest from November to March. The average frost-free season ranges from June 1 to September 26. This provides for an average growing season of 118 days.

Severe Weather

Data from the National Oceanic and Atmospheric Administration shows that from 1967 through 2002 there were 123 severe weather events in Montmorency County causing over 6.6 million dollars in damages and injuring 16 people. Additionally, updated information from 2006 through March of 2012 shows there were 34 severe storm events causing \$97,000 in property damage.

Although relatively rare, tornados have occurred in Montmorency County. Michigan is located on the northeast fringe of the Midwest tornado belt. The lower frequency of tornadoes occurring in Michigan may be, in part, the result of the colder water of Lake Michigan during the spring and early summer months, a prime period of tornado activity. Michigan averages approximately 15 tornadoes each year. Over the past 50 years, 5 tornados have been confirmed to touch down in Montmorency County, causing over \$90,000 in property damage. Tornadoes are most

likely to occur in the afternoon during the summer months June, July and August but can occur at any time. Tornadoes have occurred in northern Michigan counties as early as April and as late as October. The magnitude of a tornado is described by using the Fujita Scale. The Scale ranks tornados from F0 to F6 based on wind speed and intensity. F0 and F1 tornados are described as weak tornados with wind speeds from 40 to 112 mph, F2 and F3 are strong tornados with wind speeds from 113-206 mph, F4 and F5 are violent tornados with wind speeds from 207 to 318 mph, and an F6 is an inconceivable tornado with wind speeds above 319 mph. Of the 5 tornados that have struck Montmorency County, two were F1 and three were F0. The most destructive tornado was an F1 that struck the village of Lewiston on July 3, 1999 causing \$60,000 in property damage.

Period	Temperature Averages (°F)			Precipitation Averages (inches)	
	Max	Min	Mean	Liquid equivalent	Snow
January	28.3	9.9	19.1	1.51	13.3
February	31.6	10.1	19.1	1.18	7.1
March	41.4	18.1	29.7	1.57	10.7
April	55.0	30.6	42.8	2.34	6.1
May	67.3	40.7	54.0	2.65	0
June	77.0	50.8	63.9	2.99	0
July	81.6	55.6	68.6	3.00	0
August	79.4	53.6	66.5	3.30	0
September	71.2	46.0	58.6	2.80	0
October	57.7	35.7	46.7	2.64	1.0
November	44.3	27.5	35.9	2.12	3.8
December	32.7	17.0	24.8	1.60	8.0
Annually	55.6	33.0	44.3	27.7	43.2

Source: Midwestern Regional Climate Center, Champaign IL, Station 200343 Atlanta MI

Strong winds and thunderstorm winds are the most prevalent severe weather that affects Montmorency County. Annually, thunderstorms will occur on an average of 30 days per year with an average of one per year that has severe winds. From 1973 to 2002, there were 27 severe wind events recorded in Montmorency County. From 2006 to March of 2012, there were six wind events that caused \$89,000 in property damages. Strong winds are most likely to accompany a thunderstorm in the summer months of June, July and August but can occur any time of year. The most destructive windstorm in Montmorency County occurred in the Lewiston area on April 24, 1993 and caused over \$500,000 in damage. Thunderstorm winds, with gusts estimated to over 100 mph, caused massive tree damage and some structural damage to homes and cabins, mainly due to fallen trees.

Winter storms consisting of heavy snow, freezing rain and blizzards are common seasonal hazards that can be expected to occur several times every year. From 2006 to March of 2012, there were 18 severe winter storm events. Although the county averages 2-3 heavy snowstorms and/or blizzards each year, the number and intensity of snowstorms can fluctuate dramatically from year to year. In 1994, heavy snowstorms and or blizzards occurred 9 times while in 1996, no heavy snowstorms or blizzards were recorded. In March of 2012, a severe late season snowfall resulted in region wide power outages.

The following snowfall extremes, for the 1927 to 2001 time period for the Atlanta station's published record, are:

- Greatest observation-day total: 12 inches (recorded May 3, 1929, December, 15, 1989, January 26, 1990, February 24, 1994 and March 10, 1998)
- Greatest monthly total: 41.1 inches (recorded December 1951)
- Greatest seasonal total: 139.2 inches (recorded during 1996 – 97)

Freezing rain and ice storms can cause widespread damage and can be an extremely costly natural hazard. Ice laden limbs break off trees and cause damage to homes and power lines. Travel on ice covered roads is extremely hazardous, if not impossible. On January 27, 1994, a freezing rainstorm that swept across northern Michigan paralyzed the area and caused over 5.0 million dollars in damages. Freezing rain events are most likely to occur in January, February and March.

Geology

The geology of Montmorency County as well as the entire northern Lower Peninsula can be described in terms of the surface geology and bedrock geology. The rolling hills, river valleys, swamps and lakes were created by the retreating continental glacier some 12,000 years ago. Beneath this thick mantle of the glacial deposits lays a foundation of layered sedimentary bedrock that comprises the Michigan Basin

