

PLANNING & INSPECTIONS DEPARTMENT  
Craig N. Benedict, AICP, Director

Current Planning  
(919) 245-2575  
(919) 644-3002 (FAX)  
www.orangecountync.gov



131 W. Margaret Lane  
Suite 201  
P. O. Box 8181  
Hillsborough, NC 27278



July 31, 2018

RE: Participation in the National Flood Insurance Program – Services offered by the Orange County Planning Department

**YOU ARE RECEIVING THIS LETTER BECAUSE:**

- 1. Your property is located within a Special Flood Hazard Area (SFHA)**
- OR**
- 2. You are a surveyor, insurance agent, developer, real estate agent, or banker that does business in Orange County and work with property that could be encumbered by SFHA**

**BACKGROUND:** Orange County has been a member of the National Flood Insurance Program (NFIP) since approximately 1976.

In 1968 Congress created the NFIP to help provide a means for property owners to financially protect themselves from the possible damage of structures resulting from flood events. The program is intended to supplement typical homeowner insurance policies, which do not cover damage to structures resulting from a flood. The NFIP offers flood insurance to homeowners, renters, and business owners if their community participates, specifically through the adoption and enforcement of regulations designed to mitigate/reduce flood risk, in the program.

Part of the 'regulations' at our disposal are Flood Insurance Rate Maps (FIRM) denoting those areas of the County that are susceptible to flooding. The County utilizes these maps to verify the anticipated 'elevation' of flood waters during a storm event and works with property owners to ensure structures are not located in areas where flooding is a possibility. Through the enforcement of our flood damage prevention regulations, the County requires incorporation of design standards (i.e. elevation of structures and utilities, installation of flood vents, prohibition of specific activities, etc.) all in an effort to reduce the risk of loss during a flood.

Our original FIRM became effective on March 16, 1981, with the latest becoming effective on November 17, 2017. Flood map data is available at the County Planning office or by visiting the North Carolina Flood Risk Information System (FRIS) webpage at: <http://fris.nc.gov/fris/Home.aspx?ST=NC>.

In accordance with our responsibilities as a member of the NFIP, Orange County has adopted its own flood regulations, currently embodied within the Orange County Unified Development Ordinance (UDO) and can be found utilizing the following link: <http://orangecountync.gov/planning/Ordinances.asp>.

**WHAT DOES THIS MEAN?** Being located in or near identified SFHAs does not inherently mean you cannot develop your property. There are steps you can take to mitigate your risk and, at the same time, ensure compliance with applicable flood regulations.

This letter is being sent as a courtesy to remind you of the service(s) the Planning Department provides with respect to understanding, and abiding by, local flood regulations as well as providing some proactive tips in addressing flood issues on your property.

**COUNTY SERVICES:** The County has made available a variety of documents on existing flood data as well as guidelines and flood protection methods for you to review in several convenient locations including:

- The Orange County Public Library – Hillsborough Branch on Margaret Lane,
- The County Planning office located on the second floor of the West Campus Office building at 131 W. Margaret Lane in downtown Hillsborough, and
- On the County Planning Department website utilizing the following link: [http://orangecountync.gov/planning/floodplain\\_information.asp](http://orangecountync.gov/planning/floodplain_information.asp).

If you are thinking about engaging in land disturbing activity on your property for any reason (i.e. building a new structure, grading, removing trees, etc.) you should first consult the Planning Department to understand what issues, if any, the project may create. Staff will be more than happy to schedule a formal meeting with you, on site, to discuss specific flood issues associated with your property and identify opportunities to correct or prevent flood damage.

A breakdown of the services we offer, with respect to understanding and identifying flood issues on your property, include:

**1. PROVISION OF MAPPING SERVICES / PREPARATION OF SITE ASSESSMENT(S):**

County planning staff can assist you determine where floodplains are located on your property and provide basic mapping services to delineate them. While this service does not take the place of procuring a professionally prepared site plan where a surveyor formally delineates floodplains on your property, staff can provide vital information such as the depth of anticipated flood waters and the location of any structure with respect to its proximity to identified floodplains. As a free service the Planning Department can prepare an environmental assessment of your property. This assessment, which utilizes Orange County Geographic Information Service (GIS) data, is intended to identify environmental conditions that may restrict the overall development of property.

