

***POTABLE WATER  
EMERGENCY RESPONSE PLAN***

***2019***

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Township of  
**Langley**



**Est. 1873**



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## Part 1: Aim of the Potable Water Emergency Response Plan

### 1.1 Background and General Goals

In most emergencies, traditional public services such as the police, fire departments, ambulance services and hospitals provide the necessary assistance. In the event of major emergencies or disasters affecting the water utility first responders are not specifically qualified nor likely available to assist with problems experienced by water utility operations. The Township of Langley (TOL) endeavors to provide potable water at sufficient quantities and pressures to provide trunk distribution of drinking water and effective firefighting. Therefore, the goal is to maintain an effective plan to provide both regulatory compliance and major emergency or disaster response capacity in the event of a significant incident.

The principal purposes of this plan are to: provide for the Health and Safety of all municipal staff and first responders in the event of a major emergency or disaster impacting the Municipal Water Utility, protect public health in the operation of the Water Utility and to minimize disruption of utility service when the Water Utility is faced with emergency or disaster circumstances.

### 1.2 Objectives of the Plan

This plan sets out the respective roles, responsibilities and activities within the municipality that will ensure that staff are aware of the expectations placed upon them, the Programs that support emergency management in the municipality and the interlinking of other operational plans and the Langley Emergency Response Plan that, as a whole, will ensure a cohesive, integrated, municipal wide approach to major emergency or disaster threats or events facing the Water Utilities.

The specific objectives of the plan are to:

- Ensure that all response efforts follow the British Columbia Emergency Response Management System (BCERMS) goals.
- Ensure that the TOL Engineering Division has met its obligations for emergency management as set out in relevant legislation;
- Ensure that there is continuity of operations in the provision of water utility services to customers.
- Provide for adequate protection and or restoration of critical infrastructure that could be damaged or destroyed in major emergencies or disasters;
- Protect the environment in the event of threats to or by the water utility;
- Reduce economic and social impacts from the loss of the water utility;

- Apply the principles of emergency management including threat identification, risk assessment and vulnerability analysis, prevention and mitigation strategies, preparedness activities, response capacity and recovery planning to the effective management and operation of the municipal water utility;
- Set out in brief plan form, supported by appropriate documentation the activities, organizational roles and responsibilities and supporting measures that will plan for, respond to, and recover from major emergencies or disasters affecting the municipal water system;
- Identify other documentation or responsibilities that will support the Potable Water Emergency Response Plan; and
- Ensure that all response efforts are reviewed and updated periodically to ensure effectiveness and efficiency as this plan is considered a living document.

### 1.3 Plan Organization

This Plan is organized into three sections:

- **Part 1** – Aim of the Potable Water Emergency Response Plan;
- **Part 2** – Activation of the Plan;
- **Part 3** – Roles & Responsibilities;

## Part 2: Activation of the Plan

### 2.1 Activation Levels

There are three Activation Levels recognized for this Water Utility Continuity of Operations Plan. They are described in the following table.