Surface Geology

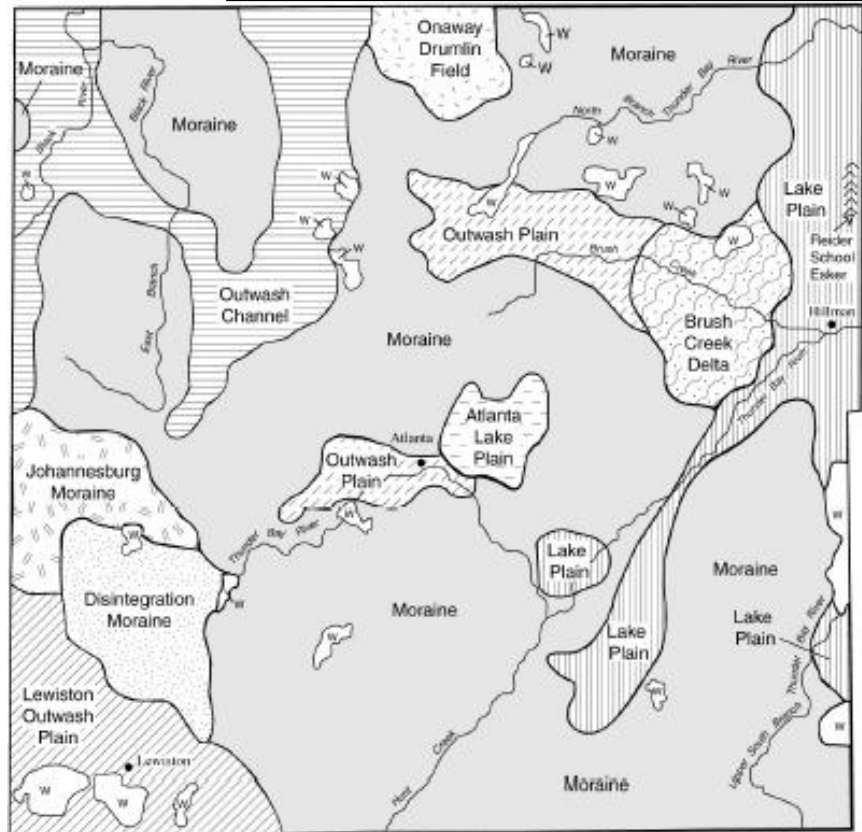
Starting some 2 million years ago, during the Pleistocene era, continental glaciers formed in the Hudson Bay area. Several times, over this two million year period, the massive sheets of ice built up and inched their way south across what is today Michigan. The massive ice sheets more than one mile thick advanced in a southerly direction, bulldozing their way across the landscape. The glacier pushed material in front of it, incorporated rocks and soil into the debris laden ice, and scraped, ground and broke apart the sedimentary bedrock of the Michigan Basin. The last glacial period, called the Wisconsin era, created the landscape we know today. The glacier left behind boulders, rocks, cobble, sand, gravel, silt, clay and loam. In some areas the material was deposited in unsorted masses called till plains, ground moraines and end moraines. Water flowing from the melting glaciers also sorted materials, creating outwash channels, sand deltas, kames and eskers. Fine materials, captured in the fast moving glacial meltwater, settled to the bottom of expansive glacial lakes creating lacustrine clay and silt plains.

Figure 2.1 reflects the glacial landscape of Montmorency, as prepared by U.S.D.A and presented in the Montmorency County Soil Survey. The dominant glacial feature in the county is the Johannesburg Moraine, located in the southwest portion of Montmorency County just north and east of Lewiston, while scattered isolated moraines can be found throughout the county. Till plains also formed from deposition by ice consisting of unsorted sand, gravel, rock and clay, and are generally situated between moraines. The only till plain is in the northeast near the farming community of Royston, north of Hillman.

Outwash and lacustrine plains are water laid deposits from the melting glacier. Outwash plains are stratified deposits of sand, gravel, silt and clay. Lacustrine plains are also stratified deposits consisting of silt, clay and fine sediments on glacial and post glacial lakes that have been since drained. Outwash plains comprise much of the northern half of the county and a small area around East and West Twin Lake, near Lewiston. Lacustrine Plains are found intermixed with isolated moraines in the central and eastern parts of the county. Thickness of glacial deposits

increases moving from the northeast where deposits range from 10 to 200 feet to the southwest where deposits are 600 to 800 feet in depth

Figure 2.1: Montmorency County Physiography,
Source: USDA Montmorency Soil Survey



Bedrock Geology

Bedrock geology underlying the county was formed from ancient seas that covered the area some 250-600 million years ago. The shallow marine seas deposited layers of silt, clay, fine sediments, marine animals, plants, coral and other calcareous materials. These deposits formed shale, limestone, and dolomite deposits. Significant oil and gas deposits are found in the Antrim columnar coral formations across much of Montmorency County. Of additional geological interest is the formation of sinkholes that are found in Montmorency County. Formation of sinkholes results from the interaction of

glaciers and limestone bedrock and water and limestone. During the time glaciers covered the area, the massive weight depressed the existing limestone bedrock. When the glaciers melted, the limestone rebounded and cracked. Groundwater, moving through the cracks, mixed with the limestone to form carbonic acid, enlarging the fissures and forming caverns and domes underground. As the domes grew larger, the weight of the overlying glacial drift collapsed into them forming deep narrow circular depressions on the surface called sinkholes. Sinkholes and sinkhole lakes are found throughout the northwest part of the county. New sinkholes are constantly being formed, taking several decades to appear on the surface.

Topography

Five major glaciers moved across Montmorency County. The current surface is a product of the last of these glacial stages, the Wisconsin, which was thousands of feet thick and finally melted from this area approximately 10,000 years ago. The county consists of plains, rolling plains and hilly lands. Deep sand plains are found on the southwestern portion of the county with elevations ranging from 1,200 to 1,300 feet. Stretching in a band running southeast toward the northwest is a rolling hilly highland with local level areas. Elevations in this section range from 900 to 1,100 feet. Most of the hills are rounded and slope gently toward stream bottoms, but, in places where streams pass through local plain-like areas, their banks are steep. Most of this upland is predominantly well-drained sand and gravel with wetlands occupying swales and valleys. An old lake plain of considerable extent occurs in the northeastern part of the county. The land in this area is level or gently rolling but contains numerous wet swales, ponds, and higher patches of sand. Elevations range from 700-900 feet in this area.

Soils

When planning for types and intensity of land uses, soil types and slopes are two important factors that determine the carrying capacity of land. The construction of roads, buildings and septic systems on steeply sloped areas or areas with organic and hydric soils require special design considerations. In addition, costs for developing these sensitive areas are greater than in less constrained parts of the landscape. If developed improperly, the impacts to natural resources can be far reaching.

Hydric Soils and Steeply Sloped Areas

The Natural Resource Conservation Service completed a detailed soil survey of Montmorency County. A digital or computerized version of the soil survey maps was acquired from the Michigan Center for Geographic Information. **Figure 4.4** is a color thematic map that classifies hydric soils and soil units with slopes 12% and greater.

Hydric soils are saturated, flooded or ponded during part of the growing season and are classified as poorly drained and very poorly drained. When associated with water courses, hydric soils are often prone to seasonal flooding. Hydric soils have poor potential for building site development and sanitary facilities. Wetness and frequent ponding are severe problems that are difficult and costly to overcome. Sites with high water tables may be classified as wetlands and a wetlands permit would be required to develop these areas. The hydric soils (colored green on the map) are mainly located adjacent to streams and creeks. This connectivity of riparian wetlands and surface water features can be seen throughout the landscape.

