### **FOR EXTERNAL PARTNERS**

# Upper Thames River Conservation Authority 2020 FLOOD CONTINGENCY PLAN

**Municipal & Agency Information** 



## UPPER THAMES RIVER

Updated: January 20, 2020

### **Purpose & Distribution List**

This flood contingency plan has been prepared and distributed by the Upper Thames River Conservation Authority (UTRCA) as a guide to users in the event of potential or imminent flood conditions. Holders must be aware of their responsibilities as listed in this plan.

The UTRCA is responsible for the compilation of the plan. Users should notify the UTRCA in writing of any required change in their contact information.

Copies of this publication are issued to:

- Flood Coordinators of all municipalities in the watershed receiving flood forecasting services from the UTRCA, including Counties
- Municipalities of South Huron and Lucan-Biddulph, which receive forecasting services from the Ausable Bayfield Conservation Authority (see Section 1.0)
- First Nations Oneida Nation of the Thames, Chippewas of the Thames First Nation, Munsee Delaware Nation
- Neighbouring Conservation Authorities (Ausable Bayfield, Catfish Creek, Grand River, Kettle Creek, Long Point Region, Lower Thames Valley, Maitland Valley, St. Clair Region)
- Health Units in the watershed
- Western University
- City of London Fire Department
- Local and provincial police forces in the watershed
- UTRCA Chair and Vice-Chair, key UTRCA personnel
- Ministry of Natural Resources & Forestry Response Coordinators (Province and Districts)
- District school boards (public and catholic) in the watershed

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### 1.0 Introduction

The Thames River Watershed has been subject to serious flooding in the past. In response, the Upper Thames River Conservation Authority (UTRCA) has undertaken a major program of flood control through the construction of large water management structures, namely Fanshawe, Wildwood and Pittock Dams. Channels, floodwalls and dykes have also been constructed and are maintained in Mitchell, Stratford, Ingersoll, St. Marys and London.

Although these structures play a significant role in flood control on the Thames, they do not guarantee against the possibility of future flooding. Therefore, a system of flood warning is necessary in the watershed, a system developed through the UTRCA.

The aim of this system is to provide routine flood messages to specific agencies and officials in the watershed and, in times of flood danger, to provide necessary warning to officials and citizens whose lives and properties may be in danger. Figure 1 outlines the flood communications process.

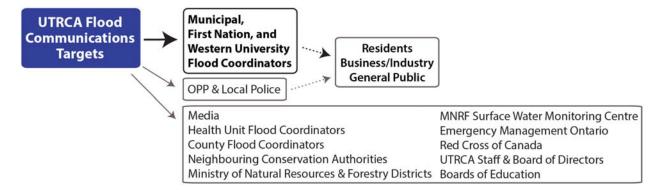
All officials or public servants who are likely to play a role in the system must be aware of their responsibilities and must be prepared to ensure the system's success. In addition, citizens who have been duly warned must exercise the responsibility necessary to safeguard their wellbeing and belongings.

The Government of Ontario has, by Order-In Council, designated the Ministry of Natural Resources & Forestry as the provincial agency responsible for flood emergencies. Within the Upper Thames River watershed this role is delegated to the UTRCA, which is responsible for alerting municipal representatives, local police, Ontario Provincial Police, media, etc.

The Conservation Authority is not responsible for notifying individual citizens of the watershed. That responsibility lies with the appointed municipal Flood Coordinator. It is that person's responsibility to ensure the continuity of the notification system. Each municipality is responsible for their own fan-out system.

The UTRCA coordinates flood contingency planning and operation services with the neighbouring Ausable Bayfield (ABCA) and Maitland Valley (MVCA) Conservation Authorities. Accordingly, the Municipalities of South Huron and Lucan-Biddulph receive forecasting services from the Ausable Bayfield Conservation Authority. The UTRCA provides forecasting services for the portion of the Municipality of Middlesex Centre in the ABCA's watershed, on behalf of that Conservation Authority.

**Figure 1. Flood Communications Process** 



## 2.0 Floods & Flood Monitoring in the Upper Thames River Watershed

Historically, the major floods in the upper Thames watershed have occurred from January to April; however, flooding is possible at any time of the year. Figure 2 shows the month of maximum discharge (also called the annual flood) of the Thames River at Byron (west London), every year from 1914-2018. It should be noted that significant floods have occurred in all months, but they were not necessarily the largest for that particular year. It is also important to understand that on smaller watercourses, intense summer rainfall can result in significant flooding but not result in significant flows at the gauge used for this analysis.

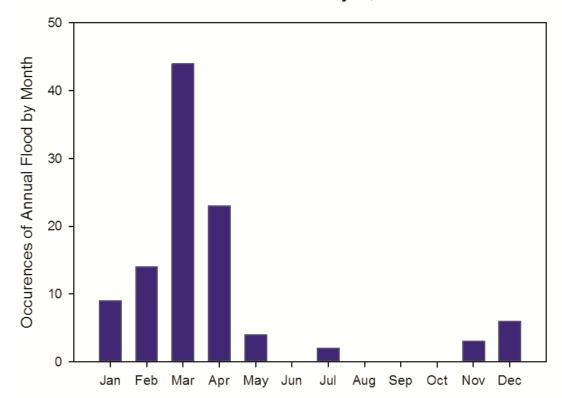


Figure 2. Month of Annual Flood of the Thames River at Byron, 1914-2018

Spring floods (March/April) are usually the result of major rainfall when the ground is saturated/ frozen and/ or snow melt. In all cases, the watershed is usually saturated and any snow pack tends to be well ripened (i.e., very moist and quick to melt). Runoff is generally rapid, with major peaks occurring within a day of extreme temperatures or heavy rainfall. The highest flows are generally associated with major rainfall. Floods due mainly to melting snow tend to produce lower, more prolonged flows.

Floods at other times of the year (May to December) are the result of heavy rainfall and problems may be compounded by a lack of storage space in the flood control reservoirs. In addition, intense summer thunderstorms may produce localized flooding problems on smaller watercourses and areas drained by urban storm sewers.

These different runoff patterns require different responses by the UTRCA and the respective municipalities. Each municipal Flood Coordinator should be aware of the different conditions that may arise within the watercourses of his/her jurisdiction.

The UTRCA operates a number of recording stream gauges, snow measuring courses, precipitation gauges and weather stations (Figure 3). The snow measuring courses and weather stations provide detailed information on the flood potential in the watershed. The additional information provided by the stream gauge recorders allows UTRCA personnel to monitor the progress of runoff events throughout the watershed. These data are most useful in predicting the magnitude and time of arrival of peak flows and water levels at downstream locations.

Weather information and stream flow prediction models further enhance UTRCA efforts to improve flood responses by assisting with predictions of flood peaks as much as possible in advance.

The UTRCA's website (<u>www.thamesriver.on.ca</u>) is an excellent resource for flood coordinators. The following information is available on the site:

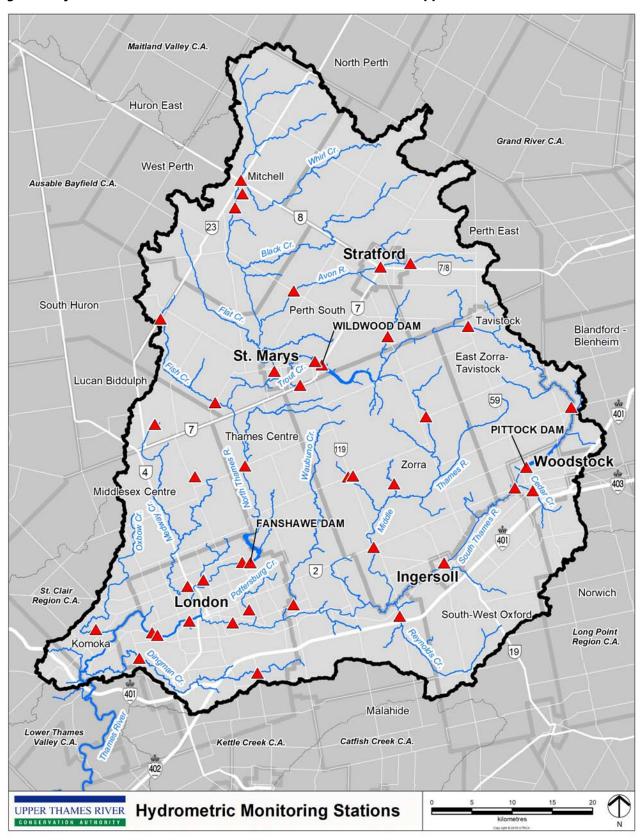
- Current flows, water levels and meteorological information
- Flood bulletins (if any)
- Media releases

The UTRCA has identified some locations that are prone to flooding (Table 1) and should be monitored by flood coordinators during flood events. Please note that this is by no means a comprehensive list. The UTRCA welcomes feedback from flood coordinators on this list and on additional flood prone areas.

