LOCAL AUTHORITIES AND FIRST NATIONS RECOVERY TOOLKIT

Freshet and Wildfire

May 26, 2018
Local Authorities and First Nations Recovery Toolkit

This toolkit is intended to guide Local Authorities and First Nations as they plan for disaster recovery. It includes planning for community recovery, infrastructure recovery, demobilization and debris management. All items listed below are intended for your consideration only, if you deem them necessary then they likely are scalable.

This is an evergreen document, meaning it is intended to continually be edited and updated. Space has been provided for users to add information where none has been identified.

For questions, please contact the Provincial Disaster Recovery Branch.
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Rapid Damage Assessment

Financial Considerations:
This may be an eligible response cost for reimbursement. Refer to Financial Assistance Guidelines.

Questions for consideration:

Resources and Information:
BC Housing is the lead agency and offers Rapid Damage Assessment (RDA) and Coordination of Damage Assessment (CDA) training to Local Authority personnel. Rapid Damage Assessors will assess homes that have been impacted to determine whether or not they are safe to re-enter. RDA is a tool that can be used by the EOC to gain situational awareness. It also provides valuable information to the private sector (homeowners) and to the Resilience Centre in completion of a needs assessment and contributes to the community's overall recovery.

Source:
BC Housing: Rapid Damage Assessment

Critical Site Cleanup

Financial Considerations:

Questions for consideration:

- Is there any critical infrastructure or sites that need to be cleaned up first?
- Who owns them?
- Do you need to collaborate with industry?

Resources and Information:
Non-Government Organizations (NGO's) may be of assistance.

Source:
Ensure Safe Community Re-entry

Financial Considerations:

Questions for consideration:
- Have rapid damage assessments taken place?
- Have building inspections taken place?
- Have utilities been restored?
- Have residents been provided with information on how to enter their home safely?
- Are there any security concerns that need to be addressed?

Resources and Information:
The Canadian Red Cross developed a Guide to Wildfire Recovery in response to the 2017 British Columbia wildfires. The guide provides a checklist for returning home, and includes a number of practical and emotional things to consider before returning home.

Emergency Management British Columbia has developed community re-entry guidelines that may also be useful to ensure safe community re-entry. They were designed to support Local Authorities and First Nations in making a decision regarding the timing of lifting an evacuation order and allowing residents to return to their homes. It provides guidance and planning considerations in making this decision as well as some items to consider shortly after re-entry. It includes Considerations for Community Re-entry; Further Considerations for Community Re-entry; Returning Home After a Wildfire; and One Step at a Time: A Guide to Disaster Recovery.

Source:

Guide to Wildfire Recovery

Emergency Management British Columbia: Community Re-entry Guidelines

One Step at a Time: A Guide to Disaster Recovery, Step 3: Re-entering your home

Establish Recovery Supports

Assign a Community Recovery Manager

Financial Considerations:
The Community Recovery Manager is an eligible response cost for reimbursement only when the scope and scale of the event meets the eligibility criteria for a Community Recovery Manager. Check with your PREOC or PECC. The costs associated with operating a Community Recovery or Resilience Centre, including the hiring of a Community Recovery or Resilience Centre Manager to support recovery efforts.
are RESPONSE costs. Recovery or Resilience Centers are community facilities to help residents recover from the disaster by communicating information about community resources, registering people who may need additional support, and facilitating an Unmet Needs Committee. The Centre's operating costs, such as contract fees for an external Community Recovery /Resilience Centre manager (either an individual or organization), setting up telephone and fax lines, paying rent and heat (if building is not owned by the Local Authority or First Nation) are all eligible RESPONSE costs.

For the purposes of section 22 (1) "eligible local government body expenses" means eligible costs incurred or required for (d) emergency response measures including (viii) the establishment and operation of any one or more of special communications facilities, special registration and inquiry services, emergency control headquarters, and protective health and sanitation facilities.

Submit Expenditure Authorization Form to PREOC for Approval.

Questions for consideration:

- Has the event been declared eligible for a Community Recovery Manager? Check with PREOC or PECC
- How are recovery operations being organized in your EOC and over the long term?
- Who in your community is going to provide leadership? (If you use someone from the LA/FN, that full time position may be backfilled as an eligible response cost)
- Will you hire from within or contract someone external? Either way, the LA/FN must oversee this position

Resources and Information:
The purpose of a Community Recovery Manager is to assist individuals through the long-term recovery process. The Community Recovery Manager is tasked with assessing community needs; defining local solutions; and drafting an incident-specific recovery plan.

Source:

Compensation and Disaster Financial Assistance

Emergency Program Act

Appendix 1: Scope of Services for Community Recovery/Resilience Centre Manager and sample position description
Develop a Recovery Plan

Financial Considerations:
- This is an eligible response cost for reimbursement only when the scope and scale of the event meet the eligibility criteria.
- Check with PREOC or PECC.
- Submit EAF or Resource Request to PREOC for approval.

Questions for consideration:

Resources and Information:
The Community Recovery Manager will have 30 days to submit a draft recovery plan to the Province which outlines recovery needs with respect to infrastructure, socio-economic, land-based, and future mitigation, including funding required, and timeframes for implementation.

Source:

Appendix 2: Community Recovery Plan Template

Considerations for financial support

Financial Considerations:

Questions for consideration:
- What proportion of individual or community losses are insured? Insurable?
- What options exist for repair/rebuilding support?

Resources and Information:
The Insurance Bureau of Canada has provided a list of common Question and Answers regarding Property Insurance Coverage and Insured losses.

Source:

Insurance Bureau of Canada

Appendix 9: Residential Flood Insurance in BC

Wildfire Recovery Programs
Distribute clean-up kits and information on home re-entry

Financial Considerations:

Questions for consideration:

- Are clean-up kits needed for people whose homes did not burn?
- What about tip sheets to deal with things like improving internal air quality?

Resources and Information:

Canadian Red Cross or other NGOs may be able to provide clean-up kits.

Source:

Set up an Unmet Needs Committee or working group

Financial Considerations:

- This is an eligible response cost for reimbursement.
- Submit EAF to PREOC for approval.

Questions for consideration:

- Who is on your committee?
- How often are you meeting? Are you engaging the right people to help identify gaps, needs and resources to fill them?

Resources and Information:

This working group can be made up of representatives of different agencies who specialise in different forms of support. It is led by a Local Authority staff member or First Nations member. Its function is to evaluate the needs of the impacted residents and determine what assistance might be available, such as physical help with cleaning, psychosocial, or financial aid. These needs can be discovered informally and formally though the town hall meeting or Resilience Centre.

Source:

Appendix 3: Unmet Needs Post Disaster Template
Establish a Donations Management System

Financial Considerations:

Not Eligible for response or recovery costs.

Questions for consideration:

What groups are available to support material and financial donations management?

Resources and Information:

The Public may wish to donate clothing, materials, or funds to people impacted by the event. It is strongly recommended that Local Authorities and First Nations communities ask for cash donations only. Managing donated goods is very labour intensive and expensive to manage the waste disposal. This is a significant undertaking and is not recommended that the Local Authority or First Nation take this on. Sometime an NGO or other organization is asked to take this on and point the public in the right direction.

Source:

Appendix 4: List of Potential Organisations for Resilience Centres
Consider special permitting process

Financial Considerations:

Questions for consideration:
- Will your usual permitting process be adequate for this recovery and rebuild?
- Do you have a way to track permits that will meet recovery needs?
- Is an expedited process or different permits required?
- Do you need to put a time frame or deadline on the demolition stage?

Resources and Information:

Source:

Develop a debris removal plan or plans

Financial Considerations:

Questions for consideration:
- What type of debris will need to be removed, and where will it be going?
- What is the capacity of the various sites?
- Are there contaminants that will require special handling procedures?
- Who is managing the debris removal?
- Does it need to be coordinated at a community level, or can individual homeowners work with their insurance provider?

Resources and Information:

Non-Government Organizations (NGO’s) may be of assistance.

Enhanced Waste Management Consideration

Source:

FEMA Public Assistance Debris Management Guide
Consider waiving tipping fees

Financial Considerations:

Questions for consideration:
- Is the facility municipally owned or private?
- Is a differential fees schedule more appropriate than forgiving?

Resources and Information:
The province will not reimburse local authorities for lost revenue from waived tipping fees at their own facilities.

However, Local Authority costs to remove debris to a privately operated facility may be considered as a recovery cost on their Infrastructure Recovery Plan.

Source: See your Local Authority tipping fees policy or waste disposal bylaw

Removal and disposal of sandbags

Financial Considerations:
Eligible response cost

Questions for consideration:
- Who is managing removal?
- How many were placed?
- Is the fill material contaminated?
- Were the sandbags damaged during the event?
- Have they been buried by debris or migrated into a water course?
- What type of bags were used (burlap/hessian or plastic)?

Resources and Information:

Source:
Policy 4.03 Debris Removal
Removal of Provincial Government owned mitigation equipment: Gabions and Tiger Dams

Financial Considerations:
Eligible response cost

Questions for consideration:
- When will they need to be removed?
- Who is managing the removal?
- Has any damage been assessed?

Resources and Information:
The Local Authority, First Nation or contracted crews will demobilize and arrange shipping with the PREOC to return to Provincial stock.

Source:

Installation and Removal of temporary berms and dikes

Financial Considerations:
Eligible response cost

Questions for consideration:
- Using temporary berms or dikes is a last resort and should only be used when placement of sandbag dikes, tiger dams or gabion baskets is not suitable.
- They must be removed after the event. Have these other options been considered first?

Resources and Information:

Source:

Policy 5.12 Construction of Temporary Berms and Dikes
Testing of Contamination of sandbags and gabion fill material

Financial Considerations:

Questions for consideration:
- Is there reason to believe that the sandbags or gabion fill material may be contaminated?
- Do you know the source of the sand and or fill material?
- Where will sand and fill material be disposed of?

Resources and Information:
Sand or fill that came from a known uncontaminated source and has not been contaminated during the event can be disposed of according to LA/FN direction. Testing is not required. (No material is to be deposited near or in water courses. The only exceptions can be authorized by the Ministry of Forests, Lands, Natural Resource Operations and Rural Development).

If the material history is not known or contamination is suspected, LA/FN’s may choose to test to aid with correct disposal.

Source:

Assign a Public Infrastructure Recovery Manager

Financial Considerations:
This is an eligible Recovery cost (at 10% of total cost of approved infrastructure projects) through Disaster Financial Assistance (DFA).

Questions for consideration:
- How are infrastructure recovery operations being organized in your EOC and over the long term?
- Who in your agency is going to give leadership?
- Will you hire from within or contract someone external?

Resources and Information:
The DFA Recovery Plan is normally prepared by a Local Authority employee (someone from public works and/or finance) or First Nations member. If additional resources are needed EMBC recommends hiring a Professional Engineer for those specific projects that are beyond the capacity of the Local Authority or First Nation to manage. Hiring an external manager or company is not recommended.

The Local Authority or First Nation should not transfer this responsibility to a third party. It should hire specific help for complex projects.

Source: Disaster Financial Assistance
Measures taken to ensure the area and extent of the disaster

**Financial Considerations:**
This is an eligible response cost for reimbursement. Submit EAF to PREOC for approval.

**Questions for consideration:**
- Who will conduct this initial scope?
- Will this be done by public works, or other?

**Resources and Information:**

**Source:**

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**Infrastructure Recovery Plan**

**Financial Considerations:**
This is an eligible Recovery costs through Disaster Financial Assistance (DFA)

**Questions for consideration:**
- What infrastructure will need to be repaired?
- Complete a DFA Application for Local Governments and Local Government Body Recovery Plan.

**Resources and Information:**

**Source:**

[DFA Forms and Other Information](#)

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**Consider providing construction information to citizens**

**Financial Considerations:**

**Questions for consideration:**
- Do residents need help on how to hire contractors? Is there value in hosting a rebuilding fair?
- Consider hosting a Town Hall meeting
- Consider having information available at the Resilience Centre

**Resources and Information:**

**Source:**
Coordination of Non-Governmental Organisations and other agencies

Financial Considerations:

Questions for consideration:

- Which organizations are already operating?
- Which organizations might be able to assist?
- What local community groups, service clubs, schools, sports groups, churches, professional associations, businesses, etc. are able to help?

Resources and Information:
The Province coordinates NGOs through the Integrated Disaster Council of BC (IDCBC). Different organizations including local businesses may be able to provide a variety of services to your community.

Source:
Appendix 4: List of Potential Organisations for Resilience Centres

Set up a Resilience Centre

Financial Considerations:

This is an eligible response cost for reimbursement.

Questions for consideration:

- Are the relevant agencies involved?
- What materials and advice is available from the relevant agencies?
- How is the Unmet Needs Committee (UNC) involved? The UNC is a team that identifies unique community and individual needs at the local level.
- Have psycho-social or mental wellness needs been considered?
- What needs assessment form are you using?
- What is being done to minimize the number of times an impacted individual has to tell their story?

Resources and Information:
The purpose of a community resilience centre is to assist individuals through the recovery process. The community resilience centre provides the space for and coordination of the various agencies and groups
offering guidance, advice, and assistance to those affected by an emergency/disaster. A Resilience Centre Manager may establish a physical resilience centre or provide virtual assistance.

Assistance and support are provided through completing a capacity and needs assessment with community residents; assisting individuals and businesses with completing their personal action plan; ensuring those with urgent needs are connected with the appropriate agencies and groups; and monitoring individual progress throughout the recovery process.

Source:


Community Recovery: Capacity Needs and Assessment Form

Appendix 5: Community Resilience Centres: Guidance for Local Authorities and First Nations in British Columbia

Appendix 6: Recovery: Community Needs Assessment

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**Hold a community or town hall meeting**

**Financial Considerations:**
This is an eligible response cost for reimbursement. Submit EAF to PREOC for Approval.

**Questions for consideration:**
- Is this being scheduled at a time that meets community needs?
- Have all relevant agencies been invited?
- Consider a virtual meeting so that people can join in even if they haven’t returned yet.

**Resources and Information:**

Source:

Appendix 7: PREOC Recovery Outreach and Community Visit

Appendix 8: Town Hall/Community Centre Considerations

Appendix 9: Recovery Unit Awareness for Local Governments
Ensure dissemination of public information

Financial Considerations:

Questions for consideration:

- Do you have a website where people impacted by the emergency can get information on Rapid Damage Assessment, DFA and other recovery resources? Note that for individuals, DFA only applies to non-insurable losses (i.e. from flood but not fire).
- What social media sites will be promoting your messaging?
- Do you have an information line set up where people can call to receive information?
- What key documents can be distributed to people looking for guidance and information?

Resources and Information:

Source:

One Step at a Time: A Guide to Disaster Recovery

First Nations Emergency Management Toolkit

Financial Considerations:

Questions for consideration:

Resources and Information:
This toolkit is designed to provide First Nations communities with resources to support emergency management activities at the community level.

