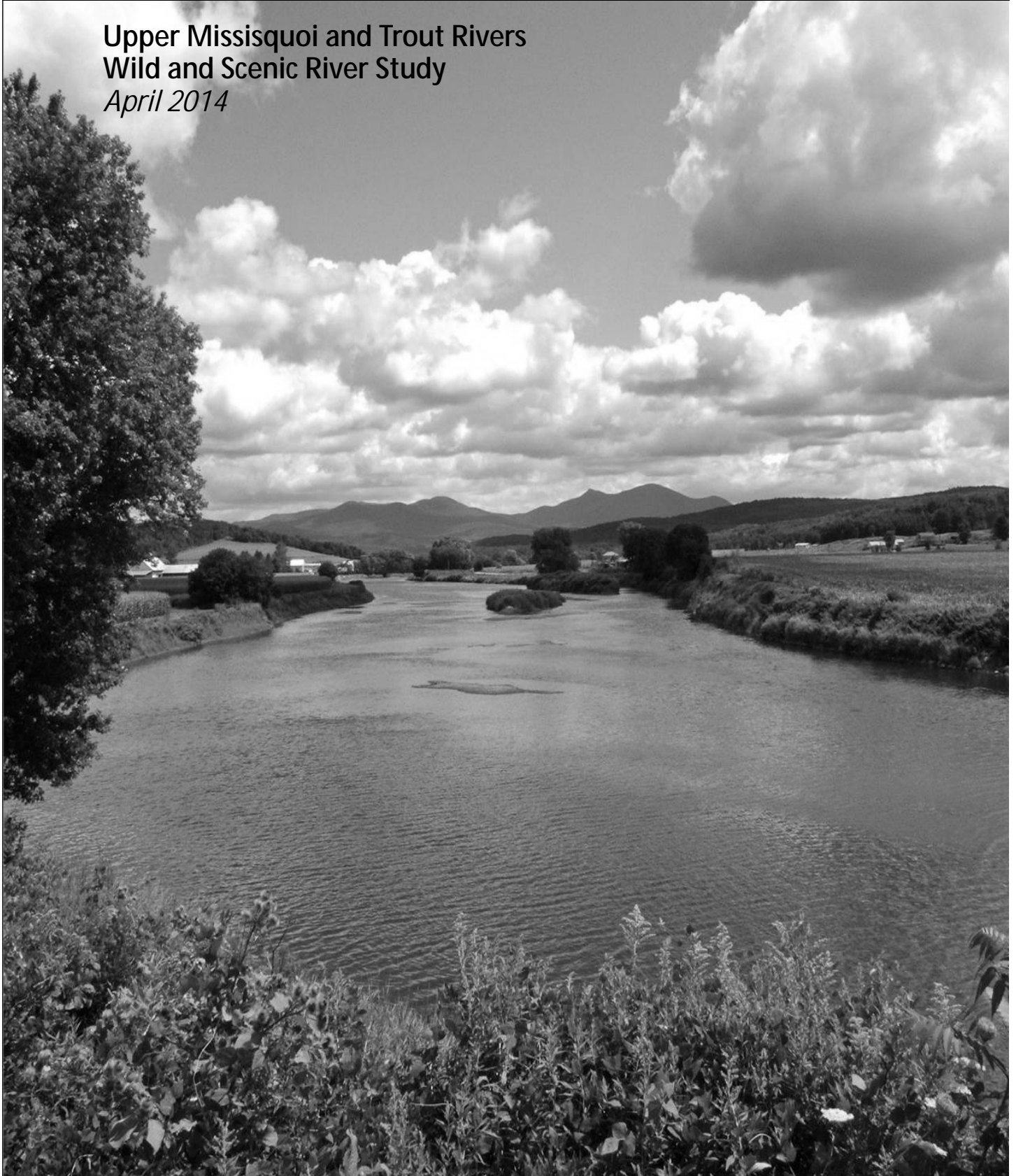




**Upper Missisquoi and Trout Rivers**  
**Wild and Scenic River Study**  
*April 2014*



**Front Cover Photo**

Missisquoi River – Dan Moriarty, courtesy of the Missisquoi River Basin Association (MRBA)

