



WELCOME!



FEMA



Mitigation



Mitigation is...

**Measures taken now
to reduce losses in
the future.**



FEMA



Protecting Your Property



Staying Above Water

There are many low-cost options to keep a home safe and protect against basement flooding.

Nothing Can Dampen The Joy Of Home Ownership



...or can it?





Mitigate...Before the Storm!



A little time just cleaning your gutters can save a lot!



Channel Water Away From The Foundation

Avoid flooding your neighbor's property.





Window Well Covers

Guard Against Snow, Rain and Debris



Gravel bottoms promote good drainage.





Berms And Barriers

Protect Against Overland Flooding

Photo 1

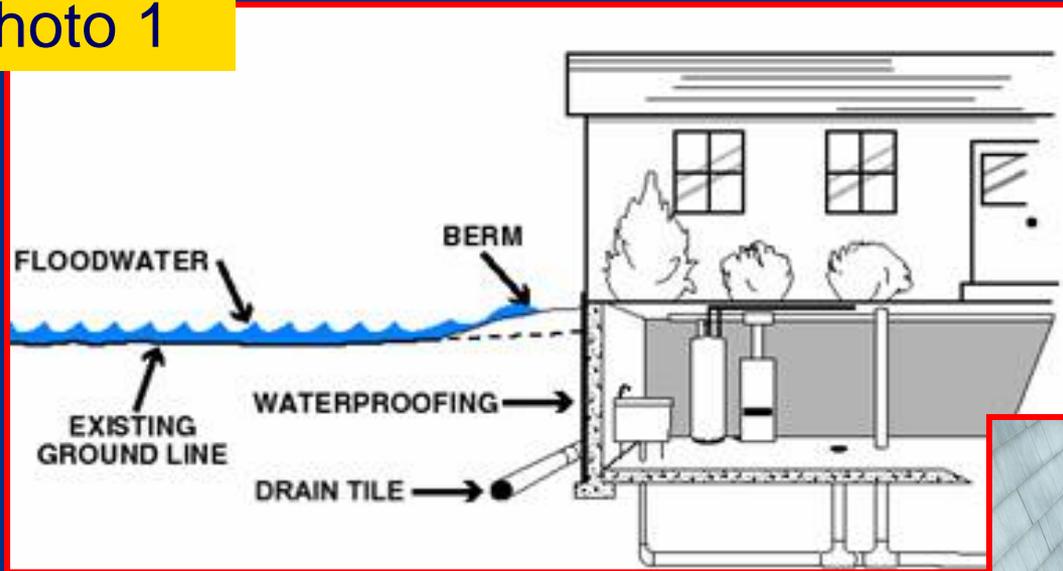


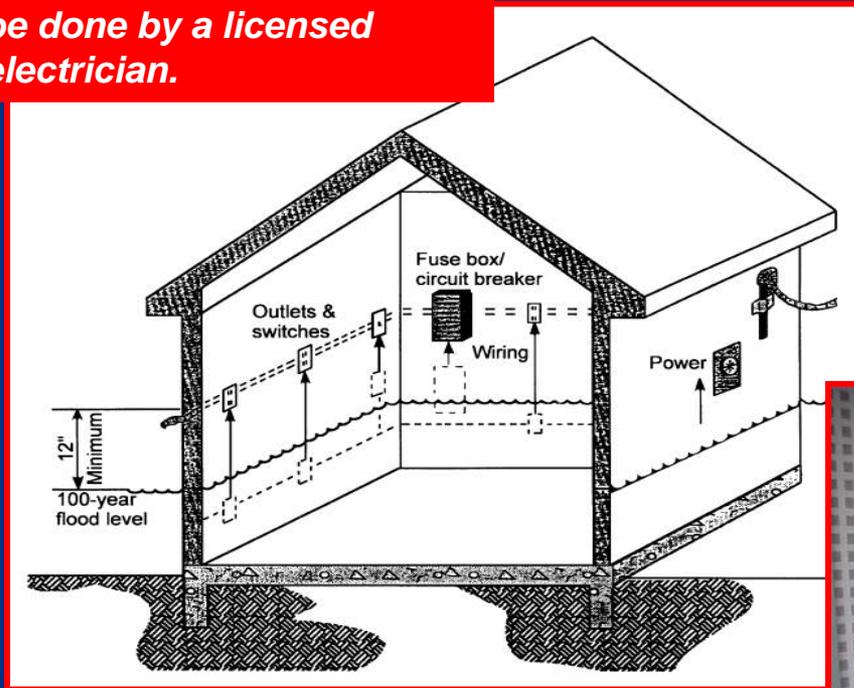
Photo 2



Don't forget...You may need a permit!