Source:
First Nations Emergency Management Toolkit
## Checklist

<table>
<thead>
<tr>
<th>CHECKLIST:</th>
<th>ELIGIBLE COST</th>
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<tbody>
<tr>
<td>☐ Conduct rapid damage assessments</td>
<td>✓</td>
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<tr>
<td>☐ Clean up critical infrastructure sites</td>
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<tr>
<td>☐ Ensure utilities are restored</td>
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<tr>
<td>☐ Provide information on safe re-entry to residents</td>
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<tr>
<td>☐ Address security concerns</td>
<td></td>
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<tr>
<td>☐ Distribute clean-up kits and information on home re-entry</td>
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<tr>
<td>☐ Determine whether or not you need a Community Recovery Manager; if yes,</td>
<td>✓</td>
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<tr>
<td>submit an Expenditure Reimbursement Form to the PREOC for approval</td>
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<tr>
<td>☐ Develop a recovery plan (responsibility of the Community Recovery Manager)</td>
<td>✓</td>
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<tr>
<td>☐ Set up a Resilience Centre</td>
<td>✓</td>
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<tr>
<td>☐ Determine what proportion of individual or community losses are insured</td>
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<tr>
<td>or insurable</td>
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<tr>
<td>☐ Determine what options exist for repair and rebuild support</td>
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<td>☐ Consider introducing a special permitting process</td>
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<td>☐ Develop a debris removal plan or plans</td>
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<td>☐ Test contamination of sandbag and gabion fill material</td>
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<tr>
<td>☐ Remove and dispose of sandbags</td>
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</tr>
<tr>
<td>☐ Remove gabions and tiger dams</td>
<td>✓</td>
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<tr>
<td></td>
<td>Remove temporary berms and dikes</td>
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<td>Host a town hall meeting to provide construction information and other resources to citizens</td>
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<td></td>
<td>Determine whether or not you need a Public Infrastructure Recovery Manager; if yes, assign one (someone from Public Works and/or Finance)</td>
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<td></td>
<td>Determine the area and extent of the disaster (beyond what may have been done for safe re-entry)</td>
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<td></td>
<td>Develop Infrastructure Recovery Plan (responsibility of the Infrastructure Recovery Manager)</td>
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<td></td>
<td>Complete and submit a Disaster Financial Assistance application for Local Governments and Local Government Body Recovery Plan</td>
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<td></td>
<td>Set up an unmet needs committee or working group</td>
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<td></td>
<td>Establish a donations management system (if applicable)</td>
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Appendices

Appendix 1: Scope of Services for Community Recovery/Resilience Centre Manager and sample position description

SCOPE
A Resilience Centre Manager or Community Recovery Manager is needed to lead and coordinate the transition from response to recovery. The emergency event caused significant social, cultural, environmental, economic and infrastructure impacts to communities. Residents were forced to spend days or weeks outside of the region, leaving pets, homes and jobs behind. The CRRM will create and implement a workable plan to guide the (insert community here) recovery strategies to assist individuals, groups and businesses in rebuilding their lives and their community.

Length of Contract
The CRRM will be signed to a contract, with a competitive salary and appropriate expenses included, ending nine months from start date. It is intended that the CFRM work out of an office in (insert location here) to understand the local impacts and be available for inquiries and face to face meetings as required.

Responsibilities
- Manage the transition from a response Emergency Operations Centre (EOC) to one focused on recovery.
- Collect and document the social, cultural, environmental, economic and infrastructure impacts of the event. (Refer infrastructure queries to the Provincial government Disaster Financial Assistance Program if applicable)
- Be the main point of contact for all inquiries relating to both the EOC transition, and to the recovery activities.
- Lead the recovery program while coordinating with other agencies, including but not limited to the Provincial government, Non-Government (NGO) and Not for Profit (NFP) organizations, and other industry sector groups related to the four pillars of recovery.
- Develop programs and strategies for with input from the affected communities.

Expected Outcomes
- Create a Recovery Plan to guide community recovery activities in the region. This plan would include specific priorities and objectives for implementation.
- Implement the Recovery Plan with the assistance of (insert community here) staff and other Local Authority staff or First Nations members and stakeholders supporting the communities.
- Undertake public and business outreach activities in the process of writing and implementing the Recovery Plan.
- Reports directly to the CAO of (insert community here).
JOB OVERVIEW
The Community Recovery Manager plays a major role in leading the social recovery support to individuals and the community in a disaster. As a Local Authority or First Nations representative and/or community leader, the position guides community support services through the establishment and operations of Resilience Centre(s) and oversees the implementation of the Local Authority/First Nations Community Recovery Plan. The position works closely with community organizations/agencies, small & medium-sized businesses, and other local government officials to establish effective, coordinated and collaborative relationships to deliver services to affected communities and individuals throughout the recovery process.

ACCOUNTABILITIES
Suggested qualifications:
- Implements the Community Recovery Plan and ensures there are clear processes in place to support citizens throughout their personal recovery process;
- Has training in and understanding of support needs for individuals who have been through traumatic situations, including those directly and indirectly affected by a community disaster, and emergency responders at all levels;
- Has training or understanding of how the current mental health system works in regards to expediting any available assistance, short or long term, for those affected by a disaster;
- Provides oversight and management of all aspects of a Resilience Centre to support staff, volunteers and agencies;
- Ensures there is guidance and information to community members on the necessary steps to return safely to their homes;
- Collects information from clients, provincial ministries, businesses and community organizations, other local government staff and/or subject matter experts to ensure disaster recovery specific information is coordinated and validated;
- Communicates decisions to local government staff, senior management, and others to update community and social recovery priorities;
- Works collaboratively with the Disaster Financial Assistance (DFA) program representatives and has a good understanding of DFA in order to recognize potential opportunities for those who may be eligible and provide clarity for those who may be ineligible (i.e. due to insurable losses such as fire);
- Builds relationships internally and with key external stakeholders and community services to establish a common operation picture and collaborative recovery process;
- Shares information to mitigate any concerns or challenges arising from recovery operations and shares with local government, community organizations, not-for-profit organizations and individual citizens;
- Experience working with, or on, boards of community non-profit organizations in order to better understand how they fit into the larger community support scenario;
- Manages an “Unmet needs committee”, providing direction and coordination for the ongoing management of activities and address issues as they arise;
- Works with ESS Teams, Building Inspectors, Health, Insurance, Emergency Management BC
(EMBC), Non-Government Organizations (NGOs);
- Identifies the unique needs of each community;
- Provides regular and timely operational reports inclusive of daily situation report, operational data and relevant statistics, as appropriate;
- Contributes to a healthy and safe working environment;
- Manages facilities such as the Recovery Operations Centre and/or Resilience Centre;
- Determines and plans for the standing down of recovery operations, including Resilience Centres in conjunction with other relevant partners.

POSSIBLE JOB REQUIREMENTS:
Suggested Knowledge, Skills and Abilities
- Knowledge of emergency management, collection and analysis of disaster recovery information, community engagement and restoration and protection of community services;
- Being a lateral thinker as required, in finding solutions to help the community with unique needs;
- Experience in personnel scheduling and staffing requirements;
- Knowledge of and practical experience in Emergency Social Services;
- Experience in building, developing and maintaining successful relationships with public/private organizations and partnerships;
- Knowledge of local government operations, geography and community services;
- Knowledge and understanding of each provincial government ministry in order to easily and expediently access information and support as appropriate for the community;
- Experience in building relationships with multi-faceted, multi-stakeholder groups;
- Experience in grant writing;
- Experience in recognizing and finding the potential partnering opportunities between groups, individuals and businesses in a community to successfully create and complete projects of benefit;

WILLINGNESS CONSIDERATIONS
- Available 24/7 during response to emergencies and disasters and willing to perform a variety of duties within the scope of the position’s responsibilities;
- Ability to travel to disaster areas of the province on short notice and visit remote locations by vehicle, boat, air or on foot for overnight or extended hours in all-weather considerations due to emergencies;
- Ability to speak formally and informally to various audiences including town hall meetings, local and regional elected representatives, First Nations, Local Government officials, businesses and industry experts (e.g. insurance, construction, etc.).

POTENTIAL COMPETENCIES
- Empowerment
- ESS knowledge
- Information seeking
- Decisive insight
- Listening, understanding, responding
- Cultural awareness
- Recognizing recovery is multi-faceted
- Being able to focus on the need at hand while at the same time understanding the larger picture and how one fits within the other
Appendix 2: Community Recovery Plan Template

Introduction to the Recovery Plan Template
The Emergency Management British Columbia (EMBC) Recovery Branch, and both the Community Wildfire & Provincial Disaster Recovery Branches (FLNRORD) have developed this recovery plan template to provide a mechanism for Local Authorities and First Nations to identify and coordinate available recovery resources and match them with their community recovery needs. This document makes the assumption that an evacuated community has already returned home and therefore does not contain a re-entry plan.

Pre-filled templates are provided as guides and are to be used as examples only. We encourage you to create blank templates and begin to develop an event-specific recovery plan. Other approaches to planning may include the creation of a Gantt chart, or another project management-style work plan. Community Recovery Managers and their team members are encouraged to edit and modify the templates included here, based on specific community needs.

This template should be used to identify any short- to medium-term needs, and to describe the actions communities plan to take in delivering recovery services to their communities. Resources for communities to develop robust mid- to long-term Wildfire Recovery Implementation Strategies will be provided at a later date. A number of activities to consider implementing at various stages of Recovery are listed in Figure 1. Finally, lists of common recovery issues and activities for Recovery Managers and Planners to consider are attached as Appendices 1 and 2.

What is Recovery?
Recovery is the restoration, re-development, and /or rehabilitation of facilities, livelihoods and living conditions of disaster impacted populations to a level that meets - or in some cases improves on - the original condition. Recovery planning is a legislated component of community emergency preparedness planning under the Emergency Program Act (Section 6.2). You may want to review your local government’s emergency preparedness plan to see what is included in it under recovery planning for utilization in the completion of your event-specific Recovery Plan.

Recovery is a three-stage process: short term recovery or incident stabilization; medium term recovery; and long term recovery. Short term recovery activities include assessing damages, providing temporary housing and restoring essential services. In contrast, long term recovery is reflected by a return to normal routines and permanent reconstruction efforts that may include improvements to promote a more resilient community. The extent of the recovery process should reflect the scope and scale of the disaster.

When moving through these stages, the impacted communities will need to:
- Set priorities for recovery and objectives for recovery (see Appendix 3 for issues tracking document)
- Articulate the roles and responsibilities of all involved
- Set realistic milestones for gauging how much progress has been made
- Ensure the effective transfer of knowledge, expertise, services and support
Recovery Components:

We encourage communities to think of the scope of recovery and associated activities under the following foundational components (Figure 2):

- **People**: Ensuring the right resources are available to support the overall physical, mental and social well-being of disaster impacted communities, municipalities, First Nations, families and individual British Columbians.
- **Economy**: To nurture an environment that supports the rehabilitation of an and reinvestment in disrupted economies and businesses
- **Environment**: To protect and re-establish the environment to a healthy state and mitigate long-term environmental effects and risks.
- **Reconstruction**: To enable the safe and orderly restoration of damaged infrastructure within impacted areas.
Communities are encouraged to use the following tables (Part I: Recovery Work Plan and Part II: Short – Medium Term Recovery Actions) to articulate to the Province of British Columbia how they intend to approach the work of recovery, as well as how they envision meeting identified immediate needs of their local communities. Submission of Part I is required by an initial date agreed upon between your recovery manager and the Province. Submission of Part II at this initial date is optional. Utilize Part II if you have identified immediate needs and opportunities to support recovery for your community. As a component of your submission, you must include in your Part I: Recovery Work Plan, a proposed milestone date by which you will submit Medium and Long Term Recovery Actions to the Province.
Please discuss your submission dates with Community Wildfire Recovery Branch and/or Provincial Disaster Recovery Branch staff.

**Part I: Recovery Work Plan**

**Key Considerations**
Use this section to articulate the steps to be taken by the Recovery Manager and Recovery Teams to:

- Identify and inventory recovery needs,
- Strategize recovery actions for implementation,
- Generate community buy-in to recovery approach,
- Document how your recovery team is responding to community and individual issues,
- Receive Council/ Board support for recovery implementation,
- Other steps as deemed fit by Recovery Manager, CAO and Local Government...

**Tips:**
- Try to keep your activities listed in order of chronological timeframe, so that the recovery plan table can be used as a work-plan for Recovery Managers, and referred back to frequently to ensure processes are on-track.
- Flag where activities include other jurisdictions, such as collaboration with the Regional District, or the Province.
- Try to identify a ‘team’ approach, which can help to share the load of recovery across multiple functions. This may include someone from your finance, economic development, or planning departments, passionate members of Council or your Board, or support staff from other jurisdictions including the Province, health authorities, Chambers of Commerce, RCMP, etc. Talk to these individuals about the role you see them playing on your team, and set realistic expectations about their involvement

**Recovery Work Plan Example/Template:**
Below is an example of some need-focused activities that could be undertaken in the wildfire recovery:

<table>
<thead>
<tr>
<th>Need</th>
<th>Activity</th>
<th>Resources to Consider</th>
<th>Timeline/Milestone</th>
<th>Person Responsible</th>
<th>Financial Considerations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gain understanding and appreciation of full-scope business impacts from the wildfires.</td>
<td>Conduct business impact assessment. Target: 200 businesses</td>
<td>- Survey Interviewers - Promotions to businesses on purpose/timing of impact assessment Interview teams - Database for data entry</td>
<td>Interviews completed as of January 15, 2018.</td>
<td>Recovery Manager X</td>
<td>Municipality would like to bring on the services of the BC Economic Development Association to assist in impact assessment and provide summary</td>
</tr>
</tbody>
</table>
Some businesses, individuals and non-profit organizations are facing acute needs in the short-term. Many of these needs do not fit neatly within existing recovery supports. Triage immediate and pressing economic, social, and land-based needs from citizens, non-profits and businesses. Track needs, as well as program gaps. Use this information to inform larger recovery implementation plan.

- Analysis

- Recovery manager
- Cell phone
- Tracking Sheet
- Pathways document to identify organizations with potential solutions/supports.

Ongoing. Expecting this need to decrease as of February, 2018

Recovery Manager X

No additional financial considerations needed.

Part II: Short-Medium term Recovery Actions

Key Considerations

Use this section to articulate any early-identified short to medium-term recovery needs that have emerged in your communities, and actions that could be adopted to meet these needs. Try to identify any major issues, actions or steps to be taken to address them, individual roles and expected outcomes. It is acceptable target a second date in your Assessment Process by which to submit medium to long-term needs.

Short to medium-term needs may be identified through:

- Conversations that Recovery Managers, Chief Administrative Officers, Economic Development Officers, and elected officials are having with residents and businesses as they respond to immediate requests for support, or try to assist residents to navigate through existing programs.
- Early information gathered through the variety of surveys shared to-date in communities, including those being conducted by external agencies. Talk to external agencies about their findings to see if there are needs that align with your local government jurisdiction and priorities.
- Feedback to Town Hall sessions, Community Outreach Sessions, etc. that have taken place to date. Inquire to those conducting these sessions what items have arisen under the topic of ‘Recovery” for your jurisdiction.
- Smart practices from other communities and jurisdictions that have undergone major emergency events, and what was helpful for them as immediate/short term recovery activities. Consider if there are similar needs that could be addressed through replicating these activities in your community or jurisdiction. Consider what differences there may be between your
community or jurisdiction and the source-site of the smart practices.

- Other avenues as appropriate.