**Back Cover Photo**

Trout River, Comstock Covered Bridge – Mike Manahan

# Upper Missisquoi and Trout Rivers Wild and Scenic River Study Study Report and Environmental Assessment

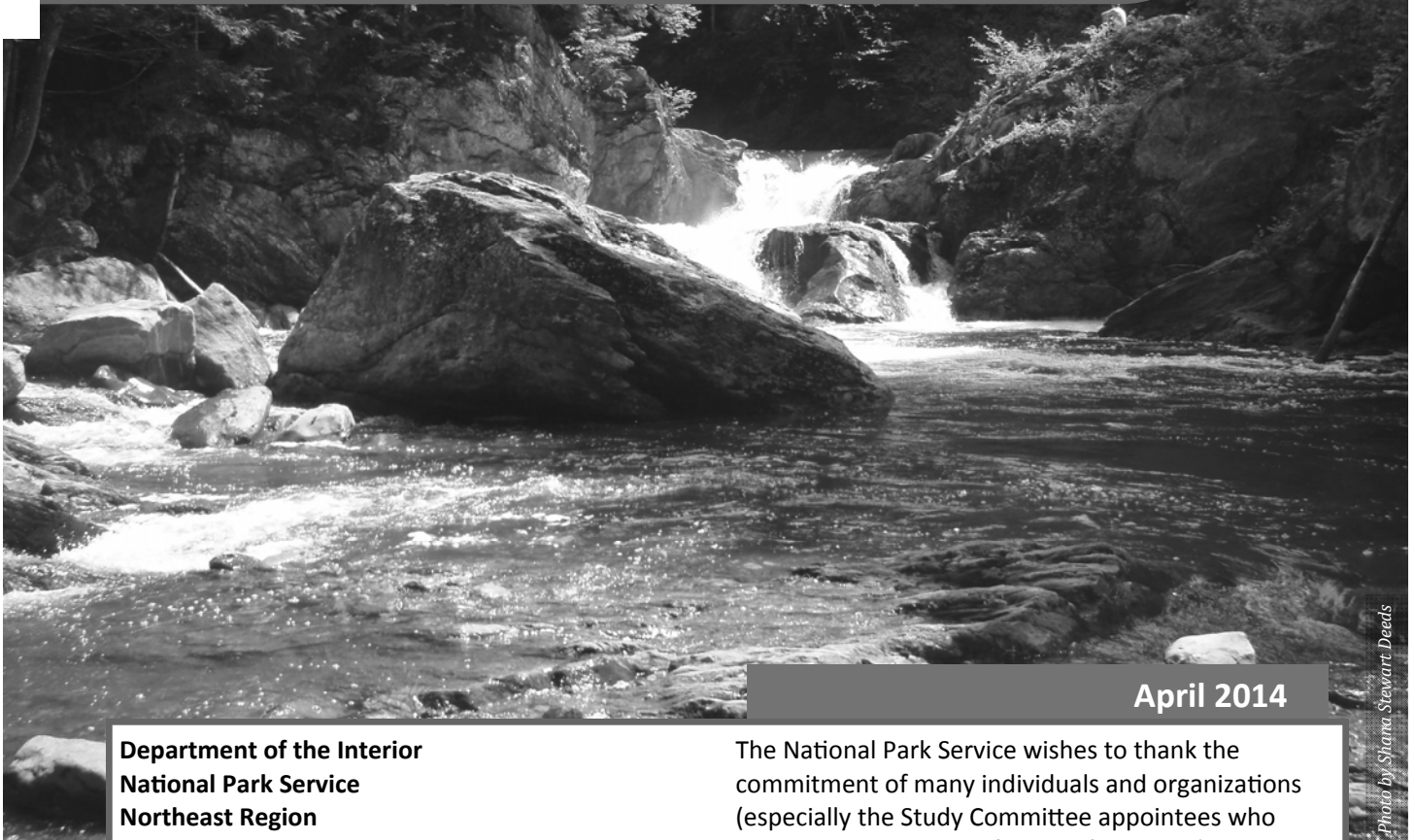


Photo by Shana Stewart Deeds

April 2014

**Department of the Interior  
National Park Service  
Northeast Region**

15 State Street  
Boston, MA 02109-3572  
617-223-5191

**National Park Service  
Northeast Region**

200 Chestnut Street  
Philadelphia, PA 19106  
215-597-6482

For more information on the Upper Missisquoi and Trout Rivers, or to see the companion document: the Upper Missisquoi and Trout Rivers Wild and Scenic Study Management Plan (Management Plan) please visit [www.vtwsr.org](http://www.vtwsr.org) or contact: **Upper Missisquoi and Trout Rivers Wild and Scenic Study Committee**  
2839 VT Route 105  
East Berkshire, VT 05447  
802-393-0076  
[info@vtwsr.org](mailto:info@vtwsr.org)

The National Park Service wishes to thank the commitment of many individuals and organizations (especially the Study Committee appointees who volunteered their time for over four years). Many thanks also to Joyce Kennedy Raymes, the Wild and Scenic Coordinator for the Lower Farmington and Salmon Brook Wild and Scenic River Study, who generously shared her time and resources for use in this Report and its companion document, the Management Plan. Please see the Management Plan for a full list of acknowledgements and thanks to all who contributed to the Study.

