

FLOOD WARNING SYSTEM

2019

CROWE RIVER WATERSHED



Crowe Valley
C o n s e r v a t i o n

For further information, please contact:

Crowe Valley Conservation Authority
P.O. Box 416, 70 Hughes Lane
Marmora, Ontario
K0K 2M0

Phone: 613-472-3137 Fax: 613-472-5516

E-Mail: info@crowevalley.com
www.crowevalley.com

Last Updated: March, 2019

TABLE OF CONTENTS

- 1.0 INTRODUCTION
- 2.0 OBJECTIVES OF C.V.C.A. FLOOD WARNING SYSTEM
- 3.0 MANDATE OF THE C.V.C.A.
- 4.0 DAILY OPERATING PROCEDURES
 - 4.1 PROCEDURES FOR RECORDING DAILY WATER LEVELS
 - 4.2 MONTHLY WATER LEVEL REPORT
- 5.0 RESPONSE TO FLOOD WARNING
- 6.0 FLOODING REPORTED TO A MUNICIPALITY
- 7.0 OFFICE HOURS DURING AN EMERGENCY
- 8.0 EMERGENCY SITUATIONS
- 9.0 AMATEUR RADIO EMERGENCY SERVICE
- 10.0 FLOOD WARNING SYSTEM
 - 10.1 DATA COLLECTION AND ASSESSMENT
 - 10.2 ISSUING OF WATERSHED CONDITIONS STATEMENTS
 - 10.2.1 FLOOD WATCH STATEMENTS
 - 10.2.2 FLOOD WARNING STATEMENTS
 - 10.3 REGULAR REVIEW AND UPDATING OF THE C.V.C.A. FLOOD WARNING SYSTEM
 - 10.4 ASSISTING IN THE PREPARATION OF MUNICIPAL FLOOD CONTINGENCY PLANS

11.0 FLOOD WARNING TELEPHONE LIST

11.1 CROWE VALLEY CONSERVATION AUTHORITY

11.2 DAM OPERATORS AND GAUGE READERS

11.3 MINISTRY OF NATURAL RESOURCES AND FORESTRY:
CO-ORDINATOR FOR FLOOD EMERGENCIES

11.3.1 MINISTRY EMERGENCY OPERATIONS CENTRE
(MEOC)

11.3.2 SURFACE WATER MONITORING CENTRE

11.4 LOCAL RESPONSE CO-ORDINATORS

11.4.1 M.N.R.F. - KINGSTON

11.4.2 M.N.R.F. - BANCROFT

11.4.3 M.N.R.F. - PETERBOROUGH

11.5 ATMOSPHERIC ENVIRONMENT SERVICES

12.0 ONTARIO PROVINCIAL POLICE

12.1 ONTARIO PROVINCIAL POLICE: EMERGENCY SERVICE

12.2 ONTARIO PROVINCIAL POLICE: LOCAL DETACHMENTS

13.0 MUNICIPAL FLOOD CO-ORDINATORS AND CONTACTS

13.1 TOWNSHIP OF NORTH KAWARTHA

13.2 MUNICIPALITY OF TRENT HILLS

13.3 MUNICIPALITY OF HIGHLANDS EAST

13.4 TOWNSHIP OF FARADAY

13.5 TOWNSHIP OF HAVELOCK-BELMONT-METHUEN

13.6 TOWNSHIP OF LIMERICK

13.7 MUNICIPALITY OF MARMORA & LAKE

13.8 TOWNSHIP OF STIRLING-RAWDON

13.9 TOWNSHIPS OF TUDOR & CASHEL

13.10 TOWNSHIP OF WOLLASTON

14.0 TRENT SEVERN WATERWAY

14.1 HEADQUARTERS: PETERBOROUGH

14.2 CAMPBELLFORD SECTOR & TRENTON SECTOR

15.0 MEDIA

15.1 MEDIA - RADIO/TELEVISION

15.2 MEDIA - NEWSPAPER

APPENDIX 1 - FLOOD FORECAST CENTRE - DAILY REPORT EXAMPLE

APPENDIX 2 - MONTHLY WATER LEVEL REPORT EXAMPLE

APPENDIX 3 - AMATEUR RADIO EMERGENCY SERVICE

APPENDIX 4 - SAND BAGS

APPENDIX 5 - DISTRIBUTION LIST

APPENDIX 6 – WATERSHED MUNICIPAL BOUNDARIES MAP

APPENDIX 7 – WATERSHED WATERCOURSES AND SUBWATERSHED

APPENDIX 8 – FLOW GAUGES AND MONITORED LAKES

APPENDIX 9 – BACKGROUND AND SITUATION ANALYSIS

1.0 INTRODUCTION

Throughout the existence of the Crowe Valley Conservation Authority, the Authority has been actively involved in water management and in particular, flood forecasting and warning. The Authority has installed 13 stream and lake level gauges to date, to monitor real time conditions in the watershed. As well, information related to flood forecasting is received from the Ministry of Natural Resources and Forestry in Peterborough, Ontario. The Authority also monitors precipitation, snow pack and advancing weather conditions.

Following severe flooding in 1976, flood plain mapping was produced and many areas that are susceptible to flood damage were identified.

The Authority is responsible for advanced warning and monitoring of flood situations; the individual municipalities are responsible for reacting to flood emergencies.

2.0 OBJECTIVES OF C.V.C.A. FLOOD WARNING SYSTEM

- To provide advice to local municipalities, the public and emergency response services regarding potential flooding, and to provide rapid warning if loss of life, injury or property damage may result.
- To provide continuous monitoring of flood conditions should a flood occur.

3.0 MANDATE OF THE C.V.C.A.

In the publication, "Planning for Flood Emergencies" prepared by the Ministry of Natural Resources and Forestry, it states that:

"It will be a function of Conservation Authorities to maintain a flood warning system throughout the Authority for alerting municipal representatives, media, local police, the Ontario Provincial Police, and the Ministry of Natural Resources and Forestry."

4.0 DAILY OPERATING PROCEDURES

4.1 Procedures for Recording Daily Water Levels

The C.V.C.A., on a daily basis, downloads water levels and other pertinent information available at each gauge site. In normal conditions, these gauges are contacted a minimum of once per day, seven days a week. The gauges provide the current water levels and flow data as required.

The information obtained is compiled into a log book by the Duty Forecaster (see **Appendix 1**). The Duty Forecaster analyzes the data and determines what, if any, further actions are required. These actions may consist of stop log adjustments being made at any or all of the individual dams under the Authority's jurisdiction. Further actions may be the issuance of watershed conditions or flood watch statements in extreme conditions; a flood warning will be issued to all parties listed in the C.V.C.A.'S Flood/Emergency Contact List.

The daily schedule for the Duty Forecaster is as follows:

- (1) Collect all the water levels, flow volumes, precipitation and temperatures throughout the watershed.
- (2) The Duty Forecaster will then contact the Ministry of Natural Resources and Forestry for Provincial weather conditions which may impact the CVCA watershed. Additional information may be received from the Provincial Surface Water Monitoring Centre.
- (3) With this data in hand, the Duty Forecaster will make a decision whether there is a need for stop log changes, or the issuance of a flood watch or flood warning statements.
- (4) Should the Duty Forecaster determine a flood watch or flood warning is necessary, he/she will advise both the General Manager and the Chair of the Authority that the agencies listed in the Flood/Emergency Contact List will be notified. Contact will be made by fax, e-mail or telephone, as the situation warrants.
- (5) Should no changes to log settings or bulletins be needed, the Duty Forecaster will continue with his/her regular daily duties; however, he/she will continue to monitor all incoming information and data throughout the remainder of the day.

4.2 Monthly Water Level Reports

For reference purposes, daily records are summarized into a "Monthly Water Level Report" which is distributed to member municipalities and other interested parties on a regular basis. This report indicates regulated winter and summer lake levels, minimum and maximum levels as well as the level on the last day of each month for each controlled lake and gauge site in the Crowe River Watershed. See **Appendix 2**.

5.0 RESPONSE TO FLOOD WARNING

It must be noted and understood that the responsibility to respond to a flood warning is that of the Municipality concerned. The Crowe Valley Conservation Authority will act in an ***advisory capacity*** but will not be responsible for flood fighting.

6.0 FLOODING REPORTED TO A MUNICIPALITY

If an incidence of flooding is reported to a Municipality, by anyone other than the Crowe Valley Conservation Authority (C.V.C.A.), the Municipality concerned will immediately contact the C.V.C.A for confirmation and/or additional information. The C.V.C.A. will then revise and update its forecast accordingly and continue to monitor the reported flooding.

7.0 OFFICE HOURS DURING AN EMERGENCY

If a flood warning bulletin has been or is about to be issued, the C.V.C.A. office will be staffed on a 24-hour basis. This will continue until the emergency has passed.

8.0 EMERGENCY SITUATIONS

A C.V.C.A. staff person will be "on call" during off hours and weekends. ***In an emergency situation only***, this person can be contacted via telephone at 613-968-0724. For a list of key C.V.C.A. contacts, refer to Section **12.1 Crowe Valley Conservation Authority** of this plan.

9.0 AMATEUR RADIO EMERGENCY SERVICE

The Quinte Amateur Radio Club, established under the auspices of The Radio Amateurs of Canada, has installed an antenna at the Crowe Valley Conservation Authority Administration Office in Marmora which can be utilized in an emergency situation.

The Radio Club can cover all Hospitals, Conservation Authorities, Town and City Halls, Police Stations, Red Cross offices and other sites as required. They are also able to make direct contact with any Government office in Toronto. Their mobile units are able to go to any site as required.

Please refer to **Appendix 3** for contact information.

10.0 FLOOD WARNING SYSTEM

The flood warning system of the Crowe Valley Conservation Authority will involve four basic areas of activity:

- 1) data collection and assessment;
- 2) issuing of statements;
- 3) assisting in the preparation of municipal flood contingency plans; and
- 4) regular review and updating of the system.

10.1 Data Collection and Assessment

The Crowe Valley Conservation Authority will be responsible for the collection of all data necessary to prepare appropriate messages regarding flooding. The collection of data and issuing of statements will be carried out at the CVCA. Administration Office in Marmora.

10.2 Issuing of Watershed Messages

On completing an assessment of pertinent data, the Duty Forecaster will review it with the General Manager and an appropriate statement will be issued. Messages be one of four types, i.e.: (Water Safety or Flood Outlook) 1) normal, 2) watershed conditions (water safety or flood outlook), 3) flood watch or 4) flood warning. The Authority Chair will be advised immediately when a flood watch or flood warning message has been issued.

Communication of messages will normally be made by telephone, email and/or fax. However, information sheets regarding snow pack, lake levels and flows may also be circulated on an "as needed" basis.

All messages must be updated regularly and a final watershed conditions statement indicating that a crisis has ended must be issued.

10.2.1 Flood Watch Messages

Flood watch statements will be issued to Municipal Flood Co-ordinators when conditions are such that it may be necessary to implement a local flood contingency plan. Flood watch messages will not require action by the Municipal Flood Co-ordinator, i.e.: mobilization of manpower and equipment. They may, however, require a state of readiness to act.

