



Fundy Model Forest

~Partners in Sustainability~

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***The Fundy Model Forest...
...Partners in Sustainability***

“The Fundy Model Forest (FMF) is a partnership of 38 organizations that are promoting sustainable forest management practices in the Acadian Forest region.”

Atlantic Society of Fish and Wildlife Biologists
Canadian Institute of Forestry
Canadian Forest Service
City of Moncton
Conservation Council of New Brunswick
Fisheries and Oceans Canada
Indian and Northern Affairs Canada
Eel Ground First Nation
Elgin Eco Association
Elmhurst Outdoors
Environment Canada
Fawcett Lumber Company
Fundy Environmental Action Group
Fundy National Park
Greater Fundy Ecosystem Research Group
INFOR, Inc.
J.D. Irving, Limited
KC Irving Chair for Sustainable Development
Maritime College of Forest Technology
NB Department of the Environment and Local Government
NB Department of Natural Resources
NB Federation of Naturalists
New Brunswick Federation of Woodlot Owners
NB Premier's Round Table on the Environment & Economy
New Brunswick School District 2
New Brunswick School District 6
Nova Forest Alliance
Petitcodiac Sportsman's Club
Red Bank First Nation
Remsoft Inc.
Southern New Brunswick Wood Cooperative Limited
Sussex and District Chamber of Commerce
Sussex Fish and Game Association
Town of Sussex
Université de Moncton
University of NB, Fredericton - Faculty of Forestry
University of NB - Saint John Campus
Village of Petitcodiac
Washademoak Environmentalists



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Composite of
Water Quality Survey
Results.

April 2000

By

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B. Sc.(Eng)

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Nadine Thebeau – Kennebecasis Watershed Restoration Committee (KWRC)

Kevin Pugh – Fundy Model Forest (FMF)

David Lockerbie – Environment Canada (Env. Can.)

Jane Tims, Nelda Craig and Jerry Choate – NB Department of the Environment
(NBDOE)

Allan Weatherly – Washademoak Environmentalists

Bob Owen – Potash Company of Saskatchewan- Sussex (PCS)

Isabelle Frenette – Petitcodiac Watershed Management Group (PWMG)

Rod Currie – Biological Consultant

Dr. Alyre Chiasson – Universite de Moncton

Introduction

This report contains a summary of water quality testing in the streams and rivers of the Fundy Model Forest area. The lake data was not targeted, but some were supplied and can be found in the same references. All the raw data that was collected, has been placed on the accompanying CD. This data has been set up in an *Excel '97* format

A summary of the water quality sites, indicating where some additional sampling could be instituted by the FMF is included. As well as the group who is sampling, and the UTM coordinates of each site.

For the most part, the water quality sample analyses were completed by NBDOE, or Environment Canada. The only exception to this was data collected from PCS-Sussex. These samples were analyzed in the lab at the mine site. The benthic sample analysis was completed by Rod Currie, a biological consultant for PCS-Sussex. Benthic Sampling was also completed by Dr. Alyre Chiasson for part of the Fundy Model Forest area.

Further data is expected from PCS-Cassidy Lake, but was not received in time to be included in this report.

In some cases the water quality samples were targeted during rain events. This was the case with the Canaan-Washademoak samples. The rain events were taken as any rain fall over 25 mm. The water quality samples taken on July 4, September 4, October 29 and November 11, 1997, were the ones taken after major rain events, other samples taken in 1997 were baseline samples.

The water sampling in the Kennebecasis area for 1999 was completed for a nutrient study. The samples were taken as baseline samples and rain event samples. The rain events for these samples were collected on August 9, August 16, September 17 and September 23.

In the collection of this data many reports were used. To find additional data on the water quality sampling sites you can contact the following people.