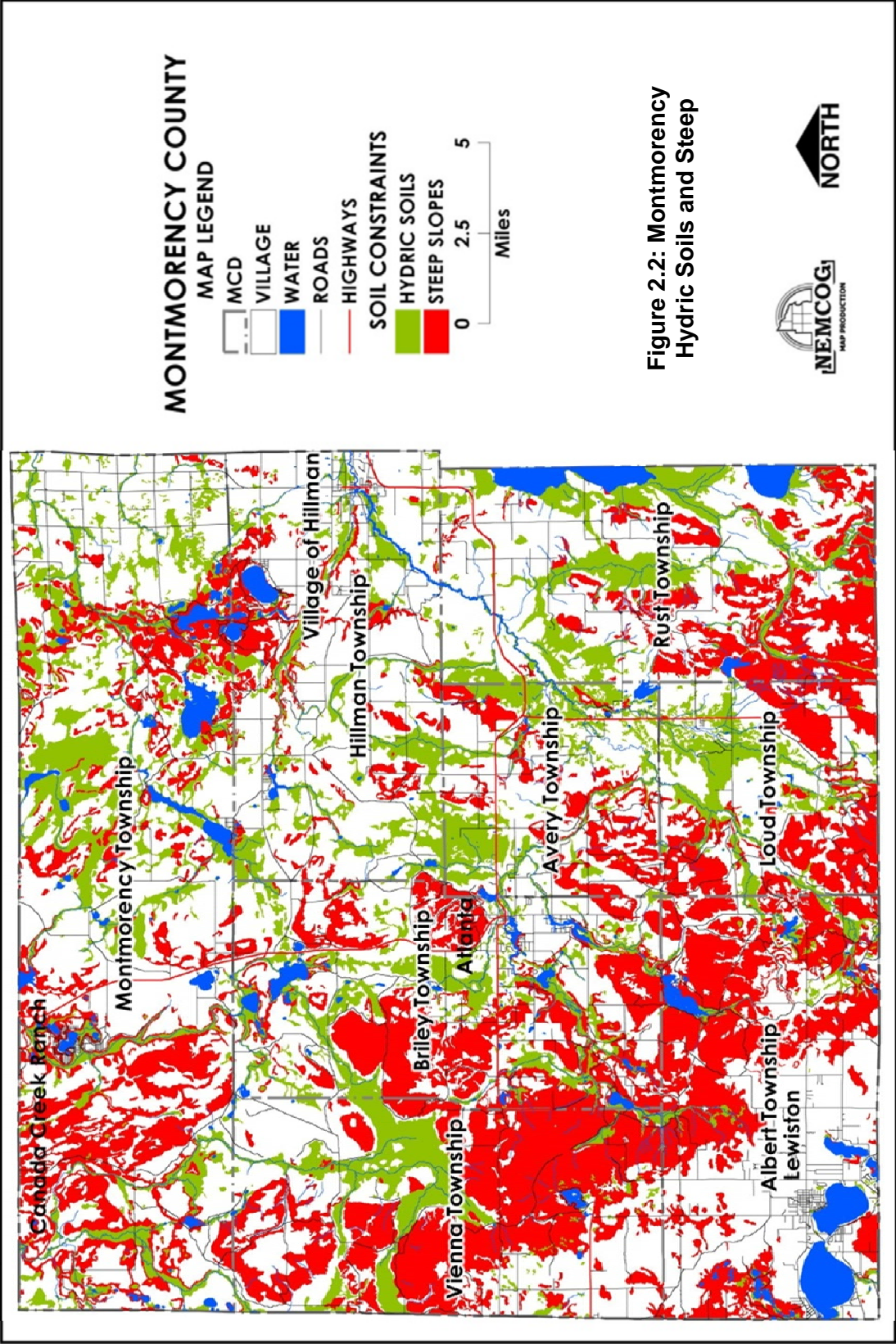
Hills and steeply rolling terrain may provide opportunities for spectacular views of the landscape. However, steeply sloped sites have severe building constraints and are more difficult and costly to develop. Another concern with development in steeply sloped areas is firefighting equipment such as tankers have limitations on climbing steep slopes. Special design standards such as erosion control measures, limiting size of disturbed areas, retaining natural vegetation, re-vegetation, slope stabilization and on-site retention of water run-off from impervious surfaces would all serve to minimize resource impacts. According to information presented in the Montmorency County Soil Survey, areas with slopes 12 percent and greater are located in a wide band that runs from the southeast corner to the northwest corner of the County and are associated with the Johannesburg Moraine complex.

Water Resources

Groundwater

Groundwater is generally available in adequate quantities throughout Montmorency County. Four inch wells in glacial drift will yield 10 to 15 gallons per minute. Availability of groundwater in bedrock is not very productive since only 10 or less gallons per minute can be expected from bedrock throughout the county. Depth to groundwater averages 30 to 40 feet. Depth to groundwater in the Gaylanta and Gilcrest areas exceeds 100 feet.

In Montmorency County, groundwater recharge and discharge is an open system; the water that recharges groundwater must also be discharged somewhere. Some water is extracted for domestic uses, but most is returned to groundwater through septic system drain fields after treatment. A much larger volume is discharged through springs, streams, and lakes.



Groundwater research conducted as a result of hydrogeological investigation of groundwater contamination sites in and around Atlanta indicates that groundwater is flowing toward Haymeadow Creek in the northern half of the community and toward the Thunder Bay River in the southern half. Specific information on flow direction in other portions of the county is not available. However, since ground water generally flows toward nearby surface waters, it is likely that groundwater flows toward the headwaters of the Black River in the northern and western portions of the county; toward the AuSable River in the southwestern part of the county; and toward the Thunder Bay River throughout the remaining two thirds of the county.

