

Hazard Resilience Strategies

Power and Water Outages

Power Outages
Water Outages

Power Outages

This section has been separated into two sets of factors; one for those communities connected to the provincial/territorial power grid, and a separate one for communities where most OR all of the community is not connected to the provincial/territorial power grid.

For communities fully connected to the power-grid:

- Ensure all critical facilities and infrastructure (e.g., Emergency Operations Centre) have back-up generators in place.
- Ensure all dairy farmers who have essential power needs (e.g., automatic milking machines) have back-up power supplies or plans to milk cows over an extended power outage.
- Ensure all farmers who have essential power needs (e.g., greenhouses) have back-up power supplies and necessary fuel stocks for generators.
- Ensure all residents who have essential power needs (e.g., those using medical assistive devices such as respirators, or dialysis machines) have back-up power supplies and necessary fuel stocks for generators.
- Ensure bushes, trees and branches that are growing too close to power lines are regularly pruned by the power authority on a regular basis.
- Ensure community-based power outage exercises have taken place in schools and the community-at-large (e.g., table-top or full-scale exercises).
- Ensure construction and excavation workers know to check for overhead and underground wires.
- Ensure critical power lines are located underground (where possible).
- Ensure most businesses and cargo/port facilities have back-up generators in place and ready to be used (including necessary fuel stocks for generators) and are aware of ventilation and safe operating procedures and safe operating procedures (e.g., electrical safety training).

- Ensure most residents have back-up generators in place and ready to be used (including necessary fuel stocks for generators) and are aware of ventilation and safe operating procedures.
- Ensure there is a warning system in place, using various means of communication including social media, to notify community residents of a potential power outage and how to reduce non-essential power usage (e.g., turn-off unnecessary appliances, limit heavy usage to non-peak hours).
- Ensure there is a warning system in place to notify emergency response personnel of a potential power outages.

If your community is NOT fully connected to the power-grid:

- Ensure critical facilities and infrastructure (e.g., Emergency Operations Centre) have ample back-up fuel sources available for extended periods when resupply shipments cannot reach the community.
 - Ensure all dairy farmers who have essential power needs (e.g., automatic milking machines) have back-up fuel supplies or plans to milk cows over an extended shipment suspension.
 - Ensure all farmers who have essential power needs (e.g., greenhouses) maintain ample fuel supplies under appropriate storage conditions (e.g., ventilated storage).
 - Ensure all residents who have essential power needs (e.g., on a respirator) maintain ample fuel supplies under appropriate storage conditions (e.g., ventilated storage) and ensure they are aware of ventilation and safe operating procedures (e.g., electrical safety training).
 - Ensure fuel storage facilities are maintained and monitored for ventilation and heat exposure.
 - Ensure community-based power outage exercises have taken place in schools and the community-at-large (e.g., table-top or full-scale exercises).
 - Ensure Community Emergency Response Plans clearly mark fuel storage facilities and businesses/homes with major fuel supplies stored.
 - Ensure critical fuel storage facilities are located at a safe distance from waterways and potential ignition sources.
 - Ensure businesses have back-up fuel supplies in place for times when resupply may be unavailable.
 - Ensure residents have back-up fuel supplies in place for times when resupply may be unavailable.
 - Ensure there is a warning system in place, using various means of communication including social media, to notify community residents of a potential resupply outage in advance and possible alternative fuel sources/heating options (e.g., community shelters).
 - Ensure there is a warning system in place to notify emergency response personnel of potential fuel shortages (e.g., through a Priority Community Fueling Plan) and Emergency Plans effectively consider 'basic need' requirements for all community residents.
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Water Outages

This section has been separated into two sets of factors; one for those communities connected to a community water/wastewater system, and a separate one for communities where most OR all households are not connected to the community water/wastewater system.

Communities with water/wastewater systems supplying ALL householders:

- Ensure back-up generators are in place at pump stations to ensure equipment continues to operate in an extended power outage.
- Ensure community-based water outage exercises have taken place in schools and the community-at-large (e.g., table-top or full-scale exercises).
- Ensure Community Environmental Health Inspectors perform regular safety checks of individual and personal farm and residential wells; Commercial farms are inspected by the appropriate federal, territorial or provincial authority.
- Ensure inspectors perform regular safety checks of water reservoirs or silos.
- Ensure inspectors perform regular safety checks of water treatment and distribution systems.
- Ensure the community has replaced all gray cast iron pipes.
- Ensure the community has plans in place for water distribution should the community experience a loss of potable water.
- Ensure the community has policies in place to limit non-essential water usage (e.g., watering lawn) during times of drought.
- Ensure the community has updated old and worn out pipes and infrastructure to prevent pipeline failure in the future.

Communities where water/wastewater system DOES NOT supply all households:

- Ensure back-up generators are in place at pump stations (where they exist) to ensure equipment continues to operate in an extended power outage.
- Ensure community-based water safety messages are shared in schools and the community-at-large to ensure safe drinking water is maintained at all times and to reduce drinking contaminated water.
- Ensure Community Environmental Health Officer maintains pipes and taps to prevent pipeline failure and reduce leakage in the future.
- Ensure inspectors perform regular safety checks of farm and residential wells.
- Ensure inspectors perform regular safety checks of water reservoirs and community taps.
- Ensure the community has plans in place for water distribution (e.g., water trucks) when the community does not have local potable water source OR should the community experience a loss of potable water from a community tap.
- If applicable, ensure the community has policies in place to limit non-essential water usage (e.g., watering lawn) during times of drought.
- If applicable, ensure the community has updated old and worn out pipes to prevent pipeline failure in the future.

References

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