



*Mayor*  
DANIEL PODGORSKI

*Clerk*  
JEAN EISHA

*Trustees*  
ANTHONY DE LAURENTIS    JACK HOEKSTRA  
PATRICIA EIDAM            ROBERT RYAN  
MARK FOSTER                DONALD SCIACKITANO

April 24, 2006

Subject: Flooding and Flood Protection

Dear Lansing Resident:

**YOUR PROPERTY IS IN OR NEAR THE FLOODPLAIN. We want you to be aware of the hazard and what can be done to reduce flood damage.** This letter is being sent to all properties with the main building located in the Special Flood Hazard Area as mapped by the Federal Emergency Management Agency. It is part of the Village's effort to *save you money* by reducing your flood insurance premiums.

The Village of Lansing is implementing a variety of flood protection activities, including periodic cleaning of the ditches and channels, regulating new construction in the floodplain, and preserving floodprone areas as open space. The Lansing Public Library also has information and reference materials on how you can help protect yourself.

If you have experienced water problems in the past, you shouldn't wait for the problem to go away. Here are some things you can do:

- | Learn about the flood, drainage or sewer backup hazard that you are exposed to.
- | Read about floodproofing and get more information from the Library on the measures appropriate for your building.
- | Check out flood insurance coverage.
- | Read this letter's page on the Village's construction and stream dumping regulations. Follow these rules and report violations to the Building Department (call 895-7193).
- | Follow Sammy Sandbag's flood safety tips.

We hope this letter helps you. If you have any questions or suggestions, please call the Village's Building Department at 895-7193.

Sincerely,

*The Lansing Flood Advisory Committee*



Hi. I'm Sammy Sandbag, the spokesperson for the Lansing Flood Advisory Committee. My job is to tell you about flooding and what you can do about it. This newsletter will give you some valuable information on how you can protect your house.

As part of its effort to save you money from flood damage and reduce your flood insurance premiums, the Village of Lansing is implementing a variety of flood protection activities, including periodic cleaning of the ditches and channels, regulating new construction in the floodplain, and preserving floodprone areas as open space. But there are also some things that you can do.

First, let's talk about the problem we're faced with.

## The Flood Hazard

Properties in Lansing's floodplain are subject to three flood problems: overbank flooding, local drainage, and sewer backup. You could be faced with one, two or all three of these hazards.

**Overbank Flooding:** Lansing is subject to overbank flooding from the Little Calumet River, North Creek and Lansing Ditch. The largest flood problem is along the Little Calumet River. The first major flood in recent memory on the Little Cal was in June 1981. It was followed by a flood almost as high in December 1982. Lansing's worst flood on record (so far) occurred in November 1990. Heavy local storms caused the Little Cal to rise higher than before, over half a foot higher than the 1981 record. It was estimated to be a "25-year" flood. The July 1996 flood came within inches of the 1981 flood.

Find out if your property is in the mapped floodplain and subject to overbank flooding by calling the Building Department, 895-7193.

Construction of a levee and floodwall on the Little Cal during the 1980's kept the 1990 and 1996 floods out of town. However, a flood of as little as 2 foot higher would overtop this barrier and cover many blocks. For information on the base or "100-year" flood, contact the Building Department at 895-7193.

Because of all the construction in the upstream watersheds, stormwater runs off quickly. The 1990 storm caused overbank flooding to reach buildings in less than 24 hours. The river kept rising for another 24 hours. With our flat terrain, it takes a while for the waters to recede. After the Little Cal crested in 1990, it took 3-4 days to get back in its banks. In other words, the river was out of its banks for a total of five days and in buildings for two of those days. On the smaller streams, such as North Creek and Lansing Ditch, the water rises and falls faster.

**Local Drainage:** Lansing's local drainage problems are primarily due to backed up combined sewers and storm sewers. The sewers are designed to drain streets and ponding areas along with transporting sanitary sewage to treatment facilities. When they are blocked or overloaded by heavy rains, the drainage system is plugged. Stormwater sits for hours or days, waiting for the sewers to clear. Local drainage problems occur during storms in any part of the Village. In some cases, yard ponding will cause or aggravate basement flooding. Flooded streets and yards can cause or aggravate the health and safety problems and disrupt traffic.