Raise Or Relocate Electrical Components

** All electrical work should be done by a licensed electrician.*

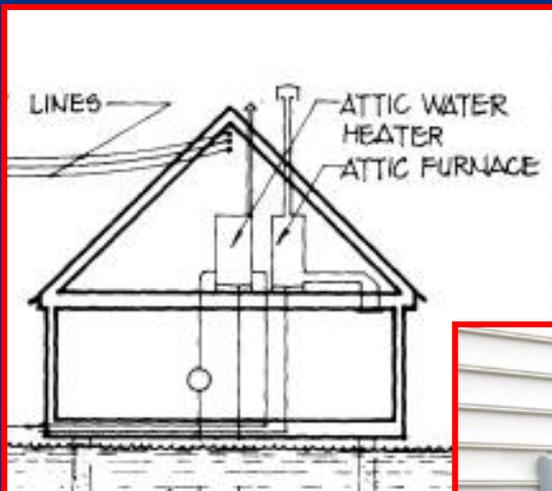


Any receptacles that could get wet should be connected to a **ground fault interrupter (GFI)** to prevent the risk of shock or electrocution.



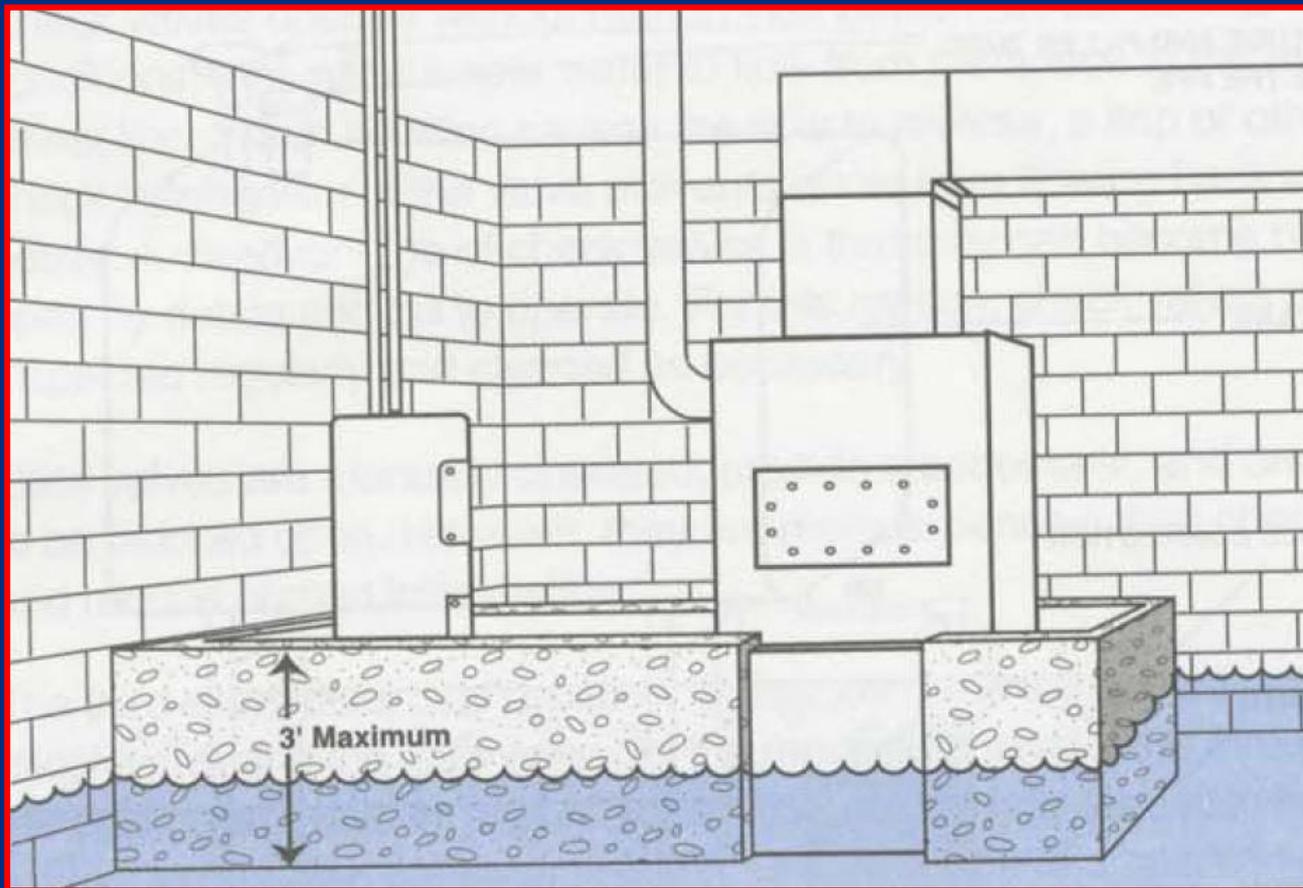