Ground water in Montmorency County is a resource at risk. The native surface soils are generally quite sandy with a high capacity to absorb precipitation and quickly allow it to pass beyond the root zone to recharge groundwater. The limited data on subsurface geology indicates that, in areas outside of the northeast portion of the county, overlying the bedrock are hundreds of feet of sand and gravel with occasional layers of clay. The spatial extent of the clay layers is unknown, but they certainly do not provide a continuous protective layer for groundwater. Certain areas of the county, such as areas with moraines, eskers, and till plains, are important groundwater recharge areas. These areas are also vulnerable to contamination from the surface because of their permeable soils. Due to the sand, gravel, and karst activity, the majority of the county can be classified as vulnerable to contamination from surface and subsurface discharges.

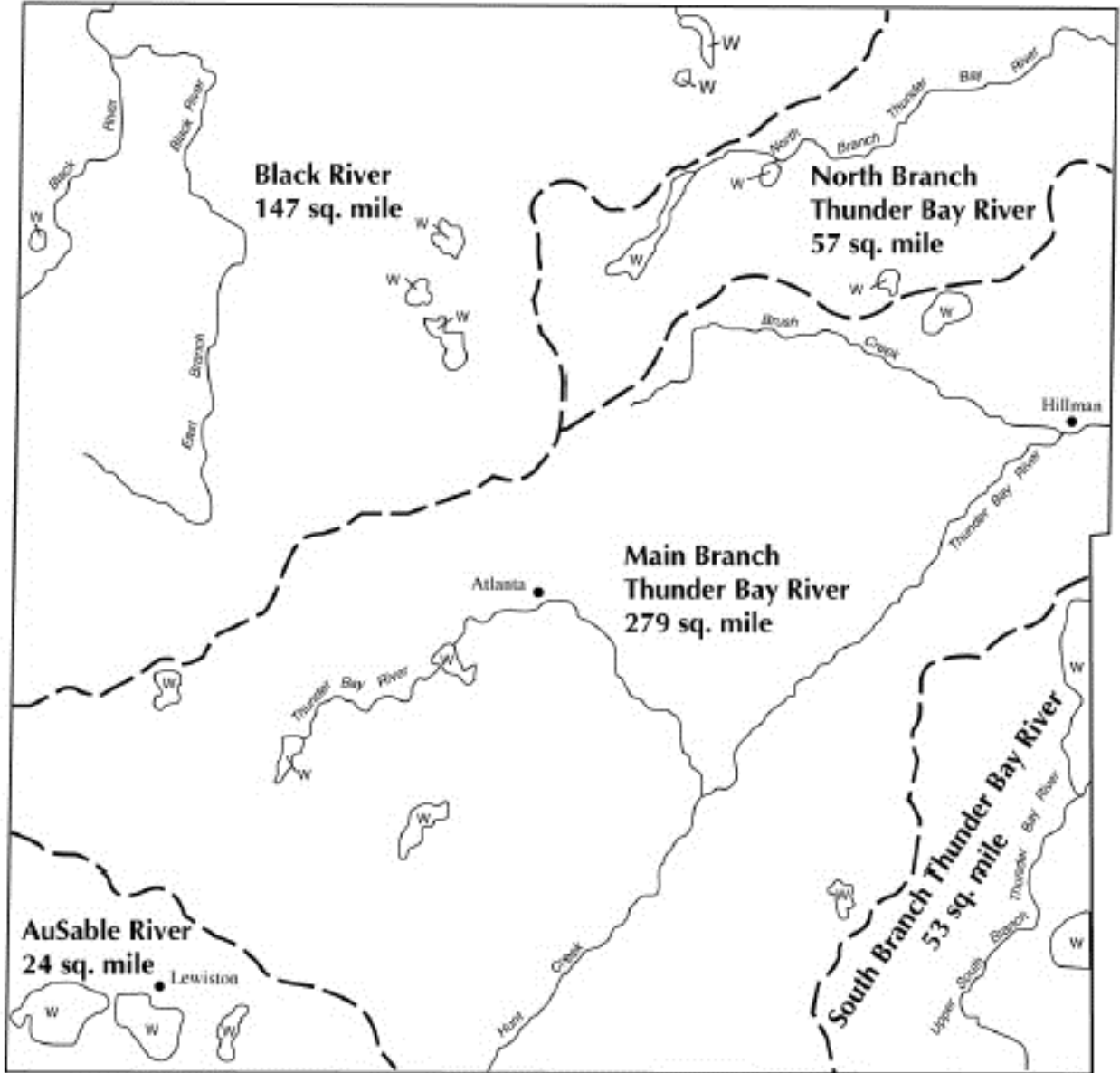
Surface Water

Numerous lakes and swamps are scattered throughout Montmorency County. In addition to these larger bodies of water are a great number of small pond, kettle holes, and marshes. These smaller bodies of water are characterized by moderate seasonal water level fluctuations and various stages of vegetative encroachment. Streams through bordering swamps and marshes interconnect many of the lakes and smaller bodies of water (**Figure 2.3**).

Montmorency County has 89 lakes covering more than 8,000 acres. 45 of these lakes are greater than 50 acres in size and three are greater than 600 acres. Fletcher Pond is the largest body of water in Montmorency County. The total acreage of this impoundment of the Thunder Bay River is 8,970 acres, with 3,660 acres in Montmorency County. Other large lakes in the county are East and West Twin Lakes, Grass Lake, Avalon Lake, Rush Lake, Long Lake, Avery Lake, and Clear Lake.

Inland Lakes and streams cover 3.3% of the total county land area of 548 square miles. The principal rivers in the county are the North, South and Main branches of the Thunder Bay River, the Black River and the AuSable River. Floods and long periods of high water along the five main rivers are not a serious problem in the county. There are comparatively few large streams and very few tributary streams in proportion to the area of the county owing to the comparative youth of the land surface and because of the large area of land underlain by rapidly permeable sand and gravel. The direction of stream flow, locally, appears to be without system as the stream courses are determined by obstruction and constructional valleys left by the ice sheet. However, the general direction of flow is northward in conformity with the pre-glacial slope of the land.

**Figure 2.4: Montmorency County
Watersheds**



Wetlands

A wetland is land where water is found, either on the surface or near the surface, at any time during the year. Poorly drained soils and water-loving vegetation also may be present. Wetlands are often referred to as marshes, swamps or bogs. Residents of Michigan are becoming increasingly more aware of the value of wetlands. Beyond their aesthetic value, wetlands protect water quality and provide critical wildlife habitat. Wetlands associated with waterways are prone to seasonal flooding.