**Table 1. Locations Prone to Flooding** 

MUNICIPALITY	LOCATION
OXFORD COUNTY	
City of Woodstock	Thames River at Highway 2
,	Cedar Creek at Southside Park
Thames Centre	Village of Putnam south of Highway 401
	Reynolds Creek - Golden Pond Trailer Park
East Zorra-Tavistock	Braemar Trailer Park
Zorra	Ponderosa Trailer Park
LONDON & MIDDLES	SEX COUNTY
City of London	North Thames River - Windermere and Adelaide Streets - Pumping station and London Hydro substation at west end of Killaly Road - Parking lot adjacent to McNay Drain in North Thames floodplain behind apartment - Parking rear of Richmond apartments (across from Bernard Avenue) - City pumping station in Elgin Hall (Western University) parking lot - Gibbons Park (Victoria Avenue) - Harris Park - Monitor City dyke system  Pottersburg Creek at Oxford Street (Veterans Memorial Parkway)  Waubuno Creek - Travelled Road, River Road  Thames River - Wellington and Front Streets - Coves trailer park - Monitor City dyke system
	Dingman Creek - various locations along Dingman Drive
Western University	Elgin Hall and Talbot parking lots Tennis Centre Westminster residence
Middlesex Centre	Former Our Lady of Lourdes Catholic School site River Road
PERTH COUNTY	
Perth South	Prospect Hill Campground
West Perth	Motherwell area
Mitchell	Intersection of St George and Adelaide (south end of Parmalat)
City of Stratford	Dolan Drive Avon Cemetery Stratford Golf and Country Club
Town of St. Marys	Thomas Street between Park and Queen Streets Parkview Drive St. Marys Golf & Country Club Monitor levels at flood wall

Figure 3. Hydrometric Stations and Flood Control Structures in the Upper Thames River Watershed



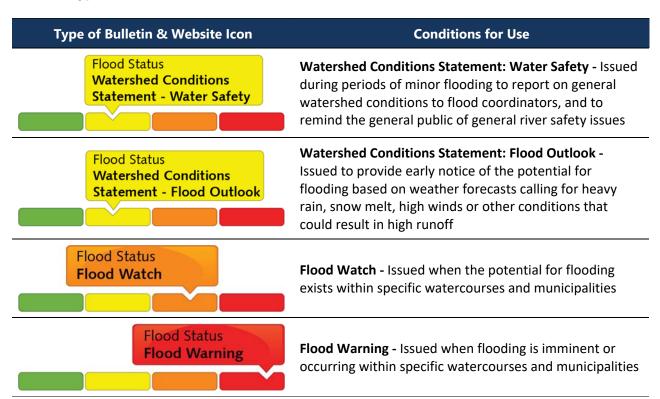
### 3.0 Flood Messages & Communications

### 3.1 Types of Flood Bulletins

The UTRCA may issue the following types of flood bulletins during a flood event (Table 2). The terminology used is consistent with Conservation Authorities across Ontario, and in line with that used by other agencies such as the Ontario Ministry of Natural Resources & Forestry, Environment & Climate Change Canada, and the Weather Network.

The icons used on the UTRCA website homepage during flood events are also shown in Table 2. These icons are consistent with icons used by most other Conservation Authorities.

**Table 2. Types of Flood Bulletins** 



**Special Bulletin** (*no icon*) - Issued for a specific situation. For example, the UTRCA issues a Special Bulletin to notify London Police Services when police may implement a Boating Ban for the Thames River within the City of London, under the Canada Shipping Act. *Note: A Special Bulletin may be issued at any time.* 

All flood bulletins include the following information:

- Year, Event Number, and Bulletin Number (sequentially by event, excluding Special Bulletins).
  - For example, 2019.05.02 identifies the second bulletin (Watershed Conditions Statement/ Flood Watch/ Flood Warning) issued during the fifth event of 2019.
  - Special Bulletins are numbered separately from other bulletins, and have "SP" in the bulletin identification. For example, 2019.05.SP2 identifies the second Special Bulletin issued during the fifth event of 2019.

- Date and time of issuance
- Date when the bulletin expires ("valid until ...")
- Identification of sender (CA and individual)
- Intended recipients
- Message summarizing relevant information, such as weather forecast (precipitation, temperature and timing) and, depending on the level of bulletin, describing potential flood magnitude and assessing flooding implications, including site-specific information if relevant
- Date and time of expected issuance of update, if any
- CA contact for additional information (including adjacent CAs when applicable)
- Request for confirmation of receipt, if required
- List of other intended recipients

The messages are described in detail below. Appendix 1 provides examples of an actual Watershed Conditions Statement, Flood Watch, Flood Warning and Special Bulletin. Table 3 (in 3.2 Flood Bulletin Communications) outlines the targets and methods of communication for the various levels of bulletins.

### 3.1.1 Watershed Conditions Statement – Water Safety / Flood Outlook

A Watershed Conditions Statement is a general notice of potential watershed conditions that could pose a risk to personal safety (e.g., high flows, unsafe ice, slippery banks). It reports on general watershed conditions and provides general public information messages encouraging safety awareness.

This bulletin is usually issued before overbank flow occurs (i.e., before watercourses flood outside of their banks), before spring breakup, or at any other time of year as conditions warrant, as a general reminder of the potential for high flows and unsafe conditions. A Watershed Conditions Statement may also be issued when a major storm is pending, when there is above normal snow cover in all or part of the watershed and snow melt is imminent, or when general watershed conditions suggest high runoff potential.

A Watershed Conditions Statement is delivered by email, and posted on the UTRCA website and Twitter. Confirmation of receipt by municipal flood coordinators is not usually required (as indicated in the Watershed Conditions Statement text).

#### 3.1.2 Flood Watch

A Flood Watch serves to notify municipal flood coordinators and other primary contacts that the potential for flooding exists. It is issued to specific affected municipalities, usually following the onset of overbank flow. A Flood Watch will describe watershed conditions and the potential flood magnitude, and assess flooding implications, including site-specific information, if relevant.

These messages do not require specific action but, having been alerted to the potential for flood conditions, municipal flood coordinators should initiate a check on their municipal flood or emergency plans and initiate monitoring of potential problem areas, and may choose to remain on a stand-by alert.

A Flood Watch is delivered by email, and posted on the UTRCA website and Twitter. If confirmation of receipt by municipal flood coordinators is required (as indicated in the Flood Watch text), UTRCA staff will follow up by phone if the recipient does not email or call to confirm.

### 3.1.3 Flood Warning

A Flood Warning is issued after a forecast has been made and will apply to specific flood damage centres where serious flooding appears inevitable. In addition to the standard content of a Flood Watch, a Flood Warning message will include specific information on the location, magnitude and timing of the anticipated flood peak.

Upon receipt of a Flood Warning for their area, municipal officials should issue warnings to households, businesses and industries that might be threatened by the flood. Necessary labour for flood combating services should also be alerted and mobilized by the municipality.

A Flood Warning is delivered by email, and posted on the UTRCA website and Twitter. **Confirmation of receipt by municipal flood coordinators is required. UTRCA staff will follow up by phone if the recipient does not email or call to confirm.** 

### 3.1.4 Special Bulletin – City of London Boating Ban

A Special Bulletin is issued to alert special interests under specific situations involving the river in which someone needs notification. These bulletins are targeted only toward the agencies, businesses, groups or individuals affected by the situation. A Special Bulletin may be issued at any time.

The Canada Shipping Act (2001) contains the following regulation:

Vessel Operation Restriction Regulations SOR/2008-120 - CANADA SHIPPING ACT, 2001, SCHEDULE 1 (Subsection 2(1)): WATERS ON WHICH ALL VESSELS ARE PROHIBITED, PART 2 Item 3 "That part of the Thames River that is within the City of London, Ontario, and its environs, between

- a) Fanshawe Dam on the north branch;
- b) the Hamilton Road bridge on the south branch; and
- c) downstream, beyond the junction of the north and south branches to the Delaware Bridge on Hwy 2

Note: Closed only during high water periods when the water level is at an elevation of 226.5 m G.D.C. or higher, measured at the Byron gauge"

http://laws-lois.justice.gc.ca/eng/regulations/sor-2008-120/FullText.html

The threshold water level (226.5 m G.D.C. or approximately 275 m<sup>3</sup>/s) described in the Act is typically exceeded at the Byron stream gauge during spring snowmelt runoff or after significant watershed-wide rainfall events. The UTRCA then issues a Special Bulletin to notify London Police Services, City of London Fire Department and specific City of London staff, at which time the police may implement a Boating Ban for the Thames River within the City of London. The UTRCA will issue another Special Bulletin when the water level recedes below the Boating Ban threshold.

### 3.2 Flood Bulletin Communications

Contact information for the UTRCA and other agencies/organizations is provided in Appendices 2-8.

The primary communications targets for the UTRCA flood message are municipal flood coordinators. Table 3 lists all the communications targets (i.e., who receives the UTRCA's information). Flood bulletins are also posted on the UTRCA website – <a href="https://www.thamesriver.on.ca">www.thamesriver.on.ca</a> and Twitter feeds (@UTRCAfloodalert, @UTRCAmarketing).