Data provided on these assessments include, but are not limited to:

- a. The location of flood plain / special flood hazard areas / floodways on your property including the provision of the necessary information found on the Flood Insurance Rate Map (FIRM) needed to complete a flood insurance policy,
- b. Determining and denoting required floodplain buffers on your property,
- c. Identifying the location of streams and/or other protected water features including previously mapped wetlands. This includes identifying/denoting required stream buffers.

Stream buffers is a generic term for the required buffer around various water features (i.e. streams, hydrologically connected water bodies, floodplains, wetlands, etc.) intended to be left in a natural state as part of our water quality guidelines/pollution protection measures as well as the preservation of the features natural drainage function,

- d. Identifying the required base flood elevation requirements for the property based on local land use regulations,
- e. Determining the depth of flooding on your property (i.e. how deep flood waters can be anticipated to be) in order to provide you with a better concept of the property's potential flood hazard,
- f. Identifying the location of existing structures with respect to their distance from identified SFHA's as well as their elevation using existing contour data,
- g. Required minimum setbacks for structures from property lines,
- h. Impervious surface limits for the property,
- i. Erosion Control and Stormwater management land disturbance thresholds, specifically focusing on identifying if an erosion control permit or a stormwater management plan will be required based on the anticipated/proposed level of land disturbance,
- j. The presence of conservation or utility easements impacting the location of structure and/or utility systems (i.e. well and septic), and
- k. Soil types on a property.

Staff is also able to provide electronic copies of flood maps and other similar data denoting flood prone areas on your property as part of this service.

During the preparation of this map staff identifies any and all regulations impacting the overall development of the property and provides direction on how you can address compliance.

**Please remember to always check with the Planning Department before you initiate construction or land disturbing activities, or deposit fill material, on your property in order to avoid unnecessary problems with respect to compliance established regulations.**

You do not need to schedule an appointment to obtain a site assessment, which any staff person can complete during normal business hours at our main office located on the second floor of the West Campus Office building located at 131 West Margaret Lane in downtown Hillsborough.

## **2. ASSISTANCE WITH FLOOD REGULATIONS:**

The Planning Department is able to provide assistance, with respect to existing flood regulations and FIRM data, on the following:

- a. Base Flood Elevations as denoted on the most recent FIRM,
- b. Current and archived FIRM maps and flood data,
- c. Cross section elevations at selected locations,
- d. Approximate location of parcel lines,
- e. Zoning and watershed overlay designations,
- f. 2 foot topographic contour lines,
- g. Approximate location(s) of structure(s) utilizing aerial photographic data,
- h. Any FIRM adjustment approved through the Letter of Map Amendment (LOMA) or Letter of Map revision (LOMR) process, and
- i. Elevation Certificates for certain parcels.

As previously indicated herein the County has made available a variety of documents on existing flood data and local guidelines. Staff will be more than happy to schedule a formal meeting to review any issues, concerns, or questions you may have regarding our flood program.

## **3. ADDITIONAL SERVICES:**

In addition to the mapping services and review of applicable floodplain management regulatory standards as detailed above, staff is also available to assist with the following:

- a. Completion of complementary site visits to review your specific situation.

Staff can make themselves available, during normal business hours, to complete a site visit of your property in order to identify current opportunities and constraints related to flood issues on your property. Please note staff likes to complete a site visit before compiling documentation outlining options with respect to protecting your property.

- b. Preparation of documents detailing specific advice/options on ways to protect your property (i.e. retrofitting/flood proofing of structures, drainage improvements, etc.), and
- c. Review of any and all available financial assistance programs to assist with development/redevelopment activities.

