

COUNTY OF CLARION

CITIZENS GUIDE  
TO  
DISASTER PREPAREDNESS

**PROTECTING  
YOUR PROPERTY  
FROM FLOODING**



## **WHAT YOU CAN DO**

Flood protection can involve a variety of changes to your house and property -- changes that can vary in complexity and cost. You may be able to make some types of changes yourself. But complicated or large-scale changes and those that affect the structure of your house or its electrical wiring and plumbing should be carried out only by a professional contractor.

### **RAISE ELECTRICAL SYSTEM COMPONENTS**

Electrical system components, including service panels (fuse and circuit breaker boxes), meters, switches and outlets, are easily damaged by flood water. If they are inundated for even short periods, they will probably have to be replaced. Another serious problem is the potential for fires caused by short circuits in flooded systems. Raising electrical system components helps you avoid those problems. Also, having an undamaged, operating electrical system after a flood will help you clean up, make repairs and return to your home with fewer delays.

All components of the electrical system, including the wiring, should be raised at least 1 foot above the 100-year flood level. In an existing house, this work will probably require the removal of some interior wall sheathing (drywall, for example). If you are repairing a flood-damaged house, or building a new house, elevating the electrical system will be easier.

### **TIPS**

- ❖ Electrical system modifications must be done by a licensed contractor, who will ensure that the work is done correctly and according to all applicable codes. This is important for your safety.
- ❖ Your contractor should check with the local power company about the maximum height that the electric meter can be raised.
- ❖ If your house is equipped with an old-style fuse box or low-amperage service, you may want to consider upgrading to a modern circuit breaker system and higher-amperage service, especially if you have large appliances or other electrical equipment that draws a lot of power.

### **ANCHOR FUEL TANKS**

Unanchored fuel tanks can be easily moved by flood waters. These tanks pose serious threats not only to you, your family, and your house, but also to public safety and the environment. An unanchored tank outside your house can be driven into your walls, and it can be swept downstream, where it can damage other houses. When an unanchored tank in your basement is moved by flood waters, the supply line can tear free and your basement can be contaminated by oil. Even a buried tank can be pushed to the surface by the buoyant effect of soil saturated by water.

One way to anchor a tank is to attach it to a large concrete slab whose weight is great enough to resist the force of flood waters. This method can be used for all tanks, both inside and outside your house. You can also anchor an outside tank by running straps over it and attaching them to ground anchors.

## TIPS

- ❖ If you prefer not to do this work yourself, you can have a handyman or contractor anchor your tank.
- ❖ Extend all filling and ventilation tubes above the 100-year flood level so that flood waters cannot enter the tank.
- ❖ Close all connections when flood warnings are issued.

## **HEATING, VENTILATING AND AIR CONDITIONING EQUIPMENT**

Heating, ventilating and cooling (HVAC) equipment, such as a furnace or hot water heater, can be damaged extensively if it is inundated by flood waters. The amount of damage will depend partly on the depth of flooding and the amount of time the equipment remains under water. Often, the damage is so great that the only solution is replacement.

In flood-prone houses, a good way to protect the HVAC equipment is to move it from the basement or lower level of the house to an upper floor or even to the attic. A less desirable method is to leave the equipment where it is and build a concrete or masonry block floodwall around it. Both of these methods require the skills of a professional contractor. Relocation can involve plumbing and electrical changes, and floodwalls must be adequately designed and constructed so that they are strong enough and high enough to provide the necessary level of protection.

## TIPS

- ❖ Changes to the plumbing, electrical system, and ventilating ductwork in your house must be done by a licensed contractor, who will ensure that he work is done correctly and according to all applicable codes. This is important for your safety.
- ❖ If you are having your existing furnace or hot water heater repair or replaced, consider having it relocated at the same time. It will probably be cheaper to combine these projects than to carry them at different times.