**Table 3. Flood Bulletin Communications** 

Tune of Bullatine					
Type of Bulletin:					
Watershed Conditions Statement (Flood Outlook/Water Safety)					
Flood Watch					
Flood Warning					
Primary Targets Emailed	Information Copies Emailed				
Municipal Flood Coordinators	County and Health Unit Flood Coordinators (App 4)				
(App 3)	Ministry of Natural Resources & Forestry (App 5)				
First Nations Flood Coordinators	Neighbouring Conservation Authorities (Ausable Bayfield, Catfish				
(App 8)	Creek, Grand River, Kettle Creek, Long Point Region, Lower Thames				
Western University Flood	Valley, Maitland Valley, St. Clair Region) (App 5)				
Coordinators (App 3)	City of London Police and Fire (App 6)				
	Boards of Education (for information only) (App 7)				
	UTRCA Chair & Vice Chair				
	Internal UTRCA flood group email				
	Fax only (email not available/monitored):				
	OPP - Middlesex (London, Strathroy, Glencoe, Lucan), Oxford				
	(Tillsonburg, Ingersoll), Perth (Sebringville, Mitchell)				
	Stratford Police				
	Woodstock Police				
	Twitter (@UTRCAmarketing & @UTRCAfloodalert):				
	Any flood coordinators and media				
Type of Bulletin:					
Special Bulletin					
Primary Targets Emailed	Information Copies Emailed				
London Police Services,	Relevant City of London flood coordinators (App 6-Boating Ban)				
attention: Duty Staff Sergeant	Internal UTRCA flood group email				
• City of London Fire Department,	0.00F 0.00F				
attention: Communications					
Office					
(App 6-Boating Ban)					
(App 6-Boating Ban)					

### 4.0 Flood Responsibilities

### 4.1 Conservation Authority

- 1. Maintain a Flood Response Centre.
- 2. Maintain a Flood Response Contingency Plan (Planning for Flood Emergencies, MNR 1990).
- 3. Encourage contingency planning by flood prone municipalities and provide technical advice to assist in reducing loss of life, property damage and social disruption due to flood events.
- 4. Maintain a system of flood monitoring throughout the watershed.
- 5. Maintain 24 hour watch of potential damaging floods.
- 6. Issue flood messages to appropriate municipal and other Flood Coordinators.
- 7. Issue flood related information to other agencies and media as warranted.
- 8. Liaise with municipal Flood Coordinators and others during flood conditions.
- 9. Maintain a flood event log.

*Emergency Flood Response:* Liaise with local Flood Coordinators to advise of flood situation prior to or following flood emergency declarations.

### 4.2 Municipalities

- 1. Maintain a Municipal Flood Contingency Plan (Planning for Flood Emergencies, MNR 1990).
- 2. Outline responsibilities of all municipal services required during a flood, the method by which they function, and all other arrangements deemed necessary in a flood emergency.
- 3. Appoint a Municipal Flood Coordinator.
- 4. Organize an Emergency Operations Control Group.
- 5. Upon receipt of flood message, inform agencies, citizens, businesses and general public affected by that message.
- 6. Coordinate flood watch and Municipal Flood Contingency Plan.
- 7. Assess flood situation and liaise with UTRCA Flood Response Coordinator as required.

### Emergency Flood Response:

- Assess flood situation and, if warranted, recommend declaration of a flood emergency to the municipal Emergency Operations Control Group.
- Declare emergency through head-of-council.
- Notify EMO of emergency declaration.

### 4.3 Ministry of Natural Resources & Forestry

- 1. Issue Provincial watershed conditions and flood messages.
- 2. Liaise with Conservation Authority providing input as required.

Emergency Flood Response: Liaise with Conservation Authority upon flood emergency declarations.

### 4.4 OPP and Local Police

- 1. When requested assist Municipal Flood Coordinators in warning businesses and citizens.
- 2. Provide transmission link through OPP joint frequency to local police forces in the event of severed telephone communications.

Emergency Flood Response: Assist municipality in notifying EMO of emergency declarations.

### 4.5 Media

1. Local radio and television stations may be asked to broadcast flood messages subject to their station policies.

Emergency Flood Response: Assist municipality, agencies and public in disseminating emergency response information.

## 4.6 Emergency Management Ontario (Ministry of Community Safety & Correctional Services)

Emergency Management Ontario (EMO), as the overall provincial emergency management organization, is responsible for the promotion, development, implementation and maintenance of effective emergency management programs throughout Ontario, and for the coordination of these programs with the federal government. EMO provides advice and assistance for all on-going emergency management activities, maintains the Provincial Emergency Operations Centre (PEOC) on a 24/7 basis, and maintains the provincial emergency response plans. EMO may coordinate the overall provincial response under the Provincial Emergency Response Plan or the Provincial Nuclear Emergency Response Plan.

During an emergency event and depending on its nature, EMO may deploy the Provincial Emergency Response Team to provide field advice and assistance. Initially this may only consist of one Emergency Management Officer, but the team may be augmented to include other provincial staff.

To contact Emergency Management Ontario for emergency advice or assistance, call:

**Provincial Emergency Operations Centre Duty Officer:** 

• Phone: 416-314-0472 or 1-866-314-0472

• Fax: 416-314-6220

Should you have difficulty in contacting the PEOC, then call the OPP General HQs at (705) 329-6950 and ask for assistance in contacting EMO.

Certain provincial ministries develop, implement and maintain emergency management programs for specific hazards and risks and/or emergency services that are complementary to the programs implemented by communities. During emergency response, a provincial ministry may implement its emergency response plan in support of a community.

### **Appendix 1. Sample Flood Messages**

Watershed Conditions Statement – Water Safety
Watershed Conditions Statement – Flood Outlook
Flood Watch
Flood Warning
Special Bulletin (City of London Boating Ban)

Tel.: 519-451-2800 Email: floodalert@thamesriver.on.ca Web: www.thamesriver.on.ca Twitter: @UTRCAmarketing

@UTRCAfloodalert

#### **WATERSHED CONDITIONS STATEMENT – WATER SAFETY**

Bulletin Number: 2018.01.03

Issued at: January 14, 2018 at 13:30

Valid until: January 17, 2018

Issued by: Mark Helsten, Senior Water Resources Engineer

To: Municipal Flood Coordinators (via email)

Message: River flows remain high

The Upper Thames River watershed received 15 – 30 mm of rain on Thursday and Friday, which, combined with warm temperatures, created spring-like runoff conditions throughout the watershed. Peaks occurred late Friday, and into the early hours of Saturday morning, and cold temperatures stopped any further snow melt. Water levels are receding, but continue to be elevated, and will remain so early into the upcoming week.

Residents are reminded to use extreme caution near all watercourses, and keep children and pets away. Ice is unstable and thin, streambanks are slippery and the water is very cold. Standing water also may be hazardous.

The UTRCA's flood control reservoirs at Fanshawe, Wildwood and Pittock Conservation Areas are being operated to reduce downstream water levels. UTRCA officials are monitoring the situation, and will report on any changing conditions if necessary.

Update: As needed.

Contact: Mark Helsten, Senior Water Resources Engineer at XXX-XXXX

Confirmation of receipt of this message: Confirmation not required

Information copies provided to:

Email: County and Health Unit Flood Coordinators; Neighbouring Conservation Authorities; Ministry of Natural Resources;

City of London Police; City of London Fire; UTRCA Chair and Vice-Chair; UTRCA Internal Flood Contacts; Boards of

**Education**; First Nations

Fax: Stratford Police, Woodstock Police, OPP (Middlesex, Oxford and Perth Counties)

**END OF BULLETIN** 

### Thames River water level information -- <u>www.thamesriver.on.ca</u> Types of Flood Bulletins

Watershed Conditions Statement - Water Safety -- Issued during periods of minor flooding to report on general watershed conditions to flood coordinators, and to remind the general public of general river safety issues

Watershed Conditions Statement - Flood Outlook -- Issued to provide early notice of the potential for flooding based on weather forecasts calling for heavy rain, snow melt, high winds or other conditions that could result in high runoff

Flood Watch -- issued when the potential for flooding exists within specific watercourses and municipalities Flood Warning -- issued when flooding is imminent or occurring within specific watercourses and municipalities

Tel.: 519-451-2800 Email: floodalert@thamesriver.on.ca Web: www.thamesriver.on.ca Twitter: @UTRCAmarketing

@UTRCAfloodalert

#### WATERSHED CONDITIONS STATEMENT - FLOOD OUTLOOK

Bulletin Number: 2018.05.01 Issued at: April 11, 2018 at 2:00 pm

Valid until: April 13, 2018

Issued by: Mark Shifflett, Senior Water Resources Engineer

To: Municipal Flood Coordinators (via email)

Message: Wet weekend forecast

Weather forecasts are predicting several wet days ahead. Total forecasted precipitation for today and tomorrow (Wednesday and Thursday) range from 10 to 25mm. A larger system is forecast for the weekend, with weekend precipitation totals (Friday, Saturday, and Sunday) ranging from 50 to 85mm. There is the potential for thunderstorms to develop on the weekend, which would locally increase rainfall accumulations.