Elevate Or Relocate Mechanicals



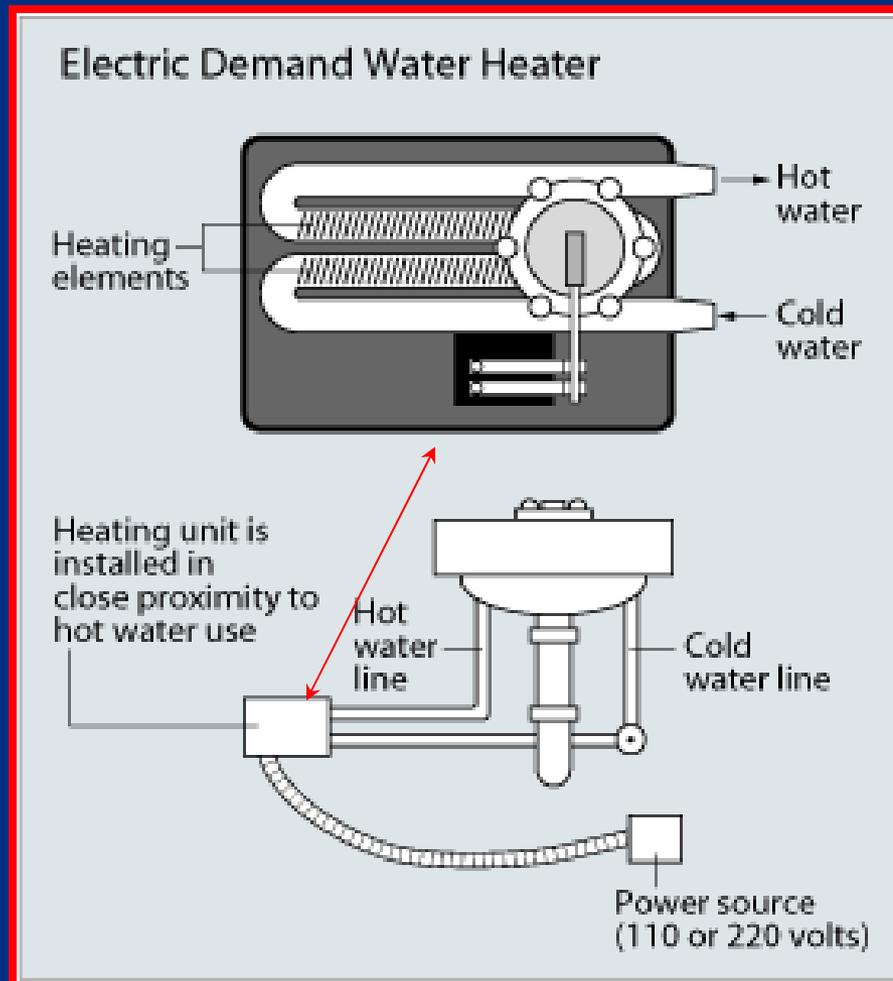


Protect Your Furnace with a Barrier Wall



FEMA

Consider Going Tankless



Gas Demand Water Heater



FEMA



Raise Or Relocate Appliances

Photo 2

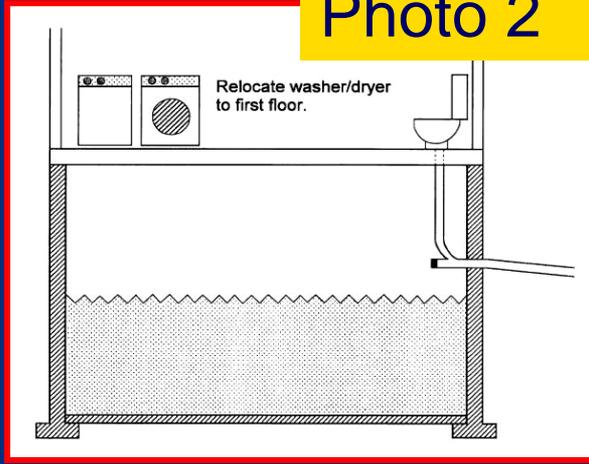
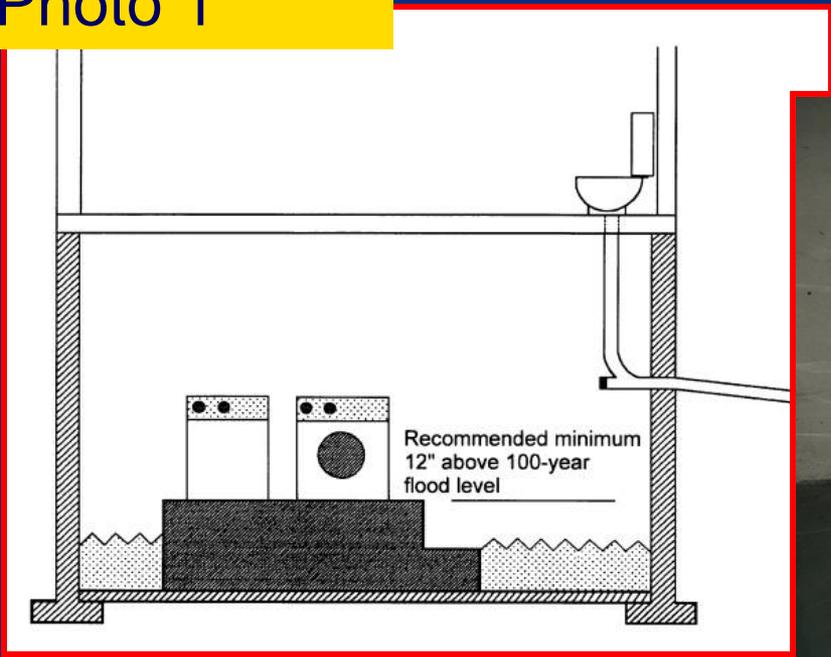


