



**The Corporation of Delta
Emergency Program Office**

Flood Risk and General Preparedness Information

Background:

- Flooding is a common, naturally occurring event in much of B.C.; however, The Corporation of Delta experiences a much greater risk of fall flooding than “freshet” spring flooding
- High snowpacks naturally raise the risk of spring flooding
- Rain, coupled with continuous warm weather will increase snow melt, thus increasing the risk of flooding
- 1999 was a record snowpack year with no significant flooding along the Fraser River in the Fraser Valley
- However, in 1948 the Lower Fraser Valley flood affected thousands of residents and impacted infrastructure such as bridges and roads in a normal snowpack year
- Serious floods have also hit settlements on the upper Fraser, in the northwest and other parts of B.C.
- Flooding can impact a neighbourhood, or affect entire river basins, multiple communities and First Nations
- The Fraser River has reached flood stage 25 times in the last 100 years.

The Corporation of Delta 5 Stage Flood Management System:

Stage 1 – Planning and Preparedness

- Confirm roles and responsibilities of staff and municipal departments
- Planning to continue/resume municipal services in the event of flooding
- Evacuation plan developed
- Evacuee reception centres determined
- Generators, materials for sandbags and list of contractors to assist in the repair of damaged infrastructure compiled
- Begin foreshore protection upgrading work and dike topping improvements on Westham Island, as needed

Stage 2 – 6.0 Meters on the Mission Gauge

- Open Corporation’s Emergency Operations Centre (EOC)
- Put EOC staff & critical agencies on standby & provide regular briefings
- Identify populations at risk
- Assist BCAS and Fraser Health with evacuation plans of special health care facilities
- Position sandbags and heavy equipment and mobilize required staff

Stage 3 – 7.0 Meters on the Mission Gauge

- Corporation EOC now fully staffed and operational
- Issue flood alert (flood advisory warning via TV/radio & reader boards)
- Initiate evacuation of special care facilities, as required
- Initiate livestock evacuation, as required
- Plan alternate transportation routes
- Distribute sandbags to fire halls for pickup by residents on a priority basis

Stage 4 – Flooding or dike failure

- Provide flood response services & mitigate damage where possible
- Mayor determines need to declare State of Local Emergency
- Prepare necessary paperwork and notifications for declaration
- Conduct evacuations, as required
- Inspect flooded areas and determine extent of damage
- Monitor sites containing hazardous materials

Stage 5 – Recovery

- Remove debris and initiate cleanup
- Inspect and document damage
- Test water quality
- Inspect sewer and drainage pump stations
- Coordinate orderly return of residents, livestock, etc.
- Resume services disrupted by flood
- Coordinate long-term recovery services
- Prepare after-action report, including expenses incurred and recommendations for change

Emergency Preparedness Information:

Before a flood – the following are some suggested actions that you can take to ensure minimum disruption to your business in the event of any flooding

- ***Records and Electronic Data*** – remove any records, files and computer equipment from basement area and ground floors. Move them to higher levels or to another location unlikely to be impacted by flood waters. This may be a good time to back up your data onto disks.
- ***Inventory and Items in Long-Term Storage*** – These items should be relocated to higher levels or removed from your facility. If any of these items are stored outside the building they should be moved indoors. If any of these items will not be damaged by water they should be tied down or moved inside.
- ***Hazardous Materials*** – Materials like paints, solvents, oils, pesticides or any other environmentally-damaging chemicals should be moved to floors above ground level or removed from the site. Fill and anchor large fuel and water tanks and plug their vents. Propane bottles float, regardless of the amount of volume. They should be chained or secured on site, or removed altogether from the site.
- ***Shop Floors and Work Areas*** – These areas should be clean of debris, oils etc.