Table 2-1: Activation Level Descriptions

	Level 1	Level 2	Level 3
<b>General Definition of Alert</b>	Minor emergency. Management of emergency can be handled by Township of Langley Engineering Division.	Major emergency. Water system emergency may be part of a larger response by Township of Langley.	Disaster situation.
<b>Reasons to Trigger Alert</b>	Personnel have been fully utilized to respond to a system failure and there are or is a likelihood of no further capacity to deal with a worsening of the event or the occurrence of a second similar event.	This level would see an incident or group of incidents beyond the capacity of Operations resources.	There has been significant or catastrophic loss of water utility capacity or quality either through regional event or beyond the capacity of Township resources.
<b>Emergency Operations Centre Status</b>	An EOC is not opened. Management of emergency is handled internally by the Engineering Department.	Director of Public Works and General Manager of Engineering decide if an EOC should be opened. EOC personnel will be alerted.	An EOC is opened to manage the emergency event. Centralized management is undertaken from the EOC.
<b>Who Should be Notified &amp; Updated Regularly</b>	<ul style="list-style-type: none"> <li>All Township departments and managers that may be affected.</li> <li>Director of Public Works</li> <li>The Drinking Water Officer (or their delegate).</li> <li>Emergency Management Co-ordinator for Township/City of Langley.</li> <li>Metro Vancouver Medical Health Officer if emergency is related to their water system (e.g. water supply, infrastructure).</li> <li>Water Event Email Group</li> </ul>	<ul style="list-style-type: none"> <li>All Township departments and managers that may be affected.</li> <li>Director of Public Works</li> <li>General Manager of Engineering</li> <li>Emergency Management Co-ordinator for Township/City of Langley who will co-ordinate opening of EOC.</li> <li>The Drinking Water Officer (or their delegate).</li> <li>Water Event Email Group</li> </ul>	<ul style="list-style-type: none"> <li>EOC Incident Commander</li> </ul>
<b>Call Centre Activated</b>	<ul style="list-style-type: none"> <li>No</li> </ul>	<ul style="list-style-type: none"> <li>Yes</li> </ul>	<ul style="list-style-type: none"> <li>Yes</li> </ul>

## 2.2 Authority to Activate

The following staff has the authority to activate a Level 1 Alert:

- **Utility Operations Manager**
- **Utilities Operations Superintendent**
- **Designated delegate**

The following staff has the authority to activate Level 2 or 3 Alerts:

- **General Manager of Engineering**
- **Director of Public Works**
- **Designated delegate**

After the recognition of a major emergency or that a disaster situation exists or is likely to exist, the level of activation can be decided.

## 2.3 Action Plans

The Township of Langley maintains action plans for responding to various emergencies in the following categories:

- Water System Component Failures
- Water Supply Events
- Water Quality Events
- General Emergencies and Disasters

### 2.3.1 Task Delegation / Incident Commander

The Action Plans assign specific people within the Engineering Department to ensure that tasks are completed. It is understood that in all cases, the responsible person may assign a delegate to be responsible for the task on their behalf at any time. Additionally, a supervisor may choose to assume responsibilities in certain situations such as higher alert levels.

The Action Plans use the concept of the "Incident Commander". This person will be identified in each action plan as being the person responsible for managing the emergency response. In most cases, the default Incident Commander will be the Utility Operations Manager.

In the event that more than one Action Plan is activated concurrently, the Incident Commander will prioritize the actions taken.

### 2.3.2 Limitations

The emergency action plans are meant to function as a general guideline to assist the Township of Langley to respond to a variety of emergencies. Every individual emergency event is different and will require tasks and responses that may not be included in these action plans. The plans are not meant to be an exhaustive and complete list of all the tasks and responses that may be required in a situation; rather, they should be used as a starting point in responding to emergency events.

### **2.3.4 Water Hauling and Storing**

In the situation water hauling is required, water can be hauled from within the Township of Langley or any other municipal water supply either from water stand stations or water hydrants. Some water hauling companies have permits with municipalities that have water stand stations, and all water hauling companies have access to water hydrants after permits are issued by the municipality. Depending on the water emergency, the incident commander may recommend a more suitable water supply source.

In the situation water is required to be stored, water solution companies can provide storing solutions.

## **2.4 Administrative Protocols to be followed during Emergencies**

### **2.4.1 Overview**

When the Water Response Plan is activated at any level, additional municipal staff outside the Engineering Division may be required to ensure continuity of operations. Additionally, staff within the Engineering Department may be required to work additional and/or irregular hours to ensure continuity of operations.

### **2.4.2 Operational Periods**

This plan will recognize three (3) time conditions which may require differing response and recovery strategies. These are:

- (i) Weekdays and regular work hours
- (ii) Weekday night hours
- (iii) Weekends and holidays

This plan will recognize emergency response shifts that are no longer than 12 hours in length.

### **2.4.3 Call Centre & Work Scheduling**

A call centre will be established based on activation level of the Water Emergency Response Plan and on operational needs. Table 2-2 describes the call centre structure and protocols based on the level of activation.

