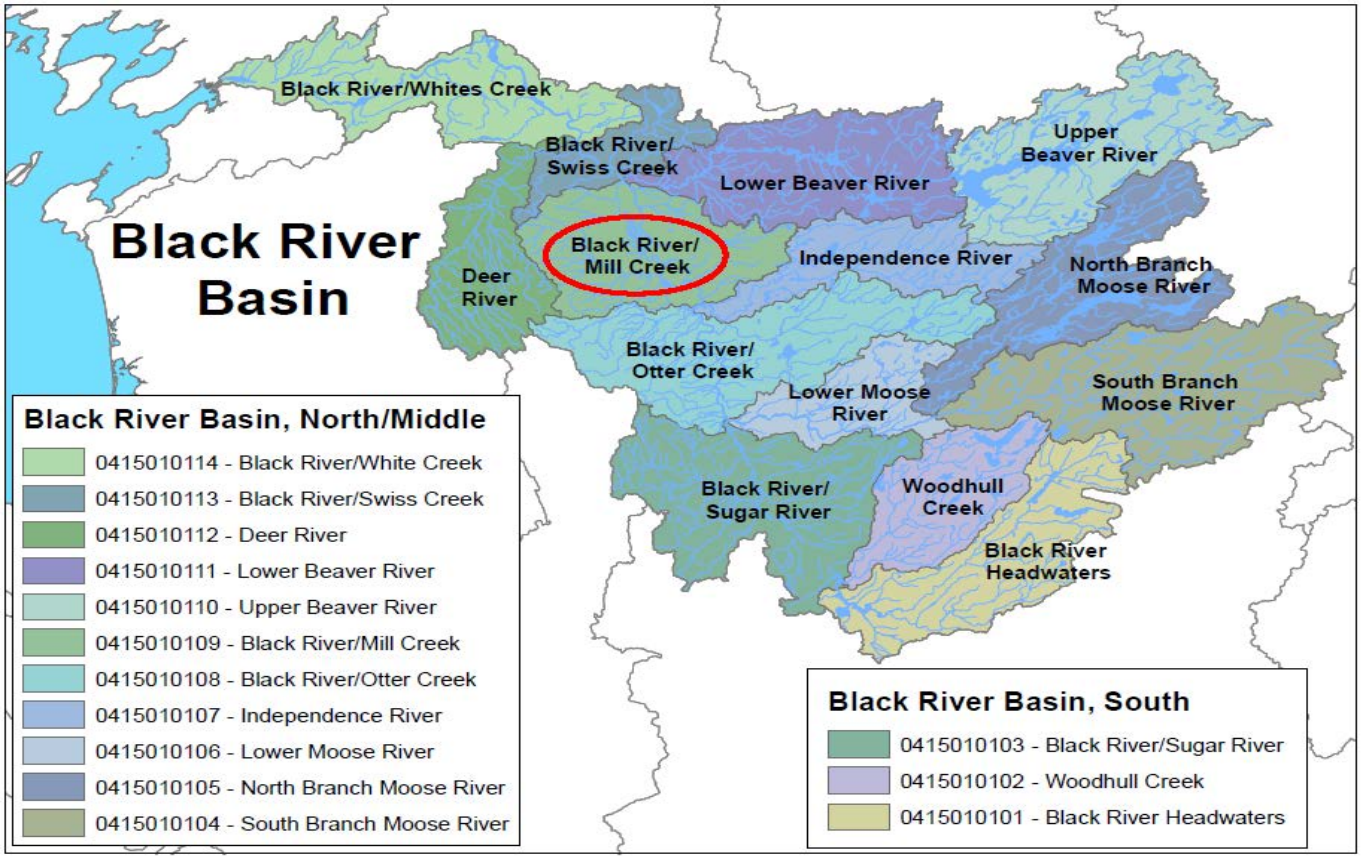

Black River/Mill Creek Watershed

(0415010109)