Tips:

- Consider how you might quantify the need/recovery supports identified and their associated costs. Being able to assign concrete financial considerations makes the identification of resources easier for you to achieve.
- Consider multiple sources and collaborations that could be drawn-in to help meet short to medium-term recovery needs. In some cases the needs might be financial, but in other cases the needs might be able to be met through the creation of support tools, communication pathways, or partnerships.
- Consider that new government policies such as tax relief measures require a significant amount of dialogue, planning and policy analysis before they can be drafted and implemented. Where you feel a response requires a larger policy needed to be developed around it, identify this as a medium to long-term activity, as demonstrated in the examples on the next page.
- Include all 4 components of recovery in your assessment of immediate/short term needs, to ensure a holistic community recovery.

Early-Identified Short-Medium term Recovery Needs/Supports Example:

Below is an example of some need-focused activities that could be undertaken by local government in the wildfire recovery assessment stage:

<table>
<thead>
<tr>
<th>Recovery Scope</th>
<th>Need</th>
<th>Activities</th>
<th>Resources To Consider</th>
<th>Timeframe/Milestone</th>
<th>Person Responsible</th>
<th>Financial/Resource Considerations</th>
</tr>
</thead>
<tbody>
<tr>
<td>People</td>
<td>Mental health supports for individuals who suffered losses of items of cultural significance</td>
<td>Short term: • Look for space where individuals can meet with counsellors • Engage community members for community led healing ceremonies</td>
<td>• Relevant cultural groups • Relevant mental health services</td>
<td>Dec, 2017 – Feb 2018</td>
<td>Team Member X</td>
<td>Space is available at the rate of $____ x 2 group meetings/month. Engage stakeholders for financial contributions to healing ceremonies.</td>
</tr>
<tr>
<td>Economy</td>
<td>Hospitality sector</td>
<td>Short term:</td>
<td>Immediate need.</td>
<td>Recovery Coordinator</td>
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<td></td>
<td>experienced significant number of cancellations in hotel bookings and significant losses in revenue.</td>
<td>• Engage media sources to message that community is safe. • Engage a communications consultant for advice.</td>
<td>• Business associations • Municipal / First Nations media departments • Neighbouring jurisdictions • BC Government • Hospitality sector</td>
<td>$ ___ will be required to engage communications consultant.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Economy</td>
<td>Debris management as a result of damaged residential, commercial and industrial structures</td>
<td>Medium to long term: • Engage all stakeholders • Develop a debris management plan to identify how to sort debris; which components can be recycled; reused; or sent to landfill • Identify temporary debris storage sites</td>
<td>• Local authority/First Nation landfill • Neighbouring landfills • Environmental consultants • Insurance companies • Communications consultant • Solid Waste Association of BC</td>
<td>Team member X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Environment</td>
<td>Interface fire destroyed X number of homes that need to be rebuilt, some of which are uninsured</td>
<td>Short Term: • Host multi-stakeholder discussions/town halls where impacted residents can ask insurance related questions. Begin identifying any potential funding sources for the uninsured</td>
<td>• Insurance Bureau of Canada • Funding sources for uninsured homes • Construction companies • Space for town halls</td>
<td>Team member X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reconstruction</td>
<td></td>
<td></td>
<td></td>
<td>$ ___ will be required for stakeholder engagement sessions</td>
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</table>
Potential Collaboration Organizations
Below are some examples of organizations that may be able to provide supports and capacity under various recovery components.

People
Supports may include: Health authorities; community centres; multicultural organizations; NGOs; school districts; care homes; psychosocial support organizations; child care organizations; insurance companies.

Economy
Supports may include: Utilities (power; gas; water); chambers of commerce; small businesses; financial institutions; BC Government; business associations; tourism destination marketing organizations; sector associations.

Environment
Supports may include: Environmental not for profit agencies; Ministry of environment; consultants; land fill operators; chambers of commerce; BC Government; engineers.

Reconstruction
Identify the need, and document information on supports to that will enable the safe and orderly restoration of damaged infrastructure and buildings. Examples of supports and resources include: construction associations; contractors; BC Government.

Appendix 1: Common Recovery Issues
Issues unique to the event will influence and drive provincial efforts and interests. A number of factors may influence the types of issues or extent of provincial involvement in recovery, including response actions; political and executive direction indicating the scope of province’s role; capacity of local authorities; scale of impact and availability of alternative supports (e.g., insurance coverage, NGOs, etc.). Nevertheless, past disasters have consistently resulted in the types of recovery issues identified below.

Recovery Issues:
- Emergency Social Services (ESS): Emergency Social Services include a range of services to preserve the well-being and provide basic necessities for people affected by an emergency or disaster (e.g., family reunification, emergency lodging, food and clothing, etc.). This is generally a Response consideration, but may still be relevant at the transition from Response to Recovery.
- Business resumption and/or continuity: Refers to efforts to resume or make alternative arrangements for service delivery of the company or business.
- Local Authority and First Nation critical infrastructure: restore and/or repair any damage to critical infrastructure to basic or pre-disaster functionality, such as roads, utilities, community centres, offices, etc.;
- Small business supports: This may include a broad array of supports to assist businesses with recovery, including access to capital, marketing, and labour force recruitment and retention.
- Industry resumption: Resumption of particular industries may be a priority to minimize the macro economic impacts to the province or impacted communities.
- Non-profit and civil society coordination: Non-profits are an important partner in recovery to resume or augment service delivery to impacted residents. Past events have also resulted in a strong civil society response as communities within and beyond the impacted area self-mobilize to provide supports to impacted residents. A coordinated and collaborative approach is of value.
to avoid duplication of efforts.

- Commemoration: As significant milestones pass, commemoration events are beneficial for morale of those engaged and to celebrated recovery successes.
- Psychosocial supports: Providing a continuum of supportive services targeting both residents and responders affected by an emergency or disaster. These services are intended to assist in diminishing the long-term psychosocial effects and improve an individual or community's adaptive coping mechanisms.
- Health and Human Services provide psychosocial supports. Human Services in particular is able to provide subject matter expertise to target supports to those with greater needs or multiple barriers.
- Housing: Housing supports have ranged from emergency lodging or transitional housing as communities are evacuated and interim housing while those impacted progress through recovery.
- Insurance: Many disasters in British Columbia are insurable and recovery will be shaped by insurance policies and coverage. However, a large event can result in thousands of claims for households, businesses and governments. A strong partnership with the insurance industry is valuable to coordinate efforts to expedite recovery for those impacted.
- Support and coaching to impacted communities: Response and recovery from a major disaster can be an overwhelming experience for local authorities. In past disasters the province has responded to requests to deploy subject matter experts to assist local authorities.
- Hazard reduction and mitigation: Implementing initiatives to increase the resiliency of communities to particular hazards. Mitigation can either be structural (e.g., flood diversion channels) or preparedness-based (e.g., reviewing existing emergency plans).
- Consumer protection: Information and complaints processes to provide consumer protection as those impacted undertake their personal recovery.
- Environmental and public health monitoring: Testing of air, soil, water and other materials samples to identify or monitor any potential threats to public health.

Appendix 2: List of Recovery Activities to Consider
Each event will present unique circumstances requiring specialized plans. However, a common suite of recovery-oriented plans will need to be developed by the municipality to coordinate, initiate and continue recovery operations. Below is a more detailed list of needs and activities for municipal recovery plans.

- Resident Needs and Capacity Assessment
- Volunteer Management
- Donations Management
- (Rapid) Damage Assessment
- Impacted Neighborhoods/Areas Site Security
- Notification to Residents and Access
- Debris Management and Clean-up – debris recycling strategy
- Business Continuity/Critical Infrastructure Restoration
- Welcome Centres/Information Centres / Resiliency Centers
- (Temporary) Housing
- Campaigns/Activity
- Community Recovery
- Stakeholder Engagement
- Recovery Governance/Recovery Task Force
- Emergency Social Services/Vulnerable Populations Supports
- Psychosocial Supports
- Re-Construction/Permits
- Transition/Demobilization
- Community Celebration/Acknowledgement
- Disaster Recovery Financial Management – including asset management for municipal insurance costs
- Records Management
- Occupational Health and Safety
- Small Business or Economic Recovery
- Mitigation and Lessons Learned
- Heritage and Cultural Re-Construction
- Environmental Public Health

**Appendix 3: Priority Issues Tracker**

<table>
<thead>
<tr>
<th>Summary of Issue / Need</th>
<th>Recovery Foundation</th>
<th>Priority (High/Med/Low)</th>
<th>Possible Solutions</th>
<th>Assigned To</th>
<th>Date Complete</th>
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Local Authorities and First Nations Recovery Toolkit
Appendix 3: Unmet Needs Post Disaster Template

Template: Unmet Needs Post Disaster

To people impacted by this event:

Many of you may already be aware of the formation of an “Unmet Needs Committee”, comprised of local residents: It is chaired by our Recovery Manager, and will maintain a presence within the Recovery Operations Centre. This committee is responsible for the identification of those persons who, for whatever reason, have not yet received assistance or sufficient assistance and aid them in getting back, as much as possible, to pre-disaster levels. If necessary, assistance other than the normal federal, provincial and local programs will be identified and utilized in meeting those needs.

“Unmet needs” refers to those needs of individuals that are not met, or cannot be met, through a variety of service organizations (e.g. Red Cross), or Federal, Provincial and Local Authority or First Nations programs.

Typical unmet needs can include the following: water, power, access, financial assistance, housing, food, transportation, home furnishings, medical, debris removal, counselling.

To aid in the identification of unmet needs, we are requesting that you take the time to answer the following questions and return this survey to the “Unmet Needs Committee” as soon as possible. Your committee can be contacted at:

1. Understanding that your confidentiality will be respected, do you give the committee members permission to advocate/investigate for available assistance on your behalf?
   Yes ___________ No ___________.

<table>
<thead>
<tr>
<th>Name</th>
<th>Signature</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
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</tbody>
</table>

2. Not limited to the examples given above, what are your current unmet needs in regard to the Wildfire 2017? If necessary, please use the second page to further clarify the type of support you require.

<table>
<thead>
<tr>
<th>Unmet need</th>
<th>Priority (High, Medium, Low)</th>
<th>Estimated Cost (if known)</th>
</tr>
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<tbody>
<tr>
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</tbody>
</table>
Appendix 4: List of Potential Organisations for Resilience Centres

List of Potential Organizations for Resilience Centres

Once Emergency Social Services (ESS) has ended, some residents may still need ongoing support. We recommend identifying and planning for these residents before the end of ESS. Some agencies work remotely and do assessments online. Emergency Management British Columbia (EMBC) ESS STAFF or EMBC Provincial Regional Emergency Operations Centers (PREOCs) may be able to provide contact information to these agencies.

This document is to assist Local Authorities and First Nations in planning speakers for their Town Hall and/or representatives for their Resilience Centre. Below is a list of agencies; those that provide their contact information are on the second page.

If an agency is contracted for support, their activities in the community should be reported to the Regional PREOC. The Local Authority or First Nation Recovery Manager should keep a track of Non-Governmental Organisation (NGO) activities in their community. The Recovery Manager may also need to act as a liaison between the residents and the NGO.

- Buddhist Compassion Relief Tzu Chi Foundation Canada
- St. Vincent de Paul
- Indigenous and Northern Affairs Canada (INAC)
- Ministry of Social Development and Poverty Reduction (SDPR)
- Community Living BC
- BC Association of Aboriginal Friendship Centres (BCAAFC)
- BC Coalition of People with Disabilities
- First Nations Emergency Services Society (FNESS)
- Provincial Health Services Authority
- First Nations Health Authority (FNHA)
- Ending Violence Association of BC
- Justice Institute of BC
- Insurance Bureau of Canada
<table>
<thead>
<tr>
<th>Name of Organization</th>
<th>Capacity/Function</th>
<th>Able to be present in person (Y/N/remote) and Number of people able to attend (#)</th>
<th>Contact information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canadian Red Cross</td>
<td>Volunteers, Reception Centres, Group Lodging, Donation management, Family reunification.</td>
<td>Yes (if available) /Remote</td>
<td>Emergency number: 1-888-800-6493</td>
</tr>
<tr>
<td>Salvation Army</td>
<td>Emotional and Spiritual Care, crisis Intervention, food and hydration services, shelter and reception centre support, donations management, emergency financial assistance, clean up and reconstruction, emergency communication.</td>
<td>Yes (if available) /Remote</td>
<td>Emergency number: (604) 681-3405</td>
</tr>
<tr>
<td>Mennonite Disaster Service</td>
<td>Skilled volunteer personnel, trucks, tool trailers, cook, etc. We supply labour, accommodation, transportation and feeding of our volunteers. For materials we partner with local recovery organizations, government (e.g. High River, AB), churches, Habitat, Red Cross and others.</td>
<td>Remote</td>
<td>Please contact EMBC ESS Staff at 250-882-6373</td>
</tr>
<tr>
<td>Samaritan’s Purse</td>
<td>SPC will conduct a rapid, comprehensive assessment of the disaster/emergency. Meet with appropriate authorities in the disaster/emergency affected area to discuss needs and establish levels of assistance. Samaritan’s Purse can then position one or more Disaster Relief Units, or DRUs, directly in the affected community and make available both resources, trained leaders and volunteer coordination to provide home and property reclamation, clean-up, debris removal and sanitation to prevent mold. Once on location, volunteer work teams are dispatched with trained leaders to serve the most vulnerable first- typically the elderly, those with lower fixed incomes, first responders, or those under insured/uninsured. Report to SPC management on local assistance requirements and feasibility of deployment.</td>
<td>Dependent on Field level assessment done by SPC.</td>
<td>Tammy Suitor 403-472-5076</td>
</tr>
<tr>
<td>Local Authorities and First Nations Recovery Toolkit</td>
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<td>----------------------------------------------------</td>
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</tr>
</tbody>
</table>

| **Program Manager** | Liaise with the SPC Office prior to and during the deployment of the Disaster Relief Unit. The program Manager will also be available to municipal designates working together to make sure those that need help are getting it. |  |

| **Disaster Psychosocial (DPS)** | The DPS program provides psychosocial services upon request and with the agreement of the impacted community. | Remote | HEMBC Duty Officer 604-686-6061 |

| **Canadian Disaster Animal Rescue Team (CDART)** | 40+ active volunteers in all regions, additional trained volunteers will step up during response, available 24/7 by phone to support communities with supporting pets (domesticated) | Can deploy to site or be available remotely; # of people varies, can provide better info if date/time is available | 24/7 cellphones Cheryl Rogers 778-227-0407 Heather Ferguson 604-790-6994 |

| **BC Housing** | BC Housing’s, Housing Registry does not have emergency housing. Our commitment to people who are looking for alternate permanent independent rental housing during a disaster situation that impacts a higher number of people and our Security and Emergency Services (SES) staff have been involved, and meet the eligibility for subsidized housing or one of our rent supplement programs (SAFER and the Rental Assistance Program), is that we will prioritize the processing of their applications. We also, in incidents where a high number of people are eligible and applying for subsidized housing, we can send a message to public and private housing providers that this incident occurred and how many households are in high need in a particular area. | Remote | BC Housing website https://www.bchousing.org/housing-assistance or call Toll-free: 1-800-257-7756 |

<p>| <strong>Ministry of Children and Family Development (MCFD)</strong> | Supporting communities with unattended minors. | Remote | Please contact EMBC ESS Staff at 250-882-6373 |</p>
<table>
<thead>
<tr>
<th>Ministry of Indigenous Relations and Reconciliation (MIRR)</th>
<th>Supporting First Nation Communities with a variety of resources.</th>
<th>Remote</th>
<th>250-356-9332 Janice Franklin</th>
</tr>
</thead>
<tbody>
<tr>
<td>World Renew</td>
<td>World Renew DRS responds with volunteer labor to survivors of disasters. This response is always at the request of an organization of local people and agencies that coordinate the disaster response. There are three primary services offered by World Renew DRS; 1. Experienced volunteers can provide guidance in the formation and work of a local recovery organization. 2. Unmet Needs Assessments - A group of 8-15 volunteers meet with storm survivors to listen to their stories and complete a form that indicates the damage, repairs already done, and still unmet needs. This information is then given to the local recovery organization. 3. Home Rebuild, Reconstruction - Groups of volunteers spend from one to three weeks at a time to rebuild homes. The assigned homes are determined by the local recovery organization. World Renew provides volunteer labor, but does not usually provide materials or money for materials. There is not a strict size of storm or number of affected homes that are required for a response</td>
<td>Remote</td>
<td>Henry and Linda Visscher are Regional Volunteer Managers based in Alberta and covering British Columbia. (780) 668-0700</td>
</tr>
</tbody>
</table>
Appendix 5: Community Resilience Centres: Guidance for Local Authorities and First Nations in British Columbia

General

This document is intended to inform Local Authorities and First Nations (collectively, Local Governments) on the role a Resilience Centre may fill within their community during or after a disaster event. It includes several considerations for a community wishing to establish this type of centre. This document has been created due to interest from several communities and it is our intention that these best practices and guidelines will continue to be improved upon.