Chuck Barscz, National Wild and Scenic Rivers Program, Division Chief, National Park Service

Jamie Fosburgh, Northeast Region Rivers Program, New England Team Leader, National Park Service

Jim MacCartney, National Wild and Scenic Rivers Program, River Manager, National Park Service

Shana Stewart Deeds, Upper Missisquoi and Trout Rivers Wild and Scenic Study Coordinator



## Upper Missisquoi and Trout Rivers Wild and Scenic Study

Selectboard appointed Study Committee members:

### Berkshire

1. Carol Hickey
2. Todd Kinney

### Richford

1. Annette Goyne
2. Mary Robinson

### Town of Enosburgh

1. Edward G. Ellis
2. Ken Secor

### Town of Troy

1. Helene Croteau
2. Robert Langlands

### Village of Enosburg Falls

1. Mike Manahan (Secretary)

### Village of North Troy

1. Jim Starr
2. Eugene St. Onge

### Lowell

1. Mark Higley
2. Jeff Parsons

### Westfield

1. Jacques Couture (Chair)
2. Dianne Laplante (Treasurer)

### Montgomery

1. Todd Lantery (Vice Chair)
2. Keith Sampietro

And other regular participants:

Missisquoi River Basin Association: John Little and Cynthia Scott  
Northwest Regional Planning Commission (NRPC): Catherine Dimitruk; Bethany Remmers  
VT Agency of Agriculture, Food, and Markets (VAAF): Sylvia Jensen  
VT Department of Environmental Conservation (DEC) - Rick Hopkins, Cathy Kashanski, and Staci Pomeroy

Shana Stewart Deeds, Study Coordinator  
Upper Missisquoi and Trout Rivers Wild and Scenic Study  
2839 VT Route 105, East Berkshire, VT 05447  
802-393-0076  
info@vtwsr.org  
www.vtwsr.org

Jamie Fosburgh  
New England Team Leader  
Northeast Region Rivers Program  
National Park Service  
15 State Street, Boston, MA 02109  
617-223-5191  
jamie\_fosburgh@nps.gov

Jim MacCartney  
River Manager  
Wild and Scenic Rivers Program  
National Park Service  
54 Portsmouth Street  
Concord, NH 03301  
jim\_maccartney@nps.gov

# Upper Missisquoi and Trout Rivers Wild and Scenic Study

## Table of Contents

Cover Page .....	i
Study Committee .....	ii
Table of Contents .....	iii
<b>Summary – Principal Findings</b> .....	1
Eligibility .....	1
Classification .....	1
Suitability .....	1
Alternatives Considered .....	2
Upper Missisquoi and Trout Rivers Management Plan .....	2
Support for Designation .....	2
Partnership Wild and Scenic River Designation .....	2
<b>Chapter 1. Background</b> .....	3
The Wild and Scenic Rivers Program .....	3
Upper Missisquoi and Trout Rivers Wild and Scenic Study History and Methods .....	5
Preauthorization .....	5
Legislation Introduced to and passed by Congress .....	5
Study Committee Formed .....	5
Study Committee Meetings .....	7
Management Plan Development .....	7
Study Committee Outreach and Education .....	8
Study Committee Recommends Designation .....	9
Town Meeting Vote .....	9
<b>Chapter 2. Description of the Study Area</b> .....	11
Description of the Study Area .....	11
Segment by Segment Study Area Description .....	13
Regional Setting .....	15
Water Quality Characteristics .....	15
Study Area Municipalities .....	15
Franklin County .....	15
Orleans County .....	17
<b>Chapter 3. Eligibility and Classification</b> .....	19
Eligibility Criteria .....	19
Upper Missisquoi and Trout Rivers Study Findings .....	21
Eligibility .....	21