With the recent past rainfall events, watershed ground conditions remain saturated; and substantial runoff can be expected from any rainfall received. Should the higher rain amounts materialize, **significant flooding is possible**. At this time, water levels are not expected to be as high as the recent event in February of this year. Peak water levels would be expected to occur in upstream areas beginning on Saturday, and continuing through downstream areas on Sunday and Monday. Water levels would be expected to remain elevated into next week.

The UTRCA's flood control reservoirs at Fanshawe, Wildwood and Pittock Conservation Areas are at seasonal levels and will be operated to reduce downstream flooding. UTRCA officials are monitoring the situation, and will report on any changing conditions. It is expected that this message will be updated on Friday.

Residents are reminded to use extreme caution near all watercourses, and to keep children and pets away. Streambanks are slippery and the water is very cold.

*Update:* As needed.

Contact: Mark Shifflett, Senior Water Resources Engineer at XXX-XXX-XXXX.

Confirmation of receipt of this message: Confirmation not required

Information copies provided to:

**Email:** County and Health Unit Flood Coordinators; Neighbouring Conservation Authorities; Ministry of Natural Resources; City of London Police; City of London Fire; UTRCA Chair and Vice-Chair; UTRCA Internal Flood Contacts; Boards of

Education; First Nations

Fax: Stratford Police, Woodstock Police, OPP (Middlesex, Oxford and Perth Counties)

**END OF BULLETIN** 

### Thames River water level information -- <u>www.thamesriver.on.ca</u> Types of Flood Bulletins

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Watershed Conditions Statement - Flood Outlook -- Issued to provide early notice of the potential for flooding based on weather forecasts calling for heavy rain, snow melt, high winds or other conditions that could result in high runoff Flood Watch -- issued when the potential for flooding exists within specific watercourses and municipalities

Flood Warning -- issued when flooding is imminent or occurring within specific watercourses and municipalities

Tel: 519-451-2800 Email: floodalert@thamesriver.on.ca Web: www.thamesriver.on.ca Twitter: @UTRCAmarketing @UTRCAfloodalert

#### **FLOOD WATCH**

Bulletin Number: 2018.03.01

Issued at: February 16, 2018 at 12:30 pm

Valid until: February 21, 2018

Issued by: Mark Helsten, Senior Water Resources Engineer

To: Municipal Flood Coordinators (via email)

Message: Warm Temperatures and Rain Create Potential for Flooding

Over Family Day weekend, and into early next week, a weather system will enter the province, bringing with it warm temperatures and rain, starting on Monday. Temperatures are forecast above zero, on Monday, heading into double digits Tuesday, and are forecast to remain above freezing overnight. These warm temperatures combined with 30-60 mm of forecast rain between Monday and Wednesday will melt most of the snowpack in the watershed, and elevate water levels above those seen in several years in the UTRCA watershed, should the forecast materialize. Snow surveys conducted yesterday report an average of about 40 mm of additional water contained in the snowpack across the watershed. Because of the amount of water already on the landscape in the form of fairly ripe snow, the lack of refreezing temperatures forecast overnight, and three days of rain, this has the potential to become a significant flood event.

Water levels will remain stable over the weekend, but will start to rise rapidly on Monday. Peak levels are expected Tuesday and into Wednesday, and watercourses will remain elevated over the week.

Municipal staff should be prepared to monitor local drainage problem areas where snow and ice may have covered catch basins. Smaller rural watercourses may have been drifted in by snow which, during a runoff event, can block flows and back up water onto adjacent lands, resulting in localized flooding problems.

Residents are reminded to use extreme caution near all watercourses, and to keep children and pets away. Ice is unstable and thin, streambanks are slippery and the water is very cold. Do not go on frozen flood control reservoirs.

The UTRCA's flood control reservoirs at Fanshawe, Wildwood and Pittock Conservation Areas are at seasonal levels and will be operated to reduce downstream flooding. UTRCA officials are monitoring the situation, and will report on any changing conditions.

Update: As needed.

Contact: Mark Helsten, Senior Water Resources Engineer at XXX-XXX-XXXX. Confirmation of receipt of this message: Confirmation not required

Information copies provided to:

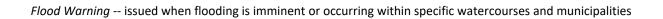
**Email:** County and Health Unit Flood Coordinators; Neighbouring Conservation Authorities; Ministry of Natural Resources; City of London Police; City of London Fire; UTRCA Chair and Vice-Chair; UTRCA Internal Flood Contacts; Boards of Education; First Nations **Fax:** Stratford Police, Woodstock Police, OPP (Middlesex, Oxford and Perth Counties)

**END OF BULLETIN** 

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Watershed Conditions Statement - Flood Outlook -- Issued to provide early notice of the potential for flooding based on weather forecasts calling for heavy rain, snow melt, high winds or other conditions that could result in high runoff Flood Watch -- issued when the potential for flooding exists within specific watercourses and municipalities





Tel: 519-451-2800 Email: floodalert@thamesriver.on.ca Web: www.thamesriver.on.ca Twitter: @UTRCAmarketing @UTRCAfloodalert

#### **FLOOD WARNING**

Bulletin Number: 2018.03.03

Issued at: February 20, 2018 at 5:00 pm Valid until: February 21, 2018 at 5:00 pm

Issued by: Mark Helsten, Senior Water Resources Engineer

To: Municipal Flood Coordinators (via email)

Message: Flood Warning Issued - Confirmation of Receipt Required

The Upper Thames River watershed has received 25-40 mm of precipitation since yesterday afternoon, with an additional 15-25 mm forecast between now and Wednesday morning. This rain and an average of 40 mm of snow melt are making their way through the Thames River system.

Some of the most upstream areas are showing indication of peaking late Tuesday afternoon/early evening. At this time, peak levels can be most likely expected to occur in upstream areas such as Mitchell, Stratford, St. Marys, Woodstock, and Ingersoll overnight, and will arrive in London tomorrow morning. Peaks will generally progress from upstream to downstream.

**Please note** that the effect of the forecast rain is uncertain, and may raise levels again early tomorrow, especially in upstream areas as noted above.

Flood coordinators should be monitoring the following locations, which are prone to flooding:

- City of Woodstock: Thames River at Highway 2; Cedar Creek at Southside Park
- Thames Centre: Village of Putnam south of Highway 401; Reynolds Creek Golden Pond Trailer Park
- East Zorra -Tavistock: Braemar Trailer Park
- Zorra: Ponderosa Trailer Park
- City of London:
  - o Waubuno Creek Travelled Road, River Road
  - North Thames River Windermere and Adelaide Streets; Pumping station and London Hydro substation at west end of Killaly Road
  - o Parking lot adjacent to McNay Drain in North Thames floodplain behind apartment
  - Parking rear of Richmond apartments (across from Bernard Ave)
  - o City pumping station in Elgin Hall (Western University) parking lot
  - o Gibbons Park (Victoria Avenue); Harris Park
  - Monitor City dyke system
  - o Pottersburg Creek at Oxford Street (Veterans Memorial Parkway)
  - o Thames River Wellington and Front Streets
  - Coves trailer park
  - o Dingman Creek various locations along Dingman Drive
- Western University: Elgin Hall and Talbot parking lots; Tennis Centre; Westminster residence
- Middlesex Centre: Former Our Lady of Lourdes Catholic School site; River Road
- Perth South: Prospect Hill Campground
- West Perth: Motherwell area
- Mitchell: Intersection of St George and Adelaide (south end of Parmalat)
- City of Stratford: Dolan Drive; Avon Cemetery; Stratford Golf and Country Club
- Town of St. Marys: Thomas Street between Park and Queen Streets; Parkview Drive; St. Marys Golf & Country Club; monitor levels at flood wall

Flood levels will be higher than those experienced in 2008 and 2009, in many areas.

Reservoirs at Fanshawe (London), Wildwood (St. Marys) and Pittock (Woodstock) are being operated to reduce the downstream effects of flooding. Conditions are being monitored and updates will be issued as the event progresses. **Municipal Flood Coordinators are encouraged to review their flood contingency plans.** 

Residents are reminded to use extreme caution near all watercourses, and to keep children and pets away. Stream banks are very slippery and water will be fast-moving, cold and dangerous and any ice cover is unstable and thin. People are encouraged to keep their children and pets away from watercourses. Do not go on frozen flood control reservoirs.

Update: As needed.

Contact: Mark Helsten, Senior Water Resources Engineer at XXX-XXX-XXXX.

