When flooding hits close to home in Putnam County…

In the northeast, heavy rainfall events are becoming more and more common. It is critical for personal safety and protection of property that we learn how to become more aware of and better-prepared for the risks associated with flooding.

Often times, human infrastructure is built in what is called the “floodplain”. A floodplain is the flat area of land that surrounds a stream on either side of its banks. They are naturally supposed to flood, and help by allowing floodwater to spread out and slow down, which helps to reduce the erosive force of the water.

So what can you and your family do to better prepare yourselves for when it starts to rain hard and the streams in your town begin to overflow their banks onto your property? What about when your route to work is closed because the road is flooded? Who do you call for help during the emergency and for help with clean-up and repairs after the flood has subsided?

Emergency Preparedness

There are many things you can do to prepare yourself and your family for flood events. First, if your home or business is in a location that has been or could be drastically affected by a flash flood, have an emergency evacuation plan in place, including a planned and safe route to a known meeting place on higher, drier ground. Keep emergency equipment in your home, such as flashlights, a portable radio, and extra batteries. Be sure to have other emergency supplies on hand, such as canned food, drinking water, and medicine and other first aid supplies.

Other important things to consider are keeping a list of valuable materials in your home or business, elevating your furnace, water heater, and other utilities from your ground floor if it is prone to flooding, sealing basement walls with waterproofing compounds, and securing propane tanks and other objects that can be carried away by floodwaters. If your property is along a stream, maintain an area of trees, shrubs, and other vegetation between the stream and your home to act as a “buffer” and slow floodwaters and reduce stream bank erosion. A flood insurance policy can help you recover from damages sustained during a flood event. For more information, visit FEMA’s National Flood Insurance Program (NFIP) website: www.fema.gov/business/nfip/.

After a flood, your local officials will be your first contact. The type of impact will influence which official you should call. In many cases, a town or county clerk can direct you to the right person or agency. This document explains who to consult when faced with the most common flood-related challenges.

Property Damage

What do I do when my property has been damaged by flooding?

Structures that are built in floodplains are more likely to be impacted by flooding. You should avoid building in a floodplain, but if you do, make sure to elevate or reinforce your home. Buildings that have been damaged by floodwaters can be very dangerous, so it is important to be careful when returning to your home after a flood. Make sure that there is no major structural damage to your house. If your home has been damaged, file a flood insurance claim. You should keep a list of valuables (clothing, furniture, and other personal property) in your home and take photos of your house and anything that has been damaged to help with your insurance claim. Before you re-enter your home, make sure that the power is off and check for gas leaks.

Also, be cautious of any unsafe materials (gasoline and chemicals) and other dangers (bacteria and molds) that might be in your home. Test your water to make sure it is potable and throw out any food, medicine, and beauty products that were in your home at the time of the flood. When you are allowed to enter your house after a flood, wear masks, rubber gloves, boots, and other safety gear. Even though you are focusing your time and energy on your home, farm, or business, remember that this is a very stressful experience, so it is extremely important to make sure to keep yourself hydrated and well rested. See the Federal Emergency Management Agency’s guidelines and website for more information on steps you can take to prevent and deal with flooding damages to your property at www.fema.gov.
Stream Bank Erosion

How do I prevent erosion and stabilize the stream bank?

To best fight stream bank erosion, especially after flooding, it is important to make sure that the area next to your stream is healthy. The vegetated area next to your stream is called a streamside buffer. Some ways to keep a healthy streamside buffer are to not mow your lawn to the edge of the stream and to allow plants and trees to grow next to your stream. Your buffer should be as wide as possible and should be made up of several different kinds of plants that are native to the area where you live.

A stream channel that has no plants or trees will erode stream banks faster. Also, it is important that you do not change the path of the stream; instead leave the stream’s channel the way it currently looks. Straightening and deepening a stream increases erosion, especially downstream.

Before making any changes in the streamside buffer, contact your county Soil and Water Conservation District for guidance on best practices to follow. Contact the New York State Department of Environmental Conservation to determine whether you need a permit. See the box below for more on permits.

