

WHAT YOU NEED TO KNOW ABOUT FLOODING IN THE CITY OF HAVELOCK AND THE CITY'S ZONING JURISDICTION

The Problem

Havelock is not subject to widespread flooding from streams. (Few buildings are actually in danger of being inundated in the way we think of as characteristics of floods, but the land is flat, very flat, and the water table is close to the sea level). Flooding in this Coastal North Carolina Community is caused, for the most part, by overflowing ditches, canals and curbs, and mostly affects streets, yards and low places. Flood hazard areas are defined on the flood map as being along Slocum Creek (East and West prongs), Hancock Creek and Tucker Creek, but problems also occur on the east side of town which depends on McCotter Canal to take stormwater to Hancock Creek, and along Joe's Branch which drains into Slocum Creek. Smaller creeks and branches draining into the major creeks can back up into yards and streets. During tropical storms, hurricanes, "Northeasters" and other prolonged heavy rainfall, such flooding can be widespread. Storm surge from the Atlantic Ocean affects the Pamlico Sound which in turn affects the Neuse River and then the creeks and channels in our area. In addition to the tidal problem, there is no way for the stormwater to drain to the normal channels of run-off.

Introduced into the coastal counties in the late 1940's, by the North Carolina Department of Wildlife for the purpose of creating wetlands, the non-native beaver has become a major problem for farmers, State Department of Transportation, and municipal/county wastewater collection systems and drainage systems. The beavers build dams which can increase flooding and are rebuilt almost as quickly as they are destroyed.

Much of the property located in the following areas is in the floodplain: the creek side of Hollywood Boulevard, the creek side of Sherwood Forest Subdivision (Chadwick Avenue and Shore Drive), Indian Hills Subdivision, Ketner Heights Subdivision (Riverside Drive, Lakeside Drive, Crest Drive), Woodland Drive and Hickory Circle, the creek side of Lynnwayne Circle, the creek side of Simmons Street, Hills of Foxcroft Subdivision and Tucker Creek Subdivision.

To find out if your property is in a floodplain, contact the Planning/Inspection Department in the City Hall Complex or call (252) 444-6411.

Natural Areas:

Under natural conditions, a flood causes little or no damage. Nature ensures that floodplain flora and fauna can survive the more frequently inundations. This is the case in the wetlands of Slocum Crrek and its tributaries.

These natural areas help reduce our flood damage by allowing flood waters to spread over a large area. This reduces flood velocities and provides flood storage to reduce peak flows downstream. Natural flood plains reduce wind and wave impacts and their vegetation stabilizes soils during flooding.

It is our job to help preserve natural areas in the floodplain. We can do this by following regulations for stream maintenance and construction in the floodplain.

What We Are Doing:

The City has developed a regular schedule for drainage maintenance which includes ongoing clean out of roadside ditches; periodic contracting to re-establish McCotter Canal; clean out of finger canals draining to McCotter Canal; and continuous year round trapping of beavers in the Slocum Creek wetlands as well as destroying the beaver dams. Under direction of the Public Works Director, this program has proven to be very effective in reducing flooding problems.

The City also has developed a flood warning plan. The Director of Public Safety is in charge of communications and is responsible for activating the Emergency Operations Command in response to emergency storm situations. This plan can be reviewed in City Hall or the Planning/Inspections Department. During an emergency storm situation, WCTI-TV Channel 12, broadcasts Craven County emergency network information, which includes the City of Havelock. Local radio stations and other local television stations will also be broadcasting emergency information.

What You Can Do:

You can:

- Determine if your property is located in a floodplain
- Implement flood protection measures for your property
- Purchase flood insurance if in a flood plain
- Help the City in its flood protection activities
- Read this newsletter and keep it handy for reference

Stream Maintenance:

Do not dump or throw anything into the ditches or streams. Dumping in our ditches and streams is a violation of North Carolina General Statutes, Article 2, Chapter 77 which the City enforces. A plugged channel cannot carry water, and when it rains the water has to go somewhere. *If you see dumping or debris in the ditches or streams, contact the Public Works Department at 444-6410. The debris may increase flooding on your property!*

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 stream, please do your part and keep the banks clear of brush and debris. The City has a stream maintenance program and inspects the channels regularly and can help you remove major blockages such as downed trees.