10.2.2 Flood Warning Messages

Flood warning messages will be issued to the Municipal Flood Co-ordinator, Dam Operators, Local Response Co-ordinator and the news media when conditions are such that public safety is at risk and property damage is likely to occur. Flood warning messages will require action from the Local Response Co-ordinator, i.e.: implementation of the local flood contingency plan.

10.3 Regular Review and Updating of the CVCA Flood Warning System

The CVCA Flood Warning Plan is reviewed and updated on a yearly or "as needed" basis. Agencies included in the mailing list are asked to notify the CVCA of any changes required. The CVCA will, in the early part of each year, issue current plans.

10.4 Assisting in the Preparation of Municipal Flood Contingency Plans

In order for Municipalities to carry out their responsibility to respond to flood emergencies, each Municipality should have some form of flood contingency plan. Assistance in preparation of contingency plans is available from the Crowe Valley Conservation Authority.

11.0 Flood Warning Telephone List

11.1 Crowe Valley Conservation Authority

Tim Pidduck,
General Manager/
Secretary Treasurer

Office: 613-472-3137
Fax: 613-472-5516
Home: 613-967-1322
Cell: 613-847-1912
Email: tim.pidduck@crowevalley.com

Emergency Only - Cellular Phone: 613-968-0724
(This cell number will contact one of the CVCA staff 24 hours a day 7 days a week during a flood warning)

Alternates

Catherine Redden
Authority Chair

CVCA Office: 613-472-3137
Home: 705-653-2046
Municipal Office: 705-653-1900
Cell: 705-653-2046
Email: catherine.redden@trenthills.ca
credden@reddens.ca

Suzanne Partridge
Authority Vice-Chair

CVCA Office: 613-472-3137
Home: 613-339-2365
Municipal Office: 705-448-2981
Email: spartridge@highlandseast.ca

11.2 Dam Operators and Gauge Readers

Neil McConkey:

Office: 613-472-3137
Fax: 613-472-5516
Home: 613-399-5693
Cell: 613-885-1979
Email: watertech@crowevalley.com

Wray Price

Office: 613-472-3137
Fax: 613-472-5516
Home: 613-472-1389
Email: watertech@crowevalley.com

Responsible for the operation of the following Dam structures:

- Allan Mills Dam
- Belmont Lake Dam
- Cordova Lake Dam
- Kasshabog Lake Dam
- Marmora Dam (Crowe Lake)
- Round Lake Dam
- Wollaston Lake Dam
- Paudash Lake Dam
- St. Ola Dam (Limerick Lake)

Luke Hillyer (M.N.R.F., Bancroft District)

Responsible for the following Dams: all Dams within the Bancroft Area of Bancroft District

Office: 613-332-3940 Ext 216
Cell: 613-202-1400
Fax: 613-332-0608
Home: 613-334-5930
Email: luke.hillyer@ontario.ca

Alternate Contact:

Glen Brethour (M.N.R.F., Bancroft District)
Office: 613-332-3940 EXT 207
Fax: 613-332-0608
Email: glen.brethour@ontario.ca

A/Resources Management Supervisor (M.N.R.F., Bancroft District)

Jen Card 613-332-3940 EXT 260
Cell: 613-334-2447
Email: jennifer.card@ontario.ca

11.3 Ministry of Natural Resources and Forestry: Coordinator for Flood Emergencies

11.3.1 Ministry Emergency Operations Centre (MEOC)

- The MNRF Emergency Management Program has implemented a 24/7 Ministry Emergency Operation Centre Hotline. This number ensures contact with the MNRF MEOC through the Provincial Coordination Centre.
- A MNRF Provincial Emergency Response Coordinator (PERC) can be contacted at the number listed below. This telephone number will go to whoever is **PERC** at the time of the emergency.

PERC Hotline:	1-866-898-7372
Clerk Number:	1-705-945-5795
AFFES – Main Switchboard	1-705-945-5700
Fax Number:	1-705-945-5785

Ministry Emergency Operations Centre

Office: 705-945-5750

Fax: 705-945-5785

Clerk: 705-945-5795

Email: meoc-mail.mnr@ontario.ca

11.3.2 Surface Water Monitoring Centre - Contact Information & AFFMB Provincial Emergency Response Coordinator

Contact Information for the Surface Water Monitoring Centre:

Mailing Address:

Surface Water Monitoring Centre
Ministry of Natural Resources
P.O. Box 7000
300 Water Street
5th Floor South
Peterborough, Ontario
K9J 8M5

Coordinator – Dave Burritt

(705) 755-1215

Daytime Phone: 705-755-5201 - SWMC duty officer desk

- Please use this number for flood forecasting/warning purposes

After Hours Duty Officer Cell Phone: 705-761-2044

- Please use this number for flood/warning purposes after regular business hours and weekends/holidays

Fax: 705-755-5038 Alternate Fax 705-755-5039

- Please use this number when issuing flood messages

Email for SWMC Duty Officer:

- surface.water@ontario.ca

11.4 Ministry of Natural Resources & Forestry - Local Response Coordinators

11.4.1 M.N.R.F. - Kingston

Contact: Suzy Shalla
District Manager
Office: 705-755-3363
Fax: 705-755-3125
Cell: 613-334-5054
Email: suzy.shalla@ontario.ca

Alternate: Andy Margetson
Office: 613-531-5720
Fax: 613-531-5730
Cell: 613-449-4905
Email: andy.margetson@ontario.ca

11.4.2 M.N.R.F. - Bancroft

Luke Hillyer (M.N.R.F., Bancroft District)
IRM Technical Specialist
Responsible for the following Dams: all Dams within the Bancroft Area of Bancroft District

Office: 613-332-3940 Ext 216
Cell: 613-202-1400
Fax: 613-332-0608
Home: 613-334-5930
Email: luke.hillyer@ontario.ca

Alternate Contacts:

Jen Card (M.N.R.F., Bancroft District)
A/Resources Management Supervisor
Office: 613-332-3940 EXT 260
Fax: 613-332-0608
Cell: 613-334-2447
Email: jennifer.card@ontario.ca

Dan Duggan (M.N.R.F., Bancroft District)
A/District Manager
Office: 705-773-4236
Fax: 613-332-0608
Cell: 705-773-8501
Email: dan.duggan@ontario.ca

11.4.3 M.N.R.F. – Peterborough

Contact Suzy Shalla
District Manager

Office: 705-755-3363
Fax: 705-755-3125
Cell: 613-334-5054
Email: suzy.shalla@ontario.ca

Alternate: Deanna Cotter

Office: 705-755-3293
Fax: 705-755-3125
Cell: 705-872-1924
Email: deanna.cotter@ontario.ca

11.5 Atmospheric Environment & Climate Change Canada Services

Environment and Climate Change Canada (Peterborough)
Climate Consultation Phone: 1-888-292-2222

Environment and Climate Change Canada
Marnie Consultation Phone: 1-844-505-2525
Climate Consultation Phone: 1-844-508-2626

Weather Consultation - Peterborough
(Automated answering devise forecast) Phone: 705-743-5852

Environment Canada - Trenton
Canadian Forces Base Trenton
Weather Office Dial-A-Forecast
(Public weather recording) Phone: 613-392-0020

13.0 Municipal Flood Co-Ordinators and Contacts

13.1 Township of North Kawartha

	<u>Residence</u>	<u>Business</u>	<u>Fax No.</u>	<u>Cellular</u>
Mayor - Carolyn Amyotte mayor@northkawartha.ca		1-800-755-6931 705-656-4445 Ext 258	705-656-4446 705-656-2676 (MOC)	705-931-1342
Chief Administrative Officer - Alana Solman Email: a.solman@northkawartha.ca	705-657-9564	1-800-755-6931 705-656-5192 Ext 236	705-656-4446 705-656-2676 (MOC)	705-931-1531
Road Supervisor- Scott Matheson Email: s.matheson@northkawartha.ca	705-760-0038	1-800-755-6931 705-656-4445 Ext 243 705-656-4796	705-656-4446 705-656-2676 (MOC)	705-656-1836
Garage Answering/Paging Service 24/7 (Roads)		705-656-4796 (Garage Direct Line) Or 705-56-4445 ext 243 705-740-6158	705-656-1836 (garage fax)	
Flood Emergency Contact - Community Emergency Management Co-ordinator Alana Solman, CEMC a.solman@northkawartha.on.ca	705-657-9564 705-656-5192	1-800-755-6931 705-656-2676 (MOC) Ext 236	705-656-4446	705-931-1531
Fire Chief- Jesse Lambe j.lambe@northkawartha.ca	705-656-1224 (Direct Line)	1-800-755-6931 705-656-4445 Ext 221	705-656-4446 705-656-4964 (Emergency Headquarters Fax)	705-931-1701

13.2 Municipality of Trent Hills

	<u>Residence</u>	<u>Business</u>	<u>Fax No.</u>	<u>Cellular</u>
Mayor - Bob Crate bob.crate@trenthills.ca	705-761-2278		705-653-5203	705-761-2278
Deputy Mayor - Rosemary Kelleher McLennan		705-653-3456	705-653-5203	705-653-6854
CAO - Lynn Phillips lynn.phillips@trenthills.ca	705-653-6016	705-653-1900 EXT 241	705-653-5203	705-632-9423
Public Works - Scott White scott.white@trenthills.ca	705-696-3668	705-653-1900 EXT 244	705-653-5203	705-653-8569
Flood Coordinator - Alternate Jim Peters jim.peters@trenfills.ca	613-481-6022	705-653-1900 EXT 234	705-653-5203	705-653-6070
Alternative CEMC Brad Patfield brad.patfield@trenthills.ca		705-653-1900 EXT 225	(pager)705-745-5757 ID#606	705-313-2848
Municipal Clerk Doug Irwin doug.irwin@trenthills.ca		705-653-1900 EXT 240	705-653-5203	705-653-6177
Emergency Information Officer Kira Mees kira.mees@trenthills.ca		705-653-1900 EXT 239	705-653-5203	705-653-6363

13.3 Municipality of Highlands East

	<u>Residence</u>	<u>Business</u>	<u>Fax No.</u>	<u>Cellular</u>
Mayor - Dave Burton dburton@highlandseast.ca	705-448-9355	705-448-2981	705-448-2532	613-334-9678
CAO/Treasurer- Shannon Hunter Alternate CEMC shunter@highlandseast.ca	705-935-8880	705-448-2981 Ext 431	705-448-2532	705-457-8434
Roads Superintendent- Earl Covert, CRSI ecovert@highlandseast.ca	705-448-2254	705-448-2934	705-448-2532	613-334-1300
Flood Emergency Contact - Stewart Hurd shurd@highlandseast.ca	705-879-9893	613-339-2442	613-339-1028	613-334-0994
Acting Fire Chief Chris Baughman Primary CEMC cbaughman@highlandseast.ca	613-334-6236	705-448-2981 Ext 428	705-448-2532	705-455-2747
Clerk Robyn Rogers Alternate CEMC rrogers@highlandseast.ca	613-334-8099	705-448-2981 Ext 422	705-448-2532	705-457-8435

13.4 Township of Faraday

	<u>Residence</u>	<u>Business</u>	<u>Fax No.</u>	<u>Cellular</u>
Reeve - Dennis Purcell dipurcell@faraday.ca	613-332-4197	613-332-3638	613-332-3006	
Clerk - Dawn Switzer d.switzer@faraday.ca	613-332-2620	613-332-3638	613-332-3006	
Road Supervisor - Scott Laundry s.laundry@faraday.ca	613-332-5156	613-332-1935	613-332-3006	
Flood Emergency Contact - Scott Laundry s.laundry@faraday.ca	613-332-5156	613-332-1935	613-332-3006	
Alternate - Dawn Switzer d.switzer@faraday.ca	613-332-2620	613-332-3638	613-332-3006	