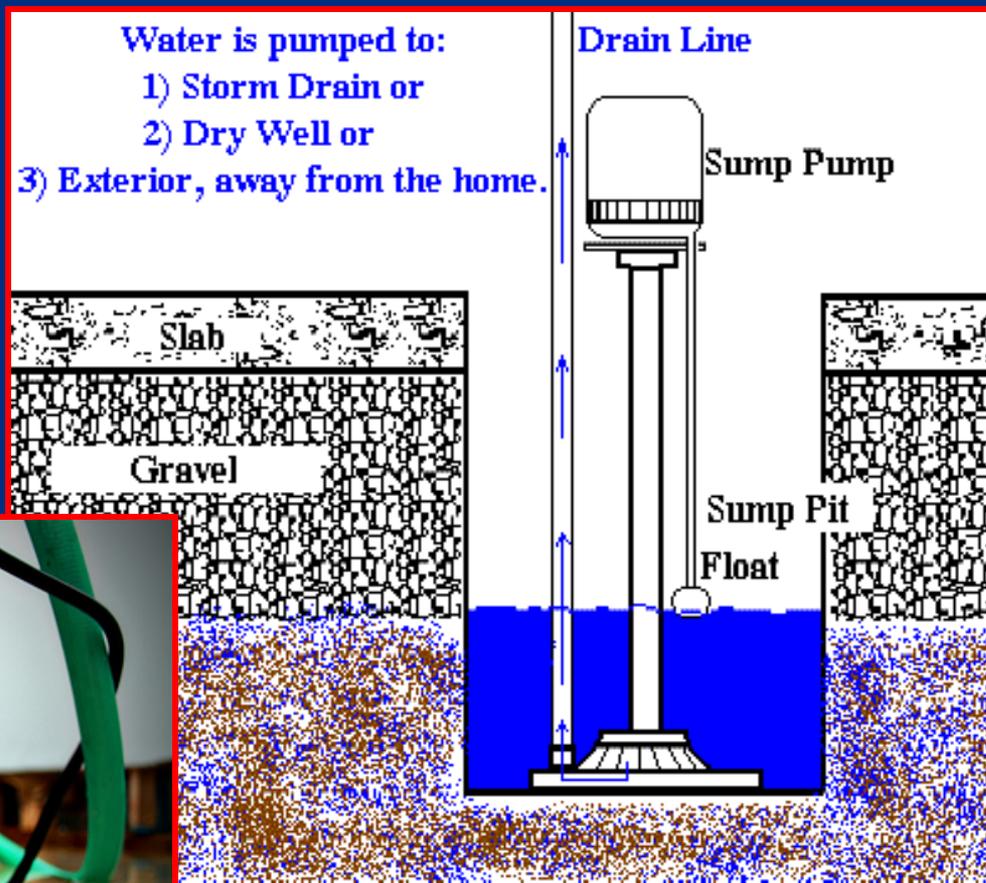
Photo 1





Sump Pump

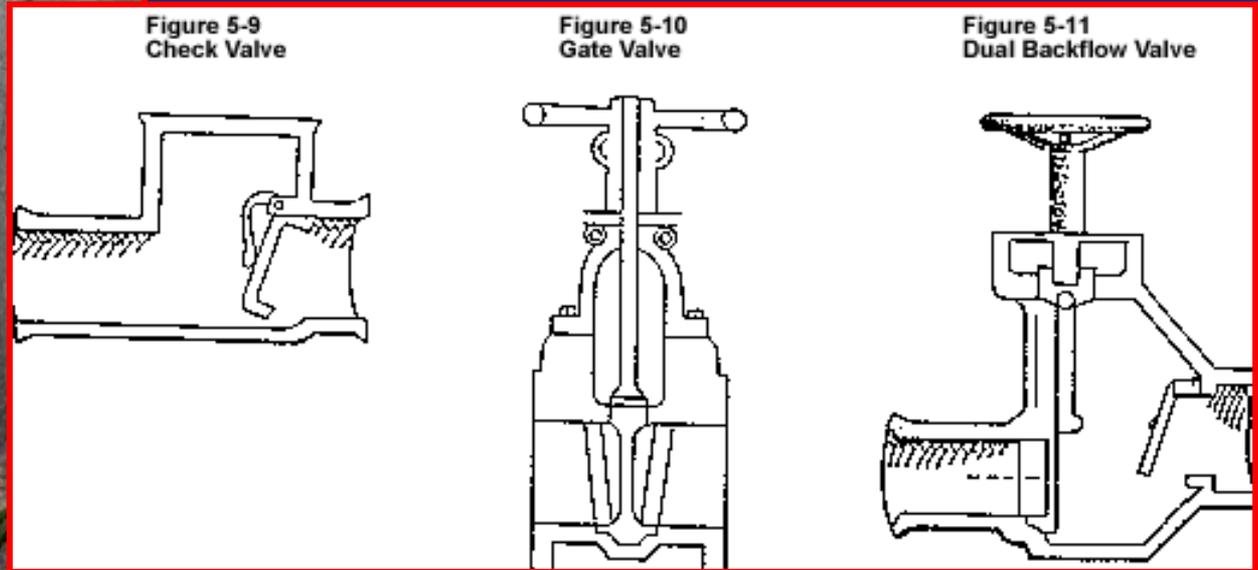
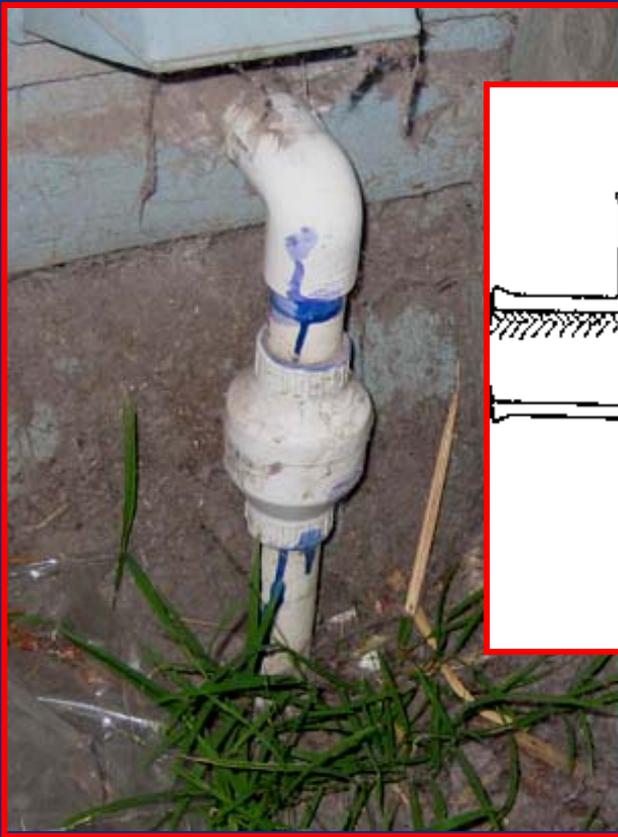
...Free Of Debris