A Resilience Centre can be adopted by Local Governments as a central location for residents affected by disaster to access resources and services that will enable them and their communities to recuperate and return to a pre-disaster state. The Resilience Centre does not intend to replace facilities such as Reception Centres or Group Lodging, which are related to disaster response. However, a Resilience Centre can be established during the response and early recovery phases of a disaster.

A Resilience Centre could also be considered as a an additional function of communities who are establishing Reception Centres and Group Lodging in support of other evacuated regions. Because of this, a Resilience Centre is best located in a central location where individuals can easily access its services. It is best to co-locate Resilience Centres in close proximity to Reception Centres and Group Lodging. It is important to note that a Resilience Centre does not serve as an entertainment or relaxation hub for displaced persons during or after a disaster event, although it may provide information about these activities.

Potential Resilience Centre Services (but also see Annex A for further suggestions)

Government services (Municipal, Provincial, and Federal):
- Employment Insurance Applications
- BC Service applications
- Child and Welfare Services
- Indigenous and Northern Affairs Canada Services

Business services:
- Insurance Operators (Home, Car)
- Utilities (Gas, Phone, Power)

NGOs
- e.g., Red Cross, Salvation Army
- e.g., SPCA, C-DART

Coordination
When determining if your community will create a Resilience Centre it is important to coordinate with adjoining jurisdictions. The correct location of a Resilience Centre will enable efficient use of limited resources. Critically, access to Resilience Centres for residents with special considerations and/or for vulnerable populations must be applied prior to opening. For example, consider not only location, but
overall layout for individuals with mobility issues.

**Linking with Long-term Recovery**
Resilience Centres may become focal points for longer term recovery if required within the community. Consideration on how a Resilience Centre transitions for longer term recovery should be undertaken. Over time, the services provided by a centre may evolve to reflect greater recovery initiatives.

**Tips and Tricks to Consider when establishing Resilience Centres**
- Signage and Public Affairs messaging to direct public to locations must be clear and consistent
- Resilience Centre should be close to, but not directly in a Reception Centre or Group Lodging
- A Resilience Centre Manager should be identified be overall responsible for the daily operation
- A welcome host is useful to direct new arrivals to appropriate sources of help
- Security personnel may be necessary
- Tracking of service providers through a sign in, including contacts information, will enable a Resiliency Centre manager the ability to track service providers
- Needs of differing users may vary greatly: some users of services may have been significantly affected (e.g. losing all possessions, and with no insurance), while others may have been lightly impacted. **Plan for this!**

**5 Steps to Resiliency Centre Creation**

**Step One:**
Identify a secure location to set up your Resilience Centre (e.g., local churches, civic centre or community halls). Consider a location that:
- Is generally available for use at least 6 days of the week
- Is located in most communities, and therefore likely close to those affected by the event
- Is capable of having many occupants in the building at one time, within fire regulations
- Has valid liability insurance in place for multiple occupants
- Has seating capacity designed for large groups as well as smaller private rooms
- Contains tables and chairs which removes the need to rent office furniture
- Has facilities for coffee, tea and snacks and potential for full meal preparation
- Is wheelchair accessible building and washrooms

**Step Two:**
Secure phone and fax lines
- Note that Telus has capabilities of connecting multiple lines within 24 hours
- At least one phone line should be designated to fax. This designated fax could be at another location but it is more practical to have it on site.
- One of the phone carriers (Bell, Rogers, Telus) may be prepared to provide cell phones if land lines cannot be quickly installed
Step Three: Outreach to Service Providers

- Identify service providers that may be willing to participate
- Develop a questionnaire with appropriate information for each provider and be prepared to utilize it when asking on availability (duration of availability, contact information, duration services can be provided, special considerations required for them to conduct their activities, space requirements)
- Contact Service Providers and initiate questionnaire

Clear and consistent messaging

- Pre-determine key information and who is best suited to deliver it
- Create clear message including hours, location, and services provided
- Ensure messaging is consistent and share with all possible avenues of traditional and non-traditional media (print, radio, social media, information boards, word of mouth)

Step Four: Resilience Centre Operation

- Designate on-site management of service providers
- Undertake continual improvements to process, including acquiring additional services
- Track arrival numbers, and what services are being used the most often
- Work with service providers to understand their needs and how to support them

Step Five: Centre Deactivation

- Pre-emptively create thresholds that may trigger de-activation (e.g., Centre will close if only receiving a certain number of visits)
- Proactively work on lessons learned documents including how service providers may be used more efficiently in the future
- Create thank-you products for service providers
- Create call-out lists in the event a Resilience Centre may be reopened within the community and coordinate this with ESS representatives
- Be prepared to transition Resilience Centre to a longer term recovery focus

Annex A: A List of potential agencies to consider including in your Resilience Centre

- Canadian Red Cross
- Salvation Army
- INAC
- Insurance Bureau of Canada
- Disaster Psychosocial (Health Services Authority)
- BC Housing
- Ministry of social Development
- Emergency Social Services
- Indigenous and Northern Affairs Canada
• Ministry of Children and Family Development
• Mennonite Disaster Service
• Justice Institute of BC
• Provincial Health Services Authority
• World Renew
• Buddhist Compassion Relief Tzu Chi Foundation Canada
• BC Coalition of People with Disabilities
• St. Vincent de Paul
• Ending Violence Association of BC
• Community Living BC
Recovery is the phase of emergency management in which steps and processes are taken/implemented to:

- Repair communities affected by a disaster
- Restore conditions to an acceptable level or, when feasible, improve them
- Restore self-sufficiency and increase resilience in individuals, families, organizations, and communities

A more complete definition, along with general Recovery concepts can be found in the BC Emergency Management System (BCEMS) Guide (Government of BC, 2016)

Prior to conducting a needs assessment it is important to determine whether additional support may be required to enhance Local Authority or First Nation capacity.

Capacity Assessment should consider:

- Magnitude of impacts and expected recovery timelines
- If there is a recovery plan and/or recovery manager in place
- Whether Disaster Financial Assistance is likely required
- Whether the local authority or First Nation has capacity to manage the disruption and undertake repairs

If concerns exist regarding the impacted Local Authority or First Nation capacity to respond over the longer-term in relation to the severity of the disaster, a detailed analysis can be conducted by the Municipal Affairs and Housing that takes into account financial, administrative and governance capacity.
The Four Recovery Pillars approach below can assist Local Authorities or First Nations to better understand their recovery needs.

<table>
<thead>
<tr>
<th>PEOPLE</th>
<th>ECONOMY</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Objective:</strong> Ensure the correct resources are available to support the overall physical, mental and social wellbeing of the people in BC.</td>
<td><strong>Objective:</strong> Encourage job creation and economic diversification while building stronger relationships with industry and small business.</td>
</tr>
<tr>
<td><strong>Components:</strong></td>
<td><strong>Components:</strong></td>
</tr>
<tr>
<td>- Health &amp; Safety</td>
<td>- Individual</td>
</tr>
<tr>
<td>- Mental Health</td>
<td>- Small, Medium, and Large Enterprise</td>
</tr>
<tr>
<td>- Community Well-being</td>
<td>- Key sectors such as tourism, agriculture, and forestry</td>
</tr>
<tr>
<td>- Interim Housing</td>
<td>- Economic Development</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ENVIRONMENT</th>
<th>RECONSTRUCTION</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Objectives:</strong> Protect and re-establish to a healthy state. Mitigate long term environmental impacts and risks. Explore new opportunities to partner on energy and climate change recovery initiatives.</td>
<td><strong>Objectives:</strong> Encourage innovative solutions and responsible development. Ensure Infrastructure is operational and safe. Involve local companies and workers wherever possible</td>
</tr>
<tr>
<td><strong>Components:</strong></td>
<td><strong>Components:</strong></td>
</tr>
<tr>
<td>- Debris Management</td>
<td>- Residential &amp; Commercial Buildings</td>
</tr>
<tr>
<td>- Environmental Testing and Monitoring</td>
<td>- Utilities</td>
</tr>
<tr>
<td>- Impacts to Biodiversity, ecosystems &amp; natural resources</td>
<td>- Infrastructure, Communications &amp; Transportation Planning</td>
</tr>
</tbody>
</table>
The following tables may help a Local Authority or First Nation conduct a needs assessment in order to gain a better understanding as to what is required to aid the community in recovery. The number and nature of the questions can be adapted to suit different communities; below are suggestions. Key stakeholders may be very helpful for gathering information related to the tables below. Appendix 2 contains a potential list.

### PEOPLE

<table>
<thead>
<tr>
<th>Impact</th>
<th>Description/Discussion</th>
<th>Current Recovery Efforts / Solutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>How many people have been evacuated?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>How many people have been hospitalized?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>How many fatalities due to disaster event?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>How many homes have been lost?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>How many homes are uninhabitable?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>What are expected timelines to have people permanently housed?</td>
<td></td>
<td></td>
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<tr>
<td>What are key dates affecting your community (i.e. return to school, first frost, etc.)?</td>
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</tr>
</tbody>
</table>

### ECONOMY

<table>
<thead>
<tr>
<th>Impact</th>
<th>Description/Discussion</th>
<th>Current Recovery Efforts / Solutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>How many small businesses (&lt;50ppl) are under evacuation order and what are associated lost revenues? Preferably listed by sector (i.e. tourism, agriculture, forestry, energy, mining, etc.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>How many small businesses (&lt;50ppl) NOT under evacuation order have been significantly affected and what are associated lost revenues? Preferably broken down by industry (i.e. tourism, agriculture, forestry, energy, mining, etc.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>What is the expected length of time businesses could face significant disruptions?</td>
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</tr>
<tr>
<td>Which key sectors in the region likely to be impacted for a significant period?</td>
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<tr>
<td>What are the impacts of the disaster on key</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Infrastructure businesses rely on (e.g. transportation networks, communications, etc.)?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>What is likelihood of displaced employees returning to work?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### ENVIRONMENT

<table>
<thead>
<tr>
<th>Impact</th>
<th>Description/Discussion</th>
<th>Current Recovery Efforts / Solutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>What are losses to natural habitat such as forest cover, fisheries, wildlife, etc.?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>How many days has the air quality posed a High to Very High health risk (an AQHI of 7 or greater)?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>What have been the impacts to food production and/or agricultural losses?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>How much soil is considered contaminated?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>What types of hazardous materials are present?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>What are the areas susceptible to flooding with reduced tree cover and vegetation?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### RECONSTRUCTION

<table>
<thead>
<tr>
<th>Impact</th>
<th>Description/Discussion</th>
<th>Current Recovery Efforts / Solutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>What is the approximate number of damaged structures (i.e. commercial, non-commercial buildings)?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>What critical services have been disrupted (i.e. electricity, potable water, sewer systems, health services, etc.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>What is the approximate volume of debris to be disposed/recycled?</td>
<td></td>
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</tr>
</tbody>
</table>
What are timelines to have critical infrastructure (i.e. electricity, potable water, sewer systems, health services, etc.) restored to an acceptable level of service?

### Appendix 1 – Additional Considerations for Recovery Pillars

#### PEOPLE
- Encompasses community recovery.
- Includes supports that enhance and strengthen the overall physical, mental, and social well-being of people in the community.
  - Could include donations and volunteer management, promoting psychosocial recovery, fostering community resilience, and housing.
  - Identifying and connecting vulnerable populations to appropriate support.
- Psychosocial care seeks to address the psychological and social impacts.
- Things to consider:
  - Most people are able to recover on their own.
  - Important to normalize reactions
  - Different people will need different levels of support.
- Potential training / resources:
  - Lessons in Community Recovery
  - Skills for Psychological Recovery
  - Psychological First Aid

#### ECONOMY
- Includes supports for the economic recovery of the municipality to enable reinvestment, diversification, and growth.
  - About the viability and sustainability of local economies.
- Linked to infrastructure recovery as the restoration of utilities, transportation and communications infrastructure provide the basic services many businesses need to function.
- Organizational capacity post-disaster is often a main concern for business.
  - Including access to capital / labour force retention or attraction.
- Business recovery center and business recovery hotline.
- Resources:
  - Local Authorities and First Nations Recovery Toolkit.
  - List of Priorities and Resources for incoming Executive Director, Recovery at EMBC

#### ENVIRONMENT
- Includes biodiversity, ecosystems and natural resources, waste management and environmental testing.
- Natural areas, parks and green spaces are important elements of community identity and should not be neglected in the

#### RECONSTRUCTION
- Includes the repair, and in some cases enhancement, of essential damaged infrastructure including residences, roads, bridges, public buildings, and utilities.
- Residences who have lost their homes are likely to be unfamiliar
reconstruction and recovery process.