13.5 Township of Havelock-Belmont-Methuen

	<u>Residence</u>	<u>Business</u>	<u>Fax No.</u>	<u>Cellular</u>
Mayor - Jim Martin jmartin@hbmtwp.ca	705-778-3764	705-778-2308 877-767-2795	705-778-5248	705-749-7676
Chief Administrative Officer Pat Kemp pkemp@hbmtwp.ca	705-656-4961	705-778-2308 EXT 222 877-767-2795	705-778-5248	705-313-5311
Director of Public Works - David Monicon dmonicon@hbmtwp.ca	705-696-9834	705-778-2481	705-778-5248	705-761-0780
Flood Emergency Contact - Jim Martin jmartin@hbmtwp.ca	705-778-3764	705-778-2308 877-767-2795	705-778-5248	705-749-7676
Alternate - Chief Administrative Officer Pat Kemp pkemp@hbmtwp.ca	705-656-4961	705-778-2308 EXT 222 877-778-2481	705-778-5248	705-313-5311
Fire Chief - Ray Haines rhaines@hbmtwp.ca	705-778-1319	705-778-3183	705-778-3415	705-930-4471

13.6 Township of Limerick

	<u>Residence</u>	<u>Business</u>	<u>Fax No.</u>	<u>Cellular</u>
Reeve Carl Stefanski c.stefanski@township.limerick.on.ca	613-474-1284	613-474-2863	905-898-1836	647-268-2620
CAO/Clerk-Treasurer Jennifer Trumble clerk@township.limerick.on.ca	613-474-0788	613-474-2863	613-474-0478	613-318-9927
Roads Department Supervisor Jason Post roads@township.limerick.on.ca	613-337-5047	613-474-0060	613-474-0478	613-318-9928
Flood Emergency Contact Jason Post roads@township.limerick.on.ca	613-337-5047	613-474-0060	613-474-0478	613-318-9928

13.7 Municipality of Marmora & Lake

	<u>Residence</u>	<u>Business</u>	<u>Fax No.</u>	<u>Cellular</u>
Mayor - Jan O'Neill j.oneill@marmoraandlake.ca		613-472-2629 Ext 2226	613-472-5330	613-847-2430
CAO – Typhany Choinard t.choinard@marmoraandlake.ca		613-472-2629 Ext 2227	613-472-5330	613-922-2947
Municipal Clerk- Tonia Bennett t.bennett@marmoraandlake.ca		613-472-2629 Ext 221	613-472-5330	613-920-0563
Manager of Transportation Services- Kevin Hart roadsdept@marmoraandlake.ca		613-472-6940	613-472-5330	613-922-3945
Flood Emergency Contact - Tony Brownson t.brownson@marmoraandlake.ca		613-472-2748		613-921-6117
Alternate- CAO Typhany Choinard t.choinard@marmoraandlake.ca		613-472-2629 Ext 227	613-472-5330	613-922-2947

13.8 Corporation of the Township of Stirling-Rawdon

	<u>Residence</u>	<u>Business</u>	<u>Fax No.</u>	<u>Cellular</u>
Mayor Bob Mullins mayor@stirling-rawdon.com	613-395-4695	613-395-2395	613-395-2356	613-438-0402
Alternate Deputy Mayor Grant Hagerman deputy-mayor@stirling-rawdon.com	613-395-3541	613-395-3346	613-395-2356	613-922-3541
Clerk Tawnya Donald info@stirling-rawdon.com	6163-395-2931	613-395-3380 EXT 2243	613-395-0864	613-848-9995
Treasurer/ CAO Roxanne Hearn	613-395-1583	613-395-3380 EXT 2222	613-395-0864	613-921-6936 613-849-4762
Public Works Manager George Burkitt	613-920-2877	613-395-3380	613-395-0864	613-847-5654
Working Foreman Alternate Dave Ray	613-922-3625	Stirling 613-395-1241 Springbrook 613-395-3223	613-395-0864	613-967-7225
Flood Emergency Contact Fire Chief/CEMC (C/S Stirling Rawdon 1) Derrick Little	613-921-8152	613-395-0214	613-395-0864	613-921-8152
Alternate/CEMC (C/S Stirling Rawdon 2) Gerry Buss	613-395-6082	613-771-9366 EXT229	613-395-0864	613-920-0069 w 613-847-6909

13.9 Townships of Tudor & Cashel

	<u>Residence</u>	<u>Business</u>	<u>Fax No.</u>	<u>Cellular</u>
Reeve - Libby Clarke reeve@tudorandcashel.com	613-331-0620	613-474-2583	613-474-0664	613-318-8201
Chief Administrative Officer - Bernice Crocker clerk@tudorandcashel.com	613-337-5062	613-474-2583	613-474-0664	613-334-2583
Road Superintendent- Glenn Hagerman roads@tudorandcashel.com	613-922-0247	613-474-2798	613-474-0664	613-334-5694
Administrative Assistant/ Flood Contact Nancy Carrol admin@tudorandcashel.com	613-474-1212	613-474-2583	613-474-0664	613-318-8234

13.10 Township of Wollaston

	<u>Residence</u>	<u>Business</u>	<u>Fax No.</u>	<u>Cellular</u>
Reeve - Barbara Shaw bjshaw@sympatico.ca	only has a cell ph		613-337-5789	613-334-4164
Clerk – Deputy Treasurer Position vacant at this time clerk@wollaston.ca		613-337-5731	613-337-5789	
Lead Hand in Roads- Jack Ingram	613-337-5505	613-337-5731	613-337-5789	613-334-0196
Roads Superintendent - Kirk McCaw roadsinwollaston@gmail.com	613-337-5759	613-337-5731	613-337-5789	613-334-2684
Alternate – Treasurer/Deputy Clerk Position will be vacant Mar-29-2019 treasurer@wollaston.ca		613-337-5731	613-337-5789	
CEMC- Dylinna Brock	only has a cell ph	613-337-5731	613-337-5789	705-875-4631

14.0 Trent Severn Waterway

14.1 Headquarters: Peterborough, Ontario (705-750-4902)

Primary Contact
Karl Ellis
Sector Manager

Office: 705-653-3240
Home:: 613-395-2008
Cell: 613-242-4305
Email: karl.ellis@pc.gc.ca

Secondary Contact
Anna Ciorap
Acting Water Management Engineer

Office: 705-750-4932
Cell: 705-761-7275
Email: anna.ciorap@pc.gc.ca

Secondary Contact
Chad Buchner
Director of Canal Operations

Office: 705-750-4902
Fax: 705-750-4934
Cell: 705-313-1469
Email: chad.buchner@pc.gc.ca

Flood Warning
Email

ont.trentsevern@pc.gc.ca

14.2 Campbellford Sector (Hastings, Dam #15 to Meyers Dam #8) & Trenton Sector (Dam #7 – Glen Ross to Trenton Dam #1)

Primary Contact
Karl Ellis
Sector Manager

Office: 705-653-3240
Home:: 705-653-0984
Cell: 613-242-4305
Email: karl.ellis@pc.gc.ca

Secondary Contact
Anna Ciorap
Acting Water Management Engineer

Office: 705-750-4932
Cell: 705-761-7275
Email: anna.ciorap@pc.gc.ca

Secondary Contact
Chad Buchner
Director of Canal Operations

Office: 705-750-4902
Fax: 705-750-4934
Cell: 705-313-1469
Email: chad.buchner@pc.gc.ca

15.0 Media

15.1 Media - Radio/Television

	<u>Office</u>	<u>Fax No.</u>
CKOL 93.7 FM Campbellford /100.7 FM Madoc Radio/Trent Valley Broad. P.O. Box 551, 15 Reglan St. S. Campbellford David Lockwood ckol-radio@bell.net	705-653-1089	705-653-1089
Corus Entertainment 100.5 Fresh Radio, 151 King St. Suite 200, Peterborough, ON., K9J 2R8 Main Office Studio Line Newsroom newswatchradio@corusent.com	705-748-6101 705-876-1005 705-748-6101 Ext 212/213	705-742-7708
Corus Entertainment The Wolf 101.5 CKWF-FM Radio, 151 King St. Suite 200, Peterborough, ON., K9J 2R8 Main Office Studio Line Newsroom *1015 from Bell Mobility newswatchradio@corusent.com	705-748-6101 705-740-9653 705-748-6101 Ext 212/213	705-742-7708
CHEX Television, 743 Monaghan Rd, Peterborough, ON., K9J 5K2 Switchboard TDD No. CHEX Television - "Newsroom" *111 from Bell Mobility newswatch@chextv.com	705-742-0451 705-749-2179 705-742-0875	705-742-7274 705-742-2930
CKPT Energy 99.7 Radio, P.O. Box 177, 59 George St. N., Peterborough, ON., K9J 6Y8 Information In Studio *9970 on Bell Mobility kawarthanews@bellmedia.ca or energy997@bellmedia.ca	705-742-8844 705-743-9970	705-742-1417
CKQM-FM Radio, P.O.Box 177, 59 George St. N., Peterborough, ON., K9J 6Y8 Country 105 Information In Studio kawarthanews@bellmedia.ca	705-742-8844 705-876-1051	705-742-1417
CJBQ Radio, P.O. Box 488, 10 South Front St., Belleville, ON., K8N 5B2 Information Direct to News Room	613-969-5555 613-968-5803	613-969-8122
Mix 97 Quinte Broadcasting, P.O. Box 488, 10 South Front St., Belleville, ON., K8N 5B2 Information News Room	613-969-5555 613-968-5803	613-969-8122
Classic Hits 95.5 (FM Radio), 497 Dundas St. W., Belleville, ON., K8P 1B6 Main Line Emergency Calls: *955 from Bell Mobility or paulm@cool100.ca	613-966-0955 613-966-3125	613-967-2565

15.2 Media – Newspaper

	<u>Office:</u>	<u>Fax No.</u>
Belleville Intelligencer, 199 Front St., Suite 118, Belleville, ON., K8N 5H5 Information bmvicar@postmedia.ca Brice McVicar	613-962-9171 613-962-9171 Ext 546211	613-962-9652
Community Press, 199 Front St., Suite 5118, Belleville, ON., K8N 5H5 Information bmvicar@postmedia.ca Brice McVicar	613-962-9171 613-962-9171 Ext 546211	613-962-9652
The Bancroft Times, 93 Hastings N., Bancroft, ON., K0L 1C0 bancroft-times@sympatico.ca www.thebancrofttimes.ca	613-332-2300 or 613-332-1894	613-332-4887
Peterborough Examiner, 60 Hunter St. E., Peterborough, ON., K9H 1G5 Information Kennedy Gordon kmgordon@postmedia.com	705-745-4641 705-745-4641 Ext 504252	705-745-3361

APPENDIX 1 - FLOOD FORECAST CENTRE - DAILY REPORT EXAMPLE

FLOOD FORECAST CENTRE – DAILY REPORT

DATE: Jan-30-2019

TIME: 0800

DUTY FORECASTER: W.P.

