

### Upper Missisquoi and Trout Rivers Photo Tour

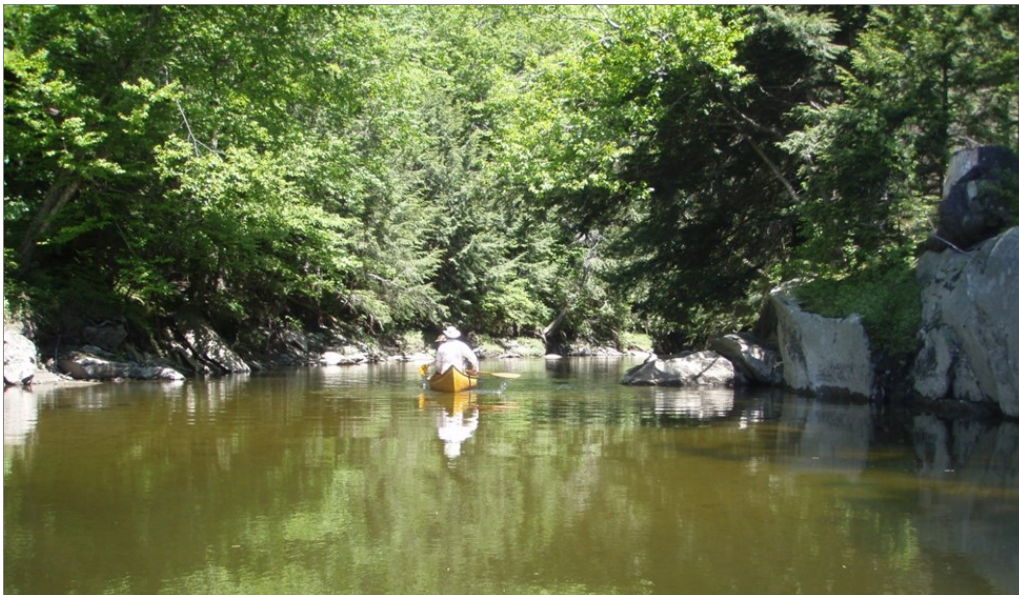
#### Rt. 100, South of Monastery to Loop Road in Westfield (4.3 mi)

This is a well-buffered stretch of the Upper Missisquoi with native ferns, dogwoods and silver maple floodplain forests. These portions of the river are well-shaded, which helps to keep the water cool. Invasive species such as Japanese Knotweed are very sparse along this section. There are beautiful bedrock outcroppings and ledges of rare serpentinite rock along the river, especially directly behind the monastery. Glimpses of the green mountains may be seen at several spots along this section of the river. The substrate along this section is largely gravel and sand.

This section of the river is overall a moderate paddle, with one section of rapids that require some paddling technique. Low-flow conditions would make paddling this stretch of the river difficult. There are some areas along this section of the river that represent opportunities for water quality improvement projects. Gaps in riparian buffer vegetation have destabilized some areas of the river bank, and many sections in these areas are eroding into the river creating sedimentation and nutrient enrichment situations. Opportunities for action include working with landowners who may wish to reduce erosion or nutrient enrichment by creating riparian buffers or preventing direct access to the river by livestock.

#### *Section Highlights:*

- ≈ *Serpentinite geology*
- ≈ *Gorge & Rapids behind the Monastery*



1. Paddling past ledges of serpentinite rock behind the Monastery on the Missisquoi River in Westfield (photo – Shana Stewart Deeds).

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2. Committee member Keith Sampietro on the Missisquoi River in Lowell (photo by Shana Stewart Deeds).



3. Paddling through the gorge behind the Monastery on the Missisquoi River in Westfield (photo by Ave Leslie).





4. Paddling through the rapids below the Monastery on the Missisquoi in Westfield (photo by Ave Leslie).



5. An intact buffer of native vegetation along the Missisquoi River in Westfield (photo by Shana Stewart Deeds).

### Loop Road in Westfield to River Road at Chase Dam in Troy (6.8 mi)

This paddle begins in a section of the river where the Missisquoi jumped its bank and created a new channel through a farm field during the spring floods of 2011.