**Table 2-2: Call Centre Structure and Protocols**

	Level 1	Level 2	Level 3
<b>Weekdays &amp; Regular Works Hours</b>	Operations general direct telephone (604-532-7300) to be staffed by Engineering Business Support to communicate approved messaging to public.	Operations general direct telephone (604-532-7300) to be staffed by Engineering Business Support staff to communicate approved messaging to public.	Emergency Operations Centre activated and EOC Call Centre protocols in effect.
<b>Weekday Night Hours</b>	Surrey Fire Base to respond to public inquiries and notify Utility Operations standby staff.	Operations general direct telephone (604-532-7300) to be staffed by Engineering Business Support staff to communicate approved messaging to public.  OR  EOC Call Centre if activated.	Emergency Operations Centre activated and EOC Call Centre protocols in effect.
<b>Weekends &amp; Holidays</b>	Surrey Fire Base to respond to public inquiries and notify Utility Operations standby staff.	Operations general direct telephone (604-532-7300) to be staffed by Engineering Business Support staff to communicate approved messaging to public.  OR  EOC Call Centre if activated.	Emergency Operations Centre activated and EOC Call Centre protocols in effect.

#### 2.4.4 Dispatching

Call Centre dispatching protocols are based on instructions as provided by the Incident Commander or EOC Director.

A Call Centre lead is assigned. All requests & information are centralized to and from the Call Centre lead. The Call Centre lead communicates/dispatches to designated Operations Area/Section leads unless otherwise instructed by the Incident Commander or EOC Director.

#### 2.4.5 Use of Incident Command System (ICS)

An ICS based on the British Columbia Emergency Response Management System (BCERMS) is to be used when an EOC is activated and will be managed under the EOC.

## 2.5 Termination of an Event

Termination of a Level 1 activation, or Level 2 activation without EOC support, to an incident will occur when the Incident Commander, in consultation with the Drinking Water Officer, and other parties as required confirm that operation has been returned to normal and the objective of supplying water of adequate quality, quantity and pressure are met.

In the case when the Township EOC has been activated, the Emergency Operations Centre Director will terminate EOC activation in accordance with EOC protocol.

## Part 3: Roles & Responsibilities

### 3.1 Emergency Response Supporters

In the event of an emergency, the following municipal staff are to support the Potable Water Emergency Response Plan:

- Department Managers;
- Division Managers;
- Municipal Emergency Management Coordinator;
- Supervisors and Foremen; and
- Engineering Business Support

#### 3.1.1 Operations

As the section responsible for the day-to-day operation of the water system, senior Operation staff will be the first responders to water system emergencies. The following chart shows the organization of the Utility Operations section.