- Other environmental issues to consider:
  - Possible contamination
  - Waste disposal and debris management
  - Environmental approvals needed for debris removal or construction work
  - Rebuilding green

- Key information for residents available through the municipality could include:
  - Local bylaw requirements
  - Permits (development, building, etc.)
  - Application procedure and supporting documents
  - Inspection requirements
  - Insurance

### Appendix 2 – Key Stakeholders

<table>
<thead>
<tr>
<th>PEOPLE</th>
<th>ECONOMY</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>External Stakeholders:</strong></td>
<td><strong>Internal Stakeholders:</strong></td>
</tr>
<tr>
<td>- Family and Community Support Services</td>
<td>- Children and Youth Services</td>
</tr>
<tr>
<td>- Local Community Organizations</td>
<td>- Community and Social Services</td>
</tr>
<tr>
<td>- Local Library or Recreation Centers</td>
<td>- Seniors and Housing</td>
</tr>
<tr>
<td>- Counselling Centers</td>
<td>- Labour</td>
</tr>
<tr>
<td>- Immigration Services</td>
<td>- Ministry of Health BC</td>
</tr>
<tr>
<td>- Housing Authorities</td>
<td>- Indigenous Relations</td>
</tr>
<tr>
<td>- Red Cross, Samaritans Purse, Save the Children</td>
<td>- Service BC</td>
</tr>
<tr>
<td>- Other NGOs / Non-Profits</td>
<td>- Culture and Tourism</td>
</tr>
<tr>
<td>- Local school authorities</td>
<td>- Advanced Education</td>
</tr>
<tr>
<td>- Indigenous and/or other significant community leaders</td>
<td></td>
</tr>
<tr>
<td>- Landlord / tenancy org / board</td>
<td></td>
</tr>
<tr>
<td><strong>Internal Stakeholders:</strong></td>
<td><strong>External Stakeholders:</strong></td>
</tr>
<tr>
<td>- Environment and Climate Change Strategy</td>
<td>- External Stakeholders:</td>
</tr>
<tr>
<td>- Energy, Mines and Petroleum Resources</td>
<td>- Economic Development Officer</td>
</tr>
<tr>
<td>- Agriculture</td>
<td>- Chamber of Commerce</td>
</tr>
<tr>
<td></td>
<td>- Business or Trade Associations</td>
</tr>
<tr>
<td></td>
<td>- Business district representative</td>
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<tr>
<td></td>
<td>- Elected officials</td>
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<tr>
<td></td>
<td>- Business community representatives</td>
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<tr>
<td></td>
<td>- Business providers</td>
</tr>
<tr>
<td></td>
<td>- Jobs skills and training organizations</td>
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<tr>
<td></td>
<td>- Industry</td>
</tr>
<tr>
<td></td>
<td>- Post-secondary</td>
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</tbody>
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<table>
<thead>
<tr>
<th>ENVIRONMENT</th>
<th>RECONSTRUCTION</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>External Stakeholders:</strong></td>
<td><strong>Internal Stakeholders:</strong></td>
</tr>
<tr>
<td>- Residents</td>
<td>- Municipal Affairs &amp; Housing</td>
</tr>
<tr>
<td>- Municipality</td>
<td>- Service BC</td>
</tr>
<tr>
<td>- Indigenous Groups</td>
<td>- Infrastructure and Transportation</td>
</tr>
<tr>
<td>- Local Environmental Groups</td>
<td>- Jobs, Trade and Technology</td>
</tr>
<tr>
<td>- University Environmental</td>
<td></td>
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<tr>
<td>Groups</td>
<td>- Health</td>
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<tr>
<td>-------------------------------</td>
<td>------------------------------</td>
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<tr>
<td></td>
<td>- Indigenous Relations &amp; Reconciliation</td>
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</table>
Appendix 7: PREOC Recovery Outreach and Community Visit

PREOC Recovery Outreach and Community Visit

Present Recovery Next Steps guidance- head of local authority as well as; electoral area directors, department heads, information officer, resiliency centre and/or recovery organization

Meeting duration - from 1-2 hours

Topics

- Define recovery as well as an end point or measureable goal to mark end of recovery efforts
- Community messaging format
- Recovery organization including selection of a recovery manager(s)
- Local government business continuity – delivery of standard and/or critical services and programs
- Local authority recovery
- Community recovery
- Ongoing case management
- Unmet needs
- Debris management
- Temporary or interim housing with public involvement and smart building (incentive funding)
- Leverage Official recovery Plan (OCP) and talk about mitigation measures
- Building moratorium, as required
- IDCBC or direct outreach to NGO, setting ground rules
- Volunteer coordinator or at least coordination
- Public education regarding rebuilding, redevelopment and revitalization

Agree on a goal: ie. Sustainable, resilient, and self-sufficient community

Resources: large enough room for comfortable seating of all attendees, screen, microphone if needed. PREOC recovery unit will bring: handouts, PPT projector, community toolkit (hard copy) and or thumb drive
Appendix 8: Town Hall/Community Centre Considerations

It is encouraged for Local Authorities and First Nations to organize a meeting just after an event in a “Town hall” or Community Centre to provide information to those impacted. Generally the information is about the event: What happened? Who was involved? Anyone hurt? Who did what? And so on...

The town hall or community centre allows Local Authorities and First Nations to talk to their impacted community members and provide accurate information, all at one time. It can be used to explain the path forward towards recovery and continue on through the recovery process.

Typically a meeting will take up to 2 hours. The highest ranking official from the LG in attendance welcomes the residents at the start and may chair the town hall or may introduce the person who will facilitate the meeting. The facilitator introduces each of the speakers (name, rank and organization).

During the question and answer session the facilitator allows those in attendance to speak and ask their questions. At the end the facilitator will thank everyone and provide contact information.

Considerations:
- Suggested list of speakers (depends on event and availability);
  - Local Government (Mayor / Band Chief)
  - Environment Canada
  - Emergency Responders/Incident Commander/Fire Chief/Public works
  - Incident Commander
  - Public Works
  - Rapid Damage Assessment (BC Housing)
  - Emergency Social Services
  - Disaster Financial Assistance
  - Health Authority
  - NGO’s
- Show empathy by example and explain how everyone is there doing their best and providing support;
- Explain where the Resilience Centre (RC) is, (or will be located) and when it will be open, the hours of operation and how support can be accessed; Carefully consider the presence of the media (this changes the meeting dynamic where some people are reluctant speak and others take as an opportunity to dominate with their own particular issues). It is not recommended to allow recording devises. Some prefer to not allow the media inside the town hall;
- Advise on ESS to those who haven’t registered at the RC;
- Provide as much information as possible, both verbally and in handouts about safety, re-entry (if there have been evacuations) and recovery. The RC may wish to produce an information package ahead of time to hand out;
- The different coloured placards placed on buildings, as part of Rapid Damage Assessment, need to be explained, and the process for addressing life safety issues identified by yellow or red placards.
- Other presenters may include handouts as well although care should be taken to ensure information packages are not used to solicit work from private contractors. However, guidelines on choosing a reputable contractor could be included;
• Consider ways to mitigate contentious conversation and any security issues that may arise.
• Other presenters may include handouts as well although care should be taken to ensure information packages are not used to solicit work from private contractors. However, guidelines on choosing a reputable contractor could be included;
• Consider ways to mitigate contentious conversation and any security issues that may arise.
Appendix 9: Recovery Unit Awareness for Local Authorities and First Nations

Recovery Unit Awareness for Local Authorities and First Nations

Below is a draft of the steps followed to introduce/discuss recovery planning with Local Authorities and First Nations. It is meant as a guideline only, and is based on the example of one of the Regional District in the South East; RD Central Kootenay.


1. The presentation. In order to be most effective this should be done in person either by the recovery coordinator from SEAPREOC alone or along with one or two key people who can speak on specific topics (ex: DFA/other funding available; Ministry of Health; MOTI, etc.) Sending the information via text only would defeat the purpose of effectively relaying to and connecting with local government on the breadth and extent of what Recovery can look like.

Reasoning: Engaging those involved in a way which will leave lasting impressions and benefit (ie in person) so that they can then understand the scope and importance of recovery work, and become more prepared ahead of time (when possible) to assist communities in the region when needed, will work best.

2. Presentation should include:

- A power point or other visual images to enhance the information shared.

- Resources with links included within the power point, as well as printed copies; possibly in a folder or binder for use in the field if needed.

- Clear messaging when first meeting with the Local Authority or First Nation as to the resources that the PREOC and PECC can provide within a recovery event as well as outside of active recovery events (i.e. training in aspects of recovery).

This would include an overview of what funding is available from provincial and federal sources, and what is expected to be sourced locally through other methods.

Reasoning: If information is included in the presentation of how the community itself can get assistance from local non-profits, fund raising, grant writing, etc, it may help the Local Authority or First Nation to see that they are not expected to cover all the costs for everything.

Along with this, the idea of supporting and encouraging the affected community to begin their own individual/group/community recovery initiatives will help to reduce a mentality of just expecting things to be done for them and they can begin to regain their independence knowing there are supports in place to help them get there - while making decisions on their own needs.
A list of Core training that local staff or members should have in order to be more aware and prepared for the recovery phase after an event, in order to better support the community affected as a government body (not just the emergency responders who work for the local government). Perhaps an overview for staff not directly involved and more in-depth training and understanding expected of the emergency response staff.

This information may include but isn't limited to:

- Training/knowledge in Disaster Financial Assistance

  Reasoning: The more the recovery unit (locally) is aware of the parameters of DFA the better prepared all of them will be to assist those affected. Example: If a staff member answers a phone call from an affected resident and hears of some issue that they know may be covered via DFA, instead of missing the opportunity for guiding the resident to the application form and process, they would perhaps be able to move things ahead for that resident (faster) towards recovery.

  In the end it may also help the capacity of the DFA department, having people apply who are more likely to be eligible due to assistance received ahead of applying (by those who have been trained in what can be considered for DFA).

  Without understanding the basics of what is eligible, opportunity for helping (sooner) may be lost. There are many people affected by disaster who don't have the capacity to do the research themselves and may become more vulnerable if they fall between the cracks.

- Training in recognizing and helping to get appropriate assistance for those with mental health issues brought on by a disaster or emergency event.
- Disaster Psychosocial First Aid, Awareness of PTSD symptoms, etc.
- Awareness of local supports available: immediately following an event for responders; for those directly affected; and for those in the greater community who are affected.
- Awareness of local supports available: in the long term, as above including support workers, community support groups, mental health practitioners in the health care system, etc.

Clarification of how this particular mental health need (issues arising from disasters and emergency events) will be addressed by the new Ministry of Mental Health and Addictions, ongoing.

- Understanding of what each Ministry represents and how to effectively and expediently access funding and resources as needed to help in Recovery. Given the breadth and scope of what may be needed, finding out what is available and how to access it efficiently will be important. A cheat sheet of all the Ministries with one line for each covering what they deal with is useful to have.

- Understanding of the Incident Command System and how the Recovery Unit works within it (and the role of local politicians within the system, also.)
Again, if there is a basic overview and perhaps an organisation chart permanently placed on the wall of the local government offices for the staff as a whole to refer to; and more in depth training for the emergency responders (if they don't know already) it makes it easier to understand and respond in the same way, ongoing.

3. Discussion after the presentation:

- Discussion needs to encompass the importance of hiring the right person for the Recovery Manager position and why.
- Discussion regarding setting a timeline of achieving the above, (training, hiring etc. so it is completed.) This includes ongoing training and awareness, updating resource lists (locally and other) etc.

4. Resources to share with RD/municipalities and go through (as time allows):

- Local Authorities and First Nations Recovery Toolkit
- Possible job description for Recovery Manager (embedded within Toolkit)

Note: recognizing that this job description may seem overwhelming; it is a best case scenario. A person with this type of varied experience may not be easy to find, and no doubt the job description will be adjusted according to the need in each region or community.

- Local Knowledge: Links to local non profit groups in each area, and any other local knowledge that can be of use in a recovery.

5. Other:

- If at all possible the presentation should be given by presenters who have had direct past experience working in the field, in recovery. There is nothing like direct experience to get a point across.
Residential flood insurance in BC

Many Canadian insurers now offer residential overland flood insurance which, along with sewer backup coverage, helps reduce the financial risk of these events. However, these products are optional and are added to home insurance policies.

Most home insurance policies do not cover damage due to overland flood or sewer backup, so it’s best to check with your insurance representative to see what optional coverages are available to you.

What may be covered

- Flood insurance products vary by company and may cover damage caused by flooded lakes or rivers, rising groundwater, or surface water from heavy rainfall or melting snow.
- Homeowners may also be covered for damage from a sudden backup and overflow of their sewers, pipes or septic systems.

Additional Living Expenses

- In some cases, homeowners have coverage for additional living expenses, which pays for the cost of alternative accommodations and living expenses for people whose home is unlivable as a result of insured damage.
- Each person’s situation is unique, so it’s best to contact your insurance representative for more information.
- If your policy covers additional living expenses, keep all of your receipts and speak to your insurance representative to discuss what you have coverage for.

If your home, car or business was damaged during flooding, we are here to answer your insurance-related questions.

More insurance questions? Please contact:

Insurance Bureau of Canada’s Consumer Information Centre at 1-844-2ask-IBC (1-844-227-5422) or visit ibc.ca
About Insurance Bureau of Canada

Insurance Bureau of Canada (IBC) is the national industry association representing Canada’s private home, auto and business insurers. Its member companies make up 90% of the property and casualty (P&C) insurance market in Canada. For more than 50 years, IBC has worked with governments across the country to help make affordable home, auto and business insurance available for all Canadians. IBC supports the vision of consumers and governments trusting, valuing and supporting the private P&C insurance industry. It champions key issues and helps educate consumers on how best to protect their homes, cars, businesses and properties.

P&C insurance touches the lives of nearly every Canadian and plays a critical role in keeping businesses safe and the Canadian economy strong. It employs more than 120,000 Canadians, pays $9 billion in taxes and has a total premium base of $49 billion.

For media releases and more information, visit IBC’s Media Centre at www.ibc.ca. Follow IBC on Twitter @InsuranceBureau and @IBC_West or like us on Facebook. If you have a question about home, auto or business insurance, contact IBC’s Consumer Information Centre at 1-844-2ask-IBC.

Contact us

Aaron Sutherland
Vice-President, Pacific
Insurance Bureau of Canada
604-684-3635 ext. 223
ibc.ca
CLEANING UP AFTER THE FLOOD

General Information

Picking up the pieces and restoring homes and lives in the wake of widespread flood damage is one of the toughest things people who have experienced such trauma ever have to face. Following a flood, it is important to restore your home as soon as possible so your health is protected and further damage to your house and its contents is prevented.

Flood damage is harmful, not only because water causes walls or floors to buckle and supports to weaken, but also because contamination from sewage and other pollutants pose a serious health hazard.

Another potential longer-term danger from flooding is the possible growth of moulds, which may present a health hazard. Moulds thrive in damp conditions, so it is crucial to dry everything quickly.

Following are some tips about what to do and what not to do after a flood.

Before moving back into your house:
- Ensure access to your house is safe, and that there are no downed power lines, road washouts or debris posing a travel danger in your community.
- Complete a perimeter check of your house and note any structural or other damage. If serious, contact the local building inspector or a structural engineer for advice.
- Take photographs and keep a record of the damage for government agencies involved in flood relief efforts.
- Make a list of things you need to have to start cleaning up and repairing damage.
- Organize and develop a recovery plan.
- If you smell volatile fumes such as gasoline, natural gas or propane, leave the property immediately and call your local gas company or fire department.
- Do not attempt to turn the power back on in your home until wiring has been inspected by an electrical inspector or electrician. If the power must be reconnected by BC Hydro, they require a written declaration before restoring service.