Portions of this reach of river have some vegetated riparian buffers, the best examples of which are intact silver-maple floodplain forests. However, many sections of this paddle travel through open or narrowly-buffered agricultural fields. Outcroppings of rare serpentinite bedrock dot the river bank as you travel downstream. Spectacular views of Jay Peak and the Green Mountains may be seen from this part of the river. As the river becomes larger in this stretch, wildlife is seen in greater abundance. Waterfowl like mergansers and great blue Herons, dragonflies and damselflies, turtles, frogs and otters might be seen during a paddle along this section of the Missisquoi.

After you cross under Rt. 100 in Troy, the water slows as the river winds through forested banks towards the Chase Dam. Here the river splits, bisecting its course as it travels around an island. There are more interesting rock formations in this stretch as more bedrock is exposed around this island. The take-out point is just above the dam just before the River Road bridge. From here, the river travels over the dam and Baker's Falls. This section of river is an easy-moderate paddle. There are some swift-water features, but these may be navigated by paddlers with some experience.

There are several areas along this section of the river that offer opportunities for water quality enhancement projects. Gaps in riparian buffer vegetation have destabilized sections of the river bank, and these areas are eroding into the river creating sedimentation and nutrient enrichment situations. Planting native vegetation to fill gaps in riparian buffers, as well as implementing best management practices to deal with storm water runoff from agricultural fields are the primary strategies to deal with water quality issues in this part of the Missisquoi River.

#### *Section Highlights:*

- ≈ *Serpentinite geology and gorges*
- ≈ *Outstanding views of Jay peak and the northern Green Mountains*
- ≈ *Exposed bedrock and island near Troy Dam*





6. Setting off on the Missisquoi River from Loop Road in Westfield (photo by Shana Stewart Deeds).



7. A well-shaded sandbar along the Missisquoi in Westfield (photo by Shana Stewart Deeds).





8. A beautiful intact silver maple floodplain forest along the Missisquoi River in Westfield (photo by Shana Stewart Deeds).



9. Paddling along serpentinite geology on the Missisquoi River in Westfield (photo by Shana Stewart Deeds).





10. Outcrop along the Missisquoi in Westfield (photo by Shana Stewart Deeds).



11. A flock of young merganser ducks on the Missisquoi River in Westfield (photo by Barry Kade)

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12. John Little and Cynthia Scott on the Missisquoi River in Westfield, enjoying the view of Jay Peak and the Northern Green Mountains. Note the lack of riparian vegetation and resulting bank erosion in this location; this allows the release of excess sediment and nutrients into the river (photo by Shana Stewart Deeds).



13. The Missisquoi River in Troy above the hydro dam and Baker's Falls, where the river becomes still and deep. The dense riparian vegetation provides good habitat for both aquatic and terrestrial wildlife (photo by Shana Stewart Deeds).





14. Bedrock outcrop on the island above Chase Dam and Baker's Falls in Troy (photo by Shana Stewart Deeds).

### Baker's Falls to Canada (10.7 mi)

Paddling opportunities for most will be limited below Baker's Falls, as this portion of the river contains many areas of rapids and waterfalls, including the Troy Gorges and Big Falls State Park, along with its waterfalls and gorge. The river still may be viewed and accessed at many spots along this reach, as River Road follows the Missisquoi all the way to the Canadian border. Notable access spots include the River Road covered bridge and Big Falls state park. Big Falls consists of three separate channels dropping about 25 feet, the highest undammed waterfall in Vermont. Below the falls is a gorge over 200 feet long with 60-foot high walls.

Downstream of Big Falls, the river flows through the village of North Troy, then meanders through farm fields and forest before it reaches the Canadian border.

