



Quinte
CONSERVATION

Sandbagging

What You Need to Know



Sandbagging is a simple and effective way to prevent or reduce flood water damage. It provides a barrier from flood water, protecting your property and home. In this document you will learn more about sandbagging and the safe and proper way to create a sandbag wall.

Quinte Conservation's Role

The province of Ontario delegates the responsibility for flood warning to the Conservation Authorities of Ontario. To fulfill this responsibility Quinte Conservation administers Flood Forecasting and Flood Message systems. Quinte Conservation acts in an advisory capacity only, providing continuous monitoring of flood conditions. Quinte Conservation is not responsible for flood fighting other than in the operation of its own dams. During a flooding situation, Quinte Conservation's office will be staffed appropriately to monitor water levels and weather conditions on a 24-hour basis if required. Quinte Conservation maintains a flood warning system for the watersheds

of the Moira, Napanee and Salmon Rivers as well as all of Prince Edward County and will alert its member municipalities and appropriate agencies regarding potential flood threats. Quinte Conservation's staff monitors watershed conditions carefully all year. They are on duty, ready to alert municipal flood coordinators, the media, the public, police and other agencies of potential danger to lives or property. Quinte Conservation's experienced staff know the watersheds, their flooding history and how they respond under various conditions. Staff members use all the data and tools available in preparing forecasts and warnings.



Quinte
CONSERVATION
a member of
Conservation Ontario

For more information
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What You Will Need

You can purchase sandbags through your local commercial supply and hardware store. Contact your local municipality to find out if and where sand can be provided or delivered.

- Sandbags
- Plastic Poly (10 foot wide, 6mm Vapour Barrier)
- Supply of Sand
- Pump



About Sandbags

Sandbags are not a permanent flood proofing solution. Treat used sandbags as a contaminated product, due to river water that has possibly picked up septic fluid and contact your local municipality about sandbag removal.

- Sandbags will take a lot of weight, standard plastic bags will NOT work because they cannot take the weight that is required.
- Sandbags biodegrade in the sun therefore you cannot fill them and leave them stock piled for a long period of time.
- It is required that you leave your sandbags empty if you wish to stock pile and fill them only when you need them.

Safety Tips

- Avoid taking part in sandbagging if you have a medical condition that may put you in danger while sandbagging
- Wear personal protective equipment, such as closed toe shoes, gloves, hat, sunscreen, etc.
- Take regular water breaks
- Make sure to lift with your legs to avoid back injuries
- Keep the sandbags below shoulder height and close to the body. Also limit the reach with arms when passing sandbags.
- Use wheel barrow, ATV trailers, or handcarts to help move the sandbags around

Where to Build Sandbag Walls

- Locate your sandbag wall a meter away from your house, taking advantage of any elevation your property may have.
- Don't put sandbags directly against your homes walls, the water will saturate the ground underneath which can create hydraulic pressure applying force to your basement walls.
- Sandbags located too far away from your house takes away from the flood plain, this creates issues for others downstream and upstream.
- Municipal resources should be used to sandbag homes not detached sheds or garages.

How to Build Sandbag Walls

Step One: Pack Sandbags

- Use a overhand, underhand grip on your shovel to put the sand in the bag.
- Make sure to only fill the sandbag 1/2 or 2/3 full (max 40 pounds).
- If you have to transport the sandbags it is a good idea to tie them but if the sandbags are not being transported it is not necessary to tie them.
- If you are not tying the sandbags, fold the access of the bag over to one side, sealing the sand from falling out.



Step Two: Dig a Trench

- Dig a narrow trench as deep and as wide as the sandbags.
- This trench will act as a locking system when the sandbags are placed in it, preventing sandbags from falling over and preventing water from coming under the sandbag wall.



Step Three: Lay the Poly

- Flip the poly all the way out
- Place the poly over top of the trench, making sure that there is half a meter of poly on the backside of the trench (the side facing the house).
- If you have to use more than one sheet of poly you want the plastic to be overlapping in the downstream flow of water.



Step Four: Build the Wall

- Place the sandbags in the trench overtop of the poly.
- Make sure that your sandbag walls are continuous with no gaps or openings
- Pack in the first layer to make sure that it is sealed tightly.
- Walls should be twice as wide as they are tall (e.g. 0.5m tall = 1m wide; 1m tall = 2m wide)
- When stacking the sandbags higher make sure that you are changing the direction of the sandbags for each layer, stacking them in a brick pattern.



Step Five: Finish the Wall

- Once your wall is to the desired height flip the poly on the outside of the wall overtop to the backside of the wall
- Put a series of sandbags on the backside and top of the wall overtop of the poly in order to prevent the poly from falling off.
- You can make your sandbag wall higher if necessary by unwrapping the poly from the wall and adding more sandbags.
- Note: Placing the poly overtop of your sandbags prevents water from coming through the wall.



Step Six: Pump Out Water

- Sandbag walls may still leak no matter how well they are built, so be prepared to pump the dry side of the wall out.
- Find a low spot in the ground behind the sandbag wall where water may pond.
- Dig a small hole and place the strainer and pump in the hole.
- As an alternative you can use a plastic bucket and sump pump. Put holes in a plastic bucket causing it to act as a strainer, placing the bucket with sump pump in the small hole.



Flood Communications

At any time of the year, when there is flooding, Quinte Conservation will issue up to three levels of messages:

WATERSHED CONDITIONS STATEMENT:

This is a general notice of potential flooding or other conditions that pose a safety risk. There are two kinds of statements:

- A **WATER SAFEY STATEMENT** indicates that high flows, unsafe banks, melting ice or other factors could be dangerous for users such as anglers, boaters, swimmers, children or pets. Flooding is not expected.
- A **FLOOD OUTLOOK STATEMENT** gives early notice of the potential for flooding based on weather forecasts calling for heavy rain, snow melt, high wind or other conditions that could lead to high runoff, cause ice jams, lakeshore flooding or erosion.

FLOOD WATCH:

This level notifies that the potential for flooding exists within specific watercourses and municipalities. Municipalities, emergency services and individual landowners in flood-prone areas should prepare.

FLOOD WARNING:

Flooding is imminent or already occurring in specific watercourses or municipalities. Municipalities and individuals should take action to deal with flood conditions. This may include road closures and evacuations.

Where to Find Flooding Information

For up to date water levels and flooding information

visit our website,

www.quinteconservation.ca.

Flood Updates

Visit our Webpage, Twitter or Facebook for any updates on flooding.



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