**BEING PROACTIVE - WHAT CAN YOU DO:** Here are some simple tips for reducing potential negative impacts from flooding:

### **I. STORMWATER MAINTENANCE:**

There are easy, proactive, steps property owners can take to address and even abate potential flooding risks. Here are some steps local property owners can take to not only help themselves but others within identified floodplain areas:

- a. Do not dump or throw anything into ditches or streams. Dumping grass clippings, leaves, trash, yard debris, etc. can accumulate and plug ditches, culverts, and channels thereby increasing the risk of flooding during storm events as rain water will have nowhere to go.
- b. The dumping of this material will also put you in violation of several County regulations and subject you to enforcement action.
- c. You are encouraged to keep any ditch on your property clear of brush and debris to avoid unnecessary flooding during a storm event.

If you witness dumping of materials into a stream please report the problem to the Planning Department at: (919) 245-2575.

### **II. FLOOD PREPARADNESS AND SAFETY:**

You should prepare an emergency checklist to address simple steps that can be taken to mitigate the impacts of a flood on your property. These 'steps' include:

- Shutting off the gas and electricity to any structure that has a history of being flooded.
- Moving valuable contents out of 'harms way'.

There are also some basic safety tips you should keep in mind during flood conditions:

- a. Prepare, in advance, a survival kit with bottled water, food, and medical supplies (i.e. prescription medication, basic first-aid items, etc.). Your survival kit should have sufficient stockpiles to last you for a minimum of 72 hours after a storm event.
- b. Have a battery, or crank handled, emergency weather radio available to listen for news/information on storm events and conditions in the area.
- c. Do not walk or drive through 'flowing' water or flooded areas.

Drowning is the number one cause of flood deaths, mostly during flash floods. Current can be deceptive and remember that six inches of moving water can knock you off your feet or impact your car.

If you walk in standing water, use a pole or stick to ensure the area is still passable.

- d. Avoid driving through a flooded area. More people drown in their cars than anywhere else. Do not drive around road barriers as they may signal a bridge or roadway that has been washed out.

If you have an emergency please contact the Orange County Sheriff's office or Emergency Services for assistance by dialing 911 before driving.

- e. Be alert for gas leaks and report them immediately to your utility provider.

If you suspect a gas leak remember to always use a flashlight to inspect damage, do not use open flame devices (i.e. match, candles, lanterns, flare, etc.), and remember to extinguish all tobacco products (i.e. cigar, cigarettes, etc.) prior to going into an area where you suspect a gas leak.

Also be cautious when inspecting damage in an enclosed space if you suspect a gas leak. Ensure the area is properly ventilated prior to entering.

- f. Stay away from power and electrical lines: The second highest cause of death resulting from a flood event is electrocution. Electrical current can travel through water. Report downed power lines immediately to your local power company and Orange County Emergency Services.
- g. Be on the lookout for animals, especially snakes. Small animals, who have been flooded out of their homes, may seek refuge in yours. Use a pole or a stick to turn things over to check for animals to avoid hurting them or yourself.
- h. Remember that after a flood the ground, and possibly floors of your residence, are covered with debris which can include broken bottles, glass, nails, and other similar hazards. Floors and stairs can also be very slippery. Walk in areas that have been inundated by flood waters with care to avoid injury.

### **III. FLOOD PROOFING:**

As previously indicated there are several different ways to protect a building from flood damage, most notably locating structures outside of identified floodplains and stream buffers as well as ensuring the structure(s) are properly elevated above established flood elevations. There are also various options with respect to 'flood proofing' or addressing the impacts of existing structures including. Some basic options include:

- Retrofitting crawl spaces underneath a structure by relocating existing utilities (i.e. water heater, furnace, air conditioner, electric box) to some other location within the structure that is compliance with established flood regulations and installing hydrostatic vents.

Hydrostatic pressure from floodwaters is a major cause of damage to structure(s) and can result in the catastrophic failure of the foundation.

These vents allow floodwaters to move freely into and out of a crawl space thereby equalizing the water pressure on the walls.

You will need to determine the location and number of vents necessary for the structure. Bear in mind hydrostatic vents cannot be higher than 1 foot above natural grade and the total vented area cannot be less than one square inch for every square foot of crawl space wall subject to flooding. Also bear in mind vents cannot be modified to remain closed. In order for the vent to function properly it must be allowed to open and close based on water flow. You will have to maintain the vents by keeping them clear of debris to ensure they function properly.

