

# SUMP PUMP

## WATER BACKUP

### Water-powered backup system

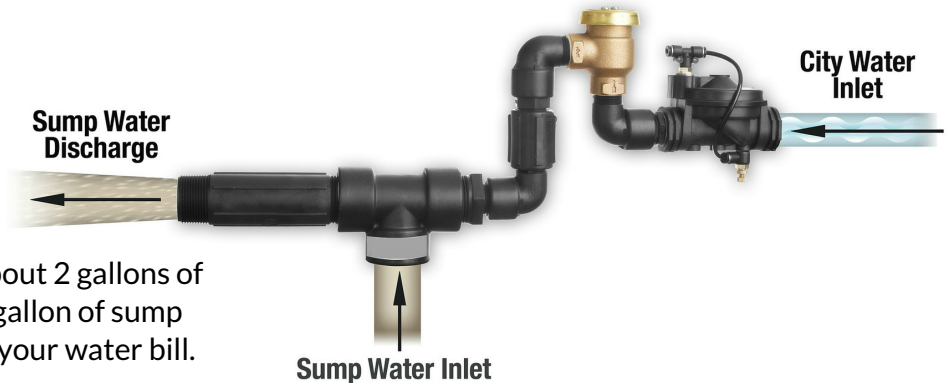
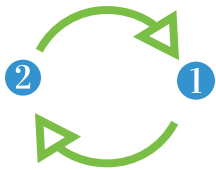
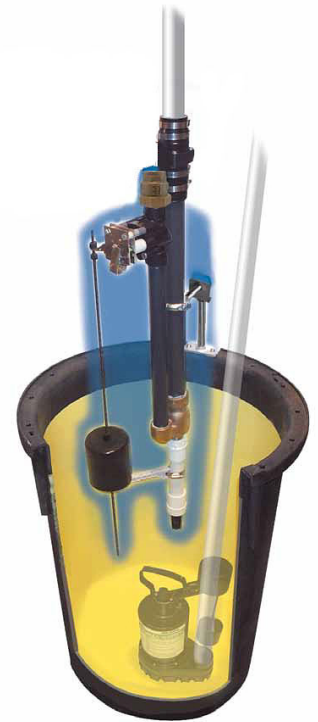
A water-powered backup system is an emergency backup pump that uses the pressurized fresh water service in the house to power the pump.

The water-powered backup requires installing water pipes from the nearest water supply pipe to the sump area, as well as a backflow prevention device to prevent the sump water from contaminating the public water supply.

### How it works

A water-powered pump uses the Venturi effect:

- Fresh water flows through a nozzle pointed into the discharge.
- As the water shoots down the discharge it creates a vacuum and draws water from the sump crock.
- Sump water then combines with the flowing city water and exits your basement via a discharge line.



A water-powered backup pump uses about 2 gallons of pressurized fresh water to pump out 1 gallon of sump water. Water usage will be charged on your water bill.



Backflow prevention device (RPZ)

Water-powered backup pumps are installed with a backflow prevention device, also known as a reduced pressure zone (RPZ) valve, to prevent sump pump water from entering the municipal water supply.

Backflow prevention devices must be tested by a licensed certified plumber and inspected by the City **every 3 years** to verify that sump water is not contaminating the pressurized potable water.

Find a Certified Backflow Tester at the Michigan Plumbing and Mechanical Contractors Association website: <http://www.mpmca.org/backflowsearch.php>.






# SUMP PUMP

WATER BACKUP MAINTENANCE

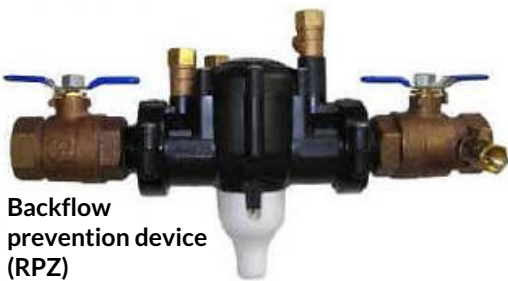
## Maintaining your water-powered backup system

Your water-powered backup system should be maintained twice a year, along with your primary sump pump system, to make sure they are in working order.



- 1** Unplug your primary sump pump. 
- 2** Fill your sump pit with water until the float on your water-powered backup activates the switch, turning on your backup pump and beginning its cycle.
- 3** While your water-powered backup pump is operating, listen for leaks and check that the valves, clamps, pipes and connections are in good condition.
- 4** After your water-powered backup pump has completed its full cycle, plug in your primary pump.

- 5** As your primary pump operates, look for a small amount of water spurting from the weep hole in the discharge line. The float on the primary pump should fall slowly as the water in the sump pit is pumped out through the discharge pipe. Finally, the switch on the primary pump should pause and stop the pump.



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