- **Client Records** – Ensure that important business papers and client records are secure. It is recommended to move records off site, such as: invoices, general ledger, tax returns, checks, customer lists, orders, important contracts and other legal documents. This would also be a good time to review your business insurance.
- **Evacuation** – Review the evacuation plan for the building and ensure all staff know the evacuation route(s) out of the building.
- **Utilities** – When advised of immediate danger of flooding, shut off all power, water and gas to your business. If any of your electrical equipment is too large to be relocated, remove motors, fans and controls. Once shut off, only a qualified representative from the Utility Company should turn the power and/or gas back on.
- **Emergency Supplies** – Have a supply of rope, sandbags, plastic sheeting, lumber and tools for emergency waterproofing. You may also wish to have emergency supplies on hand for staff, such as: bottled water, food, first aid kit, flashlights and battery operated radios.
- Use a camera to document preparations/damage.
- Go to www.corp.delta.bc.ca or www.pep.bc.ca for emergency preparedness information

If you must evacuate –

- Always follow the instructions of local emergency officials
- Take personal emergency supplies and important papers/documents
- Ensure all staff evacuate the premise and are accounted for
- Lock all doors, windows and gates
- Double check to ensure gas, electricity and water are shut off
- Know how to turn off your gas meter:
www.terasengas.com/Safety/SafetyHomeWork/CareOfYourMeter/HowtoturnOffYourMeter/default.htm
- Get information about electrical safety www.bchydro.com/safety/ or www.safetyauthority.ca/?q=flooding_information
- Take extra care when driving; familiar roads may look dramatically different when flooded
- Do not walk through moving water. Less than 15 cm (six inches) of moving water can make you fall. If you have to walk in water, go where the water is not moving and watch for tripping hazards
- Do not drive into flooded areas—a vehicle can be quickly swept away
- Establish a telephone number out of the flood area for staff and clients to get information on when business will resume
- Keep disaster response routes clear

Following a flood –

- Listen for news reports to learn when the flood risk has subsided and it is safe to return to business
- Do not return until there is a safe water supply and a system for disposal of garbage and human waste. If there is any doubt, contact Fraser Health Officials
- Do not re-enter your building if there are any signs of structural damage
- When entering the building, do not use matches, cigarette lighters or any other open flames since gas may be trapped inside. Instead use a flashlight to light your way.
- Leave the power and gas off until Utility Representatives have inspected your system for safety

- Once safe to do so, initiate clean-up. This could be a tedious and dangerous task. Floodwater can pickup sewage and chemicals from roads and factories. Be careful walking around. Steps in floors may be covered with mud and debris, including nails and broken glass. Small animals may have been forced to leave their homes and take up residence in your building. Be cautious when picking up or turning over items.
- To avoid a health hazard from eating food contaminated with flood waters, or left in an unplugged fridge or freezer – *if in doubt, throw it out*. Contamination can spoil foods and medicines, making them dangerous to consume
- Contact your insurance company
- Access the *One Step at a Time Disaster Recovery Guide*
<http://www.pep.bc.ca/floods/docs/recoveryguide.pdf>

Important Contact Information:

Emergency (Police, Fire, Ambulance):	911
Flood Information Hotline:	604-946-3260
Engineering Department:	604-946-3260
Engineering Works Yard:	604-952-3400
Fire Department (non-emergency):	604-946-7755
Police Department (non emergency):	604-946-4411
Emergency Program Office:	604-952-3101
BC Ambulance (non-emergency):	604-872-5151
Delta Hospital:	604-946-1121
Fraser Health Authority:	1-877-935-5669
Delta School District:	604-946-4101
Provincial Emergency Program:	1-800-663-3456
Ministry of Environment:	604-582-5200
Environment Canada:	604-664-9100
Utility Companies – Emergency Lines:	
BC Hydro	1-888-769-3766
Terasen Gas	1-800-663-9911
Telus	604-663-5555
Red Cross, Lower Mainland:	1-800-565-8000
Road Conditions:	1-800-550-4997

To purchase Sandbags: Contact Burnaby Bag & Burlap at telephone: 604-434-4725

For more information about emergency preparedness, go to www.corp.delta.bc.ca (public safety / emergency program office) or www.pep.bc.ca