Does your pump have a battery backup?

Drain Backing Up?

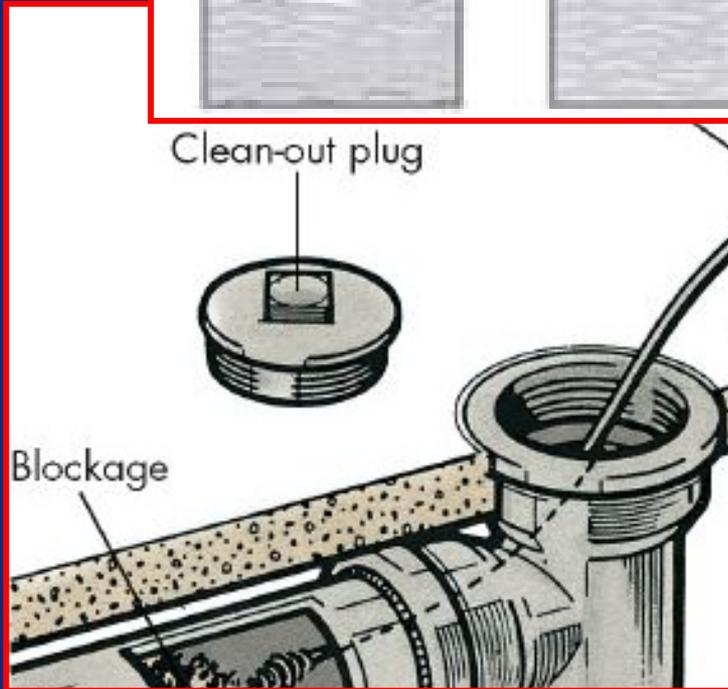
Consider A Backflow Valve



Consult with your local official to remain code compliant.