Do I need a permit?

If you need to work in or near a stream, it’s likely you’ll need a permit. The purpose of permitting is to ensure that actions undertaken with good intentions don’t unintentionally cause other problems. The following is an overview of the types of permits that may be needed.

US Army Corps Permits

Permits are required from the U.S. Army Corps of Engineers for projects involving the discharge of dredged or fill material into waters of the U.S. including culvert or bridge repair and stream stabilization projects. The USACE has general permits known as Nationwide Permits and Regional General Permits which authorize certain activities which have a minimal environmental impact such as repair or replacement of existing structures. Nationwide permits and Regional General Permits provide an expedited permit review process for routine actions or actions undertaken in response to a storm event.

New York State DEC Permits

The following provides a brief overview of NYSDEN permits that may be needed for work in or near a stream or wetland. More specific information can be found at the following link: http://www.dec.ny.gov/63.html

Article 15 Protection of Waters Permits: These permits are necessary if projects will disturb the bed or banks of protected streams (Class C (1) or higher), or if the project will involve excavation or fill in a navigable waters of the state (i.e., streambank stabilization, repairs or replacement of bridges or culverts, etc.). It is important to note that for some protected streams, the actual regulated stream bank may extend 50 feet or more from the stream bed (refer to http://www.dec.ny.gov/permits/70947.html for a Stream Bank Illustration and Definition).

Article 24 Freshwater Wetlands Permits: Wetlands that are 12.4 acres or greater, or have been determined by the NYSDEC to have unusual local importance, are protected under the Freshwater Wetlands Act and require a permit for most disturbances within the wetland and 100 ft. of the wetland.

Article 25 Tidal Wetlands Permits: Tidal Wetlands are protected under the Tidal Wetlands Act and the NYSDEC requires a permit for most activities within the wetlands or up to 300 feet adjacent to the wetlands.

Section 401 Water Quality Certification: If work will occur within a federally regulated waters of the U.S. (including wetlands and streams), and a USACE permit is required, the NYSDEC may need to make a determination that discharges from the proposed activities will comply with the applicable effluent limitations, water quality standards, and any other applicable conditions of the State Law. A Water Quality Certification, pursuant to Section 401 of the Federal Clean Water Act, may be required from the NYSDEC for impacts to federally regulated waters of the U.S. For routine repairs and replacements of existing structures and for some stream bank stabilization projects, work may be authorized under a Blanket 401 Water Quality Certification; more details on this can be found at: http://www.dec.ny.gov/permits/81010.html.

Stormwater Permit for Construction Activities: Before commencing construction activities, applicants need to obtain coverage under the State Pollutant Discharge Elimination System (SPDES) General Permit for Stormwater Discharges from Construction Activities that will disturb more than 1 acre. The Permit requires the preparation of a Stormwater Pollution Prevention Plan and submission of a Notice of Intent. Please see the following link for more information: http://www.dec.ny.gov/chemical/43133.html.

Often after a storm event, the NYSDEC will provide for an expedited permitting process to address storm related repairs such as issuance of General Permits. The following link provides additional information on Storm Recovery Permits: http://www.dec.ny.gov/permits/89343.html. Additionally, there are some activities that are exempt from permitting including the removal of debris and woody material from streams that may be compromising existing infrastructure, provided that removal does not result in the disturbance of the bed or banks of the stream (i.e., using chainsaws to cut up woody material in the stream, hand removal of woody material, or picking up woody material using heavy equipment provided that the equipment itself does not enter the water).

Which streams and wetlands are regulated/protected by NYSDEC?

