

Existing Uses, Water Quality Classifications and Fish Habitat Designations in the Missisquoi Bay Watershed Pursuant to the 2016 Vermont Water Quality Standards - 7/8/21

The Vermont Water Quality Standards categorizes surface waters by river basin or collection of smaller discharges for a total of 17 basins. The Missisquoi Bay watershed includes all surface waters that drain to the Missisquoi River or Basin 6 surface waters as well as all other waters that drain to the Missisquoi Bay, which includes part of Basin 5, specifically the Rock and Pike River watersheds and direct drainage to the Bay from Lake Champlain shorelines.

Existing Use Determinations

During the Missisquoi Bay Tactical Basin planning process, the Agency of Natural Resources (Agency) collected sufficient information to document and determine the presence of existing uses for swimming (contact recreation, fishing and boating on flowing waters. All surface waters used as public drinking water sources were also identified. The Agency presumes that all lakes and ponds in the Basin have existing uses of fishing, contact recreation and boating. This simplified assumption is being used because of the well-known and extensive use of these types of waters for these activities based upon their intrinsic qualities and, to avoid the production and presentation of exhaustive lists of all of these waterbodies across the Basin.

Likewise, the Agency recognizes that fishing activities in streams and rivers are widespread throughout the state and can be too numerous to document. Also recognized is that streams too small to support significant angling activity provide spawning and nursery areas, which contribute to fish stocks downstream where larger streams and rivers support a higher level of fishing activity. As such, these small tributaries are considered supporting the use of fishing and are protected at a level commensurate with downstream areas. This presumption may be rebutted on a case-by-case basis during the Agency’s consideration of a permit application, which might be deemed to affect these types of uses.

The following lists are not intended to represent an exhaustive list of all existing uses, but merely an identification of well-known existing uses. Additional existing uses of contact recreation, boating and fishing on/in flowing waters may be identified during the Agency’s consideration of a permit application or in the future during subsequent basin planning efforts.

Table 1. Determination of existing uses in Missisquoi Bay Basin.

Area or Reach	Waterbody	Town	Use	Info Source/ Comments
Big Falls	Missisquoi River	Troy	Contact Recreation	(1) (2)

Highgate Falls Dam	Missisquoi River	Highgate	Contact Recreation	(1) (2)
Troy Four Corners	Jay Branch	Troy	Contact Recreation	(1) (2)
Hectorville Bridges	Trout River	Montgomery	Contact Recreation	(1) (2)
Hutchins Covered Bridge	Trout River	Montgomery	Contact Recreation	(1) (2)
Montgomery School House	Trout River	Montgomery	Contact Recreation	(1) (2)
Longley Covered Bridge	Trout River	Montgomery	Contact Recreation	(1) (2)
Kidder's	Tyler Branch	Enosburg	Contact Recreation	(1) (2)
Creamery Covered Bridge	West Hill Brook	Montgomery	Contact Recreation	(1) (2)
Hippy Hole	West Hill Brook	Montgomery	Contact Recreation	(1) (2)
Jay Branch	Jay Brook	Montgomery	Recreational Boating	(11)
Trout River	Trout River	Montgomery	Recreational Boating	(11)
East Richford to Enosburg Falls	Missisquoi River	Richford/Enosburg h	Recreational Boating	(3) (4) (5)
Troy to Big Falls	Missisquoi River	Troy	Recreational Boating	(11)
Enosburg Falls to Highgate Falls	Missisquoi River	Enosburg/Sheldon/Highgate	Recreational Boating	(3) (4) (11)
Highgate Falls to Lake Champlain	Missisquoi River	Highgate/Swanton	Recreational Boating	(3) (4) (5) (6)
Upper Missisquoi River	Missisquoi River	Troy	Fishing	(3)

Swanton to Lake Champlain	Missisquoi River	Swanton	Fishing	(3)
Tyler Branch	Tyler Branch	Enosburg	Fishing	(3)
Riverside Cemetery (Swanton) to below Swanton Dam	Missisquoi River	Highgate/Swanton	Fishing	(7) Special Regulations
Swanton Dam downstream to water treatment plant	Missisquoi River	Highgate/Swanton	Fishing	(7) Special Regulations
Swanton Dam to Highgate Falls Dam	Missisquoi River	Swanton/Highgate	Fishing	(7) Special Regulations
Highgate Falls Dam to top of the Sheldon Springs Dam in Sheldon Springs	Missisquoi River	Highgate/Swanton	Fishing	(7) Special Regulations
Kane Road (TH-3) bridge to Enosburg Falls Dam	Missisquoi River	Sheldon/Enosburg	Fishing	(7) Special Regulations
Burgess Branch	Burgess Branch	Lowell	Fishing	(8) Stocked
Hazen Notch Brook	Hazen Notch Brook	Lowell	Fishing	(8) Stocked
Jay Branch	Jay Branch	Jay	Fishing	(8) Stocked
Missisquoi River-East Branch	Missisquoi River	Lowell	Fishing	(8) Stocked
Sheldon Rapids between Sheldon Jct and N. Sheldon	Missisquoi River	Sheldon	Fishing	(8) Stocked