4 HOUR TREND	GAUGE SITE	PRESENT LEVEL	PRESENT FLOW (m ³ /s)	TEMPERATURE °C		PRECIP (mm)	REGULATED LEVELS		
				MAX	MIN		SUMMER	WINTER	100 Year Elevation
	MARMORA FLOW	10.440	19.8						
	BEAVER CREEK	9.404							
	GLEN ALDA FLOW	12.578	5.33						
	PAUDASH LAKE	342.110				3.0	342.31	342.02	342.80
	BELMONT LAKE	186.756					187.09	186.66	188.80
	CROWE LAKE	182.250					182.42	182.25	183.88
	ST. OLA LAKE						313.57	313.05	313.93
	CHANDOS LAKE	312.854	(3XX.XXX M)						
	CORDOVA LAKE	216.426					216.50	216.20	217.58
	KASSHABOG LAKE	261.909					262.16	261.64	262.70
	ROUND LAKE	199.751					200.10	199.34	200.30
	WOLLASTON LAKE	309.980					310.24	309.88	311.55

COMMENTS:

APPENDIX 2 - MONTHLY WATER LEVEL REPORT EXAMPLE

CROWE VALLEY CONSERVATION - MONTHLY WATER LEVEL REPORT FOR THE MONTH OF APRIL 2017					
Gauge Site	Winter Level	Summer Level	Monthly Maximum	Monthly Minimum	Last Day of Month
Marmora (Flow)			173.0 cms	25.4 cms	173.0 cms
Beaver Creek (Flow)			71.4 cms	12.8 cms	59.9 cms
Glen Alda (Flow)			46.2 cms	7.8 cms	46.2 cms
Paudash Lake	342.02m	342.31m	342.62 M	342.25 M	342.61 M
Belmont Lake	186.66m	187.09m	187.85 M	187.06 M	187.85 M
Crowe Lake	182.25m	182.42m	182.84 M	182.30 M	182.84 M
St. Ola Lake	313.06m	313.57m	----- M	----- M	----- M
Chandos Lake			313.30 M	312.80 M	313.30 M
Cordova Lake	216.20m	216.50m	217.16 M	216.32 M	217.16 M
Kasshabog Lake	261.64m	262.16m	262.22 M	262.07 M	262.22 M
Round Lake	199.34m	200.10m	200.41 M	200.14 M	200.38 M
Wollaston Lake	309.88m	310.30m	310.91M	310.21 M	310.75 M
Allan Mills	NO LONGER IN SERVICE				
Oak Lake (previous month)	0.10m	0.50m	0.45m	0.36m	0.38m
Conversions: ✓ Metres to feet: multiply by 3.2808 ✓ Cubic metres/second (cms) to cubic feet/second: multiply by 35.315 ✓ Millimetres (mm) to inches: multiply by 0.039		Total amount of precipitation recorded this month: Belmont Lake: 221.0 mm = 8.8 inches Glen Alda: 149.90 mm = 6.0 inches		Total number of dam operations undertaken during month: <p style="text-align: center;">125</p>	
Monthly Summary: Heavy rains and snowmelt caused levels and flows to rise very quickly.					
For further information, please contact Crowe Valley Conservation Authority P.O. Box 416, Marmora, Ontario K0K 2M0 Phone (613) 472-3137 Fax (613) 472-5516 E-Mail: info@crowevalley.com					

APPENDIX 3 - AMATEUR RADIO EMERGENCY SERVICE

Emergency Co-Ordinator

Peter Hodgson* VE3UR

Home: 613-962-1386

Cell: 613-969-8613

Email: phodgson@kos.net

11 Baldwin Street, Belleville, Ontario., K8P 2V1

Peter Blakely VA3PGB

Cell: 613-921-2346

Email: blackgunpowder@yahoo.ca

452 Kellars Bridge Road, Eldorado, Ontario., K0K 1Y0

Brian Redden VE3HQR

Home: 705-653-2046

Cell: 705-653-7578

Email: redden@reddens.ca

NOTE: * indicates EMO introduction to IMS course

APPENDIX 4 - SAND BAGS

In a flooding emergency situation, the Crowe Valley Conservation Authority will act in an ***advisory manner only***.

Therefore, the CVCA only maintains a small supply of 2,500 sand bags which, in emergency situations, may be made available to watershed municipalities and/or residents, on an "as needed" basis as a stop gap measure in an emergency situation.

The CVCA does not have sand stockpiled for sandbagging purposes. Sand should be readily available from each municipality.

Municipalities are encouraged to maintain an adequate supply of sandbags on hand at all times and be prepared to supply sand also on an "as needed" basis. Should municipalities require assistance, the CVCA can help to determine the number of sandbags to stockpile.

In non-emergency situations, persons wishing to obtain sand bags from the CVCA will be required to purchase the sand bags as required.

Sand Bag Supplier

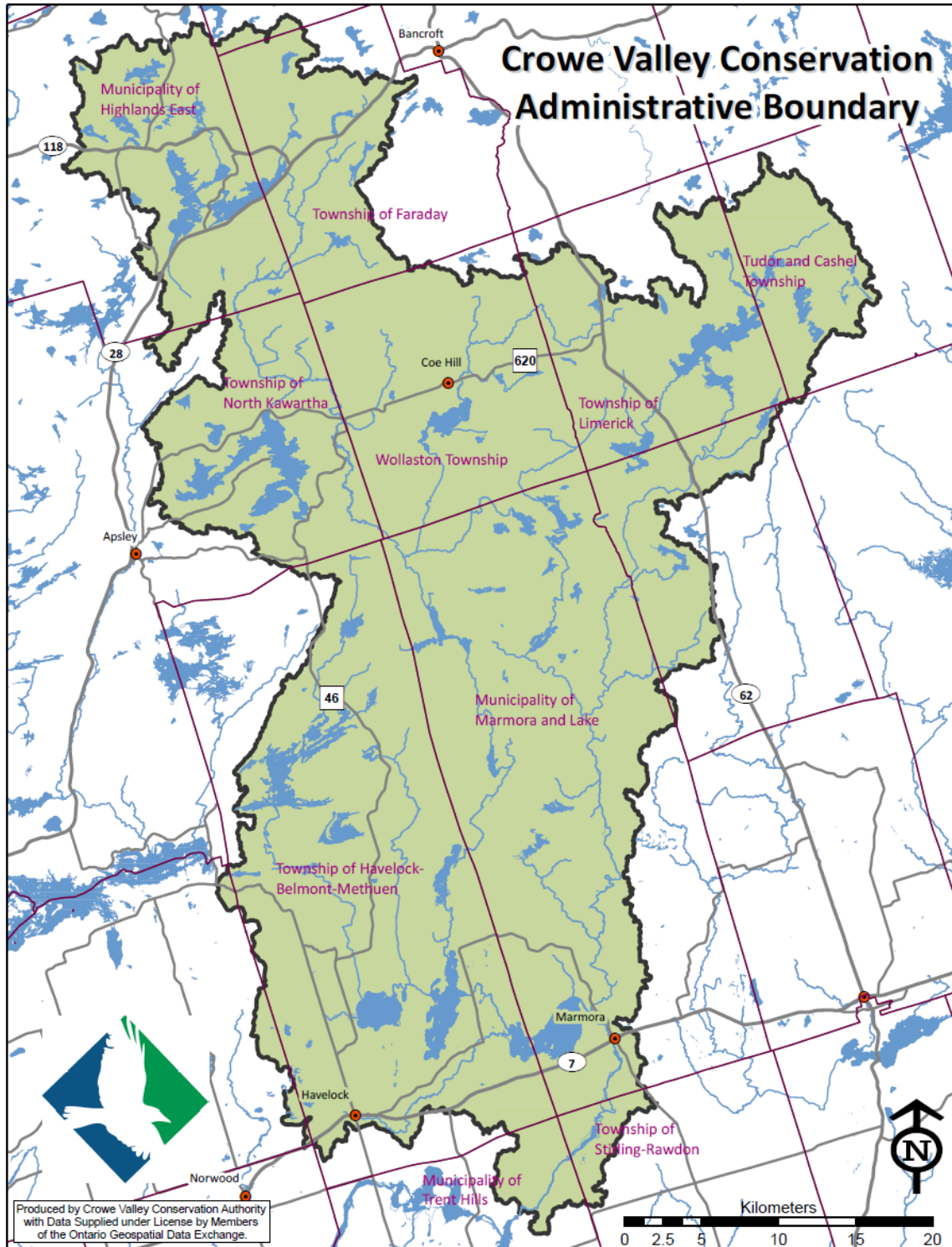
Sand bags may be purchased from the following supplier:

Burtex Industries
66 Bartor Road
Weston, Ontario
M9M 2G5
Telephone: 416-745-2711
Fax: 416-740-2261
Toll Free: 800-268-0908
Email: farrellent@aol.com