Construction Requirements:

Always check with the Building Inspections Department before you build on, alter, regrade, or place fill on your property. A permit is needed to ensure that project do not cause problems on other properties. *If you see building or filling without a City permit sign posted, contact the Building Inspections Department at 444-6433. The project may increase flooding on your property.*

New buildings in the floodplain must be protected from flood damage. Our Flood Damage Prevention Ordinance requires that new residential buildings must be elevated no lower than the base or "100-year" flood. New nonresidential buildings must be elevated or flood-proofed to a level no lower than the structural repairs, additions or alterations. **Also, a permit is required to place a storage shed or other accessory building on your lot.**

Substantial Improvement Requirements:

Substantial improvement means any repair from damage or destruction, reconstruction, improvement, or additions of a structure, the cost of which equals or exceeds 50 percent of the market value of the structure before the start of construction of the improvement. This value must be determined by a certified appraisal. The assessed value of the structure must be determined before the improvement is started, or if the structure has been damaged and is being restored, before the damage or destruction occurred.

The percentage of a substantial improvement shall be counted cumulatively for a period of not less than five years for improvements, modifications, additions and reconstruction.

This requirement does not include either: (1) any project or improvement of a structure to correct existing violations of state or local health, sanitary, or safety code specifications which have been identified by the local code enforcement official and which are the minimum necessary to assure safe living conditions; or (2) any alteration of a historic structure, provided that the alteration will not preclude the structure's continued designation as a historic structure.

Substantial Damage:

If your home or business suffers "substantial damage" to the structure and/or interior of the building, Havelock's Flood Damage Prevention Regulations may affect how you rebuild. Substantial damage means damage of any origin where the cost of restoring the structure to its before damage condition equals or exceeds 50 percent of the market value of the structure before the damage occurred. When a structure is damaged a permit must be obtained from the building inspection department before initiating repairs.

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Floodproofing—Protecting Your Property:

There are several different ways to protect a building from flood damage. One way is to keep the water away by regrading your lot or building a small floodwall or earthen berm. These methods work if your lot is large enough, if flooding is not too deep, and if your property is not in the floodway. The Planning/Inspections Department can provide this information.

Another approach is to make your walls waterproof and place watertight closures over the doorways. This method is not recommended for houses with basements or if water will get over two feet deep.

A third approach is to raise the house above flood levels.

Many houses, even those not in the floodplain, have sewers that back up into the basement during heavy rains. A plug or standpipe can stop this if the water doesn't get more than one or two feet deep. For deeper sewer backup flooding, talk to a plumber about overhead sewers or a backup valve.

These measures are called floodproofing or retrofitting. More information is available at the City of Havelock Public Library. **Important note: Alterations to your building or land may require a permit from the Building Inspections Department. Even regrading or filling in the floodplain may require a permit.**

The City of Havelock participates in the National Flood Insurance Program. Local insurance agents can sell a flood separate insurance policy under rules and rates set by the Federal government. Any agent can sell a policy and all agents must charge the same rate. Your rates will not change just because you file a damage claim; they are set on a national basis.

Protecting Yourself:

There are things that you can do to be prepared for a flooding situation. Most damage occurs during heavy rainfall such as hurricanes or tropical depressions which affect Havelock and Craven County even though not right on the coast.

- Is your property subject to flooding?
- What would be the source of the flooding water—rain or steam?

- How does the flood warning affect your property?
- Is your street subject to flooding—if so—what access or evacuation route would you use?

Describe your lot and your building when you talk to the Planner about protecting your building. He/she may recommend regrading your lot, installing drainage swales or retrofitting your building. The Public Works Director can also be helpful regarding drainage, ditches, etc. There are several good references on retrofitting in the Havelock Public Library and in the City Hall Reference Library.

Flood Preparedness:

There are things that you can do to be prepared for a flooding situation. Most damage occurs during heavy rainfall such as hurricanes or tropical depressions which affect Havelock and Craven County even though not right on the coast.

- Know the official warning and evacuation procedures.
- Read the safety instructions included in this brochure.
- Talk to your insurance agent about your coverage. Check our flood and sewer backup insurance.
- Prepare a list of emergency telephone numbers, including your insurance agent. Make copies and keep them in your car, at work and at a friend's house.
- Assemble the supplies you will need for cleanup and recovery. Keep them in a safe place.
- Make a record of all your personal property. Go through your house room by room and record household inventories. Take photographs or videotapes. Inventory forms are available free from most insurance companies or you can make your own.
- Put photocopies of inventory records, insurance policies, deeds, automobiles titles, wills, telephone numbers, bank and credit card account numbers, and other valuable papers at a location away from your house, such as a safety deposit box.
- Prepare a flood response plan that will help you think through all the details that demand attention after a flood watch or warning is issued. Writing it down will help you remember everything, which is especially important when everyone is in a hurry and excited because a flood is coming.
- Identify two places where family members can meet if you are split up—one place in the neighborhood and another place that is sure to be high and dry and out of the flood area.
- Shut off the gas and electricity and move valuable contents upstairs or to a safe location.