Certain waters of the state are protected on the basis of their classification. NYSDEC classifies streams with a letter that designates best intended use. Sometimes a “T” is added to signify trout habitat. Streams and small water bodies located in the course of a stream with a classification of AA, A, or B, or with a classification of C with a standard of (T) or (TS) are collectively referred to as “protected streams,” and are subject to the stream protection provisions of the Protection of Waters (Disturbance of the Bed or Banks of a Protected Stream or Other Watercourse) regulations. It is also important to note that some streams are considered navigable waters (regardless of their classification and standard) and may also require a Protection of Waters Permit for Placement of Fill in Navigable Waters. You can easily determine the classification of your stream or whether there are mapped Freshwater or Tidal Wetlands in the area by using the Environmental Resource Mapper on NYSDEC’s website. Go to: http://www.dec.ny.gov/imsmaps/ERM/viewer.htm. Use the search tools on the left to find your site, and then zoom in to the location. Then use the “Layers & Legend” tab to turn on the stream and wetlands layers to view regulated features in the selected area.

It is important to note that even if NYSDEC and/or USACE approvals are not required for a project, work shall not result in the degradation or contravening of water quality standards of streams or waterbodies. Care shall be taken to stabilize any disturbed areas promptly after construction, and all necessary precautions shall be taken to prevent contamination of the stream or waterbody.

County/Town Permits

Floodplain Development Permit

Generally, local governments regulate construction and development in floodplains, based on the National Flood Insurance Program. This involves regulations not only in streams, but also in adjacent floodplains.

Local Land Use Laws

These regulations include any other legislation or ordinances your local government may have for stream, wetlands, and floodplain development.
Stream Blockages

How do I safely and correctly remove woody debris from a stream?

Generally, it is best to leave woody debris, such as logs, branches, and other plants, in place. Woody debris is a natural part of a stream system and helps promote a healthy stream ecosystem. This woody material provides important habitat areas and food for many animal species. However, after flooding events, pipes, culverts, and other stormwater structures can become blocked by the build-up of woody material. In order to prevent the stream from backing up and causing damage, it may be necessary to remove some woody debris to protect and maintain pipes, culverts, bridges, and other structures. This should be done on a case-by-case basis and only if it can be done without disturbing the stream or banks. Most work done in a stream requires a permit. Also, using heavy machinery in streams is harmful and destructive and should be avoided. If trees that have fallen into the stream are causing problems, but are not actually on your property, you will have to work with your neighbor(s).

If you are unsure about whether or not you should remove vegetated stream debris, and whether or not you need a permit, contact the New York State Department of Environmental Conservation, the US Army Corps of Engineers, or your local county/town government.

For more information on permits, review the “Do I need a permit?” box on the previous page.

Wetlands Issues

How do I deal with flooded wetlands on my property?

In order for wetlands to function best, it is important that you do not clear any trees or other plants currently in the wetlands. If you do think that you need to remove plants or other woody debris from a wetland, you should first contact your regional DEC office to determine if permits are required. Your community may also require permits under a local ordinance.

Check the permit section on the previous page for more information on permits for wetland construction projects.

Sediment and Gravel Deposits

How do I deal with sediment in the stream?

Streams transport both water and sediment. When a stream cannot carry all of its sediment, it will deposit the sediment on the streambed. This causes the streambed to rise and makes the stream channel smaller. During a flood, the stream channel goes back to its larger size, so that it can carry all of the floodwaters. Removing gravel and sediment from streams often causes more problems and requires a permit and approval from the DEC. Making a stream deeper will make the stream less stable, and even causes more sediment to be deposited. If the stream becomes deeper, floodwaters may not be able to overflow into the floodplain. A floodplain is the land next to a stream that naturally floods and helps to slow down floodwaters and decrease channel erosion. The best way to control floodwater is to keep the stream in its natural form to allow natural processes to take place. If you are worried about sediment or gravel in the stream, contact your county’s Soil and Water Conservation District to assist you in finding a stream professional who can help.

Scan the box on page 2 for more about any permits you may need involving sediment and gravel projects in and around streams.