Much of this section of the Missisquoi travels through intact vegetated buffers, but there are gaps in buffers where agricultural fields or development associated with the village of North Troy are adjacent to the river. Establishing buffers in these areas and managing both non-point runoff in this section are potential actions that could enhance water quality here. There are two wastewater treatment plants along this section of the river (Troy/Jay and North Troy), so management of point-source discharges is also a consideration here.

#### *Section Highlights*

- ≈ *Baker's Falls below Troy Dam*
- ≈ *Big Falls State Park – Waterfalls and gorges*
- ≈ *Troy Gorges*
- ≈ *River Road Covered Bridge*



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15. Baker's Falls, below the dam in Troy (photo by Shana Stewart Deeds).



16. River Road covered bridge, off of River Rd. in Troy (photo by Shana Stewart Deeds).



17. The top of Big Falls waterfall in Big Falls State Park, Troy (photo by Shana Stewart Deeds).





18. The Big Falls cascading waterfall, in Big Falls State Park, Troy (photo by Shana Stewart Deeds).





19. The gorge below Big Falls waterfall. The gorge is about 60 feet tall and 200 feet long (photo by Shana Stewart Deeds).

**Canadian Border (Rt. 105A) to Richford (6.1 mi)**

This paddle begins below the Historic Bridge on Rt. 105A at the border with Canada. The river is noticeably larger at this point, as it has gained significant size in its watershed since it crossed the border in North Troy. Much of this section of the river is well-buffered, though agricultural fields are more common as you get close to Richford. A diversity of wildlife such as waterfowl, turtles, and deer may be seen along this stretch. This stretch concludes as the river reaches Richford's downtown historic district, with river access at Davis Park just downstream of town.

There are areas of moderate swift water (Stevens Mills Rapids) in this section that may present a challenge to some inexperienced paddlers, but these sections may be portaged around. The majority of this section of the Missisquoi is flat, slow-flowing water that may be paddled by boaters with any level of experience. This part of the Missisquoi River is largely forested close to Canada, as it flows closer to Richford there are more gaps in riparian vegetation. Managing these areas for buffer gaps and non-point runoff are opportunities for water quality improvement projects here.

*Section Highlights*

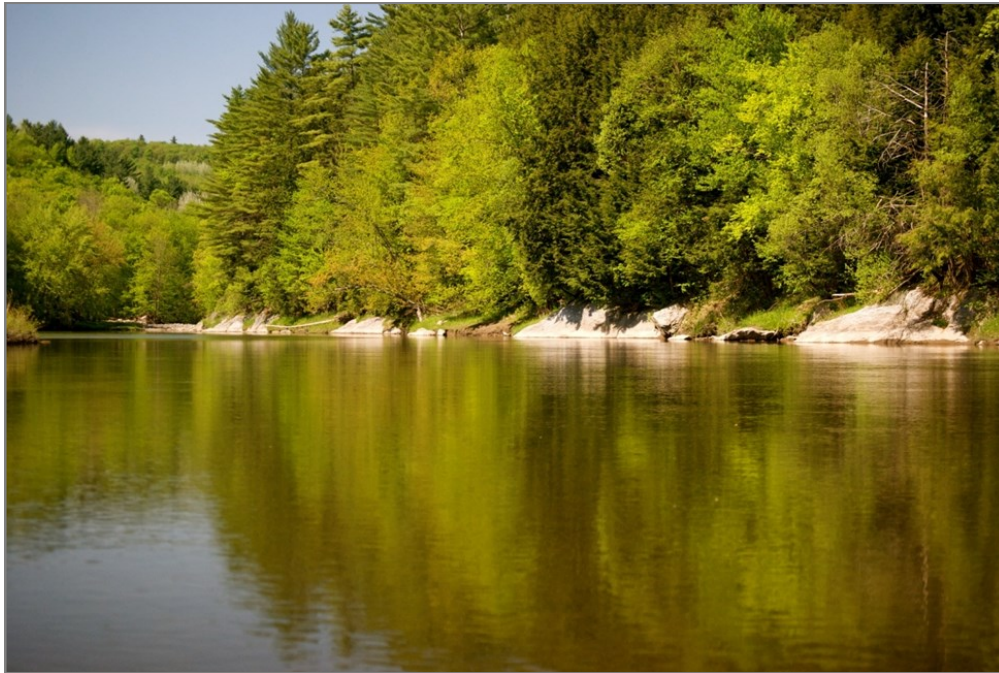
- ≈ *Historic Missisquoi River Bridge at border crossing*
- ≈ *Steven's Mill Rapids*
- ≈ *Richford's Downtown Historic District*