**Sewer Backup:** With no place to go, sewers back up and flow into the lowest opening in the sewer line. Sanitary sewers back up into basements and storm sewers back up into streets. An overloaded combined

sewer backs up into basements first and, if the water gets deeper, into streets. With the completion of the Deep Tunnel connection in 1996, the combined sewers have been better able to handle their wet weather flows.

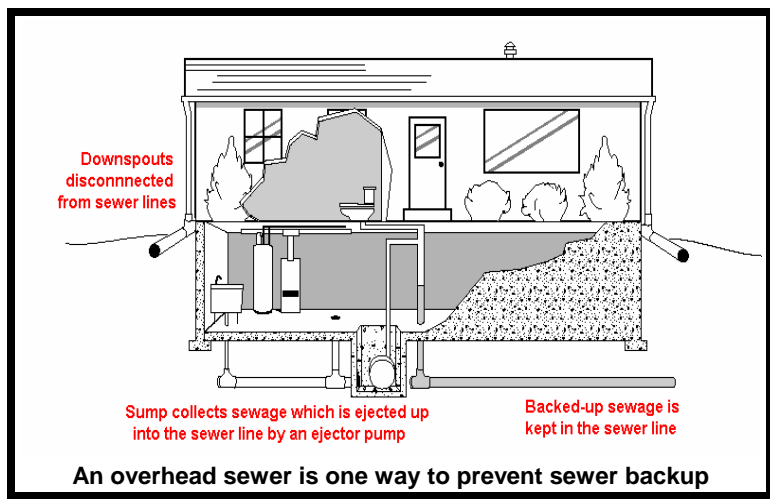
## Floodproofing

Floodproofing a house means altering it so floodwaters will not cause damage. Different floodproofing techniques are appropriate for different types of buildings. See Sammy Sandbag's *Guide to Flood Protection*, which is available free at the Building Department. Use the following as a guideline:

- | If you have a basement, split level, or other floor below ground level, there are lots of ways to protect your basement or lower floor from seepage and sewer backup (see illustration).
- | If your house is on a slab foundation, investigate a low floodwall, berm or "dry floodproofing" (i.e., making the walls watertight and closing all the openings when a flood comes).
- | If your house is on a crawlspace, a low floodwall, berm or "wet floodproofing" will work. "Wet floodproofing" means moving all items subject to damage out of harm's way so water can flow into the crawlspace and not cause any problems. If floodwaters go over the first floor, it is relatively easy to elevate the building to get the first floor above the flood level.

An excellent source for more information is *Homeowner's Guide to Retrofitting: Six Ways to protect Your House from Flooding* (FEMA publication 312). It can be read at the Library, ordered (for free) from the Federal Emergency Management Agency by calling 1-800/480-2520, or viewed and downloaded from FEMA's web site at <http://www.fema.gov/mit/rfit/>

**Emergency measures:** No matter what kind of building you have, some last minute emergency measures can always help. For example, you could move valuable items (photos, antiques, and other "irreplaceables" etc.) or items that are most damaged by floodwaters (upholstered furniture, stuffed toys, mattresses, foam rubber, etc.) up to a higher level. You can place sandbags or plastic sheeting in front of doorways and other low entry points. Whatever emergency protection measures you use, it is always best to have a plan written in advance to make sure you don't forget anything after you hear the flood warning. Keep in mind the flood safety hints at the end of this newsletter.



## Flood Insurance

Flood insurance is highly recommended because no floodproofing measure is 100% foolproof. Most homeowners insurance policies do not cover a property for flood damage. The Village of Lansing participates in the National Flood Insurance Program (NFIP). Local insurance agents can sell an NFIP policy under rules and rates set by the Federal government. Any agent can sell a policy and all agents must charge the same rates.