Wetland areas in Montmorency County are typically associated with old glacial drainageways. Poorly drained, lowland areas support northern white cedar, tamarack, balsam fir, black spruce,

eastern hemlock, white pine, balsam poplar, trembling aspen, paper birch, black ash, speckled alder and shrub willows. Northern white cedar dominates the wetland areas where there is good lateral water movement and the soils are high in organic content. These lowland forests are typically located adjacent to water features and function as riparian forests and water quality buffers. The network of lowland forests, associated with rivers and creeks, also function as wildlife corridors and are the backbone of large regional ecological corridors. Non-forested wetland types include lowland brush, marshes and bogs. Forested and non-forested wetlands are a finite resource in the County.

Figure 2.5 is a color thematic map prepared from the US Fish and Wildlife Service National Wetlands Inventory. The map shows the predominate wetland type is lowland forest. Note the extensive, connected wetland complexes associated with streams. These complexes form important regional wildlife corridors. Small kettle hole depressions form isolated wetlands within the Johannesburg Moraine complex.

Vegetation Circa 1800

The Michigan Department of Natural Resources has compiled pre-settlement vegetation maps of counties in Michigan. The maps were generated from information contained in the first government land survey notes in the 1800's along with information such as current vegetation, land forms and soils. A review of the circa 1800 vegetation map of Montmorency County show extensive areas were covered with pine and oak forests, see **Figure 2.6**. This clearly shows a long history of wildfires in the area. The map delineates jack pine-red pine forest, white pine-red pine forest, pine barrens and pine/oak barrens, which combined, covered 47 percent of the County. In the late 1800's extensive logging and subsequent wildfires resulted in the conversion of white pine-red pine forests to oak and aspen forests. Areas once covered with pine forests still have a high propensity for wildfires.

Woodlands

According to 2001 statistics from the U.S. Forest Service, Montmorency County has a total land area of 349,775 acres. Accessible forestland totals 283,567.1 acres (approximately 81% of the county's total land area).

Tree species vary depending upon the soils, moisture and past activities such as logging, fires and land clearing. **Table 2.3** shows that the major forest species found in the county are Aspen (24%), Maple/Beech/Birch (23%), and Oak/Hickory Group (22%). Other forest types found in Montmorency County are Jack Pine (9%), Red Pine (7%) and Northern White Cedar (7%). Elm/Ash/Cottonwood Group, Eastern White Pine, Balsam Fir, Balsam Poplar, and Red Maple/Oak make up the difference.

Under dry spring conditions forest fires can occur in any forests type. However some forest types have higher risks. Jack and red pine forests have a high risk for wildfires. Oak and white pine forests have a moderate risk for wildfires.

Approximately half of the forestland (52%) is state owned **Table 2.3** shows the breakdown of tree species by ownership group. Large amounts of Aspen, Maple/Beech/Birch, and Oak/Hickory are in both state and private ownership. Red Pine is all state-owned, as is most of the Jack Pine and Northern White Cedar. All of the Balsam Poplar, Elm/ Ash/Cottonwood, Red Maple/Oak, Balsam Fir, and Eastern White Pine are privately owned.

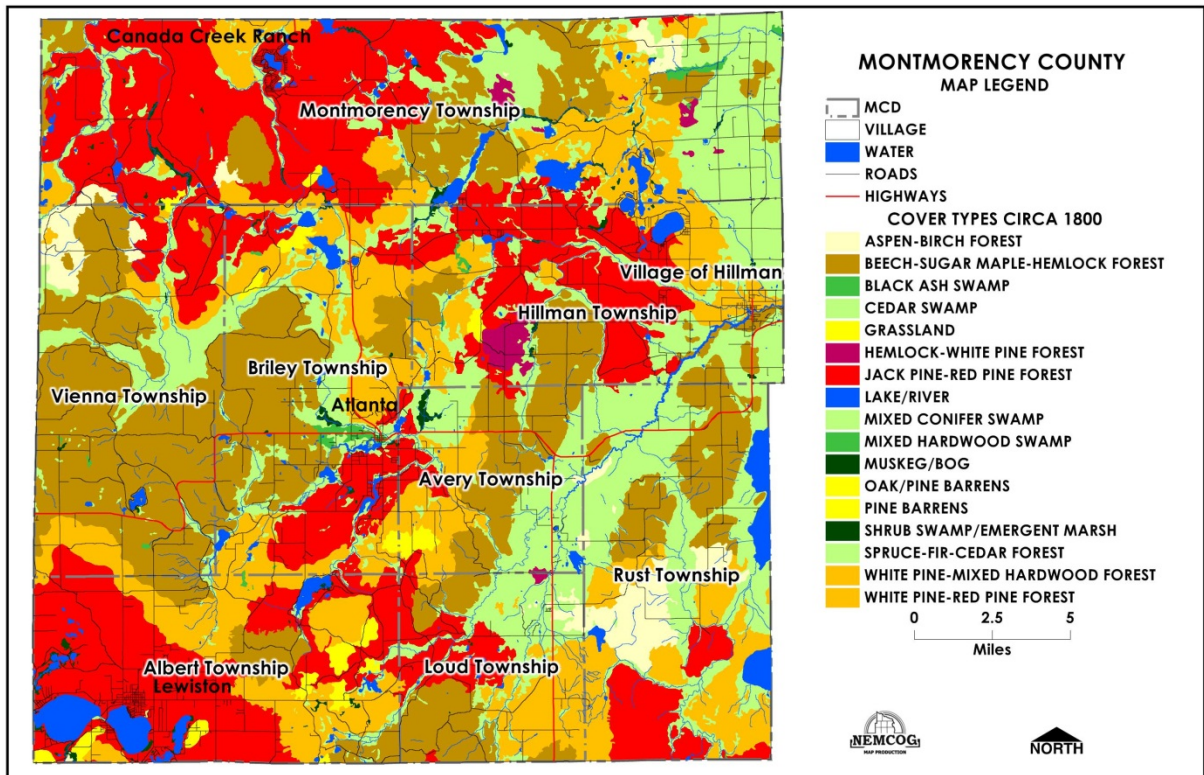
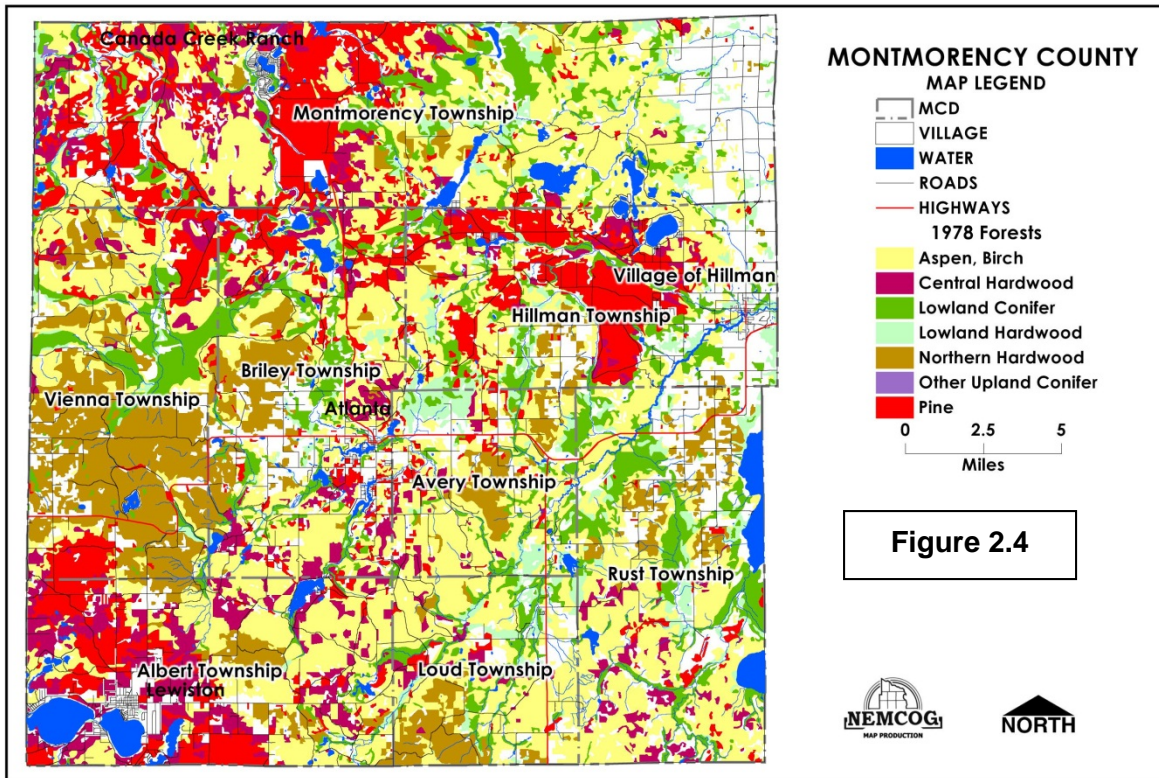
The distribution of forest types can be viewed in **Figure 2.7**. The forest type map show areas with pine, oak, northern hardwoods, aspen-birch, lowland conifers and lowland hardwoods. Pine forests and pine-oak forests have high risks for forest fires. Other forests, while not high risk, can be subject to wildfires. Grass and shrub covered fields have higher risks for wildfires.