20. John Little starts his paddle from the Canadian Border to Richford, with the Historic Border Crossing Bridge in the background (photo by Ken Secor).



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21. Many sections of the Missisquoi River between Canada and Richford are slow-flowing and welcome paddlers of all levels (photo by Ken Secor).



22. John Little surveys the Stevens Mill Rapids above Richford before paddling them. Paddlers should always survey unknown sections of rivers before they are attempted (photo by Ken Secor).





23. John Little navigates Stevens Mill Rapids above Richford (photo by Ken Secor).



24. Merganser ducks on the Missisquoi above Richford (photo by Ken Secor).





25. A snapping turtle on the bank of the Missisquoi above Richford (photo by Ken Secor).



26. Canada geese take off from the Missisquoi above Richford (photo by Ken Secor).

**Richford to East Berkshire (6.4 mi)**

This section begins at Davis Park, in Richford, just west of downtown on River Street. The river here is flat, slow-flowing and wide with the occasional riffle to paddle through. The landscape is rolling hills and dairy farms, and offers dramatic views of the northern Green Mountains. This portion of the Missisquoi follows the Route 105 Corridor.

The river is wider here and more of the native vegetation has been cleared. This has allowed the invasive plant Japanese Knotweed to become well-established along this stretch. Knotweed eradication offers one opportunity for water quality enhancement, as well as filling gaps in buffers with native vegetation and implementing agricultural runoff best management practices.

*Section Highlights*

- ≈ *Wonderful Views of the northern Green Mountains*
- ≈ *Working Dairy Farms*



27. Setting off from the river access at Davis Park, just west of Richford's downtown historic district (photo by Shana Stewart Deeds).



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28. Silver maples along the Missisquoi below Richford - this riparian area is a good example of an intact buffer (photo by Shana Stewart Deeds).



29. Rolling hills, dairy farms and the Northern Green Mountains frame this portion of the Missisquoi River (photo by Shana Stewart Deeds).

### East Berkshire to Enosburgh Falls (7 mi)

The most downstream section of the Upper Missisquoi and Trout Rivers Wild & Scenic Study area is a seven-mile paddle on the Missisquoi from East Berkshire to Enosburgh Falls. This section is much like the Richford to East Berkshire section, but is considerably wider. A major feature of this section of river is the Old Samsonville Dam and Rapids, which may offer a navigational challenge to some paddlers, though the rapids may be portaged around. Other than the Samsonville rapids, the river here is wide and slow-flowing, past rolling hills and dairy farms. Spectacular views of the Green Mountains may be seen along this entire stretch. This section ends at the dam in Enosburgh Falls, near the downtown historic district. The falls and dam may be viewed from the historic Bridge of Flowers and Light, which spans the river over the falls.

The river is wider here and more of the native vegetation has been cleared. This has allowed the invasive plant Japanese Knotweed to become well-established along this stretch. Knotweed eradication offers one opportunity for water quality enhancement, as well as filling gaps in buffers with native vegetation and implementing agricultural runoff best management practices.

#### *Section Highlights*

- ≈ *Wonderful Views of the northern Green Mountains*
- ≈ *Working Dairy Farms*
- ≈ *Samsonville Dam & Rapids*
- ≈ *Historic Bridge #12 at Boston Post Rd.*
- ≈ *Enosburgh Falls Downtown Historic District*
- ≈ *Enosburgh Falls Dam, and Historic Bridge of Flowers and Light*



30. The river at the put-in at East Berkshire is very calm and still (photo by Shana Stewart Deeds).



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31. The invasive plant Japanese Knotweed becomes very common along the banks of the Missisquoi as the river gets larger (photo by Shana Stewart Deeds).