Water Index Number	Waterbody Segment	Category
Ont 19- 39	Hufcut Creek and tribs (0801-0272)	UnAssessed
Ont 19- 41 thru 50 (selected)	Minor Tribs to Middle Black River (0801-0313)	UnAssessed
Ont 19- 45	Crystal Creek and minor tribs (0801-0240)	NoKnownImpct
Ont 19- 45-10,11	Unnamed Tribs to Crystal Creek (0801-0315)	UnAssessed
Ont 19- 45-P595	Crystal Lake (0801-0316)	UnAssessed
Ont 19- 51	Mill Creek/South Branch, and tribs (0801-0200)	Impaired Seg
Ont 19- 51	North Branch Mill Creek, and tribs (0801-0317)	MinorImpacts
Ont 19- 52 thru 56 (selected)	Minor Tribs to Middle Black River (0801-0318)	NoKnownImpct

Crystal Creek and minor tribs (0801-0240) NoKnownImpct

Waterbody Location Information

Revised: 01/09/2007

Water Index No: Ont 19- 45
Hydro Unit Code: 04150101/130 **Str Class:** C(T)*
Waterbody Type: River
Waterbody Size: 53.6 Miles
Seg Description: entire stream and select tribs

Drain Basin: Black River
Black River
Reg/County: 6/Lewis Co. (25)
Quad Map: LOWVILLE (F-19-4)

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

Use(s) Impacted	Severity	Problem Documentation
NO USE IMPAIRMNT		

Type of Pollutant(s)

Known: - - -
Suspected: - - -
Possible: - - -

Source(s) of Pollutant(s)

Known: - - -
Suspected: - - -
Possible: - - -

Resolution/Management Information

Issue Resolvability: 8 (No Known Use Impairment)
Verification Status: (Not Applicable for Selected RESOLVABILITY)
Lead Agency/Office: n/a **Resolution Potential:** n/a
TMDL/303d Status: n/a

Further Details

Biological (macroinvertebrate) assessment of Crystal Creek near the mouth in New Bremen (at Van Amber Road) was conducted in 2002. Sampling results indicated water quality just to be just within the range of slightly impacted. The sampling habitat was less than ideal, consisting of sand, gravel and rubble downstream of an impoundment. The resident invertebrate fauna was diverse. Taking into account the poor habitat and impoundment effects actual water quality is considered to be non-impacted. (DEC/DOW, BWAM, SBU, 1996)

This segment includes the entire stream and selected/smaller tribs. The waters of the stream are Class C(T) from the mouth to a point 0.5 miles below unnamed pond (P590) in New Bremen, Class A to/including unnamed pond (P590) and Class C(T) for the remainder of the reach. Tribs to this reach/segment, including South Branch (-5), are Class C,C(T),C(TS). Select Crystal Creek tribs making up the Lowville water supply are listed separately.

Mill Creek/South Branch, and tribs (0801-0200) Impaired Seg

Waterbody Location Information

Revised: 01/09/2007

Water Index No:	Ont 19- 51			**Drain Basin:**	Black River
Hydro Unit Code:	04150101/120	**Str Class:**	C		Black River
Waterbody Type:	River			**Reg/County:**	6/Lewis Co. (25)
Waterbody Size:	34.3 Miles			**Quad Map:**	LOWVILLE (F-19-4)
Seg Description:	stream and tribs, from mouth to Lowville				

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

Use(s) Impacted	Severity	Problem Documentation
AQUATIC LIFE	Impaired	Known
RECREATION	Impaired	Known

Type of Pollutant(s)

Known:	NUTRIENTS
Suspected:	PATHOGENS, D.O./Oxygen Demand, Silt/Sediment
Possible:	Thermal Changes

Source(s) of Pollutant(s)

Known:	AGRICULTURE
Suspected:	Streambank Erosion
Possible:	- - -

Resolution/Management Information

Issue Resolvability:	1 (Needs Verification/Study (see STATUS))		
Verification Status:	4 (Source Identified, Strategy Needed)		
Lead Agency/Office:	ext/WQCC	**Resolution Potential:**	Medium
TMDL/303d Status:	1*		

Further Details

Aquatic life support and recreational uses in Mill Creek are impaired by effects of organic wastes and nutrients from agricultural activities in the watershed.