- A second option would involve elevating the residence above established base flood elevation thresholds. While this option can be expensive it is an effective means of addressing flooding problems.

As previously indicates staff is more than happy to review various opportunities with you in protecting your property from damage as a result of flooding.

#### IV. FLOOD INSURANCE:

All property owners are encouraged to secure flood insurance regardless of the presence of flood plain on your property. Please bear in mind homeowners insurance policies do not cover damage to a structure resulting from flooding.

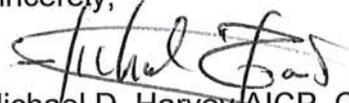
If you do not have flood insurance talk with your insurance agent and get more information on securing a policy. This insurance is backed by the Federal Government and is available to everyone.

If you already have flood insurance, it is wise to double check that the building coverage is adequate and to make sure you have content coverage (i.e. coverage for materials within the residence) as well.

Do not wait for the next major storm/hurricane to purchase flood insurance. There is a **THIRTY (30) DAY** waiting period before the policy takes effect. For more information on flood insurance, including rates and required documentation, please contact your local insurance agent to review and discuss options in more detail.

The Department looks forward to providing you with additional assistance and information with respect to addressing flooding issues or questions on your property. Please contact staff at (919) 245-2575 for assistance.

Sincerely,



Michael D. Harvey, AICP, CFM, CZO  
Current Planning Supervisor  
Orange County

## FLOOD SAFETY:

Here are some tips to remember during flood conditions:

1. Do not walk through flowing water. Drowning is the number one cause of flood deaths, mostly during flash floods. Currents can be deceptive. If you walk in standing water, use a pole or stick to ensure that the ground is still there.
2. Do not drive through a flooded area. More people drown in their cars than anywhere else.
3. 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 Piedmont Electric or Duke Power and to the County Emergency Management office.
4. Have your electricity turned off by the utility company. Some appliances, such as television sets, keep electrical charges even after they have been unplugged. Do not use appliances or motors that have gotten wet unless they have been taken apart, cleaned, and dried.
5. 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.
6. 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.
7. Be alert for gas leaks. Use a flashlight to inspect for damage. No not smoke or use candles, lanterns, or an open flame unless you know the gas has been turned off and the area has been ventilated.
8. Develop an emergency flood event checklist You may not receive much of a warning when a flood event hits, so develop a detailed checklist prepared in advance would help ensure that you will not forget anything. This would include shutting of gas lines, unplugging non-essential electrical items, an emergency food/medicine kit, etc.

## WE NEED YOUR ASSISTANCE:

Here are some helpful steps that can be taken by citizens to offset the potential damage created during flood events:

1. Do not dump or throw anything into the ditches or streams.. Even grass clippings and branches can accumulate and plug channels and culverts. A plugged channel cannot carry water and when it rains the water has to go somewhere. Every piece of debris contributes to flooding somewhere downstream.
2. If your property is next to a ditch or stream, please do your part and keep the channel banks clear of brush and debris.
3. If you see others dumping or debris in a ditch or stream please report it to us at 919 245 2575.
4. Always check with the Building Division before you build on, alter, regrade, or fill on your property. A permit may be required to ensure that projects do not cause flood problems on other properties.
5. If you see building or filling without a County building permit posted, contact the Planning and Inspections Department at 919 245 2575.
6. Check out the following information on flood proofing, flood insurance and flood safety.

For more information on the County's floodplain program you may use the following web link:

[http://www.orangecountync.gov/departments/planning\\_and\\_inspections/floodplain\\_information.php](http://www.orangecountync.gov/departments/planning_and_inspections/floodplain_information.php)

Or contact us at:

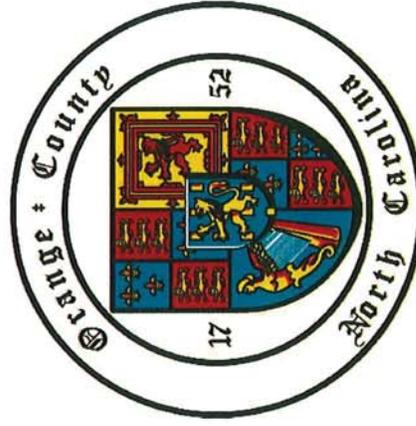
PHONE (919) 245-2575

FAX: (919) 644-3002

E-mail: [mharvey@orangecountync.gov](mailto:mharvey@orangecountync.gov)