32. This section of the river parallels Rt. 105 to Enosburg Falls. There are many gaps in vegetated buffers, as shown in the riparian area (photo by Shana Stewart Deeds).

33. Some reaches of the river do have a vegetated buffer, although this buffer should be wider to optimize bank stabilization and maintain water quality (photo by Shana Stewart Deeds).



34. The one water feature to navigate on this section of the Missisquoi River is the Old Sampsonville Dam and rapids. The dam breached long ago, and the river now flows over its remnants (photo by Shana Stewart Deeds).



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35. An example of a gap in riparian buffer vegetation. With no buffer, stormwater runoff from the lawn, barn and farm may enter the river without being filtered of nutrients and other pollutants. Buffers also slow down stormwater, lessening its erosive effect on river banks (photo by Shana Stewart Deeds).



36. Some sections of the Missisquoi in Enosburgh still have an intact riparian buffer. These buffers help maintain water temperatures cool enough to support native fisheries (photo by Shana Stewart Deeds).



37. Paddling below historic bridge #12 (Boston Post Rd.), with the Northern Green Mountains in the background (photo by Shana Stewart Deeds).



38. Paddling within view Jay Peak (photo by Shana Stewart Deeds).



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39. Another benefit of paddling the Missisquoi: being able to buy fresh cheese at one of the farms along the river (photo by Shana Stewart Deeds).



40. The dam and falls at Enosburg Falls, taken from the historic Bridge of Flowers and Light (photo by Shana Stewart Deeds).

### Trout River (11 mi)

The Wild and Scenic study portion of the Trout River extends from its confluence with the Missisquoi River in East Berkshire to its headwaters east of Montgomery, marked by the confluence of Wade and Jay Brooks.

The upper Trout River may be paddled in high water conditions by experienced white-water paddlers. Lower on the river, closer to the Missisquoi, the water is slower and accessible to a variety of paddling levels. Outside of paddling The Trout River in is renowned for its abundance of swimming holes, covered bridges, fishing spots, and countless other recreational opportunities. Three holes, grey rocks and Longley Bridge swimming holes are just three of the areas along the trout river that are popular with both locals and visitors.

The watershed of the Trout River is largely undeveloped, but many areas along the mainstem of the river are developed. The settlements of Montgomery and Montgomery Center are along the banks of the river, as are many agricultural fields along the lower portion of the river. Addressing gaps in vegetated buffers and management of stormwater from the towns and agricultural fields are the opportunities for water quality enhancement projects along the Trout. Other river-related projects could be Japanese Knotweed eradication and management of popular access spots to prevent erosion and litter accumulation from excessive use.

#### *Section Highlights*

- ≈ *Three Holes Falls and Swimming Hole*
- ≈ *Gray Rocks, School House and Longley Bridge Swimming Holes*
- ≈ *Comstock, Longley and Hopkins Covered Bridges*
- ≈ *Many more waterfalls, swimming holes and covered bridges on Trout River tributaries*



41. Three Holes waterfalls and swimming area, east of Montgomery Village on the Trout River (photo by Shana Stewart Deeds).





42. A moose near Hopkins Covered Bridge near the Enosburgh/Montgomery town line (photo by Frank Wirth).



43. Both locals and visitors are drawn to the Trout River for swimming in the summer months (photo by Ken Secor).



44. Fishing on the Trout River is very popular, with numerous access areas and a variety of fish habitats (photo by Brenda Elwood).

We are always looking for information about paddling and fishing and access points. Please let us know about your favorite paddles on the Missisquoi and Trout Rivers. Please also send along photos you'd like us to add to our photo tour, and be sure to tell us where the photo was taken ([www.vtwsr.org](http://www.vtwsr.org)).