A biological survey of Mill Creek at multiple sites in and above Lowville was conducted in 1997. Sampling results revealed water quality that ranged from slightly to moderately impacted. The upper reaches of Mill Creek and its tributaries drain primarily cattle grazing/pasture lands before flowing through the Village of Lowville and on to the Black River. Unfettered access to the stream by cattle herds in the upper watershed result in high nutrient loads that cause a slight to moderate macroinvertebrate community impact, corresponding to a restricted fishery community. More significant impacts were noted along trib 3 which drains the southern portion of the watershed. Both macroinvertebrates and fish indicated an impairment to the fishery. Sampling conducted in Mill Creek just upstream of the confluence with this trib was less affected. However, the improvement may be attributed, at least in part, to the flow and reaeration of the creek as it flows through the High Falls Gorge just upstream of the sampling site. Inspection of the creek above the gorge found agricultural activities similar to those noted in the southern watershed. Unfortunately, no suitable riffle sampling areas were available to directly assess the water quality above the gorge. Other suspected pollutants to the stream include pathogens, from the cattle waste runoff, and silt (sediment) from

various agricultural activities and streambank erosion. Below the village, Mill Creek also receives the discharge from the Lowville WWTP. However, the biological study did not include sampling below the discharge (poor access/unsuitable riffle) and no conclusion about the impact of the WWTP discharge on the creek can be offered. But plans are underway to extend the WWTP outfall to discharge directly to the Black River. This project is expected to be complete in 2009. (Mill Creek Biological Assessment Report, Bode et al, DEC/DOW, BWAM/SBU, July 1998)

A biological (macroinvertebrate) assessment of Mill Creek in Lowville (at East State Street) was conducted in 2002. Sampling results indicated slightly impacted water quality conditions, consistent with the sampling results at this site from 1997. (DEC/DOW, BWAM/SBU, June 2006)

In the past, the Lewis County WQCC has discussed targeting the Mill Creek watershed for up grants to address agricultural affects through the EQIP Program.

This segment includes the portion of the stream and all tribs from/including Gulf Stream/South Branch (-4) in Lowville. The waters of this portion of the stream are Class D from the mouth to Route 26 and Class C for the remainder of the reach. Tribs to this reach/segment, including Gulf Stream (-4), are Class C,C(T). Upper Mill Creek is listed separately.

North Branch Mill Creek, and tribs (0801-0317) MinorImpacts

Waterbody Location Information

Revised: 01/09/2007

Water Index No:	Ont 19- 51			**Drain Basin:**	Black River
Hydro Unit Code:	04150101/120	**Str Class:**	C		Black River
Waterbody Type:	River			**Reg/County:**	6/Lewis Co. (25)
Waterbody Size:	36.8 Miles			**Quad Map:**	WEST LOWVILLE (F-18-3)
Seg Description:	stream and tribs, above Lowville				

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

Use(s) Impacted	Severity	Problem Documentation
Aquatic Life	Stressed	Known
Recreation	Stressed	Known

Type of Pollutant(s)

Known:	NUTRIENTS (phosphorus)
Suspected:	PATHOGENS, D.O./Oxygen Demand, Silt/Sediment
Possible:	Thermal Changes

Source(s) of Pollutant(s)

Known:	AGRICULTURE
Suspected:	- - -
Possible:	- - -

Resolution/Management Information

Issue Resolvability: 1 (Needs Verification/Study (see STATUS))
Verification Status: 4 (Source Identified, Strategy Needed)
Lead Agency/Office: ext/WQCC **Resolution Potential:** Medium
TMDL/303d Status: n/a

Further Details

Aquatic life support and recreational uses in North Branch Mill Creek are known to experience minor impacts organic and nutrient loadings from agricultural activities in the watershed. Visual reconnaissance of the watershed suggests that the impacts might reach the level of impairment, but suitable sampling locations to verify this level of impact were not available.