# Upper Missisquoi and Trout Rivers Wild and Scenic Study

## Table of Contents

Free-flowing Character .....	22
Free-flowing Character by Segment.....	23
Outstandingly Remarkable Values .....	26
Scenic and Recreational ORVs .....	26
Swimming Holes .....	27
Fishing.....	27
Paddling.....	27
Natural Resource ORVs.....	31
Geology.....	31
Waterfalls, Cascades and Gorges .....	33
Rare, Threatened and Endangered Species and Communities .....	35
Historic and Cultural ORVs.....	38
Archeological Sites.....	38
Bridges .....	40
Classification .....	42
<b>Chapter 4: Suitability .....</b>	<b>45</b>
Suitability Criteria .....	45
Existing Protections.....	46
Scenic and Recreational Protections .....	48
Natural Resource Protections .....	49
Water Quality Protections.....	50
Historic and Cultural Protections .....	56
Local Support .....	58
Management Framework .....	58
Designation Effects .....	59
General Effects of the Partnership Model.....	59
Effects on Dams.....	60
Summary of General Findings on Suitability.....	62
Segment-by-Segment Suitability Findings .....	62
<b>Chapter 5: Environmental Assessment .....</b>	<b>67</b>
Introduction .....	67
Project Description .....	68
Purpose and Need for Action.....	68
Alternatives.....	69

# Upper Missisquoi and Trout Rivers Wild and Scenic Study

## Table of Contents

Alternative A. No Action .....	70
Alternative B. Full Designation .....	70
Features Common to the No Action and Full Designation Alternatives.....	72
Alternatives Considered and Rejected Prior to the Wild and Scenic Study .....	72
Identification of Environmentally Preferable Alternative.....	73
Affected Environment.....	73
Impact of Alternatives.....	73
Impact of Alternatives - Tables .....	75
Impact of Alternatives - Discussion.....	80
Cumulative Impacts .....	81
Public Involvement, Consultations and Coordination.....	82
Local Support for the Management Plan and Wild and Scenic Designation .....	86
Preparers and Contributors .....	86
List of Recipients .....	87

# Upper Missisquoi and Trout Rivers Wild and Scenic Study

## Table of Contents

<b>Maps</b> .....	
Wild and Scenic Rivers of New England .....	4
The Upper Missisquoi and Trout Rivers Wild and Scenic Study Area .....	12
Study Area Segments .....	13
Tributaries, 3 <sup>rd</sup> Order or Larger, in the Study Area .....	14
Land Use in the Study Area .....	16
Dams and hydroelectric power facilities.....	22
Scenic and Recreational ORVs .....	28
Natural Resource ORVs.....	32
Highest Water Quality.....	34
Historic and Cultural ORVs.....	39
Covered Bridges in Montgomery, VT .....	42
Segments Proposed for Designation.....	65
Alternative B - NPS and Environmentally Preferred Alternative.....	71
<b>Appendices</b> .....	89
Appendix 1. Upper Missisquoi and Trout Rivers Study Act.....	
Appendix 2. Town Meeting Results on Designation .....	
Appendix 3. Designation Support Letters .....	
Appendix 4. Outreach and Education Examples .....	
Appendix 5. Hydroelectric Projects.....	



## Summary – Principal Findings

### Eligibility

The National Park Service (NPS) concludes that two segments of the upper Missisquoi River, all of the Trout River, and those tributaries evaluated are eligible for designation into the National Wild and Scenic Rivers System based on their free-flowing condition and the presence of one or more Outstandingly Remarkable Values. Short segments of the Missisquoi River are found to be ineligible due to their lack of free-flowing character due to hydroelectric facilities. The Outstandingly Remarkable Values (ORVs) described in this Study Report (Report) are **Scenic and Recreational, Natural Resource, and Historic and Cultural**, all of which are supported by healthy water quality in the watershed.

### Classification

The Wild and Scenic Rivers Act provides for three possible classifications of eligible river segments: **wild, scenic** and **recreational**. The criteria distinguishing these classifications are based on the degree of human influence and access to these rivers. Based on applicable criteria, the National Park Service (NPS) has assigned a preliminary classification of **recreational** to the segments of the upper Missisquoi and Trout Rivers that are eligible for designation. Some segments likely could have been classified as **scenic**; however, **recreational** was the best classification for the entire proposed designation.

### Suitability

The National Park Service concludes that approximately 35.1 miles of the upper Missisquoi and 11.0 miles of the Trout River are currently eligible and suitable for designation. Two short segments of the upper Missisquoi River are found to meet the standards of eligibility but are currently found unsuitable. Designation would end in Enosburg Falls upstream of the hydroelectric dam project area which is presently **unsuitable** for designation based on FERC licensing for hydropower generation and the wishes of

the Village of Enosburg Falls, the current project owner. The project boundary includes a 4.3 mile segment upstream of the dam that, while riverine in appearance, is under the influence of the dam, leaving the 4.7 miles of the Missisquoi presently influenced by the hydroelectric facility in Enosburg Falls **unsuitable** for designation. Should the project boundary ever be reduced, the upstream 4.3 mile segment would be suitable. A 3.8 mile segment in Lowell is also found eligible but presently **unsuitable** based on the level of community support at this time. The Missisquoi and Trout River tributaries were found eligible for designation due to their free-flowing character and ORVs; however, they were not evaluated for suitability based on a desire to move forward with designation of the mainstem of the Rivers, and timing constraints on the Study. They were not proposed for consideration at Town Meeting votes.