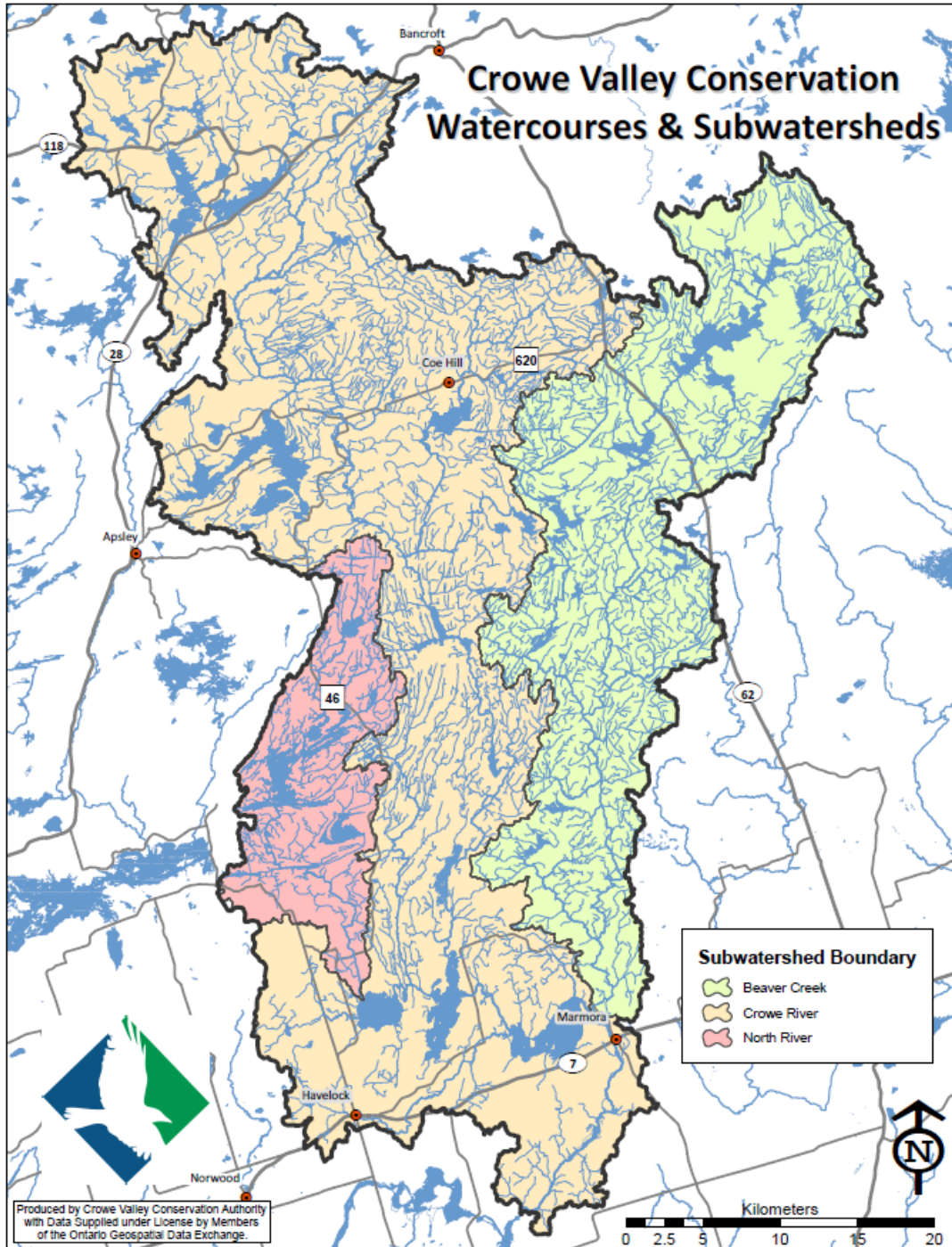
APPENDIX 5 - DISTRIBUTION LIST

- (a) Members of Crowe Valley Conservation Authority Board
- (b) Clerks of all Member Municipalities
- (c) Ministry of Natural Resources & Forestry: Kingston, Bancroft, Peterborough
- (d) Ontario Provincial Police:
Detachments: Bancroft, Northumberland, Kawartha, Central Hastings, Haliburton Highlands
- (e) Adjacent Conservation Authorities: Lower Trent; Quinte Conservation; Otonabee
- (f) Trent Severn Waterway: Peterborough, Campbellford, Trenton
- (g) Amateur Radio Emergency Service: Emergency Co-ordinator
- (h) Marmora Fire Department: Attention: Fire Chief
- (i) Staff: Crowe Valley Conservation Authority
- (j) Canadian Red Cross: Attention: Gerry Chartrand, Volunteer Operational Lead Disaster Management
Co-Lead Teresa Prato 613-920-5252 teresa.prato@redcross.ca

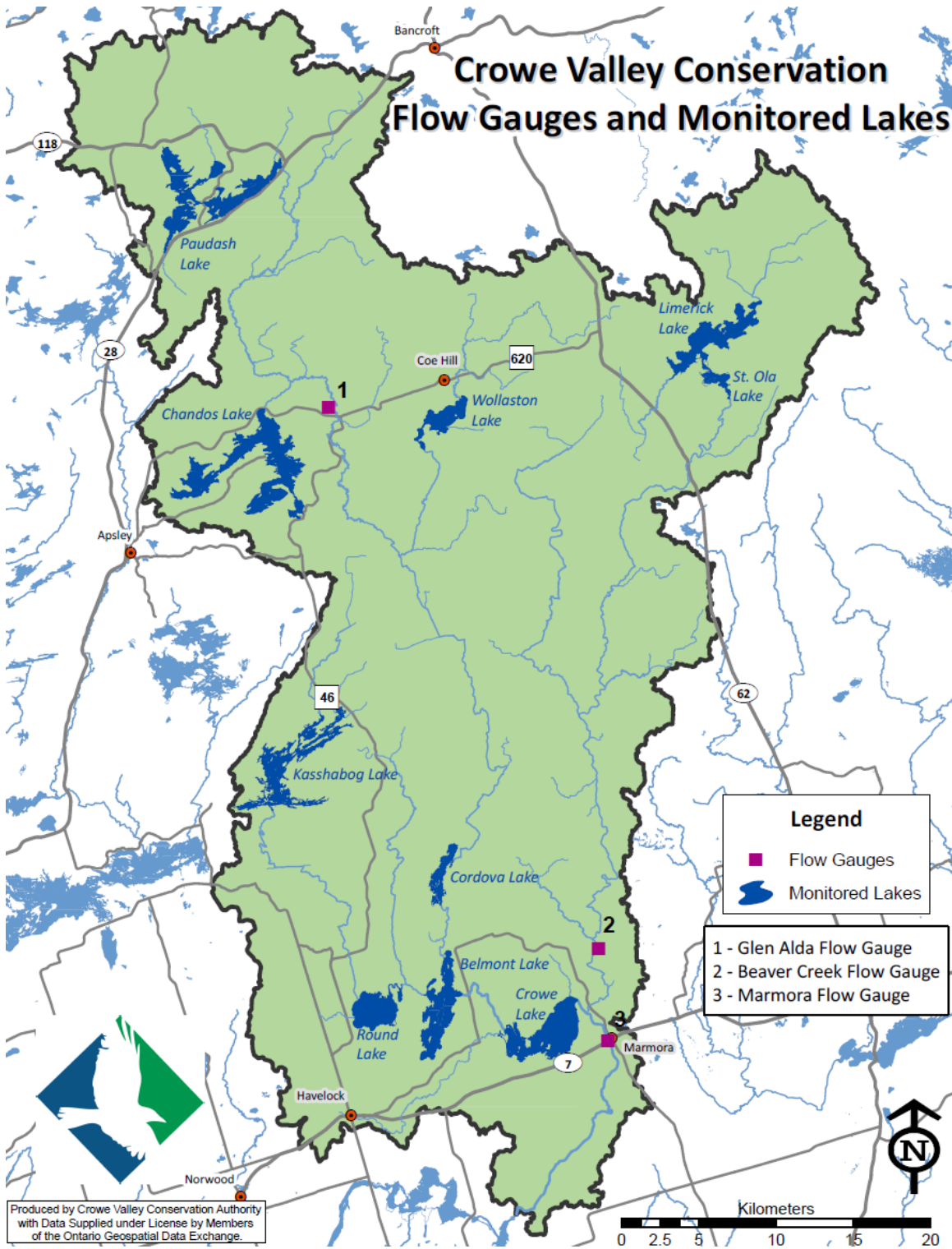
APPENDIX 6 – WATERSHED AND MUNICIPAL BOUNDARIES MAP



APPENDIX 7 – WATERSHED WATERCOURSES AND SUBWATERSHED



APPENDIX 8 – FLOW GAUGE AND MONITORED LAKES



APPENDIX 9 – BACKGROUND AND SITUATION ANALYSIS

1.0

The Allan Mills Dam, which is owned and operated by the Crowe Valley Conservation Authority, is located in Part of Lot 26, Concession 12, Seymour Township. The dam is located approximately 10 kilometers downstream of the Village of Marmora and approximately 6 kilometers above the outlet of the Crowe River into the Trent River system. The dam, with a 64meter overflow weir and three operating sluice gates, maintains water levels on a wide section of the Crowe River named Rylstone Lake upstream to a small waterfall known as Callaghan's Rapids.

Immediately upstream of the dam is a bridge owned jointly by Hastings County and Northumberland County. The river through this area varies in width and in steepness of the riverbank. A small number of seasonal and permanent residences are located along the banks of the river between the dam and Callaghan's Rapids. In general, the lowest lying residences are located immediately upstream of the bridge.

The Crowe River watershed above Allan Mills Dam drains an area of approximately 1900 Km². The flow of the river in this section varies from under 2 cubic meters per second (cms) in summer to a 1:100 year flow in excess of 225 cms. During the spring of 1998 the river peaked at a flow of 194 cms. Recently, in 2016, the river peaked at a flow of 165 cms.

This appendix has been prepared in response to concerns that the ice jamming may cause flooding due to shifting and jamming in downstream narrows, the bridge or the dam. In the event of flooding resulting from ice jams, this Authority's Flood Contingency Plan will be used as a guideline for flood watch, flood warning and flood response. Given that flooding, resulting from ice jamming, may affect residents in the Municipality of Trent Hills or the Township of Stirling-Rawdon, both municipalities will take a joint leadership role in flood response. Access to some of the property that may be affected will be through Marmora and Lake Township and as a result they are included as participants in this plan in a support role.

This appendix assumes that, if flooding does occur as a result of ice jamming, the response time for action will be extremely short. The first point of this plan will be the safe evacuation of residents at risk of flooding.

2.0 Purpose

This plan has been prepared as an Appendix to the Emergency Plans of the affected Municipalities and the annual Crowe Valley Conservation Authority Flood Contingency Plan. It is intended to form part of the local emergency planning process in the event that a flood emergency occurs as a result of a ice jamming during periods of high water. The plan is intended to prepare for the most efficient deployment of all services and resources in the event that ice jamming blocks the flow of water and causes localized flooding. This plan is intended to ensure:

- 2.1 an efficient flood monitoring system
- 2.2 the earliest possible response to an emergency with the resources available and the establishment of overall control of emergency operations
- 2.3 a response consistent with the prevailing conditions and information provided by the Conservation Authority flood warning system or other sources
- 2.4 crowd control to maintain order so that emergency operations are not impeded and to eliminate sources of potential danger in flood areas
- 2.5 policing to protect property and prevent looting
- 2.6 controlled evacuation and relocation of people considered to be in a hazardous situation
- 2.7 rescue of persons with minimum delay and provision of medical aid
- 2.8 salvage of property
- 2.9 orderly re-occupations of premises

3.0 Revisions

This plan will be revised as long as the threat of flooding from ice jamming remains or as conditions change.

4.0 Responsibilities

In general terms the responsibilities of the primary agencies involved in this plan are given below.

4.1 Crowe Valley Conservation Authority – Duty Forecaster

The responsibilities of the Crowe Valley Conservation Authority – Duty Forecaster will include:

- 4.1.1 daily monitoring of climatic conditions, water conditions and flood forecasting predictions
- 4.1.2 providing Flood Watch and Flood Warning Statements as required by the plan
- 4.1.3 acting as the initial media contact

- 4.1.4 acting as the liaison with the Ministry of Natural Resources and Forestry regarding Provincial Flood Alerts and environmental issues
- 4.1.5 acting as the liaison with the Department of Fisheries and Oceans regarding potential implications of the *Federal Fisheries Act*

**4.2 Lead Municipalities & Municipal Flood Coordinators
Municipality of Trent Hills & Township of Stirling-Rawdon**

Due to the potential for flooding to cross municipal boundaries it has been agreed that the Municipality of Trent Hills and the Township of Stirling-Rawdon will assume joint responsibility for flood response. Each Municipality will appoint a Flood Coordinator whose responsibilities will include:

- 4.2.1 providing the coordination and deployment of all resources required to respond to flooding
- 4.2.2 acting as the coordinating agency for determining persons and properties at risk (in consultation with the Ontario Provincial Police and the Conservation Authority)
- 4.2.3 acting as the coordinating agency for the orderly and timely evacuation of residents (in consultation with the Ontario Provincial Police)
- 4.2.4 providing temporary shelter for persons evacuated
- 4.2.5 acting as the coordinating agency for securing property (in consultation with the Ontario Provincial Police)
- 4.2.6 providing sandbags, sands and manpower assistance to land owners (Note: opportunities for sand bagging may be limited due to time constraints and/or manpower constraints and will take a secondary role to preventing loss of life)
- 4.2.7 acting as the coordinating agency for the relocation of evacuated residents
- 4.2.8 providing cleanup of flood debris and damage on municipally owned land and at the discretion of the municipality, provide cleanup assistance for citizens
- 4.2.9 acting as the Chair for regular Flood Coordinating Meetings
- 4.2.10 declaration of municipal emergency (in consultation with the Ontario Provincial Police and the Conservation Authority)
- 4.2.11 determining if local resources are adequate or if additional resources are required

4.4 Ontario Provincial Police

The responsibilities of the Ontario Provincial Police will include:

- 4.4.1 the coordination of all security aspects relating to the flood – such as road closures, vandalism, looting and crowd control
- 4.4.2 acting as a media spokesperson during the flood event (in consultation with the Municipalities and the Conservation Authority)
- 4.4.3 consulting with the Municipalities with respect to the declaration of an emergency

4.5 Support Municipality Township of Marmora and Lake

The responsibility of the Support Municipality – Township of Marmora and Lake, will include:

- 4.5.1 manpower and equipment support to be directed by the Lead Municipalities
- 4.5.2 support to the lead Municipalities with respect to access and control issue for residents that access their property through Marmora and Lake Township
- 4.5.3 shelter support for evacuated residents

5.0 Flood Monitoring Plan

Attached, Schedule 'B', is a copy of the Flood Monitoring Plan. The Crowe Valley Conservation Authority will be responsible for the flood monitoring section of this plan.

