



May 25, 2021

## **STORMWATER & FLOOD COMMITTEE - Homeowner Best Practices**

This listing provides recommendations to Bethany Beach homeowners on practices which can improve their property drainage as well as contribute to maintaining and improving overall community area drainage. Be aware that our town is approximately 86% within the 100-year flood plain. The recommendations listed below provide steps that can assist in flood prevention and readiness as well as assist with flood insurance positioning. The below recommendations are listed by priority.

1. Install gutter systems on your home if currently not present. Boot any gutter down spouts and have them empty into dry wells or French drains filled with gravel or ornamental rock. Down spouts can also be installed to gutter systems to help channel water away from structures and into natural drainage areas. These practices can also be used to improve landscape watering and drainage.
2. Promote area drainage by cleaning drainage swales of overgrowth and obstructions. Be sure to properly dispose of materials cleaned out of drainage swales in accordance with Town regulations and policies. Do not dispose of any grass, leaves, or shrub clippings, or any other material which will impede flow in drainage areas. Clear out overgrowth and debris from high areas allowing positive drainage downslope. Look for ponding areas and regrade to allow positive unobstructed drainage. **Please reference Town Code §475 Property Maintenance, Part 1 Drainage and Elevation Standards** on our Town's website for guidance on property owner responsibilities and regrading guidelines.
3. Install driveways with loose pervious stone allowing rain and high waters to flow freely through. Other pervious materials such as pervious asphalt and pavers are also recommended in constructing driveways and patios to help with stormwater runoff. Our soil is generally sandy in nature with a very high-water table. The water table rises quickly with rain events creating surface water, but it will also recede quickly after such events. Only professional contractors should be contacted for these types of installs.
4. Promote natural street drainage including along street stretches and at intersections. Be sure not to block the flow of water from street areas into swales and drainage structures.
5. Install all utility equipment, HVAC, hot water heater, generator, etc., at least 18 inches above your property base flood elevation, as per FEMA standards. Electrical panels and outlets should as well be mounted high with panels on upper levels.
6. The use of non-porous landscape fabric will trap water and prevent natural drainage. This can cause nuisance flooding. Rain gardens and ornamental bio-swales can also be used to help catch water on properties. Porous landscape fabric should be used in these and other landscape projects.
7. Install lower-level water relief louvers, or flood vents, if not already installed. New homes and large renovation projects are required to have them if located within certain FEMA flood zones. More information can be found at <https://www.fema.gov/flood-insurance>.
8. French drains and underground or surface stone sumps can collect water around homes and distribute it to drainage areas. Utilizing a pump system can also remove water away from homes to areas of positive drainage and can assist with nuisance lot or home flooding.
9. Flood plain maps as defined by FEMA are informative and used by insurance companies to define flood risk and associated rates. Sometimes there can be accuracy issues as locations are approximate. They can be challenged with an accurate survey (at homeowner's expense) and submittal to FEMA for a determination. This application process is called filing for a LETTER OF MAP AMENDMENT. Preparation by a licensed surveyor is recommended. More information can be found at <https://www.fema.gov/flood-maps/change-your-flood-zone/loma-lomr-f>.