Drain Plug Varieties



FEMA

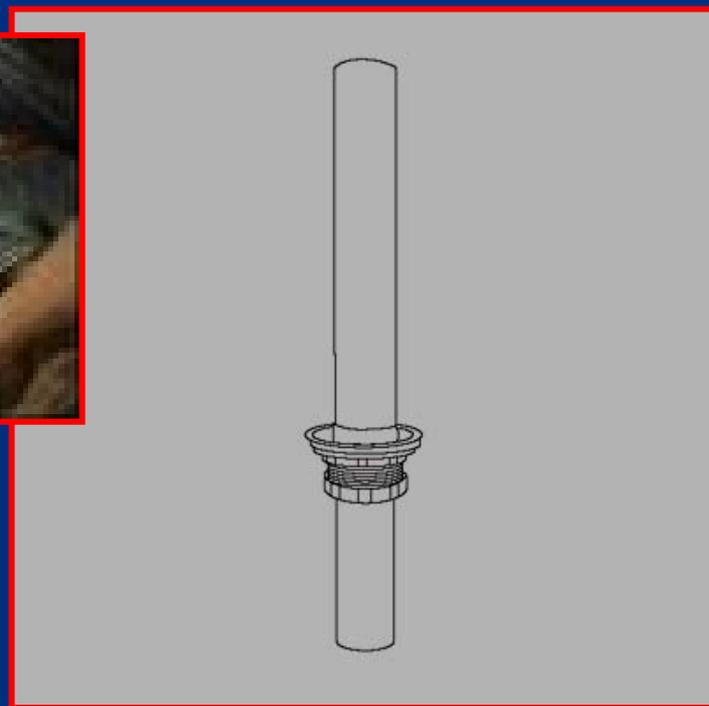




Restrict Drain Backup With a Standpipe



If water depths are minimal, a standpipe may be your solution.





Prevent Sewer Backup

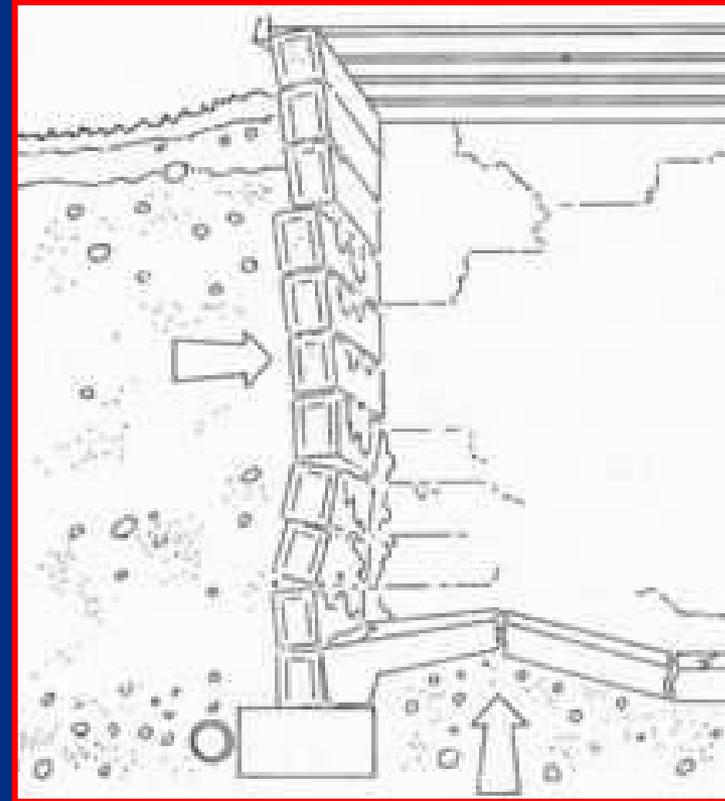
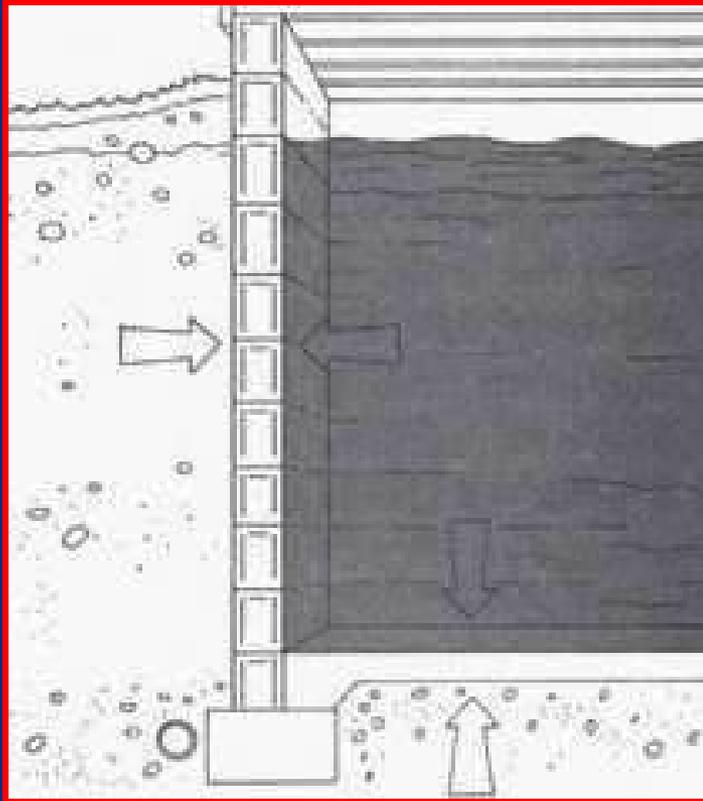
An Overhead Sewer System may be your solution.