Additional findings of suitability include:

- Existing local, state, and federal regulatory and non-regulatory protections applicable to the upper Missisquoi and Trout Rivers are found to adequately protect the rivers consistent with the purposes of the Wild and Scenic Rivers Act. The Upper Missisquoi and Trout Rivers Wild and Scenic Management Plan developed as part of the Study provides an appropriate management framework for the long term management and protection of the waterways.
- Existing regulations at the federal level in Canada and the Province of Québec were also reviewed to assess applicable protections for the upper Missisquoi and Trout Rivers. According to Vermont Department of Environmental Conservation (DEC) staff, the agricultural regulations are more stringent in Québec than Vermont, and localities have strong regulations on riverine and lakeshore buffer activities. Additionally, Canada's partnership with the Lake Champlain Basin Program and the seeming lack of additional hydroelectric potential in the North Missisquoi River (the portion that runs through Canada locally called the Missisquoi du Nord) indicate sufficient measures in place in Canada to protect the Missisquoi in the long term.

- Based upon the official record of endorsement from local citizens, local governing bodies, and local and regional organizations in the eight municipalities, it is concluded that there is substantial support for designation under the Wild and Scenic Rivers Act based on the Partnership Wild and Scenic Rivers model.

### Alternatives Considered

This Study Report evaluates one Wild and Scenic River designation alternative in addition to the 'no action'

#### Alternative A.

**Alternative B: Full Designation.** This alternative would designate all segments of the upper Missisquoi and Trout Rivers found to meet the criteria for eligibility and suitability. This total designation length would be 35.1 miles of the upper Missisquoi River and 11.0 miles of the Trout River. This alternative would designate the upper Missisquoi River from the Westfield/Lowell Town Line to Canada (excluding the property and project areas of the Troy and North Troy hydroelectric facilities) and from Canada to the project boundary of the Enosburg Falls dam; and the entire Trout River. This alternative is identified as the preferable alternative based on eligibility, suitability, provisions for the maximum protection to free-flowing rivers values consistent with the purposes of the Wild and Scenic Rivers Act, and based on the documented support of local citizens, organizations and state river management stakeholders.

#### Upper Missisquoi and Trout Rivers Management Plan

Development of the Upper Missisquoi and Trout Rivers Management Plan (Management Plan) has been one of the primary tasks of the Upper Missisquoi and Trout Rivers Wild and Scenic Study Committee (Study Committee). The Management Plan is the product of an extensive collaboration effort between the Study Committee, local citizens, resource and regional experts, state agencies, volunteer partnership organizations and more. The Management Plan contains the vision and strategies for protecting and enhancing the Wild and Scenic River values identified as important at the local, regional, state or national

level.

If the upper Missisquoi and Trout Rivers are designated, the National Park Service concludes that the Management Plan would serve as the comprehensive rivers management plan required under Section 3(d)(1) of the Wild and Scenic Rivers Act (WSRA). It functions as a companion document to this Study Report. If the rivers are not added to the National Wild and Scenic Rivers System, the Management Plan will still serve to provide insight for state and local partners working to manage and protect the special values of the Missisquoi and Trout Rivers.

#### Support for Designation

At their Vermont Town Meeting Day (either March 4 or March 5, 2013), eight of the nine municipalities (Berkshire, Enosburgh/Enosburg Falls, Montgomery, Richford, Troy/North Troy, and Westfield) voted to seek Wild and Scenic designation based on the Management Plan. Only the Town of Lowell voted not to support designation at this time. In addition, many local and state partnership organizations expressed their support for designation as well. Municipalities voted on the following article:

*To see if the voters of the Town of \_\_\_\_\_ will petition the Congress of the United States of America that the upper Missisquoi and Trout Rivers be designated as Wild and Scenic Rivers with the understanding that such designation would be based on the locally-developed rivers Management Plan and would not involve federal acquisition or management of lands.*

#### Partnership Wild and Scenic River Designation

The Upper Missisquoi and Trout Rivers Wild and Scenic Study was conducted based on the established model of the Partnership Wild and Scenic Rivers. All members of the Study Committee thought that this model would work best in their communities. During the course of the Study, the Study Committee confirmed its preference for the Partnership model, and rejected any alternative model which increased federal management or acquisition of lands (including the formation of a National Park).