## FLOOD ISSUES:

### Understanding Orange County Services



ORANGE COUNTY  
PLANNING AND INSPECTIONS  
DEPARTMENT -  
Current Planning Division

## FLOOD EVENTS HAPPEN HERE

It may be hard to believe but flooding can occur within the Piedmont region of North Carolina and Orange County is certainly not immune.

Floods are dangerous. Moving water as shallow as two feet can knock a grown man off his feet and float a car. For those properties that contain identified flood prone areas, property owners should taken additional precautions to avoid the negative impacts that can be generated during a storm event. While you may not be able to plan for every contingency, there are certain steps that you can take to negate the potential impact flooding can have on your property.

### PLANNING CAN HELP!

Orange County Planning can assist you in addressing potential flood issues on your property including:

1. Determining the location of flood plain/special flood hazard areas/floodways on your property including the provision of the necessary information found on the Flood Insurance Rate Map (FIRM) needed to complete a flood insurance policy.
2. Determining and denoting required floodplain buffers on your property,
3. Determining the depth of flooding on your property (i.e. how deep flood waters can be anticipated to be) in order to provide you with a better concept of the property's potential flood hazard.
4. Providing electronic copies of flood maps and other similar data denoting flood prone areas on your property,
5. Providing assistance in determining the location of a specific structures elevation within a floodplain and provide you assistance on obtaining an elevation certificate,
6. Providing the location of water/drainage features on a parcel of property in an effort to work with you to preserve their natural drainage functions, and
7. Providing you with available mapping data denoting the location of wetlands on your property.

This information is available on what we refers to as a 'Site Assessment'. There is no charge for this service

tentially expensive, this option may be best suited to avoid future damage to a structure resulting from flood events.

Please note that any alteration to any building located on the property, or any alteration to your property in general, will require a permit from the Planning and Inspections Department before the commencement of work. Staff will be more than happy to assist you through the permit application and approval process and offer guidance on various options as detailed herein.

### BUY FLOOD INSURANCE:

If you do not have flood insurance, the County strongly encourages you to talk with your insurance agent in order to understand the potential benefits of flood coverage.

Homeowner's insurance policies do not cover damage from flooding. As Orange County is a participant in the National Flood Insurance Program, you can purchase a separate flood insurance policy for your property. This insurance is backed by the federal government and is available to everyone, even for properties that have been flooded before.

Some people have purchased flood insurance because the bank required it 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 here in Orange County, the furniture and house contents can also be damaged.

At present there are approximately 70 flood insurance policies in effect throughout the unincorporated portions of Orange County. If you are covered, double check that the building coverage is adequate and make sure you have content coverage. Even if you think you have covered all your bases flood-wise, the next flood could be worse than Hurricane Fran was in 1996. Flood insurance covers all surface flooding.

Please do not wait to the next hurricane to buy flood insurance. There is a thirty-day waiting period before the policy takes effect.

Contact your insurance agent for more information on rates and coverage.

and no appointment is necessary. Maps can be completed in about 20 minutes by staff during normal business hours.

### ADDITIONAL SERVICES:

In addition to the mapping services detailed above, Planning staff is also available for the following:

- Completion of complementary site visits to review your specific situation,
- Preparation of documents detailing specific advice/options on ways to protect your property (i.e. retrofitting/flood proofing of structures, drainage improvements, etc.), and
- Review of any and all available financial assistance programs to assist with development/redevelopment activities.

### WHAT YOU SHOULD DO WHEN CONSIDERING CONSTRUCTION:

If you are thinking about building on your property, you should first consult with the Planning Department. Upon your request, staff members can visit your property to discuss your specific flood issues and explore opportunities to either correct or negate the situation with the goal of preventing damage as the result of flooding.