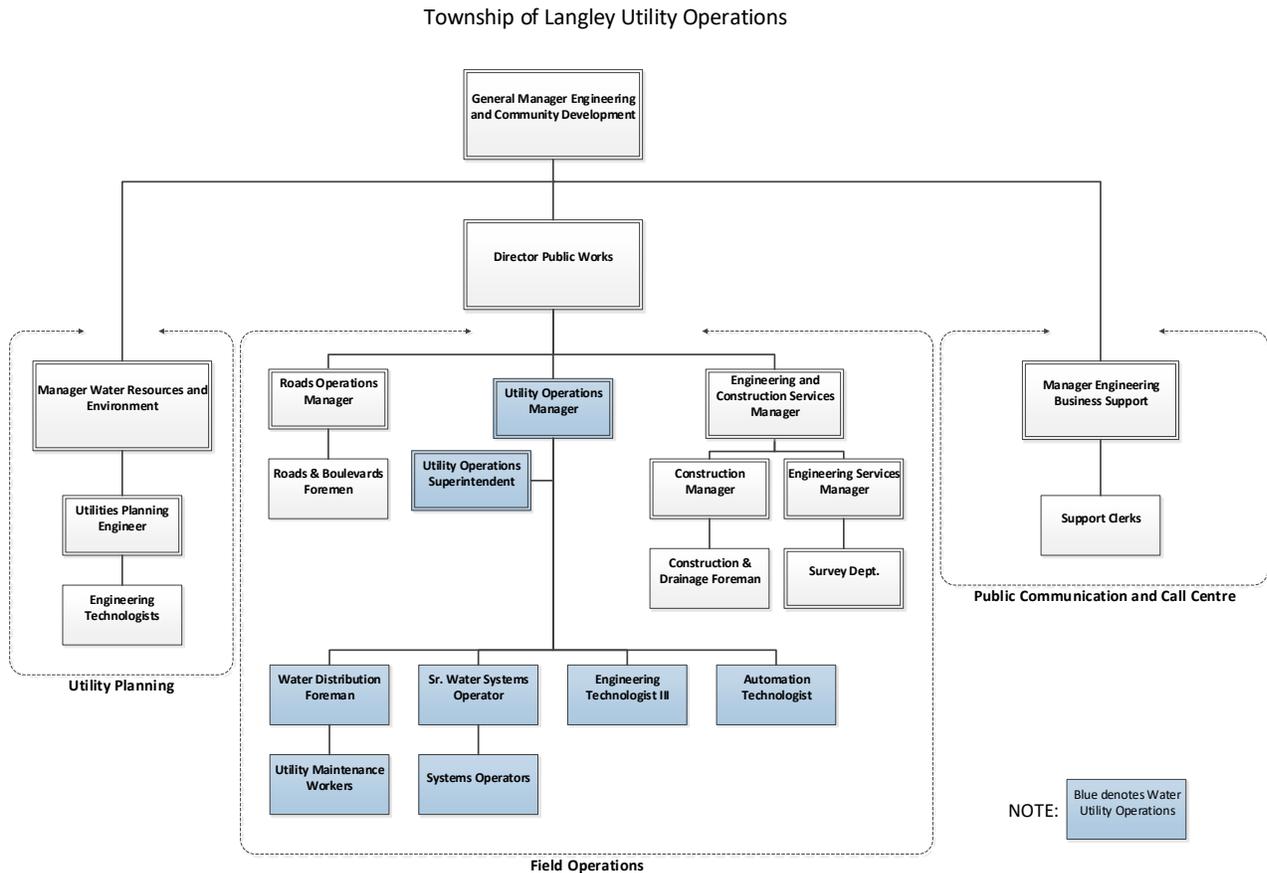


Figure 3-1: Organizational Chart

### 3.1.2 Public Works

The operation of the water system falls within the Public Works department. Most direct and support operations of the water system are undertaken by Public Works staff. Public Works staff provides surveying, drafting, AutoCAD, and field inspection.

During a Level 1 Activation, the emergency event will be managed by senior public works staff such as the Utility Operations Manager or the Director of Public Works.

### 3.1.3 Water Resources and Environment

The Water Resources and Environment section will assist and consult with Public Works staff during water system emergencies in the following ways:

- Development of emergency water quality sampling program locations and parameters of analysis;
- Interpretation of water quality sampling results;
- Water modeling investigations; and
- Liaison with Metro Vancouver.

### 3.1.4 Business Support

Engineering Business Support will assist Public Works in the following tasks:

- They will operate the call centre if an EOC is not opened;
- Will issue media releases if an EOC is not opened; and
- Will issue drinking water advisories if an EOC is not opened.

Some of the tasks performed by Engineering Business Support during a minor emergency will be performed by the EOC in major emergencies and disasters. Engineering Business Support may still need to be involved in major emergencies under the direction of the EOC.

### 3.1.5 Transportation Engineering

Interaction with Transportation Engineering will be required if road closures and detours are needed. Highway use permits for roads under the jurisdiction of the Ministry of Transportation will need to be obtained if any roads are closed.

### 3.1.6 Purchasing and Finance

Interaction with this department may be required if large expenditures outside normal budgets are required during emergencies. Note that as soon as costs need to be recovered outside normal budget expenditures, an EOC should be opened.

### 3.1.7 Risk Management

The Risk Management Advisors, or designates, may be required to assist the Engineering Department regarding insurance issues including claims.