Entering your house:
- Stay out of buildings if floodwaters remain around or in the building and ensure that BC Hydro has disconnected the electricity before you enter.
- If the building is primarily water-free, ensure that your main power switch is turned off at the breaker box. If conditions are wet/damp around the breaker box, stand on a dry board and use a dry stick to turn off the switch.
- Keep extension cords out of the water.
- For all heating systems and large appliances, whether they are wood, gas, propane or electric, ensure that you have equipment thoroughly inspected by a qualified technician before using again. If equipment has been submerged in floodwater, you may need to replace some or all parts such as gas control valves, circuit breakers, fuses, filters, blower motors and switches and controls. It is often cheaper to replace this equipment than to try to repair it.
- Inspect the building for buckled walls or floors, and look out for holes or broken glass and other hazardous debris.
If your well has been flooded, assume that the water in your home is not safe to drink. You will probably have to disinfect your well before it is safe to use it. Check with your local environmental health officer to find out how to do this. If you are on a public water system, listen to local media for news from the public health authorities on whether or not your water is safe to drink.

Your local Health Authority will release Boil Water Advisories as necessary. Find your local Health Authority at healthservices.gov.bc.ca/socsec/index.html. You may want to read “How to Disinfect Drinking Water” found at http://www.healthlinkbc.ca/healthfiles/hfile49b.stm.

Flooding may cause damage to your sewage disposal field if you use the system before floodwaters have dropped below the distribution trenches in your septic field. Talk to your local environmental health officer before using your septic system after a flood.

Have floor drains and sump pumps flushed and disinfected.

Pour two litres of chlorine bleach evenly over any standing water in your home and stir the bleach and water together as much as possible. Repeat every four days as long as the water remains.

Cleaning up:

Contact your insurance agent to verify if damage caused by flooding is covered by your policy.

When British Columbia has declared an event eligible for Disaster Financial Assistance (DFA), this program can provide financial assistance to help individuals and communities recover from catastrophic events, which have resulted in uninsurable property and infrastructure damage. DFA applications and other brochures are available at all Emergency Management BC locations and from our website.

If damaged contents must be thrown away, take pictures of the items and make a list of items that have been damaged or lost. Keep track, on a daily basis, of the number of hours you and your family or friends spend cleaning up your property and keep receipts if you have to hire equipment or suppliers to assist you with clean up. This documentation will be useful if you are making an insurance claim or applying for Disaster Financial Assistance.

Discard food in the freezer or refrigerator, boxed foods, fresh vegetables and fruit, bottled drinks and home preserves, as well as medicines, cosmetics and toiletries if there is water damage.

Wash and disinfect all dishes and utensils in boiling water or a diluted bleach solution of one part bleach to 10 parts water or a non-ammonia dish detergent.

Remove water from your flooded home slowly. Drain in stages, about a third of the volume daily. If you remove it too quickly, the walls or floor may buckle.

If you use a gas or kerosene driven water pump to drain floodwater from your home, make sure you have a way to ventilate exhaust fumes.

Do not heat your home more than above outdoor temperature until all the water has been removed.

Open windows and doors to air naturally. Ventilate or dehumidify the house until it is completely dry.

Clean, disinfect, rinse and dry all surfaces, wall and floor areas of the house that were flooded.

To avoid inhaling fumes, you may want to wear a charcoal respirator while doing this job.

Replace drywall and insulation at least half a metre above the high water line.

Replace flooring that has been deeply penetrated by floodwater or sewage.

Throw away any loose or batt insulation that was wet. Only rigid foam insulation can be salvaged, after removing, cleaning and drying.

Attack moulds and bacteria aggressively as they can aggravate allergies, asthma and other health problems. If moulds are present inside the house, clean them up with a chlorine bleach solution (one part bleach to 10 parts water).

If moulds persist, more drastic measures must be taken. The only way to avoid moulds is to keep surfaces dry and to keep the relative humidity low.

Clear your yard of debris and refuse left outside by floodwaters, since these will attract animals and insects.

Check any chemical containers for spillage or water damage, put them in a safe area, and contact your local authority about disposal procedures.
Clean-up after a Flood

What are the health hazards after a flood?
Anyone who has had a flood at home is anxious to get back to ordinary life as soon as possible. However, it is important to remember that floodwaters are usually very dirty and items that have come into contact with flood water should be handled properly. During a flood, water leaves its normal course and washes over land, and may come into contact with farmyards, manure, garbage, overflowing septic systems and other sources of contamination and disease. Flood waters can become heavily contaminated and can make people sick.

When is it safe to return home?
You should not live in a home that has been flooded until clean-up is finished, a supply of safe water is available, and proper disposal of human waste and garbage has been arranged.

If your home is served by a public water supply system, you will be notified if, and when, your water is safe to drink. If your water supply comes from your own well, you must assume that the water is contaminated and not fit to drink without additional treatment and tests to show the water is safe. For more information, see HealthLink BC File #05b Should I Get My Well Water Tested? If the water in the well looks clear, it may be used after it has been disinfected.

For more information see HealthLink BC File #49b How to Disinfect Drinking Water.

How do I clean my flooded home and outbuildings?
All movable furnishings should be taken outside. Upholstered furniture that has come in contact with water should be left outside to dry completely. Direct sunlight can be a strong disinfectant however, additional cleaning maybe necessary. Thoroughly scrub and clean all surfaces and floors with hot water and detergent as soon as possible after the water has gone down. Clean all woodwork with soap and water.

After cleaning surfaces, wash these with a sanitizing solution. The solution can be made by mixing 500g of chlorinated lime in 25 to 40 litres of water (1 pound of chlorinated lime in 6 to10 gallons). Household laundry bleaches containing 5 to 6 percent sodium hypochlorite may also be used; information will be included on the label. Mix 1 litre of household bleach in 25 litres of water (1 quart of household bleach in 6 to10 gallons of water). Be sure to wear protective gloves, eye protection, and boots, as strong solutions may irritate skin and eyes and cause respiratory symptoms. Clothing that has been worn while cleaning should be washed separately in hot water and detergent.

All standing water in flooded basements should be disinfected, but remember to wait until the flood waters have left the surrounding ground. Measure 2 litres of household bleach and distribute it evenly over any standing water. Stir the bleach and water together as much as possible. Repeat this every 4 to 5 days for as long as the water remains. When pumping basements, do not pump the area too quickly as water in the surrounding soil may cause the collapse of basement walls and/or uplifting of basement floors.

Once the water has been removed from the basement, remove all the silt and mud right away. You may need to use a hose, buckets of water, and rough scrubbing. Remove all items that have come into contact with the flood water including furniture, carpet, toys, clothing and other items. Open all windows to help with drying and apply heat using a furnace or stove if possible. Disinfect all surfaces exposed to flood waters by brushing on a sanitizing solution.
All sheds, garages and other buildings where goods are stored need to be cleaned and disinfected. In particular, utensils and containers used to prepare, preserve or store food need to be washed well and soaked in a chlorine solution.

What about septic tanks and disposal fields?
Flooding can seriously affect your septic system by undermining the soil that supports it. After the flood waters recede and you return home, consult with your local public health inspector and an authorized person in septic system construction and maintenance for advice on your septic system. To contact a registered onsite wastewater practitioner in your area, visit http://owrp.asttbc.org/c/finder.php

Following the clean-up of buildings, you must remove flood-borne material from yards. For information on disposal services and regulations in your area, contact your municipality or regional district.

What precautions should be taken for food safety?
The following precautions should be taken after a flood or when food comes into contact with flood waters:

- Food should be destroyed unless it has been packaged in waterproof containers that can be easily cleaned and sanitized. It is hard to make food directly exposed to flood waters safe to eat, especially if it has become heavily contaminated. Washing, sanitizing and properly cooking food may not destroy dangerous bacteria and chemical contaminants.
- Never eat or drink uncooked or raw foods exposed to flood waters, even if you have tried to wash and sanitize them.
- Throw out boxed foods, fresh vegetables and fruit, bottled drinks and home preserves.
- Throw out all perishable foods that have been at temperatures above 4°C for more than 2 hours such as, meat, poultry, eggs and dairy products.
- Wash your hands often if you have been cleaning up after a flood, especially before handling or eating food.
- Throw out canned goods if there is a damaged seal, bloated can, or the contents show signs of seepage. Open cans in good condition only after taking off the label, thoroughly washing the can in warm soapy water, and putting it into a sanitizing mixture. A sanitizing mixture can be made by mixing 40 mL of household bleach in 1 litre of water (5 ounces or 10 tablespoons of 5 to 6 per cent household bleach to 1 gallon of water. Remember to clearly mark the contents on the container if it will not be used right away.
- Throw out previously opened bottled food and drink products because it is very hard to clean under the caps. Throw out unopened bottles if the contents show signs of seepage.
- Wash with warm soapy water and then sanitize all contaminated utensils, dishes and food contact surfaces, such as drawers, shelves, cutting boards and countertops.

For More Information
For more information about clean-up after a flood, please contact the environmental health officer at your local public health unit.
www.health.gov.bc.ca/socsec/contacts.html

For more HealthLink BC File topics, visit www.HealthLinkBC.ca/healthfiles/index.htm or your local public health unit.

Click on www.HealthLinkBC.ca or call 8-1-1 for non-emergency health information and services in B.C.

For deaf and hearing-impaired assistance, call 7-1-1 in B.C.

Translation services are available in more than 130 languages on request.
Emergency Response

Food Safety after a Flood

Precautions should be taken after a flood or when food comes into contact with flood waters. It is hard to make food safe to eat once it has been exposed to flood waters that are heavily contaminated. Washing, sanitizing and properly cooking food may not be enough to destroy dangerous bacteria and chemical contaminants.

**General Precautions:**
- Wash your hands often if you have been cleaning up after a flood, especially before handling or eating food.
- Wash with warm soapy water and then sanitize all contaminated utensils, dishes and food contact surfaces, such as drawers, shelves, cutting boards and countertops. A simple sanitizing solution can be made by mixing 30 ml of regular household bleach per 4.5 litres of water (about 1 oz. bleach per gallon of water).

<table>
<thead>
<tr>
<th>Packaged Foods</th>
<th>Unpackaged &amp; Fresh Foods</th>
</tr>
</thead>
<tbody>
<tr>
<td>If exposed to flood waters, destroy:</td>
<td>Discard food that:</td>
</tr>
<tr>
<td>- Foods packaged in containers that are not waterproof,</td>
<td>- Is unpackaged and was exposed to flood waters, including fresh fruit &amp; vegetables,</td>
</tr>
<tr>
<td>- Bottled drinks and home preserves, which may be difficult to clean &amp; sanitize under caps, lids or sealing rings,</td>
<td>- Was not temperature controlled (warmer than 4°C for more than 2 hours), whether or not it was exposed to flood water,</td>
</tr>
<tr>
<td>- Canned goods that:</td>
<td>- Is considered higher-risk, including:</td>
</tr>
<tr>
<td>- Appear to have a broken seal</td>
<td>- Cooked grains</td>
</tr>
<tr>
<td>- Show signs of bloating or seepage</td>
<td>- Cooked vegetables</td>
</tr>
<tr>
<td>- Any previously-opened packaged foods.</td>
<td>- Dairy products</td>
</tr>
</tbody>
</table>

**Commercially-canned foods in good condition may be salvaged by:**
1. Removing the label,
2. Washing the can in warm soapy water and then rinsing,
3. Sanitizing in a solution of 40 mL of regular household bleach in 1 litre of water (approx. 5 ounces or 10 tablespoons of bleach per gallon of water), and
4. Marking the contents on the food container if it will not be used right away.

For further information, please visit [www.interiorhealth.ca](http://www.interiorhealth.ca) > Your Environment.
Drinking Water after a Flood

When should I disinfect my drinking water?

Disinfecting is a process to destroy disease-causing organisms. The need to disinfect your drinking water is largely dependent on its source and who is providing the water to your home.

- **Water Supply System** - If your water supply has been affected by a flood and a public notification has been issued (e.g. a ‘Boil Water Notice’), you may need to disinfect your drinking water.

- **Private Well** - If you get water from your own well on your property and flood waters were over the top or around the well casing, disinfect your drinking water. Do this after the flood waters have receded and then have a sample analyzed for microbiological contaminants.

- **Surface Water** - If you get your water directly from a stream, creek, spring, lake or pond, you disinfect your water supply all the time. Untreated surface waters are always at risk of carrying germs and the water should be boiled or otherwise disinfected prior to consumption.

*Please note - flood waters can contain chemical hazards that disinfection alone may not remove. Please contact your local health protection office for further information.*

Why should I disinfect my drinking water?

Disinfecting drinking water kills bacteria, viruses, and parasites, many of which can infect people and cause sickness. Sickness from water is often caused by E.coli, Campylobacter, Salmonella, Amoebic dysentery, Giardia (beaver fever), Cryptosporidium, and Toxoplasma.

These germs can enter the drinking water when animal or human feces get into drinking water. Open waters, such as lakes and streams, are more likely to be contaminated than deep groundwater supplies. The closer water is to the surface, the greater chance of contamination. Floods introduce more contaminants into surface water than what is normally found.

What should I buy store-bought water for?

Use disinfected or store-bought water for:

- Making baby formula,
- Brushing your teeth,
- Making coffee or tea,
- Cleaning raw vegetables and fruit,
- Making drink mixes such as juice concentrates or drink crystals,
- Making ice cubes, and
• Bathing children: This is to reduce the chance that your child will swallow water that may be contaminated. Give sponge baths using clean water.

What is the best way to disinfect water?

The best way to kill bacteria, viruses, and parasites is to bring water to a full boil for at least one minute; at elevations over 2,000 meters (6,500 feet), boil water for at least two minutes. Cool and store the water in clean containers made for food or water. Boiling may not make heavily-polluted water safe.

Can I use bleach to disinfect water?

Yes, use unscented household bleach. Avoid scented, colour-safe, non-chlorine and bleaches with added cleaners.

Bleach will kill viruses and bacteria, but may not kill parasites, such as Giardia or Cryptosporidium, which require boiling. If you are unsure about the safety of your water, even after it has been treated with bleach, do not consume it.

Bleach works best when added to water that is about 20˚C (68˚F). To treat your water, add two drops (0.1 ml) of unscented household bleach (about 5.25% chlorine) to 1 litre of water. Mix the bleach and water together, cover it and let it stand for at least 30 minutes before drinking. You should notice a slight chlorine smell after the 30 minutes. If you don’t, add another two drops, then let the water to stand for another 15 minutes.

If the water is cloudy or colder than 10˚C (50˚F), add four drops (0.2 ml) of unscented household bleach (about 5.25% chlorine) to 1 litre of water. Mix the bleach and water together, cover it and let it stand for one to two hours before drinking. If the treated water has a strong smell or taste of chlorine, leave the container open for a few hours. You can also pour it back and forth from one clean container to another several times. The longer the treated water stands, the better the disinfection.

If you are using chlorine tablets, follow the directions on the package.

Can I use iodine to disinfect water?

Yes, iodine can be used but only for a short period of time. If you use iodine for more than one to two months, you could develop thyroid problems. Pregnant women should not use iodine drops to disinfect water, it could harm the unborn baby.

Iodine works best when added to water that is about 20˚C (68˚F). To treat water, add five drops (0.25 ml) of 2% Tincture of Iodine to 1 litre of water. Mix the iodine and water together and let it stand for at least 30 minutes before drinking.

If the water is cloudy or colder than 10˚C (50˚F), use the same amounts, but let it stand for 40 minutes before drinking. If you are using iodine tablets, follow the directions on the package.
What if the water is still cloudy or murky after boiling or chemical disinfection?