For the purpose of this plan, Flood Monitoring has been divided into two distinct stages. The first stage, Routine Daily Monitoring will be used at all times when the flow in the Crowe River is **less** than 75 cms as recorded at the Crowe River – Marmora Flow Gauge and will consist of the following:

- 5.1 minimum once daily contact with Environment Canada (Weather)
- 5.2 minimum once daily reading of Marmora (Crowe River) electronic gauge station (flow) and upstream gauging stations
- 5.3 minimum once daily reading of precipitation gauges in Crowe Valley watershed
- 5.4 weekly back up and archiving of data from gauging network
- 5.5 completion of the Crowe River Flood Forecasting Model as required
- 5.6 completion of snow sampling as required (generally 1st and 15th of each winter month)

The second stage, Flood Watch will be implemented when the flow in the Crowe River is **greater** than 100 cms as recorded at the Crowe River – Marmora Flow Gauge and will be utilized to indicate an increased risk of flooding and a notice to Municipalities that the potential for flooding has increased. **No** immediate action is required. A Flood Watch Statement is merely intended to increase awareness of the potential for flooding. Flood Watch will consist of all of the above plus the following:

- 5.7 fax or email an alert notice to Municipal Flood Coordinators

A sample of Flood Watch has been appended to this document.

A Flood Warning will be issued at the first indications that flooding is imminent. Imminent flooding is defined as “any change in river conditions which reasonably may be considered to be a threat to personal safety or cause extensive property damage”. A sample Flood Warning has been appended to this document.

In the event that a Flood Warning is required the Crowe Valley Conservation Authority will immediately:

- 5.8 contact the Ontario Provincial Police and the Flood Coordinators of the three Municipalities and advise of a Flood Warning
- 5.9 advise the Provincial Emergency Response Coordinator (PERC) and the Media

At this point all agencies will proceed to implementation of the Flood Response Plan.

6.0 Flood Response Plan

Should a flood event occur the **Crowe Valley Conservation Authority** will:

- 6.1 organize a site meeting for municipal flood coordinators and the Ontario Provincial Police
- 6.2 continue to provide up to date reports regarding water level conditions, upstream water conditions, flood predictions and weather
- 6.3 act as a liaison with the Ministry of Natural Resources and Forestry and the Department of Fisheries and Oceans regarding flood and environmental concerns

At the Site Meeting the **Lead Municipalities** will assume joint responsibility for all flood response issues, including:

- 6.4 identifying residences and/or people at risk
- 6.5 issuing evacuation orders – (in consultation with Ontario Provincial Police)

- 6.6 issuing of sand and sandbags to residents
- 6.7 coordinating resources with Municipal agencies – (public utilities, shelter. Etc.)
- 6.8 declaration of an emergency (in consultation with Ontario Provincial Police and the Conservation Authority)

At the Site Meeting the **Ontario Provincial Police** will assume responsibility for all site security measures and media relations:

- 6.9 site security – (road closures, emergency vehicle access, etc.)
- 6.10 information to media (with support from Municipalities and Crowe Valley Conservation Authority)
- 6.11 consult with the Lead Municipalities regarding the need for the declaration of an emergency

7.0 Additional Information

Appended to this plan is a compilation of additional information, contact numbers and background information that may be of assistance during flood event. The Flood Coordinators for line Lead Municipalities will also utilize the Emergency Planning documents of their Municipalities as a resource during a flood event.

TELEPHONE LIST – MUNICIPALITY OF TRENT HILLS

	Residence	Business	Fax	Cellular
Head of Council: Bob Crate bob.crate@trenthills.ca		705-653-3977	705-653-5203	705-761-2278
Deputy Mayor Rosemary Kelleher McLennan		705-653-3456	705-653-5203	705-653-6854
CAO Lynn Phillips Lynn.phillips@trenthills.ca	705-653-6016	705-653-1900 Ext. 241	705-653-5203	705-653-9423
Municipal Clerk Doug Irwin doug.irwin@trenthills.ca		705-653-1900 Ext: 240	705-653-5203	705-632-9423
Flood Coordinator Alternate: Jim Peters jim.peters@trenthills.ca	613-481-6022	705-653-1900 Ext: 234	705-653-5203	705-653-6070
Public Works: Scott White Scott.white@trenthills.ca	705-696-3668	705-653-1900 Ext: 244	705-653-5203	705-653-8569
Public Works Alternate: Brad Patfield Brad.patfield@trenthills.ca	Pager 705-745-5757 ID#606	705-653-1900 Ext: 225	705-653-5203	705-313-2848
Ontario Provincial Police: Campbellford Detachment	Emergency: 9-1-1 OR 888-310-1122	General Inquiry: 705-653-3300	705-653-5171	
Police Chief: Insp. Lisa Darling	Emergency: 9-1-1 OR 888-310-1122	General Inquiry: 613-653-3300	Fax: 705-653-5171	N/A
Alternate OPP: Phil Pike	Emergency: 9-1-1- OR 888-310-1122	705-653-3300	705-653-5171	N/A
Fire Chief: Tim Blake	705-653-2408	705-653-1900 Ext. 222	705-653-5203	705-653-6194
Emergency Information Officer: Kira Mees Kira.mees@trenthills.ca		705-653-1900 Ext:239	705-653-5203	705-653-6363

TELEPHONE LIST – TOWNSHIP OF STIRLING-RAWDON

	Residence	Business	Fax	Cellular
Head of Council: Mayor Bob Mullins mayor@stirling-rawdon.com	613-395-4695	613-395-2395	613-395-2356	613-438-0402
Alternate: Deputy Mayor Grant Hagerman deputy-mayor@stirling-rawdon.com	613-395-3541	613-395-3346	613395-2356	613-922-3541
Emergency Flood Coordinator: Derrick Little	613-921-8152	613-395-0214	613-395-0864	613-921-8152
Alternate: Gerry Buss	613-395-6082	613-920-0069	613-395-0864	613-847-6909
Public Works: George Burkitt	613-920-2877	613-395-3380	613-395-0864	613-847-5654
CAO/Treasurer: Roxanne Hearn	613-395-1583	613-395-3380 Ext 2222	613-395-0864	613-921-6936 or 613-849-4762
Clerk Tawnya Donald info@stirling-rawdon.com	613-395-2931	613-395-3380 Ext 2234	613-395-0864	613-848-9995
Opp Madoc Detachment	Emergency: 613-473-4234 (dispatch) 9-1-1	General Inquiry: 613-473-4234 888-310-1122	Fax: 613-473-5029	
Staff Sargent: Dawn Ferguson		613-473-4234 Ext 6510	613-473-5029	613-246-6172
Alternate: N/A				
Building Inspector: Donald Reed	613-395-5325	613-395-5166 866-414-0088	613-395-0864	613-848-6008
Medical Officer of Health (Hastings County) Dr. Ian Gemmill (Acting)		613-966-5500 800-267-2803 (After hrs Emergency#) TDD/TTY ph# 711 or 800-267-6511	613-966-9418	
Fire Chief: Derrick Little	613-395-0027	613-395-0214	613-395-0864	613-921-8152
Deputy Fire Chief Stn #1: Bruce Farquhar	613-395-3012	613-395-5044	613-395-0864	613-921-3101
Deputy Fire Chief Stn#2 Stephen Finch	613-395-5969		613-395-0864	613-827-5969
Alternate/CEMC (C/S) Gerry Buss	613-395-6082	613-969-4933 Pager	613-395-0864	613-920-0069 w 613-847-6909
Environmental Manager Mathew Richmond	613-328-5475	613-395-3380	613-395-0864	613-848-1439
Assistant Environmental Manager Lucas McDonald	613-561-0956	613-395-3380 613-395-3380	613-395-0864 613-395-0864	613-403-2782 613-403-2782

TELEPHONE LIST – CROWE VALLEY CONSERVATION

	Residence	Business	Fax	Cellular
Flood Warning Coordinator: Tim Pidduck General Manager tim.pidduck@crowevalley.com	613-967-1322	613-472-3137	613-472-5516	613-847-1912
Alternate: Neil McConkey Water Resources Tech watertech@crowevalley.com	613-399-5693	613-472-3137	613-472-5516	613-885-1979
Alternate: Wray Price Lands Resources Tech watertech@crowevalley.com	613-472-1389	613-472-3137	613-472-5516	
Duty Forecaster:		613-472-3137	613-472-5516	613-968-0724
<u>Other Personnel:</u> Catherine Redden Authority Chair catherine.redden@trenthills.ca	705-653-2046	613-472-3137 or 705-653-1900	613-472-5516 or 705-653-5203	
Suzanne Partridge Vice Chair Secret.gardener@gmail.com spartridge@highlandseast.ca	613-339-2365	613-472-3137 or 705-448-2981	613-472-5516 or 705-448-2532 or 613-339-2442	
Jim Martin Havelock-Belmont-Methuen Rep jmartin@hbmtwp.ca	705-778-3764	613-472-3137 or 705-778-2308	613-472-5516 or 705-778-5248	705-749-7676
Jan O'Neill Marmora & Lake Rep j.oneill@marmoraandlake.ca	613-472-2972	613-472-3137 or 613-472-2629	613-472-5516 or 613-472-5330	613-847-2430

TELEPHONE LIST – TRENT SEVERN WATERWAY

**Campbellford Sector (Hastings, Dam #15 to Meyers, Dam #8) &
Trenton Sector (Dam #7 – Glen Ross to Trenton Dam #1)**

	Residence	Business	Fax	Cellular
Primary Contact Karl Ellis Sector Manager karl.ellis@pc.gc.ca	705-395-2008	705-653-3240		613-242-4305
Secondary Contact Anna Ciorap Acting Water Management Engineer Email: anna.ciorap@pc.gc.ca		705-750-4932		705-761-7275
Secondary Contact Chad Buchner Director of Canal Operations Email: chad.buchner@pc.gc.ca		705-750-4902	705-750-4934	705-313-1469