Confirmation of receipt of this message: Confirmation required

*Information copies provided to:* 

**Email:** County and Health Unit Flood Coordinators; Neighbouring Conservation Authorities; Ministry of Natural Resources; City of London Police; City of London Fire; UTRCA Chair and Vice-Chair; UTRCA Internal Flood Contacts; Boards of Education; First Nations

Fax: Stratford Police, Woodstock Police, OPP (Middlesex, Oxford and Perth Counties)

#### **END OF BULLETIN**

### Thames River water level information -- <u>www.thamesriver.on.ca</u> Types of Flood Bulletins

Watershed Conditions Statement - Water Safety -- Issued during periods of minor flooding to report on general watershed conditions to flood coordinators, and to remind the general public of general river safety issues

Watershed Conditions Statement - Flood Outlook -- Issued to provide early notice of the potential for flooding based on weather forecasts calling for heavy rain, snow melt, high winds or other conditions that could result in high runoff Flood Watch -- issued when the potential for flooding exists within specific watercourses and municipalities

Flood Warning -- issued when flooding is imminent or occurring within specific watercourses and municipalities

Tel.: 519-451-2800 Email: floodalert@thamesriver.on.ca Web: www.thamesriver.on.ca Twitter: @UTRCAmarketing

@UTRCAfloodalert

#### **SPECIAL BULLETIN**

Bulletin Number: 2018.03.SP1

Issued at: February 20, 2018 at 11:00 am

Issued by: Mark Helsten, Senior Water Resources Engineer

To (via email):

London Police Services, attention: Duty Staff Sergeant

City of London Fire Department, attention: Communications Office

Message: City of London Boating Ban

The Thames River within the City of London has reached boating ban levels and is expected to remain high until the end of the week.

The City of London Police may implement the ban and inform the media.

*Update*: When river levels recede below boating ban threshold levels, email notification will be sent to Police Services and the Fire Department.

Contact: Mark Helsten, Senior Water Resources Engineer, at XXX-XXX-XXXX. Confirmation of receipt of this message: Confirmation is not required

Information copies provided (via email) to:

City of London, XXXX City of London, XXXX

**END OF BULLETIN** 

Thames River water level information -- www.thamesriver.on.ca

#### Types of Flood Bulletins

Watershed Conditions Statement - Water Safety -- Issued during periods of minor flooding to report on general watershed conditions to flood coordinators, and to remind the general public of general river safety issues

Watershed Conditions Statement - Flood Outlook -- Issued to provide early notice of the potential for flooding based on weather forecasts calling for heavy rain, snow melt, high winds or other conditions that could result in high runoff Flood Watch -- issued when the potential for flooding exists within specific watercourses and municipalities

Flood Warning -- issued when flooding is imminent or occurring within specific watercourses and municipalities

### Appendix 2 – External UTRCA CONTACTS

### **UTRCA Flood Forecasting & Warning Organization**

Office Phone: 519-451-2800 Email: <u>LASTNameFIRSTInitial@thamesriver.on.ca</u> (for non-critical communication only)

Web site: www.thamesriver.on.ca (non-critical flood related information, river levels)

<del>``</del>	nood related information, river levels)	
Office Phone	Email	Cell Phone
519-451-2800 Ext. 241	helstenm@thamesriver.on.ca	519-719-3585
519-451-2800 Ext. 239	shifflettm@thamesriver.on.ca	519-719-4934
519-451-2800 Ext. 244	charlesd@thamesriver.on.ca	519-719-4192
519-951-7225 Ext. 373	rowbothami@thamesriver.on.ca	519-521-7452
519-951-7225 Ext. 356	cantelonj@thamesriver.on.ca	519-808-0082
519-451-2800 Ext. 238	taskerc@thamesriver.on.ca	519-777-9956
519-451-2800 Ext. 253	annettt@thamesriver.on.ca	519-709-7550
519-451-2800 Ext. 251	glasmanb@thamesriver.on.ca	519-777-2705
519-451-2800 Ext. 226	hollingswortht@thamesriver.on.ca floodalert@ thamesriver.on.ca	519-777-2714
519-451-2800 Ext. 275	sauders@thamesriver.on.ca floodalert@ thamesriver.on.ca	519-777-2704
519-451-2800 Ext. 276	heagye@thamesriver.on.ca floodalert@thamesriver.on.ca	519-709-3872
519-451-2800 Ext. 265	howleyj@thamesriver.on.ca	226-456-5100
519-451-2800 Ext. 227	shivasa@thamesriver.on.ca	519-719-4941
519-451-2800 Ext. 259	wilcoxi@thamesriver.on.ca	519-777-2712
	519-451-2800 Ext. 241  519-451-2800 Ext. 239  519-451-2800 Ext. 373  519-951-7225 Ext. 356  519-451-2800 Ext. 238  519-451-2800 Ext. 251  519-451-2800 Ext. 226  519-451-2800 Ext. 275  519-451-2800 Ext. 275  519-451-2800 Ext. 275	519-451-2800 Ext. 241helstenm@thamesriver.on.ca519-451-2800 Ext. 239shifflettm@thamesriver.on.ca519-451-2800 Ext. 244charlesd@thamesriver.on.ca519-951-7225 Ext. 373rowbothami@thamesriver.on.ca519-951-7225 Ext. 356cantelonj@thamesriver.on.ca519-451-2800 Ext. 238taskerc@thamesriver.on.ca519-451-2800 Ext. 253annettt@thamesriver.on.ca519-451-2800 Ext. 251glasmanb@thamesriver.on.ca519-451-2800 Ext. 226hollingswortht@thamesriver.on.ca519-451-2800 Ext. 275sauders@thamesriver.on.ca519-451-2800 Ext. 276heagye@thamesriver.on.ca519-451-2800 Ext. 265howleyj@thamesriver.on.ca519-451-2800 Ext. 265shivasa@thamesriver.on.ca519-451-2800 Ext. 227shivasa@thamesriver.on.ca

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### Appendix 2 – External UTRCA CONTACTS

FANSHAWE CONSERVATION AREA AND FLOOD CONTROL DAM					
Name / Position	Office Phone Extension	Email Cell Phone			
Steven Musclow Superintendent	519-951-6181 Ext. 366	musclows@thamesriver.on.ca 519-521-73			
Damian Schofield Assistant Superintendent	519-951-6181 Ext. 360	schofieldd@thamesriver.on.ca	519-521-7469		
Ben Dafoe Assistant Superintendent	519-951-6181 Ext. 364	dafoeb@thamesriver.on.ca 226-22			
Jennifer Howley Manager, Conservation Areas	519-451-2800 Ext. 265	howleyj@thamesriver.on.ca	226-456-5100		

PITTOCK CONSERVATION AREA AND FLOOD CONTROL DAM						
Name / Position Office Phone Extension Email Cell Phone						
Justin Skrypnyk Superintendent	519-539-5088 Ext. 6421	skrypnykj@thamesriver.on.ca	519-521-2816			
Sean Howley Assistant Superintendent	519-539-5088 Ext. 6422	howleys@thamesriver.on.ca	519-521-7428			
Jennifer Howley Manager, Conservation Areas	519.451.2800 Ext. 265	howleyj@thamesriver.on.ca	226-456-5100			

WILDWOOD CONSERVATION AREA AND FLOOD CONTROL DAM					
Name / Position	Office Phone Extension	Email Cell Phon			
Paul Switzer Superintendent	519-284-2292 Ext. 431	switzerp@thamesriver.on.ca 519-521-			
Dave Griffin Assistant Superintendent	519-284-2292 Ext. 424	Griffind@thamesriver.on.ca	519-640-9257		
Ryan Mullin Assistant Superintendent	519-284-2292 Ext. 428	mullinr@thamesriver.on.ca	519-521-7437		
Jennifer Howley Manager, Conservation Areas	519-451-2800 Ext. 265	howleyj@thamesriver.on.ca	226-456-5100		

**NOTE:** In the event that someone wishes to contact the UTRCA during a flood event, the switchboard may be operated 24 hours/day at (519) 451-2800. If a call is placed and the switchboard does not respond, the UTRCA maintains a flood emergency voicemail (519-451-2800 ext. 240) connected directly to the UTRCA Technical Support Officer. Discretion should be used when using this line and messages must be short and concise. During flood events this person is extremely busy and only calls of utmost importance should be directed to this person.