If the water is cloudy or murky, pour it through a clean cloth or coffee filter. Let any remaining particles settle to the bottom, then pour the water into clean containers made for food or water. The water might still look a little cloudy. If you are ever unsure about the safety of your water, even after it has been treated, do not consume it.

Should I consider filtration or other treatment methods?

If your drinking water requires treatment for more than one to two months, consider installing a filtration system or using another source, such as bottled water. If you are going to install a filtration system, use a reliable supplier who can help with installation and ongoing maintenance.

To remove some types of contaminants, such as Giardia, filters must have an absolute pore size of 1 micron or less, and be certified by the National Sanitation Foundation (NSF).

Jug-type water filters (such as Brita®), are not designed to remove contaminants from an unsafe water supply and will not remove Giardia. Some built-in water filtration systems will remove Giardia, but they need regular maintenance to work well.

Other types of water treatment, such as distillation and UV units, are also available. Check with local water purification suppliers, or your local environmental health officer, for more information.
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EMERGENCY – NATURAL DISASTER PROTOCOL FOR ELECTRICAL AND GAS EQUIPMENT SAFETY (E.G. – FIRE, FLOOD, EARTHQUAKE, LANDSLIDE)

Date of Issue: July 28, 2015

No: IB-EL/GA 2015-04

Topic

Procedures for re-commissioning gas & electrical equipment after a natural disaster has occurred.

If electrical or gas appliances or systems are subject to conditions resulting from a natural disaster (e.g. Fire, Flood, Earthquake, Landslide) they may become damaged, making them inoperable or unsafe.

For your safety, it is important to have your area of occupancy declared safe to enter by the proper authorities. It is important that the requirements of other health and safety protocols have also been met.

This document outlines preparations prior to a disaster and Technical Safety BC requirements for restoring service after a natural disaster has occurred.

Important Information

1. Pre Disaster Precautions for buildings:

   Gas and electrical equipment safety

   There can be potentially serious gas and electrical safety implications to consider if you are living or working in an area experiencing extreme flooding or wild fires.

   Technical Safety BC reminds homeowners and businesses to take precautions with gas and electrical appliances when there are warnings of flooding or wild fires that may impact their home or business.

   Gas and electrical appliances or systems damaged by flooding or fire can be dangerous if they are re-energized and used without being properly inspected by a licensed contractor.

   If your community is being impacted directly by flooding or wild fire and time allows, the following is recommended:

   • If you have advance warning and flood waters or wild fire could reach your gas appliances you may have a Technical Safety BC licensed gas contractor remove your gas appliances or their components that may become damaged.
   • Have your propane supplier remove your propane tank or ensure it is adequately anchored to prevent the tank from floating and being carried away by flood waters.
   • Clear the area underneath and within 10 feet of a propane tank of vegetation or any other combustible material to limit the damage from wild fires.
   • Any gas appliance that is removed must have the open end of the pipe leading from the valve to the appliance capped or sealed.
   • If you don’t have time to remove your gas appliances and or a licensed gas contractor is not available, turn off the power and gas supply to each appliance and leave it off.
• If required to evacuate your home in a hurry, shut off the main gas supply upstream of the gas meter or at the propane tank or cylinder.
• Disconnect or unplug all non-essential electrical appliances and electronic equipment.
• Ensure that all valves and power knobs on all appliances and systems are turned off.
• Ensure propane cylinders and portable appliances are in a secure area above the anticipated flood level and clear of combustible material.

If your community is in an active seismic zone and there is a risk of earthquakes the following is recommended:

• Have a Technical Safety BC licensed contractor connect appliances such as ranges, refrigerators, clothes dryers by corrugated metal connectors which are less susceptible to damage in an earthquake. Vented appliances can be connected by the same type of connectors provided they are secured to ensure that the vent cannot be dislodged and the connector does not exceed 2 feet.
• Gas water heaters should be secured so that they remain in place and upright during an earthquake. Use commercially manufactured supports which have been approved by the California State Architect.

Note: depending on the time of year and type of event it may be advisable to leave heating appliances in operation to protect against freezing conditions.

2. Post Disaster Protocol for evacuated buildings:

Permission to enter the affected area must be granted by the authority designated in command.

Utility distribution services and propane service will be restored by local Utilities or propane suppliers using their own procedures.

Gas only

• If gas suppliers have shut off fuel supplies, removed gas meters or propane containers, contact your provider regarding the required process to have your building re-energized. In some cases, a tag may be provided on site outlining these requirements.
• A shut down list, including addresses of all buildings where flood waters entered the building will be delivered by the gas supplier to the authorities having jurisdiction for follow up.

If you reside within one of the following areas please contact these local municipalities for gas permitting and protocol procedures. Maple Ridge, Burnaby, Vancouver, North Vancouver, District of North Vancouver, Richmond and Kelowna.

2(a) Buildings outside of the designated affected zone - Well away from flooding, fire, slide, earthquake, etc., however premises have been impacted by the loss of the electrical or gas utility as a result of the incident.

• When notified by the gas supplier, the building owner may turn main gas valve back on when appropriate and re-light appliances or contact a Technical Safety BC licensed gas contractor to do this work.
Electrical only

- The utility may reconnect service without any other intervention from Technical Safety BC or licensed contractor if the utility system was only disconnected for precautionary measures.
- This will not apply to conditions where customer owned infrastructure has been impacted in addition to utility disconnection.

2(b) Buildings within the designated disaster zone - Where the event may have affected the gas and/or electrical services to the building.

Electrical and Gas

- Building owner must contact a Technical Safety BC licensed contractor to assess any safety hazards. Permits are required for repairs or modifications but the contractor will not be required to obtain permits in advance of the restoration, and they may begin emergency repairs before obtaining a permit. Homeowner permits will not be issued for emergency repair work.

Please visit Technical Safety BC’s website for a list of active licensed contractors at: https://www.technicalsafetybc.ca/find-contractor

- Technical Safety BC staff will be prepared to offer technical advice to homeowners, building owners, contractors, emergency response personnel and gas/electrical suppliers. Technical Safety BC staff will also be prepared to visit sites where appropriate.

Gas only

- Appliances, accessories, components, equipment, piping, and tubing that have been exposed to fire, explosion, flood, or other damage shall not be offered for sale, installed, reactivated, or reconnected to the gas supply until the appliance, accessory, component, equipment, piping, or tubing has been inspected by a Technical Safety BC licensed gas contractor. The inspection of piping or tubing exposed to flood shall include a check for water in the piping or tubing system.
- In the event new equipment, piping or venting must be installed the appropriate gas permit will be required.

Electrical only

For residences, hospitals, essential services as deemed by the local municipality and livestock barns:

1. There are no special conditions or requirements for non-disaster affected areas.
2. If electrical equipment or wiring has not been subjected to wetting, and if the contractor assessment finds no other problems, then reconnection can be authorized without a permit.
3. In areas classified as flooded by the local authority:
Qualified field safety representative’s (FSR) may make a declaration to BC Hydro stating registration number and this bulletin number IB-EL/GA 2015-04 in replacement of the required permit number (1-866-693-7007 for major power restoration events only) to restore power if:

They are satisfied that all hazards have been safely controlled or eliminated (use section 3 of this document as a guideline)

The request is logged by the FSR in a notebook used exclusively for this purpose and must include the following information:

i. Date and time  
ii. Location of premise  
iii. Name of owner  
iv. Any work performed  
v. Name and number of FSR  
vi. Name and number of Contractor (if appropriate)

The notebook may be required to be submitted to a safety officer for audit.

The authorization and declaration form can be found on Technical Safety BC’s website at: https://www.technicalsafetybc.ca/declaration form 206 Copies of the form are also available at any Technical Safety BC office.

A handwritten declaration may be used if the normal form is unavailable, provided that in addition to the required log book information, it contains the following (or similar) statement:

I, ___ (insert name) ___ declare that I have personally inspected this site, and that the site is safe for reconnection of electrical service.

- Service repair work performed above requires a contractor declaration to be submitted to Technical Safety BC within 10 working days of the declared end of the emergency.

- This contractor declaration and permitting procedures may differ within each local authority so please contact the following applicable municipalities for this information:

Victoria, Maple Ridge, Surrey, Burnaby, Vancouver, North Vancouver, District of North Vancouver and West Vancouver.

For other premises such as businesses, manufacturing plants and warehouses:

- Follow normal procedures or contact Technical Safety BC for direction.

3. **Guidance for equipment and system assessment:**

**Electrical and Gas - Heating systems & equipment**

- Whether you use a gas or electrical heating system, ensure that you have it thoroughly inspected by a certified individual employed by a Technical Safety BC licensed contractor before using it again.
- If they have been wetted or otherwise damaged, replace the furnace blower motor, switches and controls.
INFORMATION BULLETIN

• Damaged or wetted forced-air heating ducts and return-duct pans should be either cleaned or replaced.
• The inspection of piping or tubing exposed to flood must include a check for water in the piping or tubing system.
• Replace components like filters and insulation inside appliances such as furnaces, water heaters, boilers, refrigerators and freezers if they have been wet, burnt or otherwise damaged, or replace the appliance completely.

Electrical systems & equipment

If equipment or wiring has been wetted, burnt or otherwise damaged:

• In the case of severe flooding or damage, after repairs are made, all circuits must be tested, unless complete rewiring has been performed.
• Plug-in loads (such as TVs, dryers) must be unplugged and may only be reconnected if replaced or reconditioned by a qualified repair service. Note: it is the field safety representative’s responsibility to ensure that these devices are unplugged prior to re-energization. It is the homeowner’s responsibility to ensure that the devices are repaired or replaced.
• Permanently connected loads (such as heaters, ranges) must be removed and replaced or reconditioned by a qualified repair service or contractor.
• Other electrical equipment (such as receptacles, fixtures) must be replaced.
• Electrical connections must be taken apart, cleaned and dried, and remade.
• For customer service panels, if the rest of the panel has been cleaned, dried, connections redone, and has been verified through testing, only the individual breakers need to be replaced. Note that wetted molded-case circuit breakers cannot be reused and must be discarded.
• If service metering has been wetted, contact the utility and indicate this on declaration the form.
• Any other hazards identified must be isolated or repaired.

For additional information not covered by this bulletin please contact Technical Safety BC at 1.866.566.7233.

Ulrich Janish  Brad Wyatt
Provincial Safety Manager - Electrical  Provincial Safety Manager - Gas

References:
Bill 19 – 2003  Safety Standards Act
B.C. Reg. 100/2004  Electrical Safety Regulation
B.C. Reg. 103/2004  Gas Safety Regulation
B.C. Reg. 105/2004  Safety Standards General Regulation

For more information about Technical Safety BC, please visit our website at:  www.technicalsafetybc.ca
Septic Systems & Flooding

*Information for homeowners*

The operation of septic systems can be negatively affected by flooding. The effects of flooding by rising lake levels are typically not as severe as those by flowing waters such as streams, creeks and rivers. Septic systems consist of various components and are generally limited to a septic tank (or package treatment plant), distribution box or pump chamber (not all systems need a pump), and a disposal field (see Figure 1 below).

**Lakes:** When lake levels rise, the components of septic systems may become covered by water. Under these conditions, the septic system will not function because the effluent being delivered to the drain field cannot be absorbed into the ground as intended.

**Flowing water:** When streams, creeks and rivers flood, they can scour the land and cause physical damage to the components of the septic system. In these cases, the septic system should be assessed by an Authorized Person (AP) – either a Registered Onsite Wastewater Practitioner (ROWP) or a Professional Engineer. You can find a list of professionals on-line at http://owrp.asttbc.org/rowp-finder/.

**Before the Flood**

- Protect the components of your sewage disposal system by sand bagging the area around the tank and field.
- Sand bagged walls should be built in a triangular formation (wider at the bottom than top) and a minimum of 60 cm (2 feet) higher than the anticipated highest water level.

**During the Flood**

- If your system has electrical components, turn the power (breaker) off.
- Stop using the system; otherwise, there is risk of backup into the dwelling.
After the Flood

- The quickest way to determine whether or not your system is operating properly is to check the water level in the septic tank. Water levels in the septic tank can be observed by opening the inspection port above the outlet. If operating properly, the water level will be at the bottom of the outlet pipe.
- If the water level in the septic tank is above the outlet pipe, it indicates the septic field is not draining properly and the system should be assessed by an AP.
- If you suspect damage to your septic tank or other components, have it professionally inspected by an AP.
- Septic systems affected by lake flooding will generally return to normal operation once the flood water recedes 45-60 cm (1.5 to 2 feet) (measured vertically) below the elevation of the distribution pipe in the disposal field. As there is cover material provided above the septic field, it is recommended that the homeowner wait until water has receded to 90 cm (3 feet) (measured vertically) below ground level in the area of the septic field before the septic system is used.
- Use water sparingly when returning to your home, as the disposal field may still be saturated and will have limited capacity to absorb effluent.
- Do not pump septic tanks until surface and ground waters recede; otherwise, hydraulic pressure may push the septic tank out of the ground (see Graphic 1).

Graphic 1. A plastic septic tank that was pumped out when the ground water level was above the top of the septic tank.

To find an Authorized Person, go to:

- Association of Professional Engineers and Geoscientists [https://www.apeg.bc.ca/Member-Directories/Professionals-for-Sewerage-System-Regulation](https://www.apeg.bc.ca/Member-Directories/Professionals-for-Sewerage-System-Regulation)
Here are some basic steps you may want to take
If you cannot stay in your home due to flood damage, you will need to find temporary housing for your family and any pets. For help, contact your local government office.
In a disaster, families may become separated or loved ones outside the disaster area may be trying to reach you. If you are looking for a family member, contact your local Red Cross office.
Contact your insurance company and let them know what has happened. They will want to know a record of damage to your home and belongings and may request photos or video.
After a flood, you may be eligible for government disaster financial assistance. Check with your local authorities for more information related to available assistance programs.

Before entering your home
Listen to public authorities to advise when it is safe to return to your home. Protect yourself by dressing properly, including rubber boots or sturdy boots, safety glasses, hard hat, rubber gloves and a dust mask.

Here is a list of recommended items that will help you in the recovery process:

- Camera or video camera
- Notebook and pen to record damage
- Buckets, mops and sponges
- All-purpose cleaner or unscented detergent
- Large containers for soaking bedding and clothing, and lines to hang them to dry
- Flashlight
- First aid kit
- Tools (hammer, pliers)
- Trash bags
- Drinking water
The Red Cross recommends that you have 4 litres of bottled water per person, per day in your emergency preparedness kit. For more information on preparing a kit, visit redcross.ca/prepare
You may need to rent extension cords, submersible pumps, wet/dry vacuums and dehumidifiers or heaters. Contact your local home improvement store for information. Be sure to keep the extension cords out of any water.
Entering your home and cleaning up
Use extreme caution as you enter your home. Look for buckled walls and floors, and sagging ceilings. If you see any of these, leave the home and contact authorities. Watch out for holes in the floor, broken glass, and other debris.

Check with local authorities on how to properly dispose of damaged items from your home.

Hazardous materials
Contact your municipality or provincial ministry to find out how to dispose of hazardous materials such as solvents, garden chemicals and home cleaning products that have been soaked or that show signs of water damage.

Tap water
Flood water can be heavily contaminated with sewage and other pollutants. Do not use your tap water for drinking, cooking and washing dishes until it has been tested and/or confirmed safe for use by local authorities.