	State	Private	TOTAL*	%
Aspen	46,555.5	20,587.4	67,142.9	24.2%
Maple / Beech / Birch Group	22,901.2	40,218.4	63,119.6	22.8%
Oak / Hickory Group	23,337.0	37,935.6	61,272.6	22.1%
Jack pine	16,274.5	7,201.1	23,475.6	8.5%
Red pine	18,789.0	23.6	18,812.6	6.8%
Northern White Cedar	17,286.1	684.7	17,970.8	6.5%
Elm/Ash/Cottonwood Group		7,143.7	7,143.7	2.6%
Eastern White Pine		6,482.5	6,482.5	2.3%
Balsam Fir		5,186.0	5,186.0	1.9%
Balsam Poplar		5,186.0	5,186.0	1.9%
Red Maple/Oak		1,296.5	1,296.5	0.5%
TOTAL	145,143.3	131,945.5	277,088.8	100%
Source: U.S. Forest Service 2001				
*Total of each forest type that has been classified by the U.S. Forest Service by ownership				

Fish and Wildlife Resources

The predominance of forested land and surface water makes Montmorency County the home to many species of fish and wildlife. With extensive high quality fishing streams, creeks, and inland lakes, the County has an abundance and variety of fish habitat. Brook, rainbow, and brown trout are established singly or in combination in cold water streams. Lakes offer warm water fisheries such as walleye, northern pike, largemouth bass, small mouth bass and pan fish. Gilchrist and Hunt Creeks in Southeastern Montmorency County are counted among the premier trout streams in Michigan

Deer, rabbit, grouse and woodcock are abundant in the County. Bear, coyote, bobcat, elk and turkey have small to moderate populations that are growing. Michigan Department of Natural Resources biologists recently confirmed gray wolf in the region, the first wolf substantiated in the Lower Peninsula since wolves began returning to Michigan 15 years ago. Wildlife is a resource that brings in hunters and tourists. October and November bring thousands of hunters to the County for small game hunting, bear and bow season (deer), peaking sharply in mid-November with the opening day of deer (rifle) season. Michigan's well-managed elk herd is focused in western Montmorency County, with Atlanta arguably acknowledged as Elk Capitol of Michigan. This is an area of large tracts of state and private club lands, few roads, and little permanent population.



Discharge Permits

Surface Water - National Pollution Discharge Elimination (NPDES) Facilities

Anyone discharging, or proposing to discharge, waste or wastewater into the surface waters of the State is required to obtain a National Pollutant Discharge Elimination System (NPDES) permit. The NPDES program is intended to control direct discharge into the surface waters of the State by imposing effluent limits and other conditions necessary which meet State and federal requirements. The NPDES program regulates pollutants discharged directly into waterways from wastewater sources. The lists below show NPDES permits issued in Montmorency County. See **Table 2.4**.

Air Discharge Permits

There are two Renewable Operating Permit (ROP) Air Discharge Permits issued in Montmorency County. The ROP program is a national permitting system administered by each state. Each major source of pollution is subject to the program. A "major source" is a facility that is capable of emitting more than specific amounts of air contaminants.