A sump pump collects sewage which is ejected up into the sewer line by an ejector pump.

Backed up sewage is kept in the sewer line.

If Your Basement Is Flooded... **DON'T RUSH TO PUMP IT OUT!**



Pressure from groundwater can cause the floor to crack and the walls to collapse.



FEMA





ACT FAST! Cut away wet wallboard and fiber insulation 12" above waterline.



Apply bactericide.
Ventilate well.



Fans and a dehumidifier can be well worth the investment.



Mold Can Be Toxic If Left To Grow *Clean Immediately!*

Scrub with 1 1/2 cup bleach per
gallon sudsy water.

Let dry completely.

Treat again as necessary.



Avoid Mold Exposure

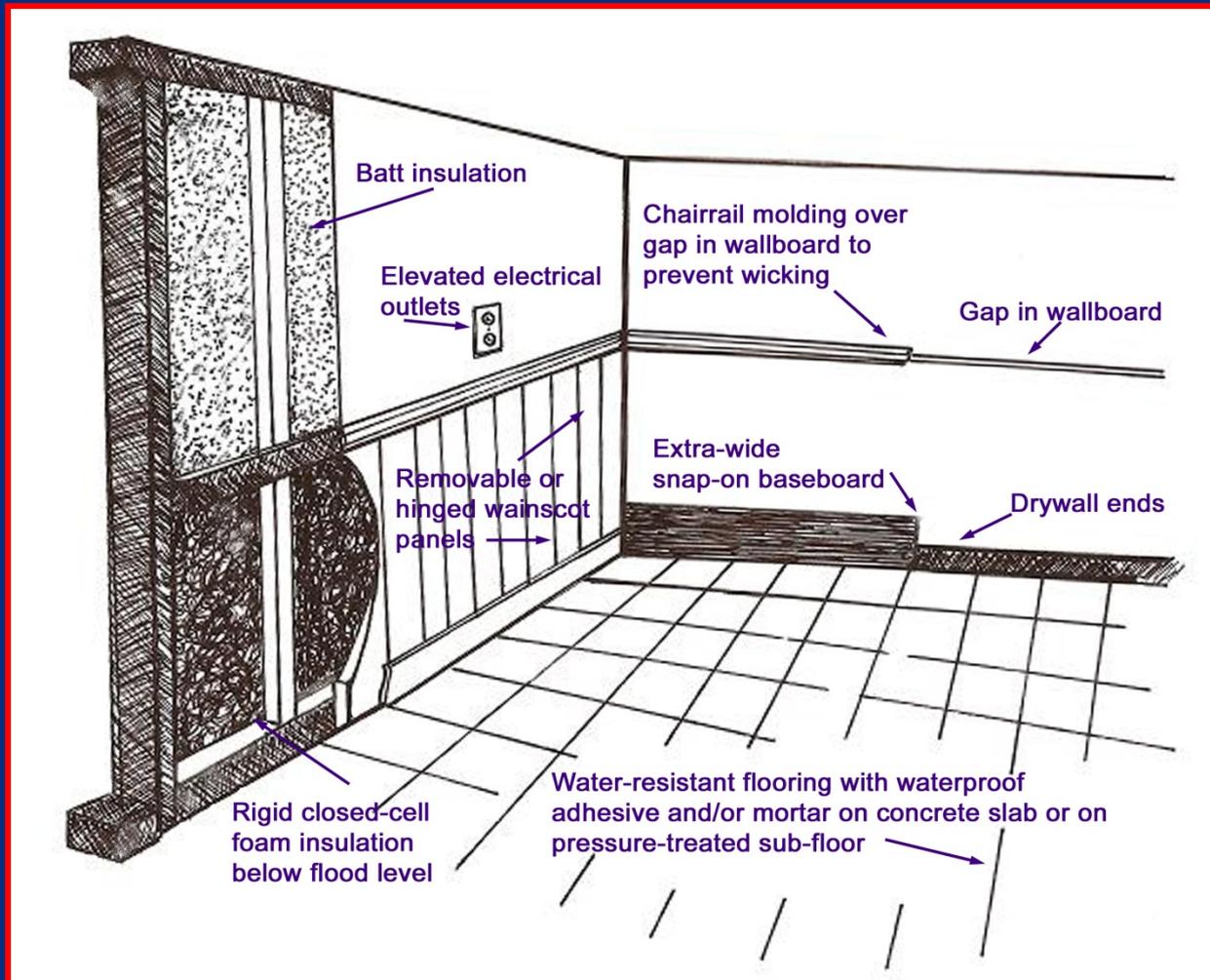
Wear protective gear!