Standing water
Remove water from your flooded home slowly. Drain it in stages – about one third of the volume daily. If the ground is still saturated and water is removed too quickly, the walls or floors could buckle. Use pumps or pails to remove standing water, then a wet/dry shop vacuum to mop up the rest.
Do not use flooded appliances, electrical outlets, switch boxes or fuse-breaker panels until they have been checked by a qualified electrician.

Have your central heating system checked by a qualified technician before use. Replace any parts that have been damaged or soaked.

Replace filters and insulation inside furnaces, water heaters, refrigerators and freezers if they have been wet. You may need to consider replacing the whole appliance, depending on the severity of the damage. Consult with a professional electrician or with the manufacturer.

Replace any telephones that have been exposed to floodwaters as they may be a safety hazard.

Contact the appropriate utility or service company to have your service restored (i.e. electricity, gas, cable, phone, etc.) when you are ready to return home.

(Please check the Yellow Pages or phonebook to find the professionals listed above.)

Foundation, floors and walls
Clean or replace footing drains outside the foundation when clogged. Consult a professional plumber for advice. Check the Yellow Pages or phonebook for listings.
Flush and disinfect floor drains with an all-purpose cleaner or unscented detergent and water.
Rinse and clean all floors after consulting with a professional cleaner. You may need to replace flooring that has been heavily soaked. Dry carpets within the first two days. Hire a qualified professional for large carpeted areas.
Throw out carpets soaked by sewage, as they are unsalvageable.
Clean all affected interior walls with all-purpose cleaner or unscented detergent and water.

Furniture
Remove residual mud and soil from furniture and dry it off.
Consult a furniture restoration professional to see if any upholstered furniture can be salvaged. Check the Yellow Pages or phonebook for listings.
Remove cushions from covers and dry separately.
You may need to replace particleboard furniture entirely if it has been saturated by floodwater.

HEATING APPLIANCES AND UTILITIES
Dispose of all medicines, cosmetics and toiletries that have been exposed to flood water.

Undamaged canned goods can be kept. Wash thoroughly and use antibacterial soap to disinfect outside of can.

Dispose of the following items if they have been exposed to flood water:

- Contents of the freezer or fridge including all meat and produce (fresh or frozen)
- All boxed foods
- All bottled drinks and products in jars (area under the seal cannot be properly disinfected)
- Cans with large dents or with any external damage

Clothing
If affected by the flood, use your washer and dryer only once they have been checked by a qualified electrician.
Scrape all heavy dirt from clothes, rinse and wash several times with detergent and dry immediately to prevent mould from forming.

Books, photographs and papers
Books may be salvaged by slow, careful drying.
Most photographs can be air-dried, face up. If they were frozen, thaw and then air-dry photos.
To salvage important documents, put them in the freezer immediately. Later, allow them to thaw and lift off each page as it thaws. Consult your lawyer to determine if the actual documents are important to save, or just the information on the documents.
For advice on salvaging books, photographs or paintings damaged by flooding, contact the Canadian Conservation Institute toll free at 1-866-998-3721.

Yard
Remove any dirt or debris from your yard.
Remove any food or garbage that might attract animals or insects.
Contact a waste removal company if required. Check the Yellow Pages or phonebook for listings.

FOOD AND MEDICINE
Long-term recovery after a flood
Consider hiring a contractor or flood restoration specialist. Professional companies can help you with cleaning and repairing your home. If you are making an insurance claim, your insurance adjuster may help you find a contractor.

Arrange for necessary inspections and building permits. Contact your municipal housing office to find out what steps you need to take to submit plans for rebuilding your home and to get required building permits.

Before moving back into your home, ensure the following:
The water supply has been inspected and officially declared safe for use.
Every room that was affected by the flood has been cleaned, disinfected and dried.
All affected dishes, utensils and glasses have been thoroughly washed and disinfected.
Adequate toilet facilities are available.

Now that you are on your way to recovering from this flood, don't forget to start preparing yourself and your family in case another one comes along.

For information on preparing your family and pets for disasters, visit redcross.ca/prepare

For more information on cleaning up after a flood, please refer to the Canada Mortgage and Housing Corporation's website or visit one of the links below:

After the Flood: A Homeowner's Checklist
cmhca/en/co/maho/yohoyohe/momo/momo_007.cfm
Water Damage, Mold and House Insurance
cmhca/en/co/maho/yohoyohe/momo/momo_005.cfm
Fighting Mold – The Homeowner’s Guide
cmhca/en/co/maho/yohoyohe/momo/momo_005.cfm
Acknowledgements
The Canadian Red Cross gratefully acknowledges the following publications:
• "After the Flood – A Homeowner’s Checklist" – Canadian Mortgage and Housing Corporation
• "Floods: what to do?" – Public Safety Canada

The information in this publication is for reference only. It should not be considered as a substitute for consulting with specialists about particular situations. It should not be assumed that all flood recovery measures are contained in this publication; other or additional measures may be required under particular or exceptional circumstances. The Canadian Red Cross makes no guarantee, warranty or other similar representation as to the quality or completeness of the information contained in this document and under no circumstance shall the Canadian Red Cross be held liable to any person relying on the information contained herein.

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If you have been affected by a disaster or emergency, or even if you are concerned about one happening, you may feel increased distress. Taking small, positive steps will help you feel better and more in control.

The Red Cross has gathered some information on how you can prepare, and tips for taking care of yourself and others when you are facing a disaster or emergency.
PREPARING YOURSELF AND OTHERS

KNOW THE RISKS

Disasters and emergencies can impact you not only physically, but also emotionally. They cause significant disruption and add stress to your life. They can exacerbate pre-existing health and mental health issues, and the increased stress felt during disasters and emergencies can disrupt your routines.

It is helpful to prepare for the emotional and social impacts of disasters by understanding how you respond to stress and build your resilience to cope.

ANTICIPATE AND IDENTIFY how you think you will react.
How will you think and feel?

A variety of reactions are common when you are recovering from a disaster or emergency. Most of these reactions are temporary. These reactions can increase if we are facing the possibility of another disaster.

You may:

- Feel sad, overwhelmed, angry, frustrated, worried, exhausted physically or mentally;
- Have difficulty making decisions, staying focused on tasks at hand, or unable to plan daily activities;
- Experience changes in appetite or sleep patterns or increase alcohol or substance use.

Children may also:

- Behave aggressively;
- Cling to caregivers;
- Regress to the behaviour of younger children, such as thumb-sucking or bedwetting.

Coping with and recovering from the effects of a disaster or emergency can take a long time. Coping is the process of managing difficult circumstances and finding ways to tolerate the effects of stress. Acknowledge whatever reactions you may have.

RECOVERING FROM THE DISASTER OR EMERGENCY

WHAT YOU CAN DO

It is important to find ways of coping with stress. The following suggestions may help you take care of yourself and others:

- Ensure you have a safe place to stay and that your basic needs are met.
- Eat nutritiously and stay hydrated.
- Get enough rest and adequate sleep. Rest provides your body and mind a break, which will increase your ability to cope.
- Avoid isolation by reaching out. If you find yourself in new surroundings, reach out to those around you. Giving and receiving support is important.
- Be patient with yourself and with those close to you. Others may be struggling to cope with the disaster and may need your patience and support.
- Be flexible and prepared to engage in new activities.
- Take it slow. Small steps are helpful when tasks seem overwhelming. Only do what you can.
- Seek out assistance and resources. Gather information that will help you and your family meet your needs.
- Stay positive and make plans. Remind yourself of how you’ve successfully gotten through difficult times in the past.
WHAT YOU CAN DO TO HELP CHILDREN:

• Give extra time, hugs and patience.
• Provide reassurance of your family’s safety and recovery plans.
• Involve them in activities to assist others; it can help them cope.
• Let them know how things might look different this year. Ask for their feelings.

GET CONNECTED

Our connections with others are critical to increasing resilience and recovery after disasters. It can be helpful to think about the following questions when we prepare:

• Who are the people in your networks of support, friends and family, that you can turn to when you experience increased stress? 
  Be specific, and let these people know that they are your support people in the event of disasters/emergencies. Be sure to list out of town contacts.
• Who do you consider to be in your community? Who do you already know? Who are your neighbours? 
  Introduce yourself. Start a conversation about how an emergency might affect your community. Talk about community strengths, and any gaps that need attention, and identify those who might need more help.
• What services do you and your loved one’s access in your local community to increase wellbeing and decrease stress? 
  This could be recreational activities, as well as formal services like counselling. Think about how you will continue these activities in a disaster or emergency.

GET ORGANIZED

Being organized helps us have a sense of control after an emergency. Here are a few things to consider:

• How will you connect with your family members, including your children, after disasters or emergencies?
• Are you or your loved ones actively managing any physical or mental health conditions?
• List medications or medical assistance of any kind you currently rely on in your self-care plan and include in your kit.
• What are the things in your life that cannot be replaced, and that have great meaning for you or your loved ones? Think about ways you can protect these things in an emergency. Some people find it comforting to bring something that reminds them of their home/community with them in an evacuation.
• How will you manage and care for your pets in a disaster/emergency? Pets may be a significant part of our lives, and provide comfort and support.

MAKE A PLAN

It can be helpful to make a plan for taking care of yourself and others, in advance of a disaster or emergency. You can ask yourself some of the following questions and write the answers down:

• How do I recognize when I am stressed, or when those around me are stressed? How do I act and what do I feel? Anticipating, monitoring and understanding these reactions will really help you during an emergency.
• What are the personal things in my life, or the activities I do, to help me cope or make me resilient? This could include physical, emotional, relationships, spiritual and cultural supports.
• How do I cope with stress?
• What are three things I can do to decompress after a stressful experience?
• How will I know when I need additional help or support?
WHEN TO SEEK PROFESSIONAL HELP

If you continue to feel overwhelmed, can’t shake feelings of despair or anxiety, or find yourself or a loved one experiencing some of the feelings and reactions listed below for two weeks or more, this may be a sign that you need to reach out for additional support. Seek help through your family doctor, spiritual care or community organization. Asking for help is a sign of strength.

- Feelings of intense sadness, hopelessness and/or guilt
- Short temper or outbursts of anger
- Difficulty eating or sleeping
- Lost interest in things that were enjoyable
- Increased physical symptoms, such as headaches or stomach aches
- Avoiding family and friends
- Increasing alcohol or substance use

RESOURCES

HealthLink BC
24-hour access to health information and advice.
Toll-free: 8-1-1 (TTY: 7-1-1)

Crisis Centre Distress Line BC
24/7 access to supports if you, or someone you know, is having thoughts of suicide.
Toll-free: 1-800-SUICIDE (1-800-784-2433)

KUU-US Crisis Line Society
24-hour crisis line for aboriginal children, youth, adults and elders across BC.
Toll-free: 1-800-588-8717

BC211
24/7 access to information and referrals for community, government and social services in BC.
Toll-free: 2-1-1 (TTY: 604-875-0885)
www.bc211.ca

Kids Help Phone BC
24/7 confidential support for children and teens.
Toll-free: 1-800-668-6868

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Disclaimer
The information provided in this publication is for reference only. It should not be considered as a substitute for consulting with specialists about particular situations. The Canadian Red Cross Society recommends seeking advice from a qualified health professional if you have or continue to experience a crisis. The Canadian Red Cross makes no guarantee, warranty or other similar representation as to the quality or completeness of the information contained in this document and under no circumstance shall the Canadian Red Cross be held liable to any person relying on the information contained herein.
Flood preparedness
How to protect your home or business in case of flooding

If you live in a flood-prone area, you can take steps to protect your gas and electrical appliances. However, don’t put your safety at risk. Water and electricity are a potentially dangerous combination. If you see that water is already entering the building, don’t touch anything and just focus on getting out safely.

Protect your appliances

With advance notice
Contact a licensed gas contractor to help prepare and move gas appliances, if necessary. You can find one using our online Trade Ally Network directory.

- Locate the shut-off for the electrical panel and know how to safely shut it off if your area will be flooded.
- Unplug electrical devices from their sockets and, if possible, move appliances out of the potential flood path.
- Have a licensed gas contractor remove the electric motor, burner and controls from the furnace, and turn off the gas and electric supply.
- Have a licensed gas contractor remove hot water tanks, clothes dryers and ranges from your building. Ensure the gas supply to the appliance is safely shut off before moving it.
- Have a licensed gas contractor cap and seal the gas pipe leading to the appliance shutoff valve. This will help prevent the back flow of flood water into the gas piping system.

If you have to evacuate
If you don’t have a lot of time to get out or a contractor is not available, here are some things you can do to protect your appliances.

- Shut off the gas supply valve to each appliance (usually found on the gas line to the appliance) by turning it crosswise to the pipe.
- Don’t drain your hot water tank—just shut off the water leading to and from the tank.
- Avoid electrical lines when evacuating and do not go into basements or low-lying structures where water and electricity may be present.
What to do when you return

Make sure it's safe

When local authorities have advised that it’s safe to do so, you may return to your home. But be aware of hazards that can still occur once flooding has subsided:

- Floodwater may have shifted your home or caused stresses to the gas piping and electrical wiring. For your safety, have a licensed gas contractor inspect your piping and appliances for damage—don’t try to repair or relight them yourself.

- Wet electrical wiring is very dangerous. Any loose wires should be treated as live, and avoided. Have any wiring that has been partially or fully covered by flood water checked by a qualified electrician or electrical contractor.

- If you still see water in your building, do not attempt to shut off the main power switch. Avoid any electrical lines or basements and other low-lying structures where electricity may be present.

Smell gas?

If you smell rotten eggs or sulphur or hear the sound of escaping gas, don’t enter the building. Go outside and then call our 24-hour natural gas emergency line at 1-800-663-9911 or 911.

When to call us

If water levels were high enough to cover either your gas meter or electricity meter, call FortisBC to inspect your meters before using any of your equipment.

If it was necessary to turn off your natural gas due to flooding, you may find a red “outage” tag on the gas meter or your doorknob. A FortisBC technician will need to inspect the meter and regulator before turning the gas back on and relighting any appliances. Call the number on the tag or 1-877-711-8877.

Restoring your appliances and equipment

Call a licensed gas contractor

Don’t try to put natural gas appliances back in service yourself. For your safety, gas appliances that have been flooded should not be used until inspected by a licensed gas contractor.

A licensed gas contractor will check, clean, repair and pressure-test all gas pipes that have been clogged with mud or debris. They will also check switches, controls, thermostats, furnace heat exchangers, burner and pilot parts and rusting metal parts for damage. It may be less expensive to buy a new appliance than restore damaged ones to safe operating condition.

Find a licensed gas contractor near you using our online Trade Ally Network directory at fortisbc.com/gascontractor.

Call an electrician

Floodwater may have stressed electrical wiring, and water makes a dangerous combination with any loose wires. Have any wiring that has been partially or fully covered by flood water checked by a qualified electrician or electrical contractor.

Find a qualified electrical contractor using our online directory at fortisbc.com/findacontractor (for our electricity service area in the Southern Interior of BC) or the BC Safety Authority at safetyauthority.ca/contact/find-contractor (provincewide).

More information on safety and emergency preparedness

Visit fortisbc.com/safety or the following provincial agencies:

- Prepared BC: gov.bc.ca/preparedbc
- Technical Safety BC: technicalsafety.ca

Connect with us

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