(Updated December 2019) Appendix 2 - 2

Flood Coordinator, Position/Alternate Positon	Business Telephone	Fax#	Work E-mail
BLANDFORD-BLENHEIM (TOWNSHIP)			
Jim Borton Director of Public Works	1-519-463-5347 Ext. 226	1-519-463-59881	<u>iborton@blandfordblenheim.ca</u>
Ben Minutillo Road Supervisor	1-519-463-5389	1-519-463-59881	bminutillo@blandfordblenheim.ca
Michelle Van Wyk Protective Services Administration	1-519-463-5347 Ext. 232	1-519-463-59881	mvanwyk@blandfordblenheim.ca
EAST ZORRA-TAVISTOCK			
Scott Alexander Fire Chief	519-462-2697 Ext. 229	519-462-2961	salexander@ezt.ca
Tom Lightfoot Roads/Public Works Manager	519-462-2697 Ext. 230	519-462-2961	tlightfoot@ezt.ca
INGERSOLL (TOWN)			
Rich Flemming, Foreman	519-485-2931	519-485-6848	rfleming@ingersoll.ca
John Holmes, Fire Chief	519-485-6554	519-485-6848	jholmes@ingersoll.ca
Ramesh Ummat Town Engineer	519-485-0120 Ext. 2236	519-485-6572	rummat@ingersoll.ca
Doug Wituik Public Works Director	519-485-2931	519-485-2933	dwituik@ingersoll.ca
LONDON (CITY)			
AJ Tyler Centre	519-661-4965	519-661-2440	dispatch@london.ca
Shawna Chambers, Division Manager Stormwater Engineering	519-661-2489 Ext. 7318	519-661-2355	schambers@london.ca
Patrick Donnelly Urban Watershed Program Manager	519-661-2489 Ext. 0418	519-661-2354	pdonnell@london.ca
Karl Grabowski Transportation, Planning & Design	519-661-2489 Ext. 5071	519-661-4734	kgrabowski@london.ca
Henry Klausnitzer Manager II, Emergency Management	519-661-2489 Ext. 7502	519-661-5934	hklausni@london.ca
Monica McVicar Project Manager, Environmental & Engineering Services	519-661-2489 Ext. 4589	519-661-2355	mmcvicar@london.ca
Dave O'Brien Corporate Security and Emergency Management	519-661-2489 Ext. 2459	519-661-5934	dobrien@london.ca emergency@london.ca (High priority messages)
Rick Pedlow Division Manager, Sewer Operations	519-661-2489 Ext. 4623	519-661-2352	rpedlow@london.ca

Flood Coordinator, Position/Alternate Positon	Business Telephone	Fax #	Work E-mail		
MIDDLESEX CENTRE (MUNICIPALITY)					
Dan Anderson Drainage Superintendent	666-0190 Ext. 229	519-666-0271	anderson@middlesexcentre.on.ca		
Rob Cascaden Director of Public Works and Engineering	519-666-0190 Ext. 245	519-666-0271	cascaden@middlesexcentre.on.ca		
Michael Di Lullo CAO	519-666-0190 Ext. 224	519-666-0271	Dilullo@middlesexcentre.on.ca		
Arnie Marsman Director of Planning Development Services/ Chief Building Official	519-666-0190 Ext. 260	519-666-0271	marsmana@middlesexcentre.on.ca		
NORWICH (TOWNSHIP)					
Paul Groeneveld Director Fire & Protective Services	519-468-2410 Ext. 236	519-468-2414	pgroeneveld@norwich.ca		
Kyle Kruger CAO/Clerk	519-468-2410 Ext. 227	519-468-2414	kkruger@norwich.ca		
Marty Lenaers Manger, Public Works	519-468-2410 Ext. 228	519-468-2414	mlenaers@norwich.ca		
PERTH EAST (TOWNSHIP)					
Theresa Campbell CAO	1-519-595-2800 Ext. 232	1-519-595-2801	tcampbell@pertheast.ca		
Wes Kuepfer Public Works & Parks	1-519-595-2800 Ext. 234 1-519-272-3489	1-519-595-2801	wkuepfer@pertheast.ca		
PERTH SOUTH (TOWNSHIP)					
Ken Bettles Director of Public Works	1-519-271-0619 Ext. 230 1-866-771-0619	1-519-271-0647	KBettles@perthsouth.ca		
Rebecca Clothier Treasurer/Deputy Clerk	1-519-271-0619 Ext. 227	1-519-271-0647	rclothier@perthsouth.ca		
Martin Feeney Chief Building Official	1-519-271-0619 Ext. 225	1-519-271-0647	mfeeney@perthsouth.ca		
Dave Wilton Operations Manager	1-519-271-0619 Ext. 226	1-519-271-0647	dwilton@perthsouth.ca		
ST. MARYS (TOWN)	ST. MARYS (TOWN)				
Richard Anderson Director Emergency Services /Fire Chief	519-284-2340 Ext. 201 519-284-1752	519-284-1751	randerson@townofstmarys.com		

Flood Coordinator, Position/Alternate Positon	Business Telephone	Fax #	Work E-mail			
MUNICIPALITY OF SOUTH HURON	MUNICIPALITY OF SOUTH HURON					
Dan Best CAO	519-235-0310 Ext. 228 1-877-204-0747	519-235-3304	cao@southhuron.ca			
George Finch Mayor	519-235-0310 1-877-204-0747	519-235-2099	gfinch@southhuron.ca			
Jeremy Becker Emergency Services Manager/Fire Chief	519-235 1981	519-235-3705	firechief@southhuron.ca			
SOUTH-WEST OXFORD (TOWNSHIP)						
Adam Prouse Works Superintendent	519-877-2702 519-485-0477 Ext. 7060	519-877-0495	aprouse@swox.org			
STRATFORD (CITY)						
Neill Anderson, Deputy Fire Chief	1-519- 271-3212	1-519- 271-9511	nanderson@stratford.ca			
Ed Dujlovic, Director of Infrastructure & Development Services	1-519-271-0250 Ext. 224	1-519-271-1427	edujlovic@stratford.ca			
Chris Gaylor, Director of Training Stratford Fire Department	1-519- 271-3212 Ext. 231	1-519- 271-9511	cgaylor@stratford.ca			
Rod MacDonald, Fire Inspector Stratford Fire Department	1-519-271-3212	1-519-273-1305	rmacdonald@stratford.ca			
Adam Ryan Manager of Public Works	1-519-271-0250 Ext. 255	1-519-273-2720	aryan@stratford.ca			
John Paradis, Fire Chief			Jparadis@stratford.ca			
Jeremy Witzel Supervisor of Public Works	1-519-271-0250 Ext. 254	1-519-273-2720	jwitzel@stratford.ca			
STRATHROY-CARADOC (MUNICIPALITY	)					
George Elliott Director of Engineering & Public Works	519-245-1105 Ext. 270	519-245-6353	gelliott@strathroy-caradoc.ca			
Mark Campbell Chief of Police	519-245-1250 Ext. 201	519-245-6264	Chief@scps.on.ca			
Matthew Stephenson Director of Building Waste Services	519-245-1105 Ext. 246	519-245-6353	mstephenson@strathroy-caradoc.ca			
Paul Zuberbuhler Manager of Environmental Services	519-245-1105 Ext. 274	519-245-6353	pzuberbuhler@strathroy-caradoc.ca			

Flood Coordinator, Position/Alternate Positon	Business Telephone	Fax #	Work E-mail	
THAMES CENTRE (MUNICIPALITY)				
Jarrod Craven Superintendent of Environmental Services	519-268-7334 Ext. 238	519-268-3928	jcraven@thamescentre.on.ca	
Mike Henry CAO	519-268-7334 Ext. 226	519-268-3928	mhenry@thamescentre.on.ca	
Carlos Reyes Director of Environmental Services	519-268-7334 Ext. 245	519-268-3928	creyes@thamescentre.on.ca	
Mauro Castrilli Building Inspector	519-268-7334 Ext. 240		mcastrilli@thamescentre.on.ca	
WESTERN UNIVERSITY				
Inspector Aubin Campus Community Police Service	519-661-2111 Ext. 89352		jaubin4@uwo.ca	
Michael Lunau Manager, Landscape Services	519-661-2111 Ext. 88717	519-661-2122	mlunau@uwo.ca	
Steve MacKay Acting AVP Facilities, Management	519-661-2111 Ext. 88764		smackay@uwo.ca	
Police Dispatch Centre on 24/7	519-661-3300	519-661-2122	police@uwo.ca	
Daniel Redmond Director, Campus Community Police Services	519-661-4010		dredmon@uwo.ca	
Kim Reynolds Investigative Staff Sergeant Western University Campus Police	661-3300 Ext. 85640		kreyno24@uwo.ca	
Mark Van Den Bossche Parking Manager	519-661-2111 Ext. 85662		mvand49@uwo.ca	
Bryan Wakefield Director of Operations	519-661-2111 82660		bwakefi2@uwo.ca	
WEST PERTH (MUNICIPALITY)				
Mike Kraemer Operations Manager	519-348-8429 Ext. 245	519-348-8935	mkraemer@westperth.com	
Glen Patterson Rural Foreman	1-519-347-2371	519-348-8935	gpatterson@westperth.com	
Ian McCoy Urban Road Foreman	519-348-8824	519-348-8806	imccoy@westperth.com	
Richard Wright Environmental Services Coordinator	519-348-8429 Ext. 236	519-348-8935	rwright@westperth.com	