Bob Owen, with the Potash Company of Saskatchewan – Sussex, made their monthly reports available, as well as the benthic sampling reports. Nadine Thebeau, with

the Kennebecasis Watershed Restoration Committee, made the annual reports, and raw data for the Kennebecasis watershed, and the “Washademoak Lake, Canaan River Watershed Study: A Summary” available. Isabelle Frenette, with the Petitcodiac Watershed Management Group, made the water quality data available. Jerry Choate, Jane Tims and Nelda Craig, with NBDOE, passed on all the water quality data that NBDOE has collected in the Fundy Model Forest area. David Lockerbie, with Environment Canada, made all the water quality data that Environment Canada has collected in the Fundy Model Forest area available as well.

Locations

One aspect of this project was to identify current water quality sampling sites, and determine where more sampling should occur. It was found that the Kennebecasis Watershed, the Canaan-Washademoak Watershed and the Petitcodiac Watershed are being sampled quite frequently. The rivers in the Fundy Park area are being sampled less frequently, and the rivers in the Belleisle Creek, Long Creek and Mill Brook areas are not being sampled at all.

Most of the major rivers in the Kennebecasis, Canaan and Petitcodiac watersheds are being sampled by concerned local environmental groups. It may aid the Fundy Model Forest Group to help find interested people in the Belleisle area to create a committee to undertake water quality sampling.

Data

In many cases the water quality data collected from the smaller groups and committees were duplicated by the data obtained from NBDOE, and Environment Canada. In these cases the data from NBDOE and Environment Canada was used. This will be indicated by a note on the index page for the specific river.

The UTM coordinates for each site, that were available, were sent to Kevin Pugh. A map of the water sampling points was generated by Kevin Pugh of the Fundy Model Forest, and can be found on the accompanying disk.

The water quality data from NBDOE and Environment Canada was set up in two differing formats. These two formats were not easily meshed together. Because of this I have separated the data on the data sheets.

Conclusion

The water quality data for the FMF area has been collected and saved on the accompanying CD. Any additional information can be found either on the Index pages for each river, or from the original sources.(See Appendix C)

Further water quality sampling sites should be formed in the Belleisle Creek, Long Creek and Mill Brook areas.

APPENDIX A

Indices for Each Water Course

APPENDIX B

Water Courses of the Fundy Model Forest

<u>Water Course</u>	<u>Sampled</u>	<u>Sampled By</u>
◆ Petitcodiac River	66-99	NBDOE, PWMG, ENV. CAN.
Pollett River	75-99	NBDOE, PWMG, ENV. CAN.
Anagance River	94-99	PWMG, ENV. CAN.
Little River	96-99	PWMG, ENV. CAN.
North River	88-99	NBDOE, PWMG, ENV. CAN.
◆ Kenebecasis River	64-99	KRWRC, ENV. CAN.
◆ Point Wolfe River	71-93	NBDOE, ENV. CAN.
◆ Little Salmon River	92-94	NBDOE
◆ Long Creek		
◆ Mill Brook		
◆ Belleisle Creek		
◆ Canaan River	65-79,96-97	Washademoak Environmentalists, ENV. CAN., NBDOE
◆ Upper Salmon River	67-96	ENV. CAN.
◆ Quidy River	92-93	NBDOE
◆ Goose Creek	92-95	NBDOE, ENV. CAN.

APPENDIX C

Contact names

Name	Group	Address	Phone Number
Dave Lockerbie	Environment Canada	Moncton, NB	851-2906
Nadine Thebeau	Kennebecasis Watershed Restoration Committee	Sussex, NB	433-4394
Isabelle Frenette	Petitcodiac Watershed Management Group	Moncton, NB	858-4529
Bob Owen	Potash Company of Saskatchewan-Sussex	Sussex	433-5445
Rod Currie	Biological Consultant	Fredericton	458-5643
Jane Tims	NB DOE	Fredericton	457-4846
Nelda Craig	NB DOE	Fredericton	457-4846
Jerry Choate	NB DOE	Fredericton	457-4844
Kevin Pugh	Fundy Model Forest	Sussex	432-2806
Doug Riecken	PCS-Cassidy Lake	Sussex, NB	839-6250
Vicki Sahanatien	Fundy National Park	Alma, NB	887-6098
Allan Weatherly	Washademoak Environmentalists	Washademoak	488-2718
Dr. Alyre Chiasson	Universite de Moncton	Moncton	858-4030

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