**Any** house in Lansing can be covered by a flood insurance policy. Detached garages and accessory buildings are covered under the policy for the lot's main building. There are two types of coverage which can be purchased separately:

- | **Structural** coverage covers everything that stays with a house when it is sold, including the furnace, cabinets, built-in appliances, and wall-to-wall carpeting.
- | **Contents** coverage covers furniture and other personal possessions except for money, valuable papers, and the like. Renters can buy contents coverage, even if the owner does not buy structural coverage on the building.

There is no coverage for things outside the house, like the driveway and landscaping. *If you have a policy, check it closely.* You may only have structural coverage (because that's all that banks require). In Lansing, your contents are more likely to be damaged by a flood than your structure.

Some people have purchased flood insurance because it was required by the bank when they got a mortgage or home improvement loan. Usually these policies just cover the building's structure and not the contents. During the kind of flooding that happens in Lansing, there is usually more damage to the furniture and contents than there is to the structure.

Don't wait for the next flood to buy insurance protection. There is a 30 day waiting period before National Flood Insurance coverage takes effect. Contact your insurance agent for more information on rates and coverage.

An NFIP policy covers sewer backup and basement seepage if there is a general condition of flooding in the area. You may do better by checking out the sump pump failure or sewer backup coverage that might be available as an addition to your homeowner's insurance policy. Each company has different amounts of coverage, exclusions, deductibles, and arrangements. Most exclude damage from surface flooding that would be covered by an NFIP policy. The cost varies from nothing to up to about \$100 for a rider on your homeowner's insurance premium.



### Sammy's Safety Tips:

**Do not walk through flowing water.** Drowning is the number one cause of flood deaths. Currents can be deceptive; six inches of moving water can knock you off your feet. Use a pole or stick to ensure that the ground is still there before you go through an area where the water is not flowing..

**Stay away from power lines and electrical wires.** The number two flood killer after drowning is electrocution. Electrical current can travel through water. Report downed power lines to the Police Department by calling 911.

## Flood Protection Regulations

Every lot was originally designed so water would flow away from the building and along property lines to the street, storm sewer, or ditch. Fences, railroad ties, landscaping and regrading block this flow. So do construction projects in the ditches or the floodplain.

- | ALWAYS CHECK WITH THE BUILDING DEPARTMENT BEFORE YOU BUILD ON, FILL, ALTER, OR REGRADE YOUR PROPERTY. A permit is needed to ensure that such projects do not cause problems on other properties.
- | Every piece of trash can contribute to flooding. Even grass clippings and branches can accumulate and plug channels. If your property is next to a ditch or storage basin, please do your part and keep the banks clear of brush and debris.
- | DO NOT DUMP OR THROW ANYTHING INTO THE DITCHES OR BASINS. Dumping in our ditches and storage basins is a violation of Village Code.
- | You can do your part in helping the drainage system work. Sweep or pick up your gutters to prevent blockages in the storm sewers. Pick up trash and fallen branches in the ditches.

New buildings in the floodplain must be protected from flood damage. Our building code requires that new residential buildings must be elevated one foot above the base flood level.

If you see dumping or debris in the ditches or basins, filling or construction near property lot lines, or filling or construction in the floodplain without a permit sign posted, contact the Building Department at 895-7193. The debris or project may cause flooding on your property

The ordinance also requires that all substantial improvements to a building be treated as a new building. A substantial improvement is when the value of an addition, alteration, repair or reconstruction project exceeds 50% of the value of the existing building. In the case of an addition, only the addition must be protected. In the case of an improvement to the original building, the entire building must be protected.

For example, if a house in the floodplain is flooded, has a fire, is hit by a tornado, or is otherwise damaged so that the cost of repairs is more than 50% of the value of the building before the damage, then the house must be elevated above the base flood level.

These regulations are designed to protect you and your neighbors. By keeping the drainage system clear and getting the proper permits before you build, we can prevent flooding and other drainage problems.

### Sammy's Safety Tips:



**Look out for animals** that have been flooded out of their homes and who may seek shelter in yours. Use a pole or stick to poke and turn things over and scare away small animals.