### MUNICIPAL FLOOD COORDINATORS

Appendix 3 – External

Flood Coordinator, Position/Alternate Positon	Business Telephone	Fax #	Work E-mail				
WOODSTOCK (CITY)	WOODSTOCK (CITY)						
Brian Connors Director, Parks & Recreation			bconnors@cityofwoodstock.ca				
Taylor Crinklaw Director of Public Works	519-539-2382 Ext. 3140	519-537-6984	tcrinklaw@cityofwoodstock.ca				
Harold de Haan City Engineer	519-539-2382 Ext. 3112	519-421-3250	hdehaan@cityofwoodstock.ca				
Chris Kern Park Supervisor	519-5392383 Ext. 4200	519-539-7695	ckern@cityofwoodstock.ca				
Jeff Slager Acting Fire Chief	519-537-3412 Ext. 5201	519-537-0133	jslager@cityofwoodstock.ca				
ZORRA (TOWNSHIP)							
Steve Oliver Director of Public Works	519-485-2490 Ext. 227	519-485-2520	soliver@zorra.on.ca				
Mike Hughes Chief Building Official/ Drainage Superintendent and Flood Coordinator	519-485-2490 Ext. 224	519-485-2520	mhughes@zorra.on.ca				
Don MacLeod CAO	519-485-2490 Ext. 226	519-485-2520	dmacleod@zorra.on.ca				
John McFarlan Fire Chief/CEMC	519-485-2490 Ext. 240	519-485-2520	jmcfarlan@zorra.on.ca				

## Appendix 4 - External COUNTY AND HEALTH UNIT FLOOD COORDINATORS

Flood Coordinator Position/			- "		
Alternate Position	Business Telephone	Fax #	E-mail Address		
COUNTY OF MIDDLESEX					
John Elston Safety and Standards Officer, Fire Prevention Officer CFEI	519-471-2020	519-471-2335	jelston@middlesex.ca		
Martin Langdale General Superintendent, Roads	519-471-2020	519-471-2335	mlangdale@middlesex.ca		
Chris Traini County Engineer	519-434-7321 Ext. 2264	519-434-0638	ctraini@middlesex.ca		
Bettina Weber Community Emergency Mgmt Coordinator		519-434-0638	<u>bweber@middlesex.ca</u>		
MIDDLESEX-LONDON HEALTH UN	IT				
Judy Green Manager Emergency Preparedness	519 663-5317 Ext. 2371	519-663-9103	Judy.green@mlhu.on.ca		
Lynn Guy Exec. Assistant to the Medical Health Officer	519-663-5317 Ext. 2471	519-663-9581	Lynn.guy@mlhu.on.ca		
Stephen Turner Director Environmental Health	519-663-5317 Ext. 2422	519-663-9276	stephen.turner@mlhu.on.ca		
COUNTY OF OXFORD - 24 hour ma	anagement emergency	pager system thro	ugh Spectrum - 519-537-7961		
Ben Addley CEMC Alternate Emergency Management Program	519-539-9800 Ext. 3551	519-539-6206	baddley@oxfordcounty.ca		
Dave Colvin Emergency Management Coordinator	519-539-9800 Ext. 3522		dcolvin@oxfordcounty.ca		
Frank Gross, C.Tech Manager of Transportation & Waste Management	519-539-9800 1-800-755-0394 Ext 3120		fgross@oxfordcounty.ca		
COUNTY OF PERTH					
Todd McKone Community Emergency Management Coordinator	1-519-271-0531 Ext. 540	1-519-273-4216	tmckone@perthcounty.ca		
John McClelland Director of Public Works	1-519-271-0531 Ext. 310	1-519-271-6265	imcclelland@perthcounty.ca		
Emergency Management			emergencymanagement@perthcounty.ca		

## Appendix 4 - External COUNTY AND HEALTH UNIT FLOOD COORDINATORS

Flood Coordinator Position/ Alternate Position	Business Telephone	Fax #	E-mail Address				
PERTH DISTRICT HEALTH UNIT	PERTH DISTRICT HEALTH UNIT						
Dr. Miriam Klassen Medical Officer of Health	1-519-271-7600 Ext. 255	1-519-271-2195	mklassen@pdhu.on.ca				
Dale Lyttle Senior Inspector	1-519-271-7600 Ext. 247	1-519-271-2195	dlyttle@pdhu.on.ca				
Donna Taylor Director of Health Protection	519-271-7600 Ext. 254	1-519-271-2195	dtaylor@pdhu.on.ca				
SOUTHWEST PUBLIC HEALTH	SOUTHWEST PUBLIC HEALTH						
Hilaire Hudson Emergency Manager	519-631-9900 Ext. 1377	519-539-6206	hhudson@swpublichealth.ca				
Allison McIntosh Public Health Inspector	519-421-9901 Ext. 3455 1-800-755-0394	519 539-6206	amcintosh@swpublichealth.ca				

## Appendix 5 – External CONSERVATION AUTHORITIES AND PROVINCE OF ONTARIO

### **CONSERVATION AUTHORITY CONTACTS**

Flood Coordinator Position/ Alternate Position	Business Telephone	Fax #	E-mail Address			
AUSABLE BAYFIELD CA						
Geoffrey Cade, Water and Planning Manager	519-235-2610 Ext. 222	519-235-1963	gcade@abca.ca			
Davin Heinbuck, Water Resources Coordinator	519-235-2610 Ext. 237	519-235-1963	dheinbuck@abca.ca			
Brian Horner, General Manager	519-235-2610 Ext. 234	519-235-1963	bhorner@abca.ca			
Tommy Kokas, Water Resources E.I. T.	519-235-2610 Ext. 229	519-235-1963	tkokas@abca.ca			
Kate Monk, Stewardship & Conservation Lands Supervisor	519-235-2610 Ext. 227	519-235-1963	kmonk@abca.ca			
Ross Wilson, Soils & Water Resources	519-235-2610 Ext. 249	519-235-1963	rwilson@abca.ca			
CATFISH CREEK CA						
Peter Dragunas, Water Management Technician	519-773-9037	519-765-1489	water@catfishcreek.ca			
Christopher Wilkinson, General Manager Secretary-Treasurer	519-773-9037	519-765-1489	generalmanager@catfishcreek.ca			
GRAND RIVER CA						
Mark Anderson Water Quality Engineer	1-519-621-2761 Ext. 2226	1-519-621-4844	manderson@grandriver.ca			
Dwight Boyd Director of Engineering	1-519-621-2761 Ext. 2225	1-519-621-4844	dboyd@grandriver.ca			
Samantha Lawson CAO	1-519-621-2761 Ext. 2221	1-519-621-4844	slawson@grandriver.ca			
Cameron Linwood Communications Coordinator	1-519-621-2763 Ext. 2251	1-519-621-4844	clinwood@grandriver.ca			
Gus Rungis, Senior Water Resources Engineer	1-519-621-2761 Ext. 2222	1-519-621-4844	grungis@grandriver.ca			
Stephanie Shifflett Water Resources Engineer	1-519-621-2761 Ext. 2306	1-519-621-4844	sshifflett@grandriver.ca			
KETTLE CREEK CA						
Jennifer Dow, Water Conservation Supervisor	519-631-1270 Ext. 228	519-631-5026	jennifer@kettlecreekconservation.on.ca			

## Appendix 5 – External CONSERVATION AUTHORITIES AND PROVINCE OF ONTARIO

CONSERVATION ACTIONTIES AND PROVINCE OF ONTARIO						
Flood Coordinator Position/ Alternate Position	Business Telephone	Fax #	E-mail Address			
LONG POINT REGION CA						
Matthew Churly Water Resource Analyst	519-842-4242 Ext. 226 519-427-4423 cell	519-842-7123	mchurly@lprca.on.ca			
Paul Gagnon Lands & Water Supervisor	519-842-4242 Ext. 232 519-429-4899 cell	519-842-7123	watercare@lprca.on.ca			
Craig Jacques Water Resource Specialist	519-842-4242 Ext. 265 519-429-2738	519-842-7123	cjacques@lprca.on.ca			
Lorrie Minshall Interim Manager Watershed Services	519-842-4242 Ext. 231	519-842-7123	lminshall@lprca.on.ca			
LOWER THAMES VALLEY CA						
Mark Peacock General Manager	1-519-354-7310 Ext. 224	1-519-352-3435	mark.peacock@ltvca.ca			
Sarbjit Singh Natural Hazards Program Assistant	1-519-354-7310 Ext. 238	1-519-352-3435	Sarbjit.singh@ltvca.ca			
Jason Wintermute Water Management Supervisor	1-519-354-7310 Ext. 227	1-519-352-3435	Jason.wintermute@ltvca.ca			
MAITLAND VALLEY CA						
Phil Beard General Manager	1-519-335-3557 Ext. 231	1-519-335-3516	pbeard@mvca.on.ca			
Jeff Winzenried Water Resources Technician	1-519-335-3557 Ext. 243	1-519-335-3516	jwinzenried@mvca.on.ca			
ST. CLAIR REGION CA						
Brian McDougall General Manager	519-245-3710 Ext. 236	519-245-3348	bmcdougall@scrca.on.ca			
Girish Sankar, Director of Watershed Services	519-245-3710 Ext. 247	519-245-3348	gsankar@scrca.on.ca			