Upper Missisquoi River	Missisquoi River	Troy/Westfield	Fishing	(8) Stocked
Bridge on TH-3 (Kane Rd) upstream to confluence with Tyler Branch	Missisquoi River	Enosburg	Fishing	(8) Stocked
Confluence w/ Tyler Branch upstream to top of the dam in Enosburg Falls	Missisquoi River	Enosburg	Fishing	(8) Stocked
The Branch		Enosburg	Fishing	(8) Stocked
Trout River		Berkshire/Montgomery	Fishing	(8) Stocked
Tyler Branch		Enosburg	Fishing	(8) Stocked
Stanhope Brook		Richford	Public Water Source	(9)(10) Class A2
Loveland Brook		Richford	Public Water Source	(9)(10)
Old Spring/Upper Reservoir		Troy	Public Water Source	(9)
Fairfield Pond		Swanton	Public Water Source	(9)
Mountain Brook and tributary		North Troy	Public Water Source	(10) Class A2
Coburn Brook Reservoir and Tributaries		North Troy	Public Water Source	(10) Class A2
Unnamed tributary to Trout River		East Berkshire	Public Water Source	(10) Class A2
Hannah Clark Brook		Montgomery Ctr.	Public Water Source	(10) Class A2
Trout Brook and Enosburg Reservoir		Enosburg Falls	Public Water Source	(10) Class A2

Black Falls Brook		Montgomery Ctr.	Public Water Source	(10) Class A2
(1) VDEC, 2004 (2) Jenkins and Zika, 1985 (3) DeLorme, 1996 (4) AMC, 2002 (5) Jenkins and Zika, 1992 (6) AMC, 1992 (7) VDFW, 2008 (8) VDFW Website (9) VDEC pers. Com (10) VTWRP, 2008, (11) Vermont Paddlers Club				

Water Quality Classifications (2016 VWQS, Appendix F)

With the exception of the waters listed below, all waters in the Missisquoi Bay Basin are Class B(2) for all designated uses, pursuant to the [2016 Vermont Water Quality Standards](#)

- 1) Waters above 2,500 feet in elevation, are classified A(1) by Vermont statute.
- 2) The following surface waters are classified as A(2) and are managed to be suitable for use as a public water source with disinfection, and filtration when necessary:
 - Mountain Brook and a tributary and all waters within their watersheds upstream of two separate water intakes in Jay.
 - Coburn Brook and Coburn Brook Reservoir in Westfield and all waters within their watersheds upstream of the water intake in Coburn Brook.
 - Unnamed tributary to the Trout River in Enosburgh and all waters within its watershed upstream of the water intake.
 - Hannah Clark Brook in Montgomery and all waters in its watershed upstream of the water intake.
 - Stanhope Brook in Richford and all waters in its watershed upstream of the water intake.
 - Trout Brook in Berkshire and all waters within its watershed upstream of the outlet of Enosburgh Reservoir.
 - Loveland Brook in Richford and all waters within its watershed upstream of the water intake.
 - Black Falls Brook in Montgomery and Richford and all waters within its watershed upstream of the water intake.

Fish Habitat Designations (2016 VWQS, Appendix A)

All surface waters in the Missisquoi Bay Basin that are not listed below are designated as cold water fish habitat. The following waters in the Missisquoi Bay Basin are designated as warm water fish habitat for purposes of the Vermont water quality standards:

- Lake Carmi, Franklin
- Cutler Pond, Highgate
- Rock River from the Canadian boundary to its confluence with Lake Champlain
- Metcalf Pond, Fletcher
- Fairfield Pond, Fairfield
- Fairfield Swamp Pond, Fairfield
- Missisquoi River from the outfall of the Enosburg Falls wastewater treatment facility to the Swanton Dam, Swanton