Flood Insurance:

Most standard homeowners insurance policies do NOT cover a property for flood damage.

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

NFIP: The City of Havelock participates in the National Flood Insurance Program (NFIP). The NFIP makes federally backed flood insurance available for all buildings, whether they are in a floodplain or not. Flood insurance covers direct losses caused by surface flooding, including a river flowing over its banks, a lake or ocean storm, and local drainage problems. The NFIP insures buildings, including mobile homes, with two types of coverage: structural and contents. Structural coverage is for the walls, floors, insulation, furnace and other items permanently attached to the structure. Contents coverage may be purchased separately provided the contents are in an insurable building.

Mandatory Purchase Requirements: The mandatory purchase requirement applies to all forms of federal or federally related financial assistance for buildings located in a Special Flood Hazard Area (SFHA). This requirement affects loans and grants for the purchase, construction, repair, or improvement of any publicly or privately owned building in the SFHA, including machinery, equipment, fixtures, and furnishings contained in such buildings.

Financial assistance programs affected include loans and grants from agencies such as the Department of Veterans Affairs, Farmers Home Administration, Federal Housing Administration, Small Business Administration, and Federal Emergency Management Agency. The requirement also applies to secured mortgage loans from financial institutions, such as commercial lenders, savings and loan associations, savings banks, and credit unions that are regulated, supervised or insured by Federal agencies such as the Federal Deposit Insurance Corporation and the Office of Thrift Supervision. It also applies to all mortgage loans purchase by Fannie Mae or Freddie Mac in the secondary mortgage market.

How It Works: Before a person can receive a loan or other financial assistance from one of the affected agencies or lenders, there must be a check to see if the building is in a Special Flood Hazard Area (SFHA). The SFHA is the base (100-year) floodplain mapped on a Flood Insurance Rate Map (FIRM). It is shown as one or more zones that begin with the letter "A" or "V".

Copies of the FIRM are available for review in the public library, in the Reference Library at City Hall and in the City Planning Department. Many lenders and Insurance agents also have copies. It is the agency's or the lender's responsibility to check the FIRM to determine if the building is in an SFHA, although many communities provide assistance.

If the building is in a SFHA, the agency or lender is required by law to require the recipient to purchase a flood insurance policy on the building. The requirement is for structural coverage equal to the amount of the loan (or other financial assistance) of the maximum amount available, whichever is less. The maximum amount available for a single-family house is \$250,000.

The mandatory purchase requirement does not affect loans or financial assistance for items that are not covered by a flood insurance policy, such as vehicles, business expenses, landscaping, and vacant lots. It does not affect loans for buildings that are not in the SFHA, even though a portion of the lot may be flood prone. While not mandated by law, a lender may require a flood insurance policy as a condition of a loan for a property in any zone on a Flood Insurance Rate Map.

Several insurance companies have sump pump failure or sewer backup coverage that can be added to a homeowners insurance policy. Each company has different amounts of coverage, exclusions, deductibles, and arrangements. Most are riders that cost extra. Most exclude damage for surface flooding that would be covered by an NFIP policy.

Flood Safety:

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.

Do not drive through a flooded area. More people drown in their cars than anywhere else. Don't drive around road barriers; the road or bridge may be washed out.

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 power company or the City's Emergency Management Office.

Have your electricity turned off by the power company. Some appliances, such as television sets, keep electrical charges even after they have been unplugged. Don't use appliances or motors that have gotten wet unless they have been taken apart, cleaned and dried.

Look out for animals, especially snakes. Small animals that have been flooded out of their homes 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.

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.

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.***

Keep children away from flood waters, ditches, culverts and storm drains.

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 can last a long time.

If in doubt, ask. Following is a list of telephone numbers of contact for various services which are available to our residents. Please do not hesitate to call if you have any questions or concerns about floodplain management.

City of Havelock Floodplain Management Services

Flood maps and flood protection references:

Havelock Public Library—447-7509

City Hall Reference Library—444-6402

City Planning and Inspections Department—444-6433

Construction in the floodplain:

Building Inspections Department—444-6413

Stream dumping and obstructions:

Public Works Department—444-6410

Flood Protection Programs and Floodproofing advice:

City Planning and Inspections Department—444-6411

Emergency Operations Command Center:

Public Safety—447-3212

