

### WATER SUPPLY & DISASTER PREPAREDNESS

Natural disasters can strike anytime and anywhere. While we cannot prevent these occurrences, good planning and proper preparation can limit the devastating effects of these disasters on our lives.

The National Water Commission takes several steps on an ongoing basis to protect both the availability and quality of your water supply. Because we know the importance of water to life, we also take extra care in the event of a natural disaster and do risk and vulnerability analyses as well as disaster preparedness procedures to better serve you.

However, nothing that we do can totally prevent a disaster. Water supply systems are by nature very vulnerable to natural disasters such as hurricanes and earthquakes. Intake structures to harness water often need to be constructed in river beds, exposed to the powerful effects of raging flood waters; treatment plants and well stations are sometimes exposed to flooding, contamination and electro-mechanical damage; electricity, needed to pump water over hills and mountains, is likely to go off during a disaster; thousands of kilometers of pipes run along roadways and hillsides exposed to landslides; water tanks and other infrastructure may also be damaged. This means we all need to be prepared in the event water supplies are disrupted or otherwise affected by natural disasters.

You have not yet really planned for a disaster if your plan does not include a water supply plan. Here are a few tips on water supply and disaster preparedness from the National Water Commission to help you:

#### Before

- 1 Expect disruptions; always have some water stored A safe and realistic approach to the preparations for natural disasters is to expect that piped water supply may be disrupted after a hurricane, earthquake or other disaster. No emergency supplies kit is complete without your own supply of water. Water supplies may also be disrupted for other reasons as well, and so it is always a good idea to have as much water stored as is possible at all times. Additionally, water that is stored in clean, air-tight containers in a cool place remains safe indefinitely. Store your water in good plastic containers that have been washed and rinsed properly. Containers that were used for chemicals or toxic material should not be used to store water. However, even properly stored water may be changed every six months or so to maintain freshness.
  - a. If you have a tank, you should make sure the tank is filled before a known event. You should also make sure that your "no-return" valve is working; otherwise the water from your tank may run out into the main.

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- **b.** If you do not have a tank make sure to fill as many clean containers as possible with water. Get appropriate containers for the purpose if you don't already have as this may also be used to collect water from water trucks after the disaster. Store as much drinking water as you can, but you must store at least one gallon of water per person in the household for at least three days (preferably one week). Young children and sick persons will actually require more water.
- Protect your environment and do not throw or allow trash and debris to get into rivers, especially those from which water is collected - A major cause of damage and disruption at water treatment plants is the effect of silt, run-off water and debris on screens and intake structures. A major contribution to this is the state of the natural environment. If trees are planted and the watershed areas are not stripped bare but kept clear of debris and rubbish, the damage and disruption at water treatment plants will be greatly reduced.

#### **During & After**

- Conserve treated water; Use available untreated water, where appropriate -During the immediate aftermath, every effort should be made to conserve treated water and use the treated water that is stored primarily for drinking. Most of the water normally used in the home is used in the bathroom, and every effort should be made to adjust one's usage in a disaster. For instance, foods should be used that require the least amount of water for preparation and plastic/disposable containers are to be preferred. Similarly, if your internal plumbing is connected to a tank and the piped supply goes, be careful not to continue using the water as you would normally do when piped supply is available. As much as is possible, untreated water should be used for activities such as toilet flushing and washing instead of using limited supplies of treated water.
- 4 Follow advice Be sure to follow the advice of the authorities and keep informed about when your water supply is likely to be restored, trucking schedules where that is available, as well as advice about treating drinking water at home. In the immediate aftermath of a natural disaster it is most likely that the Ministry of Health will advise that you boil your drinking water or treat it with bleach. This standard precautionary measure is very important since treatment operations may have been disrupted at the water treatment plant, or the plant may have been overwhelmed by turbid (muddy) or contaminated run-off water, or the pipes may have been broken or you may be collecting your water from some untreated source.

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The Ministry of Health normally advises that water to be used for drinking, preparing food, washing fruits and vegetables, etc. must be treated at home either by:

- a. adding two drops of bleach per litre or quart of water, mix well and leave to settle and aerate for 30 minutes; or
- b. allowing the water to 'boil-up' for at least five minutes before removing from the fire, keep covered and allow to cool.
- Be careful with pipes It is critical that even as you clean up after the disaster you do not cause damage to water pipes. Be careful in chopping, digging or using heavy equipment in areas where pipes are laid.
- Be patient and do the right thing This may be the hardest thing to ask, but it may also be the most important. The National water Commission fully understands the importance of water to you and will do all it can to get back your supply in the shortest possible time. However, natural disasters may cause damage to our network in many ways and places that you don't see. Your patience and co-operation will go a far way in getting your water supply back in the shortest possible time. Having to secure water trucks and facilities from vandalism and threats certainly won't help anyone.

Even under normal conditions, supplying millions of Jamaicans with safe and continuous water is an enormous challenge. Disasters make this even more challenging. But the National Water Commission is committed to providing you with the best possible service even in the most trying circumstances. Your preparation for a natural disaster by storing water and being realistic in your expectations will go a far way in helping us to serve you better, in good times or in bad times.



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