N-95 MASK
commonly found at
hardware stores in the
paint department.



Repair With Water-Resistant Materials



FEMA





What About Flood Insurance?

Benefits of Flood Insurance vs. Disaster Assistance

FLOOD INSURANCE

- Flood insurance claims are paid even if a disaster is not declared by the President.
- Cleanup costs are covered and payout is timely.
- There is no payback requirement.

DISASTER ASSISTANCE

- Most forms of federal disaster assistance require a Presidential declaration.
- Cleanup reimbursement is subject to registration and determination of eligibility.
- The typical form of disaster assistance is a 30-year loan that must be repaid with interest.





National Flood Insurance Program

1 in 4 claims are paid on policies in low-to-moderate-risk areas.

Your home has a 26% chance of being flooded over the life of a 30 year mortgage, compared to a 9% chance of fire.



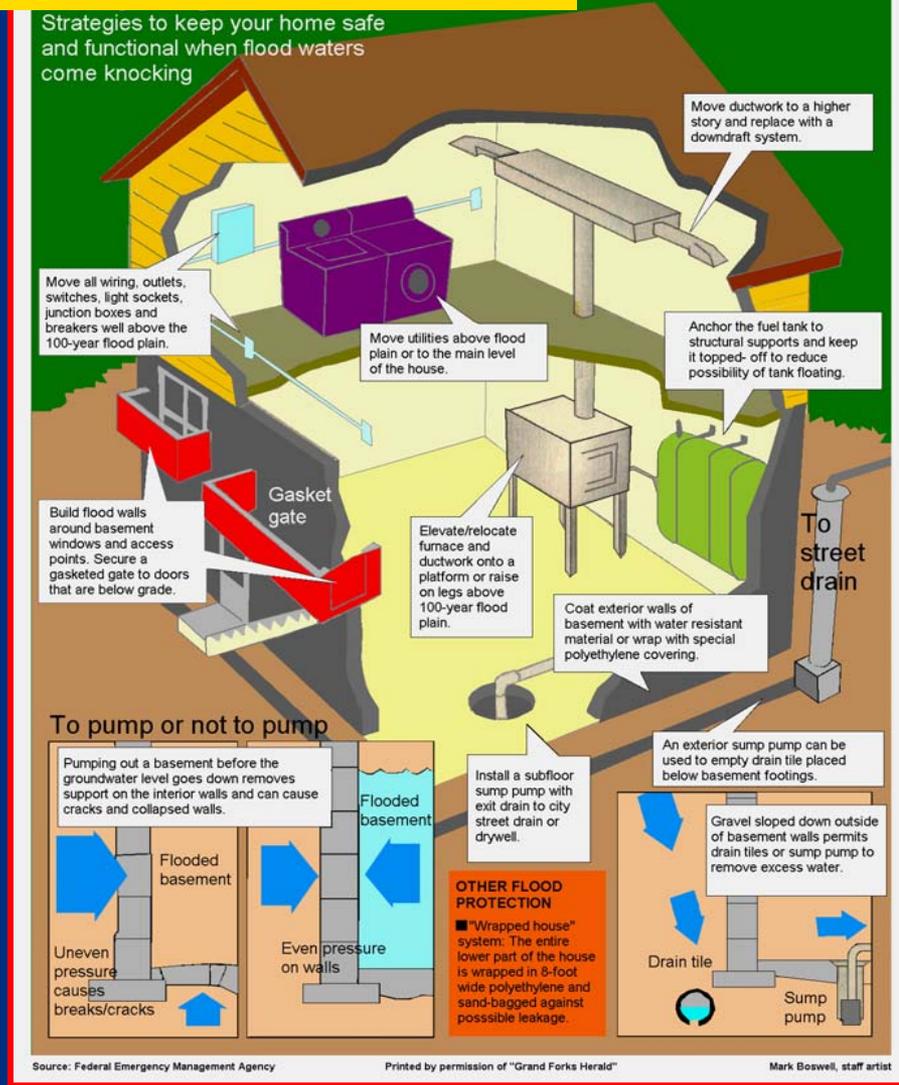
Plan ahead, a National Flood Insurance Policy must be in place 30 days to make a claim.

To assess your risk visit www.FloodSmart.gov

Call 800-427-4661 for more information!



Staying Above Water!





Important

- These are not absolute solutions.
- These are **suggestions** to help reduce your chances of repeat basement flooding.
- Your local official has authority.
- When retrofitting your home, backfilling your property or modifying your drain system, **PLEASE MAKE THE PERMITTING OFFICE YOUR FIRST STOP.**



QUESTIONS?



FEMA



THANK YOU!

Order FEMA publications free by calling (800) 480-2520.

www.fema.gov

www.floodsmart.gov



FEMA