A biological survey of Mill Creek at multiple sites in and above Lowville was conducted in 1997. Sampling results revealed water quality that ranged from slightly to moderately impacted. The upper reaches of Mill Creek and its tributaries drain primarily cattle grazing/pasture lands before flowing through the Village of Lowville and on to the Black River. Unfettered access to the stream by cattle herds in the upper watershed result in high nutrient loads that cause a slight to moderate macroinvertebrate community impact, corresponding to a restricted fishery community. More significant impacts were noted along the South Branch (-4). Both macroinvertebrates and fish indicated an impairment to the fishery. Sampling conducted at the mouth of the North Branch was less affected. However the improvement may be attributed, at least in part, to the flow and reaeration of the creek as it flows through the High Falls Gorge just upstream of the sampling site. Inspection of the creek above the gorge found agricultural activities similar to those noted in the southern watershed. Unfortunately, no suitable riffle sampling areas were available to

directly assess the water quality above the gorge. Other suspected pollutants to the stream include pathogens, from the cattle waste runoff, and silt (sediment) from various agricultural activities and streambank erosion. (Mill Creek Biological Assessment Report, Bode et al, DEC/DOW, BWAM/SBU, July 1998)

A biological (macroinvertebrate) assessment of North Branch Mill Creek in Lowville (at Cemetery Street) was conducted in 2002. Sampling results indicated slightly impacted water quality conditions, consistent with the sampling results at this site from 1997. (DEC/DOW, BWAM/SBU, June 2006)

In the past, the Lewis County WQCC has discussed targeting the Mill Creek watershed for up grants to address agricultural affects through the EQIP Program.

This segment includes the portion of the stream and all tribs above South Branch/Gulf Stream (-4) in Lowville. The waters of this portion of the stream are Class C. Tribs to this reach/segment are Class C,C(T). Mill Creek/South Branch is listed separately.

Minor Tribs to Middle Black River (0801-0318) NoKnownImpct

Waterbody Location Information

Revised: 01/10/2007

Water Index No: Ont 19- 52 thru 56 (selected)
Drain Basin: Black River
Hydro Unit Code: 04150101/160 **Str Class:** C
Black River
Waterbody Type: River
Reg/County: 6/Lewis Co. (25)
Waterbody Size: 172.2 Miles
Quad Map: GLENFIELD (G-19-1)
Seg Description: total length of all tribs, from Lowville to Pine Grove

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

Use(s) Impacted	Severity	Problem Documentation
NO USE IMPAIRMNT		

Type of Pollutant(s)

Known: - - -
Suspected: - - -
Possible: - - -

Source(s) of Pollutant(s)

Known: - - -
Suspected: - - -
Possible: - - -

Resolution/Management Information

Issue Resolvability: 8 (No Known Use Impairment)
Verification Status: (Not Applicable for Selected RESOLVABILITY)
Lead Agency/Office: n/a **Resolution Potential:** n/a
TMDL/303d Status: n/a

Further Details

Biological (macroinvertebrate) assessments of a number of these minor tribs were conducted in 2002. These include Rainbow Creek in Lowville, Hodge Creek in Lowville and Harvey Creek in Bushes Landing. Sampling results indicated water quality that ranged from non- to slightly impacted. Harvey was assessed as non-impacted, with diverse and well-balanced fauna of mayflies, stoneflies and caddisflies. Assessment at both Rainbow and Hodge Creeks were influenced by poor sampling habitat. After taking habitat factors into account, these sites are considered slightly impacted. Agricultural impacts were noted. In spite of some minor effects on the fauna and some indeterminate assessments (habitat factors), aquatic life support is considered to be fully supported in these streams. However resampling during the next RIBS cycle is recommended. (DEC/DOW, BWAM/SBU, June 2005)

This segment includes the total length of all tribs to the Black River from Mill Creek (-51) in Lowville to Independence River (-57) in Pine Grove. Tribs within this segment, including Rainbow Creek (-53), Hodge Creek (-54), Harvey Creek (-55), are primarily Class C,C(T),C(TS). Mill Creek and Independence River (-57), are listed separately.