TELEPHONE LIST - ALGONQUIN POWER (CORDOVA)SYSTEMS

	Residence	Business	Fax	Cellular
Head Office Mark de Koning mark.dekoning@apsystems.ca		Cell: 905-829-6360	N/A	Business # forwarded to Mark's cell
Mark de Koning	Use cellular #			604-860-3199
Steve McCrory		289-205-0732		
Site Supervisor Jim Molloy	613-921-3770	705-778-5478		613-921-3770

	Residence	Business	Fax	Cellular
Crowe Bay Generating Station		705-653-0045	705-653-0045	
Local Operator: Jim Malloy		705-653-0045		613-921-3770

TELEPHONE LIST – EMERGENCY RESPONSE

**AVIATION, FOREST AND EMERGENCY SERVICES (AFFES) AND MINISTRY
EMERGENCY OPERATION CENTRE (MEOC) OF THE MINISTRY OF
NATURAL RESOURCES AND FORESTRY**

MINISTRY EMERGENCY OPERATION CENTRE (MEOC)

PERC Hotline: 1-866-898-7372

Clerk: 705-945-5795

Fax 705-945-5785

Email: meoc-mail.mnr@ontario.ca

	Work	Home	Fax	Cellular
Scheduled (PERC)	866-898-7372	N/A	705-945-5785	N/A

FLOOD RESPONSE WILL GO TO WHOMEVER IS MEOC AT THE TIME

OTHER RESPONSE CENTRE CONTACT NUMBERS

PERC Hotline	866-898-7372
Clerks	705-945-5795
AFFES – Main Switchboard	705-945-5700
MEOC <i>Fax Number</i>	705-945-5785

PETERBOROUGH DISTRICT, MINISTRY OF NATURAL RESOURCES

	Work	Home	Fax	Cellular
Primary Contact District Manager: Trevor Griffin trevor.griffin@ontario.ca	705-755-3363		705-755-3125	705-919-2151
Emergency Response Coordinator Deanna Cotter deanna.cotter@ontario.ca	705-755-3293		705-755-3125	705-872-1924

**SURFACE WATER MONITORING CENTRE – CONTACT INFORMATION &
AFFMB PROVINCIAL EMERGENCY RESPONSE COORDINATOR (PERC)
CONTACT**

Contact Information for the Surface Water Monitoring Centre:

Mailing Address:

Surface Water Monitoring Centre
Ministry of Natural Resources
P.O. Box 7000
300 Water St
5th Floor South
Peterborough, Ontario
K9J 8M5

Coordinator – Dave Burritt 1-705-755-1215

Daytime Phone: 705-755-5201 – SMWC duty officer desk

- Please use this number for flood forecasting/warning purposes

After Hours Duty Officer Cell Phone: 705-761-2044

- Please use this number for flood forecasting/warning purposes after regular business hours and weekends/holidays

Fax: 705-755-5038

Alternate Fax: 705-755-5039

- Please use either of these numbers when issuing flood messages

Email for SWMC Duty Officer:

- surface.water@ontario.ca

**CONTACT FOR AVIATION & FOREST FIRE & EMERGENCY SERVICES
(AFFES),
MINISTRY EMERGENCY OPERATION CENTRE (MEOC)**

PERC Hotline 866-898-7372

TELEPHONE LIST – NEWS MEDIA

	<u>PHONE</u>	<u>FAX</u>
<u>Campbellford:</u>		
CKOL 93.7 FM Campbellford / 100.7 FM Madoc Radio/Trent Valley Broadcasting P.O. Box 551, 15 Reglan St. S. Campbellford David Lockwood ckol-radio@bell.net	705-653-1089	705-653-1089
Eastlink Cable Systems, cable provider Residential Service Business Service	888-345-1111 877-813-1727	
<u>Belleville:</u>		
CJBQ Radio Qunite Broadcasting, P.O. Box 488, 10 Front St., Belleville, ON., K8N 5B2 Information Direct to Newsroom	613-969-5555 613-969-5803	613-969-8122
MIX97 Quinte Broadcasting, P.O. Box 488, 10 South Front St., Belleville, ON., K8N 5B2 Information Direct to Newsroom	613-969-5555 613-968-5803	613-969-8122
Classic hits 95.5 (FM Radio) 497 Dundas St., W. Belleville, ON., K8P 1B6 Main Line Emergency Calls: Bell Mobility *955 paul@cool100.ca	613-966-0955 613-966-3125	613-967-2565
The Community Press 199 Front St., Suite 118, Belleville, ON., K8N 5H5 Information intelligencer.classifieds@sunmedia.ca bmvicar@postmedia.ca	613-962-9171 613-962-9171Ext 546211	631-962-9652
The Belleville Intelligencer (daily paper), 199 Front St., Suite 118, Belleville, ON., K8N 5H5 Information bmvicar@postmedia.ca	613-962-9171	613-962-9652
<u>Peterborough:</u>		
Corus Entertainment 100.5 Fresh Radio, 151 King St. Suite 200, Peterborough, ON., K9J 2R8 Main Office Studio Line Newsroom newswatchradio@corusent.com	705-748-6101 705-876-1005 705-748-6101 Ext 212/213	705-742-7708
Corus Entertainment CKWF The Wolf 101.5 Radio, 151 King St. Suite 200, Peterborough, ON., K9J 2R8 Main Office Studio Line Newsroom *1015 on Bell Mobility newswatchradio@corusent.com	705-748-6101 705-740-9653 705-748-6101 Ext 212/213	705-742-7708
CKPT Energy 99.7 Radio, 59 George St. N., Peterborough, ON., K9J 6Y8 Information In Studio *9970 on Bell Mobility kawarthanews@bellmedia.ca or energy997@bellnet.ca	705-742-8844 705-743-9970	705-472-1417

PHONE

FAX

CKQM-FM Radio Country 105, P.O. Box 177, 59 George St. N. Peterborough, ON., K9J 6Y8
Information 705-742-8844 705-742-1417
In Studio 705-876-1051
kawarthanews@bellmedia.ca

CHEX "news watch" (TV station), 743 Monaghan Rd, Peterborough, ON., K9J 5K2
Switchboard 705-742-0451 705-742-7274
TDD No. 705-749-2179
Newsroom 705-742-0875 705-742-2930
*111 on Bell Mobility
newswatch@chextv.com

The Peterborough Examiner (daily newspaper) 60 Hunter St.E., Peterborough, ON., K9H 1G5
Information 705-745-4641 705-745-3361
Kennedy Gordon 705-745-4641 Ext 504252
kmgordon@postmedia.com

Bancroft:

The Bancroft Times Newspaper 93 Hastings St. N. Bancroft, ON., K0L 1C0
613-332-2300 613-332-4887
613-332-1894
bancroft-times@sypmatico.ca
www.thebancrofttimes.ca

**LOCAL RESOURCE DIRECTORY – AS PROVIDED BY TOWNSHIP OF
STIRLING-RAWDON**

FOOD SERVICES

Foodland 44 North St, Stirling, K0K 3E0	613-395-2493
Steve Runnals RR # 1, Stirling, K0K 3E0	(Res) 613-395-5296
Mac’s Convenience 1 Mill St, Stirling, K0K 3E0	613-395-3367
Pro One Stop 280 North St., Stirling, K0K 3E0	613-395-5360
Jenny’s Country Lane 38 Mill St., Stirling, K0K 3E0	613-395-5487
Jenny Abraham, Owner RR 4, Stirling, K0K 3E0.....	(Res) 613-395-5545
Vito’s Pizzeria 160 North St., Stirling, K0K 3E0.....	613-395-1313
Jimmy’s Special Pizza 2 West Front, Stirling, K0K 3E0	613-395-5111
Savory House 24 West Front, Stirling, K0K 3E0.....	613-395-1288
Subway 127 North St., Stirling, K0K 3E0	613-395-6400
The Black Dog Family Restaurant 227 West Front, Stirling, K0K 3E0.....	613-395-9444

MEDICAL SERVICES

Dr.Ranijith, Dr Mahedeva, Dr. Lionel Noronha.....	613-395-5566
9C Tuftsville Rd., Stirling, K0K 3E0	
admin@stirlingmedical.com.au	
Hastings Quinte EMS 111 Mellennium Pkwy, Belleville., K8N 4Z5	613-771-9366
Quinte Health Care Belleville General Hospital 265 Dundas St.E. Belleville., K8N 5H9	
.....	1-800-483-2811
.....	or 613-969-7400
Campbellford Memorial Hospital 146 Oliver Rd, Trent Hills.....	705-653-1140
Quinte Health Care Trenton Memorial Hospital 242 King St, Trenton., K8V 3X1	
.....	613-392-2540
Stirling Manor Nursing Home 218 Edward St., Stirling K0K 3E0	613-395-2596
Victorian Order of Nurses (VON) 25-360 George St. N. Peterborough., K9H 7E7	
.....	705-745-9155
VON 51 Mary St. W. Lindsay., K9H 7E7.....	800-743-6255
St. John’s Ambulance Loyalist Branch 417 Montose Rd, Belleville. K8R 1B2	
.....	613-962-7933
Canadian Red Cross 80 Parks Dr., Belleville., K8N 4Z5	613-966-0730
Hastings & Prince Edward Counties Health Unit 179 North Park St., Belleville., K8P 4P1	
.....	613-966-5500
Guardian Drugs 9D Tuftsville Rd., Stirling., K0K 3E0.....	613-395-2110
Hastings Veterinary Services 9E Tuftsville Rd., Stirling., K0K 3E0	613-395-3386
Stirling Funeral Chapel 87 James St., Stirling., K0K 3E0	613-395-2424
Stirling Pharmasave 160 North St, Unit 2., Stirling., K0K 3E0	613-395-2353

TOWING COMPANIES

Wilkes Towing & Repair 439 Ashley St. RR 1, Foxboro K0K 2B0..... 613-968-5376
Chas Wilkes 228 Foxboro Stirling Rd, Foxboro K0K 2B0(Res) 613-969-5166
McKeown Motor Sales 2589 Pring Brook Rd, Springbrook, K0K 3C0..... 613-395-3883
..... or 1-800-465-9297
Rollins Auto Wreakers Inc. 623 Slab St RR 5, Madoc K0K 2K0.....613-473-2242

TOWNSHIP - EQUIPMENT LIST

1 – John Deere Backhoe 3105K
1 – Komatsu 22ton wheeled excavator
4 – 15 Ton Tandem Axle Dump Trucks
1 – 10 Ton Single Axle Dump Trucks
3 – 3.5 HP Water Pumps
1 – 10 HP Sludge Pump
50 – Sandbags
7,000 Cu. Yards sand & salt mix
1 – Front end loader 1 cu. Yard capacity
2 – Class 7 Motor Grader
3 – ½ ton trucks
1-3/4 ton truck

FIRE DEPARTMENT EQUIPMENT LIST

3 – Triple Combination Pumps
2 – Rescue Units
3 – Generators
1 – Jaws of Life
1,000 sand bags
35 – Volunteers
1 – Tanker
1 – Water Source Van