## Appendix 5 – External CONSERVATION AUTHORITIES AND PROVINCE OF ONTARIO

### **PROVINCE OF ONTARIO CONTACTS**

Flood Coordinator Position/Alternate Position	Business Telephone	Fax #		E-mail Address
MINISTRY OF NATURAL RESOURC	ES & FORESTRY, AYLM	IER DIS	TRICT	
Ron Drabick IRM Technical Specialist	519-773-4749		519-773-9014	ron.drabick@ontario.ca
Resources Operations Supervisor	519-773-4780 (dire 519-773-9241 (main o	-	519-773-9014	
MINISTRY OF NATURAL RESOURCE	ES & FORESTRY, GUEL	PH DIS	TRICT	
Tammy Verhaeghe District Manager	1-519-826-4931	4931 1-519-826-4929		tammy.verhaeghe@ontario.ca
MINISTRY OF NATURAL RESOURCE	ES SURFACE WATER M	ONITO	RING CENTRE, PET	ERBOROUGH
Surface Water Monitoring Centre – Duty Officer (daytime)	1-705-755-5201		05-755-5038 or 705-755-5039	surface.water@ontario.ca
Surface Water Monitoring Centre  – after hours Duty Officer	1-705-761-2044	1-705-755-5038 or 1-705-755-5039		surface.water@ontario.ca Rotating SWMC Duty Officers: Lak Ramanathan, Brent Smith, Andy Beaton
Andy Beaton Water Level Mgmt Specialist Surface Water Monitoring Centre Land and Water Services Section, Integration Branch	1-705-755-5129	1-705-755-5038 or 1-705-755-5039		surface.water@ontario.ca andy.beaton@ontario.ca
MINISTRY OF TRANSPORTATION				
Stan Saunders, Supervisor London Traffic Operation Centre	519 873-4737			WestRegion.TOC@ontario.ca
OFFICE OF THE FIRE MARSHALL &	<b>EMERGENCY MANAG</b>	EMENT	•	
Duty Operations Officer Provincial Emergency Operations Centre	1-866-314-0472 or 1-416-314-0472	1-416-314-3758		
Drew Maddison Emergency Field Officer	519-495-9995	5	19-679-7014	drew.maddison@ontario.ca
Christopher Pape, Field Officer	519-854-6595			Christopher.pape@ontario.ca
ONTARIO 211 SERVICES				
Alena Sleziak 211/311 Call Centre Manager, CIRS, CCCM	1-519-255-7474 Ext. 883	1-519-256-3311		asleziak@citywindsor.ca
RED CROSS CANADA – ONTARIO Z	ONE			
Darren Bees	226-374-6827			Darren.bees@redcross.ca
Dave Schiller Disaster Management ERT Supervisor, Canadian Red Cross	1-519-944-8144	1-	519-974-1424	Dave.schiller@redcross.ca

## Appendix 6 – External PROVINCIAL AND LOCAL POLICE CONTACTS / LONDON BOATING BAN CONTACTS

Municipality	<b>Business Phone</b>	Fax #	Other		
OPP – MIDDLESEX COUNTY					
London Call Centre: 519-680-4600 (24 hr)	519-681-0300 519-680-4600	519-680-4697 519-680-4692	Opp.pcc.london@opp.ca Derek.Bowles@opp.ca		
Strathroy		519-245-1410	OPP.CPIC.London@opp.ca		
Glencoe	519-688-6540	519-287-2436	Communications CPIC		
Lucan		519-227-4000			
OPP – PERTH COUNTY	•				
Sebringville	519-393-6123	519-393-6125	1-888-310-1122 Western Region Dispatch		
Mitchell (W Perth)		519-348-4155	- Non-emergency communications dispatch for region (Windsor to Tobermory to Simcoe		
OPP – OXFORD COUNTY					
Tillsonburg		519-842-2190	1-888-310-1122 Western Region Dispatch		
Ingersoll	519-485-6554	519-485-6949	- Non-emergency communications dispatch for region (Windsor to Tobermory to Simcoe		
Local Police & Fire					
Alex Krygsman Staff Sergeant Community Policing Section	519-661-4798	519-661-6495	akrygsman@londonpolice.ca		
London Police	519-661-5281 (unpublished)	519-661-8446 (24 hours)	comsgt@londonpolice.ca		
Stratford Police	1-519-271-4141	1-519-271-3122	dispatch@stratfordpolice.com		
Woodstock Police	519-688-6540	519-688-5149	1-888-310-1122		
London Fire			firecommunicatorsonduty@london.ca		

## Appendix 6 – External PROVINCIAL AND LOCAL POLICE CONTACTS / LONDON BOATING BAN CONTACTS

City of London Boating Ban					
Agency	Flood Coordinator, Position / Alternate Position	Business Phone	Fax #	Other	
City of London	HRU Officer	519-661-5670	519-660-5460	comsgt@londonpolice.ca	
Police	Communications	519-661-5281	519-661-8446		
City of London Fire	Rick Jefferson, Public Information Coordinator	519-661-2500 Ext. 4622	519-661-8419	Cell: 519.521.4501	
Department	Communications Office (24 hr/day)	519-661-5615	519-661-2441	firecommunicatorsonduty @london.ca	
London	Shawna Chambers Division Manager, Stormwater Engineering	519-661-2489 Ext. 7318	519-661-2355	schambers@london.ca	
Engineering Department	Rick Pedlow Division Manager, Sewer Operations	519-661-2500 Ext. 4623 Cell 519-636-6108	519-661-2352	rpedlow@london.ca	

## Appendix 7 – External SCHOOL BOARD CONTACTS

Flood Coordinator, Position/Alternate Position	Business Telephone	Fax#	Work E-mail			
AVON MAITLAND DSB						
Communications	1-800-592-5437 or 1-519-527-0111	1-519-527-0222	communications@ed.amdsb.ca			
General Delivery Facilities			amdsbfacilitiesinv@ed.amdsb.ca			
General Delivery Transportation			hpsts@ed.amdsb.ca			
Hugh Cox Facilities Administrator	1-519-527-0111 Ext. 251		hugh.cox@ed.amdsb.ca			
Jamie Gibbings Health & Safety Advisor	or 1-519-527-0111 Ext. 218		Jamie.gibbings@ed.amdsb.ca			
Adam Sipione	1-800-592-5437 or 1-519-527-0111	1-519-527-0222	Adam.sipione@ed.amdsb.ca			
Janice White Huron Perth Student Transportation Services	1-519-527-0111		janice.white@ed.amdsb.ca			
HURON-PERTH CDSB						
Mary Ellen Ducharme Superintendent of Business	1-519-345-2440 Ext. 8065	1-519-345-2449	mducharme@hpcdsb.ca			
Anne Marie Nicholson Manager of Plant	1-519-345-2440 Ext. 8069	1-519-345-2449	anicholson@hpcdsb.ca			
THAMES VALLEY DISTRICT SCH	OOL BOARD					
Richard Hoffman Public Affairs Coordinator	519-452-2000 Ext. 20505	519-452-2395	r.hoffman@tvdsb.on.ca			
Bill Wallace Health & Safety	519-452-2000 Ext. 20266	519-452-2395	b.wallace@tvdsb.on.ca			
Shawn Muscutt Health & Safety	519-452-2000 Ext. 20267	519-452-2395	s.muscutt@tvdsb.on.ca			
LONDON DISTRICT CATHOLIC SCHOOL BOARD						
Andrew King Health & Safety Officer	519-663-2088	519-663-9250	amking@ldcsb.ca			

## Appendix 8 - External FIRST NATIONS CONTACTS

Flood Coordinator, Position/ Alternate Position	Business Telephone	Fax #	Work E-mail				
Oneida Nation of the Thames							
Mike Acton OPP Liaison Officer	519-318-1816	519-289-2190	mike.acton@opp.ca				
Rob Cornelius Water Treatment Plant Operator	519-652-9560	519-652-9126	robert.cornelius@oneida.on.ca				
Brandon Doxtator Environment and Consultation Coordinator	519-652-6922		environment@oneida.on.ca				
Sandra Doxtator Executive Assistant	519-652-3244 Ext. 803 Cell: 519-902-5945	519-652-9287	sandra.doxtator@oneida.on.ca				
Ron Elijah Public Works Administrator	519-652-6922	519-652-6336	ron.elijah@oneida.on.ca				
Chief Jessica Hill	519-652-3244	519-652-9287	jessica.hill@oneida.on.ca				
Chanda Kennedy Director of Operations	519-652-3244 Ext. 802	519-652-9287	chanda.kennedy@oneida.on.ca				
Keith Riley Oneida FN Police Sergeant	519-289-5577	519-289-2190	keith.riley@opp.ca				
Rob Wolfe Oneida Emergency Services	519-652-9916	519-652-6154	rob.wolfe@oneida.on.ca				
Chippewas of the Thames First Nation							
Garett Cloud Bylaw Enforcement Officer & Emergency Management Coordinator	519-609-6043 519-488-5057 Ext. 407		gcloud@cottfn.com				
Mike Deleary Executive Administrator			Mike.deleary@cottfn.com				
Allan Farrell Public Works Director			afarrel@cottfn.com				
Water Department			waterdept@cottfn.com				
Emma Young Senior Environment Officer	519-289-5555 Ext. 254		eyoung@cottfn.com				
Munsee Delaware Nation	Munsee Delaware Nation						
Stacey Phillips Consultation Officer			consultation@munsee.ca				