**Look before you step.** After a flood, the ground and floors are covered with debris including broken bottles and nails. Floors and stairs that have been covered with mud can be very slippery.

**Be alert for gas leaks.** Use a flashlight to inspect for damage. Don't smoke or use candles, lanterns, or open flames unless you know the gas has been turned off and the area has been ventilated.

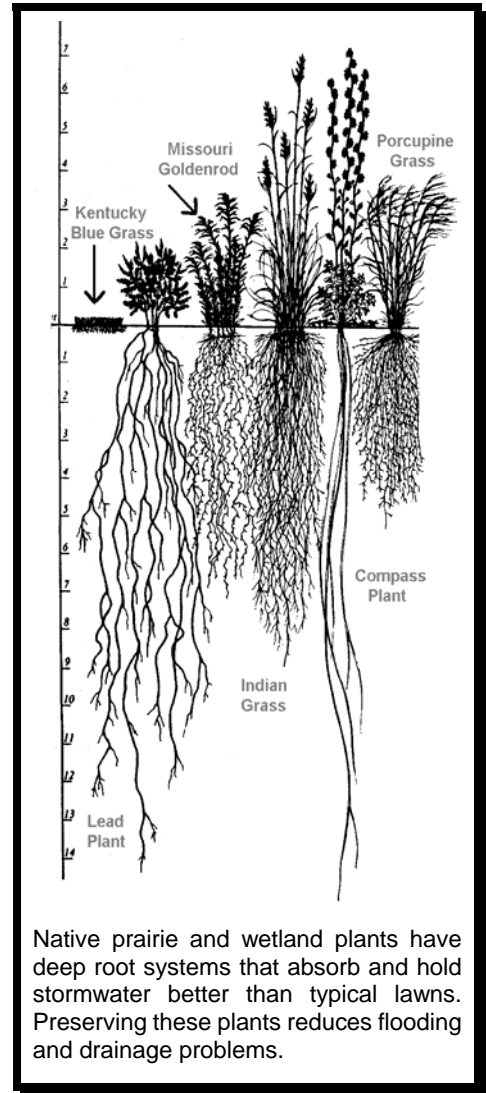
## Natural and Beneficial Functions

Floodplains should be seen in their natural context. They are more than just hazardous locations for human development. Open and natural areas, such as the Forest Preserves, absorb much more rain and floodwater than urbanized areas, reducing flood flows on downstream properties. Wetland plants filter stormwater runoff, making it cleaner for those downstream.

Nearby Forest Preserves, such as Lansing Woods, have kept or restored oak woodlands and prairies close to their natural state. These floodprone areas are used by a variety of wildlife and provide habitat for species that cannot live or breed anywhere else. For example, after being gone for over 150 years, beaver have moved back into the North Creek and Little Calumet River floodplains.

It is important that we preserve such natural areas and wetlands. While some development is allowed, the Village and state and Federal agencies make sure that the natural benefits of any filled wetlands are compensated by creation of additional or improved wetland habitats nearby.

Another concern is water quality. The storm drain system carries untreated stormwater runoff directly to our streams. Pouring wastes into storm drains directly impacts our environment. Oil, anti-freeze, paint, fertilizer and pesticides pollute the water, destroy plants, and endanger wildlife. For example, one quart of oil can contaminate 250,000 gallons of water. The oil from one motor oil change can create an eight acre oil slick. Therefore, you should do your part to help keep our streams and storm drains free of pollutants.



### Sammy's Safety Tips:

**Clean everything that got wet.** Flood waters have picked up sewage and chemicals from roads, farms, factories, and storage buildings. Spoiled food, flooded cosmetics, and medicine can be health hazards. **When in doubt, throw them out.**

**Carbon monoxide exhaust kills.** Use a generator or other gasoline-powered machine outdoors. The same goes for camping stoves. Charcoal fumes are especially deadly – cook with charcoal outdoors.

**Take good care of yourself.** Recovering from a flood is a big job. It is tough on both the body and the spirit and the effects a disaster has on you and your family may last a long time. Keep your eyes open for signs of anxiety, stress, and fatigue in you and your family.