CONSTRUCTION EQUIPMENT AVAILABLE FROM OTHER SOURCES

Danford Construction Ltd. 326 Durham S., Madoc K0K 2K0..... 613-473-2468
Pat Hunter RR 3 Frankford K0K 2C0..... 613-395-1743
Ron Coonery, Stirling Sand & Gravel 256 Eggleton Rd, Stirling, K0K 3E0..613-969-2738
McKeown Motor Sales 2589 Spring Brook Rd, Springbrook, K0K 3C0 613-395-3883
or.....1-800-465-9297

TRANSPORTATION SERVICES

Franklin Coach & Tours, 305 Bell Blvd, Belleville K8P 5H3.....613-966-7000
 Coach Canada705-748-6411 or 1-800-461-7661
 Wayne Tucker Front St, Stirling K0K 3E0.....613-395-3060
 Central Taxi, 569 Dundas St.E. Belleville K8N 1G6613-962-5353

UTILITIES

Hydro One 149 Elgin St.E., Cobourg K9A 1A11-800-434-1235 or 905-377-1881
 Trent Hills Water treatment Plant 58 Saskatoon, Campbellford K0L 1L0... 705-653-2382
 Emergency 705-653-2610

EMERGENCY SHELTERS

St. Paul's United Church Rev. Bruce Fraser	104 Church St, Stirling, ON., K0K 3E0	613-395-3379
St. James the Minor RC Church Father Stephane Pouilot Heather Bailey	236 Edward St., Stirling, ON., K0K 3E0	613-395-5700 (Res) 613-395-3952
St. Joh's Anglican Church Rev. Nancy Beal Kathy Reid	73 North St., Stirling, ON., K0K 3E0 office@stjohnsstirling.ca	613-395-1745 or 613-848-3239 (Res) 613-395-5171
Community Pentecostal Church Pastor Ben Ruth McCrory	289 West Front St., Stirling, ON., K0K 2M0	613-395-5381 613-395-2105
St. Andrew's Presbyterian Reb. Dr. Morley Mitchell Trish Hupe	P.O. Box 118, 110 Mill St., Stirling, ON., K0K 3E0 standrews@stirling.com	613-395-5006 or 613-966-6834 (cell) 613-847-6894 (Res) 613-395-1502
Jehovah's Witness Temple Coordinator for Elders: Keith Deshane	2486 Hwy 14N, Stirling, ON., K0K 3E0	613-395-4805 613-395-3251
Hastings and Prince Edward District Public School Board of Education Principal – Susan Carleton-Maines stirling@hpedsb.on.ca	156 Ann St., Belleville, ON., K8N 3L3	613-966-1170 or 1-800-267-4350 Fax:613-961-2003
Stirling and District Recreation Centre Arena Manager – Richard Dean richard@stirlingarena.ca	435 West Front St., Stirling, ON., K0K 3E0	613-395-5000
Stirling Legion, Branch #228 President Judy Heasman	2430 Stirling Marmora Rd., Stirling, ON., K0K 3E0	613-395-2975 Fax: 613-395-1068

Agencies	Municipality of Trent Hills	Stirling-Rawdon		Marmora & Lake
Ambulance	9-1-1 or Campbellford	9-1-1		9-1-1
Fire Department	9-1-1 or 705-653-1236	9-1-1		9-1-1
Hospital	Quinte Health Care Belleville General 265 Dundas St. e., Belleville, K8N 4Z5613-969-7400 Toll Free 1-800-483-2811 Campbellford Memorial 146 Oliver Rd, Campbellford, K8N 5A9705-653-1140 Peterborough Regional Health Centre 1 Hospital Dr. Peterborough, K9J 7C6705-743-2121 Trenton Memorial Hospital 242 King St., Trenton, K8V X1613-392-2540			
Marine & Air Search & Rescue	1-800-267-7270 or 613-965-3870			
Police	9-1-1 Ontario Provincial Police Emergency Only 888-310-1122 General Inquiry Campbellford Detachment 705-653-3300 Fax: 705-653-5171	9-1-1 Ontario Provincial Police Emergency Only 888-310-1122 General Inquiry Madoc Detachment 613-473-4234	9-1-1 Ontario Provincial Police Emergency Only 888-310-1122 General Inquiry Madoc Detachment 613-473-4234 Fax 613-473-5029 <hr/> Alt. Quinte Detachment 613-392-3561 (phone & fax)	
Public Works	Municipal Garage 705-653-1900 EXT 244 Fax 705-653-5203 Emergency 24HR 705-653-7090	Municipal Garage 613-395-3380	Municipal Garage Springbrook 613-395-3223	
Medical Officer	Kira Mees Emergency Information Officer Bus: 705-653-1900 Ext 239 kira.mees@trenthills.ca Fax:705-653-5203	Director of Health Protection for Hastings and Prince Edward Counties Health Unit: Dr. Ian Gemill (Acting) 613-966-5500 Toll Free 800-267-2803 (after hours emergency no.) TDD/TTY: 711 or 800-267-6511 or 613-966-3036 Fax 613-966-9418		

DISTRIBUTION LIST

As attached to CVCA “Flood Warning System”:

Members and Staff: Crowe Valley Conservation Authority

Clerks of all Member Municipalities

Ministry of Natural Resources & Forestry: Kingston, Bancroft & Peterborough

OPP Detachments: Bancroft, Northumberland, Kawartha, Central Hastings & Haliburton Highlands

Adjacent Conservation Authorities: Lower Trent Conservation, Quinte Conservation, Otonabee Region Conservation Authority

Trent Severn Waterway: Peterborough, Campbellford, and Trenton

Canadian Red Cross – Disaster Management Lead, Gerry Chartrand (Canadian Red Cross, Hastings Branch, 110 North Front Street – A3, Suite 412, Belleville, Ontario., K8P 0A6; 866-317-6544

hpecbilling@redcross.ca

Co-Lead Teresa Prato 613-920-5252 teresa.prato@redcross.ca

Circulated as Individual Document:

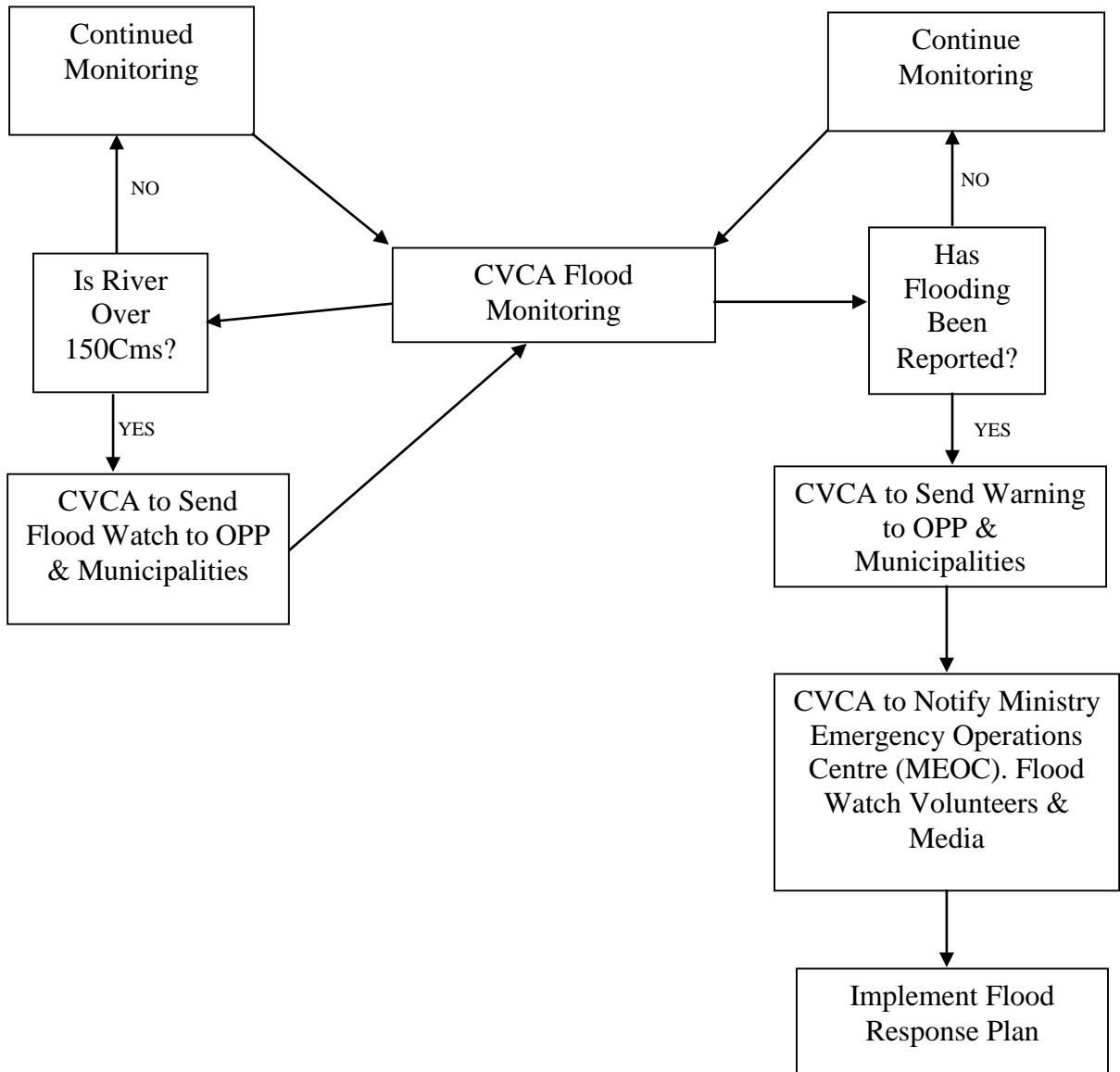
Mr. Todd Smith, MPP, Prince Edward-Hastings (Box 575, 81 Millennium Pkwy, Belleville, On., K8N 4Z5.; 1-877-536-6248; 613-962-1144; Fax 613-969-6381; todd.smithco@pc.ola.org

Mr. Lou Rinaldi, MPP Northumberland (Unit 7, 513 Division Street, Cobourg, Ontario., K9A 5G6.; 1-800-263-3980; 905-372-4000; Fax: 905-372-1672; lrinaldi.mpp.co@liberal.ola.org

Ms. Kira Mees, Emergency Information Officer, Trent Hills (P.O. Box 1030, 66 Front Street South, Campbellford, Ontario., K0L 1L0.; 705-653-1900 Ext 248; Fax 705-653-5203; kira.mess@trenthills.ca

Leanne Latter, Emergency Planning Coordinator, Hastings County Emergency Services; 613-966-1319 Ext 2500 or 613-391-8154 (cell); latterl@hastingscounty.com

CVCA FLOOD FORECASTING AND MONITORING FLOW CHART



FLOOD EMERGENCY COORDINATION

CVCA to Organize Initial Site Meeting

Continued
Monitoring

Identify Residences
at Risk

Site Security

Act as Liaison
with Ministry of
Natural Resources
& Forestry

Issue of Evacuation
Notices (OPP)

Information to Media
(in consultation with
Municipalities &
CVCA)

Act as Liaison with
TSW & Algonquin
Power

Issuing of Sand Bags
and Assisting
Residents with
Installation

Consult with
Municipality
Regarding
Declaration of
Emergency

Consult with
Municipality Regarding
Declaration of
Emergency

Coordinate
Municipal Resources

Declaration of
Emergency

Flood coordinating meetings at the call of the flood coordinators for the Municipalities.