- Hillman Power Company, Village of Hillman
- Montmorency-Oscoda-Alpena Waste Management Authority, Loud Township

Facility Name	Address	Name	Permit #	Exp. Date
DNRE-Recreation Division	20500 North M-33	Atlanta	GW1010022	2/1/2014
Gildners Concrete Products, Incorporated	800 Progress St.	Hillman	MIS210065	4/1/2012
Hillman Power Company	750 Progress St.	Hillman	MI0044563	10/1/2011
Hillman Wastewater Lagoons	Third St. - West	Hillman	MIG580152	4/1/2014
Carrier Road Rehabilitation Project	Carrier Road	Hillman	MIR110501	10/23/2012
Industrial Disposal, Incorporated	various sites statewide	varies	GW1510023	4/1/2015
The Laundry Basket	9655 East Kellyville Road	Atlanta	GW1110372	6/1/2012
DNRE-RRD	101 Jerome Street	Atlanta	MIG081148	4/1/2015
DNRE-RRD	12656 State St.	Atlanta	MIG081147	4/1/2015
M-32 Business Spur	in the Village	Hillman	MIR111046	3/25/2014
County Road 612 Rehabilitation	County Road 612	Lewiston	MIR110414	8/28/2012
Timbertown Laundromat, Incorporated	2850 South County Road 489	Lewiston	GW1010167	8/1/2011
Wayne Wire Cloth Products, Incorporated	221 Garfield	Hillman	MIS210082	4/1/2012
MDEQ	11720 M-33	Atlanta	MIG081039	4/1/2015

Sites of Environmental Contamination

The Part 201 (Environmental Response) of Natural Resources and Environmental Protection Act (P.A. 451 of 1994), as amended, provides for the identification, evaluation and risk assessment of sites of environmental contamination in the State. The Environmental Response Division (ERD) is charged with administering this law. A site of environmental contamination, as identified by ERD, is "a location at which contamination of soil, ground water, surface water, air or other environmental resource is confirmed, or where there is potential for contamination of resources due to site conditions, site use or management practices".

The agency publishes a list of environmentally contaminated sites by county showing the sites by name pollutant(s) and site status. A Site Assessment Model (SAM) score is computed to assess the relative risk a site may pose and to help determine the aggressiveness of clean-up efforts. SAM scores range from 0 to 48 with 0 being the least contaminated and 48 the most contaminated. In Montmorency County, there are currently 19 listed contamination sites. Eight of the sites are underground storage tanks related to gas stations.

Site ID: 59000173
Site Name: Denslow Oil Company (Former)
Site Address: 415 Water Street
City: Greenville
Zip Code: 48838
County: Montcalm
Source:
Pollutant(s):
Score: out of 48
Score Date:
Township: Range:Section:
Quarter: Quarter/Quarter:
Status: Interim Response in progress

Site ID: 60000001
Site Name: Briley Twp M33N Gas Contam
Site Address: Porko-De-Orko Inc.
City: Atlanta
Zip Code: 49709
County: Montmorency
Source: Petroleum Bulk Stations &Term
Pollutant(s): Gasoline; Petroleum
Score: 22 out of 48
Score Date: 2/10/2004 4:18:39 PM
Township: 30N Range:02ESection:12
Quarter: NW Quarter/Quarter: SE
Status: Interim Response conducted - No further activities anticipated

Site ID: 60000004
Site Name: Lowell St Hillman Twp
Site Address: 14978 State Street
City: Hillman
Zip Code: 49746
County: Montmorency

Source: Gasoline Service Station
Pollutant(s): 1,2,4 TMB; 1,3,5 TMB; Benzene; Ethylbenzene; Xylenes
Score: 23 out of 48
Score Date: 7/28/2004 2:51:51 PM
Township: 31N **Range:**04E**Section:**26
Quarter: NE **Quarter/Quarter:** NE
Status: Remedial Action in Progress (may incl. use restrictions, O&M and/or monitoring)

Site ID: 60000005
Site Name: Montmorency Oscoda LF
Site Address: off Avery Lake Road
City: Atlanta
Zip Code: 49709
County: Montmorency
Source: Refuse Systems
Pollutant(s): Fe; VC; Solid wastes
Score: 30 out of 48
Score Date: 4/14/2005 10:18:40 AM
Township: 29N **Range:**02E**Section:**01
Quarter: SE **Quarter/Quarter:**
Status: Contact Lead Division for current status

Site ID: 60000007
Site Name: Res Well Grosinski
Site Address: M-32 Hwy
City: Hillman
Zip Code: 49746
County: Montmorency
Source: Private Households
Pollutant(s): 1,2 DCA; Benzene
Score: 29 out of 48
Score Date: 2/12/2004 4:27:46 PM
Township: 30N **Range:**04E**Section:**12
Quarter: NW **Quarter/Quarter:** NW
Status: Inactive - no actions taken to address contamination

Site ID: 60000009
Site Name: Wayne Wire Cloth Hillman
Site Address: 221 Garfield Street
City: Hillman
Zip Code: 49746
County: Montmorency
Source: Metal Processing
Pollutant(s): PCE; TCE; cis-1,2 DCE
Score: 31 out of 48
Score Date: 8/25/2004 8:25:10 AM
Township: 31N **Range:**04E**Section:**23
Quarter: NE **Quarter/Quarter:**
Status: Interim Response in progress

Site ID: 60000019
Site Name: Hillman Farm Service
Site Address: Pleasant Valley Road
City: Hillman
Zip Code: 49746
County: Montmorency
Source: Agricultural Services
Pollutant(s): Pb
Score: 23 out of 48
Score Date: 9/28/2004 3:46:47 PM
Township: 31N **Range:**04E**Section:**23
Quarter: Quarter/Quarter:
Status: Delisted - no longer meets criteria specified in rules

Site ID: 60000020
Site Name: Pointe Bait
Site Address: 12656 State Street
City: Atlanta
Zip Code: 49709
County: Montmorency
Source: Gasoline Service Station
Pollutant(s): 1,2,4 TMB; 1,3,5 TMB; Benzene; Ethylbenzene; Naphthalene; Toluene; Xylenes
Score: 39 out of 48
Score Date: 7/28/2006 8:19:10 AM
Township: 30N **Range:**02E**Section:**12
Quarter: Quarter/Quarter:
Status: See Leaking Underground Storage Tank Site Database