**Flood Proofing:** There are several different ways to protect a building from potential flood damage, including:

1. With respect to new construction, have the structure elevated above the base flood elevation to ensure it will not be inundated during flood events or install flood vents to allow for floodwaters to pass under a structure,
2. The grading (new development) or re-grading your property outside of the floodplain and protected stream buffers to channel water away from a structure,
3. Retrofit the existing crawl spaces under a residence by installing hydrostatic vents around the base of the structure.. Hydrostatic pressure from floodwaters is a major cause of damages to residences. These vents serve to equalize the pressures on the walls by allowing floodwaters to move freely both into and out of the crawl space. This option will, however, require the relocation of electrical equipment and HVAC systems.
4. Where practical, existing structures could be elevated above the base flood elevation. While po-

# Top Ten Facts

## Every insurance agent needs to know about the National Flood Insurance Program (NFIP)

1 Almost every building in a participating community can be covered by flood insurance.

2 There is an easy-to-write flood insurance policy for low-to-moderate flood risk areas.

3 Coverage is available for both structure and contents.

4 Easy-to-use rating software is available.

5 Credit cards are accepted.

6 Provisional rating makes closings easier.

7 Contact the community building permit office for elevation information.

8 NFIP policies cover many basement elements.

9 Federal disaster loans and grants will require the purchase of flood insurance.

10 Buy now! There is a 30-day waiting period.

**1. You can sell federally-backed flood insurance to any resident or property owner in a community that participates in the NFIP.**

• It doesn't matter if the property is in the floodplain or not. Almost everyone in the community qualifies for flood insurance coverage and nearly every community throughout the United States participates. Encourage policyholders to insure to value and to buy contents coverage.

**2. We offer an easy-to-write, low-cost flood insurance policy for people in low-to-moderate flood risk areas.**

• One option combines structure and contents coverage in one. It's perfect for people located in B, C, and X zones where 20-25% of all flood insurance claims occur. Annual premiums range from \$112 to \$352 for homeowners, and begin at just \$500 for businesses.

• Contents-only coverage is available for renters and owners of eligible properties.

**3. Coverage is available for both the structure and its contents.**

• Single family residences can be covered for up to \$250,000 on the structure and \$100,000 on the contents.

• Commercial structures can be insured to a limit of \$500,000 for the building and \$500,000 for the contents.

**4. Flood insurance is easy to rate with software for your personal computer.**

• Several companies have developed flood insurance rating software to save you time, money, and office space.

• For a free list of rating products, access the FEMA web site at <http://www.fema.gov/business/nfip/software.shm>.

**5. Credit cards are accepted.**

• Flood insurance premiums are easier to pay using major credit cards. Check with your WYO Company.

**6. Provisional rating makes it easier for you to sell flood insurance.**

• Provisional rating makes coverage available before the elevation certificate is complete.

**7. You can obtain elevation information from many sources—at little or no cost to your client.**

• More than 1,000 communities participate in the NFIP's Community Rating System (CRS). They maintain elevation information on structures in A and/or V zones. Contact the local building permit official for assistance. And, policyholders in CRS communities earn premium discounts!

**8. NFIP policies cover many basement elements.**

• Basement coverage includes cleanup expense and items such as furnaces, water heaters, washers and dryers, air conditioners, freezers, utility connections, and pumps.

• Basement coverage does not include the contents of a finished basement and improvements, such as finished walls, floors, and ceilings.

**9. Uninsured flood victims will most likely have to buy flood insurance as a condition of a federally-backed disaster loan or grant.**

• Federal disaster-assistance declarations are awarded in less than 50% of flooding incidents. The annual premium for an NFIP policy is less expensive than interest on Federal disaster loans. Wouldn't it be better for your clients to be insured before the loss occurs?

**10. Buy now! There is a 30-day waiting period.**

• If the initial purchase of flood insurance is in connection with the making, increasing, extending or renewing of a loan, there is no waiting period.

• If the initial purchase of flood insurance is made during the 13-month period following the issuance of a revised flood map for a community, there is one-day waiting period.

For more information, call the National Flood Insurance Program toll free at  
1-800-427-4661 TDD 1-800-427-5593  
<http://www.fema.gov> or <http://www.floodsmart.gov>

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