Site ID: 60000023
Site Name: Sports Center, Inc.
Site Address: 300 State Street
City: Hillman
Zip Code: 49746
County: Montmorency
Source: Gasoline Service Station
Pollutant(s): 1,2,4 TMB; 1,3,5 TMB; Benzene; Ethylbenzene; Pb; MTBE; Naphthalene; Styrene; n-Propylbenzene
Score: 35 out of 48
Score Date: 7/28/2006 8:17:22 AM
Township: 31N **Range:**04E**Section:**24
Quarter: Quarter/Quarter:
Status: See Leaking Underground Storage Tank Site Database

Site ID: 60000031
Site Name: Mary D's Restaurant
Site Address: 101 Jerome Street
City: Atlanta
Zip Code: 49709
County: Montmorency
Source: Gasoline Service Station

Pollutant(s): 1,2,4 TMB; 1,3,5 TMB; 2-Methylnaphthalene; Ethylbenzene; Pb; Naphthalene; Xylenes; n-Propylbenzene

Score: 37 out of 48

Score Date: 7/28/2006 8:25:46 AM

Township: 30N **Range:**02E**Section:**12

Quarter: Quarter/Quarter:

Status: See Leaking Underground Storage Tank Site Database

Site ID: 60000033

Site Name: Joey's Service

Site Address: 12383 State St

City: Atlanta

Zip Code: 49709

County: Montmorency

Source: Gasoline Service Station

Pollutant(s): 1,2,4 TMB; 1,3,5 TMB; 2-Methylnaphthalene; Benzene; Ethylbenzene; Naphthalene; Toluene; Xylenes

Score: 39 out of 48

Score Date: 8/4/2006 9:01:37 AM

Township: 30N **Range:**02E**Section:**12

Quarter: Quarter/Quarter:

Status: See Leaking Underground Storage Tank Site Database

Site ID: 60000035

Site Name: Homant Oil Hillman Bulk Plant

Site Address: 1479 Main St. (Co. Rd. 451)

City: Hillman

Zip Code: 49746

County: Montmorency

Source: Petroleum Bulk Stations &Term

Pollutant(s): Ethylbenzene; Naphthalene; Xylenes

Score: 24 out of 48

Score Date: 2/26/2004 3:25:39 PM

Township: 31N **Range:**04E**Section:**24

Quarter: NW**Quarter/Quarter:** SW

Status: Inactive - no actions taken to address contamination

Site ID: 60000037

Site Name: Williams Service Station

Site Address: 2980 Kneeland

City: Lewiston

Zip Code: 49756

County: Montmorency

Source: Gasoline Service Station

Pollutant(s): 1,2,4 TMB; 1,3,5 TMB; Benzene; Ethylbenzene; Naphthalene; Toluene; Xylenes; n-Propylbenzene

Score: 35 out of 48

Score Date: 7/27/2006 1:58:31 PM

Township: 29N **Range:**01E**Section:**22

Quarter: Quarter/Quarter:

Status: See Leaking Underground Storage Tank Site Database

Site ID: 60000042
Site Name: Essex Building (Former)
Site Address: 11656 Reimann Road
City: Atlanta
Zip Code: 49709
County: Montmorency
Source: Automotive Stamping
Pollutant(s): PCE; TCE
Score: 26 out of 48
Score Date: 8/25/2004 10:31:25 AM
Township: 31N **Range:**2E **Section:**11
Quarter: Quarter/Quarter:
Status: Inactive - no actions taken to address contamination

Site ID: 60000054
Site Name: James A. Wright
Site Address: M-33 South &Co. RD 451
City: Atlanta
Zip Code: 49709
County: Montmorency
Source: Auto Repair Services &Garage
Pollutant(s): Xylenes
Score: 20 out of 48
Score Date: 7/28/2006 7:58:06 AM
Township: 30N **Range:**03E**Section:**25
Quarter: Quarter/Quarter:
Status: See Leaking Underground Storage Tank Site Database

Site ID: 60000056
Site Name: Wyson's General Store
Site Address: 11720 M-33
City: Atlanta
Zip Code: 49709
County: Montmorency
Source: Gasoline Service Station
Pollutant(s): 1,2,4 TMB; 1,3,5 TMB; Benzene; Ethylbenzene; MTBE; Naphthalene; Toluene; Xylenes
Score: 39 out of 48
Score Date: 8/8/2006 9:20:00 AM
Township: 30N **Range:**02E**Section:**12
Quarter: Quarter/Quarter:
Status: See Leaking Underground Storage Tank Site Database

Site ID: 60000057
Site Name: A-1 Party Mart
Site Address: 230 N State St.
City: Hillman
Zip Code: 49746
County: Montmorency
Source: Gasoline Service Station

Pollutant(s): 1,2,4 TMB; 1,3,5 TMB; Benzene; Ethylbenzene; Naphthalene; Styrene; PCE;
TCE; Xylenes; n-Propylbenzene

Score: 35 out of 48

Score Date: 7/28/2006 8:02:43 AM

Township: 31N **Range:**04E**Section:**23

Quarter: Quarter/Quarter:

Status: See Leaking Underground Storage Tank Site Database

Site ID: 60000058

Site Name: 12285 Jerome Street

Site Address: 12285 Jerome Street

City: Atlanta

Zip Code: 49709

County: Montmorency

Source: Nonclassifiable Establishments

Pollutant(s): As; Pb; Naphthalene; Ag; Zn; Hg

Score: 30 out of 48

Score Date: 1/12/2005 3:22:35 PM

Township: 30N **Range:**02E**Section:**12

Quarter: Quarter/Quarter:

Status: Inactive - no actions taken to address contamination

Site ID: 60000059

Site Name: Strolle Oil

Site Address: 11985 &11965 M-32

City: Atlanta

Zip Code: 49709

County: Montmorency

Source: Petroleum Bulk Stations &Term

Pollutant(s): 1,2,4 TMB; Benzene; Xylenes

Score: 28 out of 48

Score Date: 3/23/2006 9:28:56 AM

Township: 30N **Range:**02E**Section:**11

Quarter: Quarter/Quarter:

Status: Evaluation in progress