Sources


This publication was prepared for NYS Water Resources Institute and the NYS Department of Environmental Conservation Hudson River Estuary Program, with support from the NYS Environmental Protection Fund.
## Putnam County Contacts

**Putnam County** - www.putnamcountyny.com  
40 Gleneida Ave, Carmel NY 10512

<table>
<thead>
<tr>
<th>Agency/Official</th>
<th>Phone</th>
<th>Email/Website</th>
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<tbody>
<tr>
<td>County Clerk</td>
<td>845-808-1140</td>
<td><a href="mailto:countyclerk@putnamcountyny.gov">countyclerk@putnamcountyny.gov</a></td>
</tr>
<tr>
<td>Highway &amp; Facilities</td>
<td>845-878-6331</td>
<td><a href="mailto:PutnamHighway@putnamcountyny.gov">PutnamHighway@putnamcountyny.gov</a></td>
</tr>
<tr>
<td>Planning Department</td>
<td>845-878-3480</td>
<td><a href="mailto:Planning@putnamcountyny.gov">Planning@putnamcountyny.gov</a></td>
</tr>
<tr>
<td>Parks &amp; Recreation</td>
<td>845-808-1994</td>
<td><a href="mailto:Parks@putnamcountyny.gov">Parks@putnamcountyny.gov</a></td>
</tr>
<tr>
<td>County Executive - MaryEllen Odell</td>
<td>845-808-1001</td>
<td><a href="mailto:PutnamCountyExecutive@putnamcountyny.gov">PutnamCountyExecutive@putnamcountyny.gov</a></td>
</tr>
<tr>
<td>Soil &amp; Water Conservation District</td>
<td>845-878-7918</td>
<td><a href="mailto:SoilandWater@putnamcountyny.gov">SoilandWater@putnamcountyny.gov</a></td>
</tr>
<tr>
<td>Cornell Cooperative Extension - Putnam County</td>
<td>845-278-6738</td>
<td><a href="http://counties.cce.cornell.edu/putnam/">http://counties.cce.cornell.edu/putnam/</a></td>
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## Putnam County Town and Village Contacts

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<thead>
<tr>
<th>Town/Village</th>
<th>Phone</th>
<th>Website</th>
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<tbody>
<tr>
<td>Brewster (Village)</td>
<td>845-279-3760</td>
<td>brewstervillage-ny.gov</td>
</tr>
<tr>
<td>Carmel</td>
<td>845-628-1500</td>
<td>carmelny.org</td>
</tr>
<tr>
<td>Cold Spring (Village)</td>
<td>845-265-3611</td>
<td>coldspringny.gov</td>
</tr>
<tr>
<td>Kent</td>
<td>845-306-5620</td>
<td>townofkentny.com</td>
</tr>
<tr>
<td>Nelsonville (Village)</td>
<td>845-265-2500</td>
<td>villageofnelsonville.org</td>
</tr>
<tr>
<td>Patterson</td>
<td>845-878-6500</td>
<td>pattersonny.org</td>
</tr>
<tr>
<td>Philipstown</td>
<td>845-265-3329</td>
<td>philipstown.com</td>
</tr>
<tr>
<td>Putnam Valley</td>
<td>845-526-2121</td>
<td>putnamvalley.com</td>
</tr>
<tr>
<td>Southeast</td>
<td>845-279-4313</td>
<td>townofsoutheast-ny.com</td>
</tr>
</tbody>
</table>

## New York State Contacts

<table>
<thead>
<tr>
<th>Agency/Official</th>
<th>Address</th>
<th>Email, Phone</th>
</tr>
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</table>
| NYS DEC Region 3: Dutchess, Orange, Putnam, Rockland, Sullivan, Ulster & Westchester Counties | NYS DEC Region 3  
21 S. Putt Corners Rd.  
New Paltz, NY 12561 | Mark Lewis (845)-256-3822  
melewis@gw.dec.state.ny.us |
| NYS DEC Region 4: Albany, Columbia, Delaware, Greene, Montgomery, Otsego, Rensselaer, Schenectady & Schoharie | NYS DEC Region 4  
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Schenectady, NY 12306 | Tom Blanchard (518)-357-2379  
teblanch@gw.dec.state.ny.us |
| U.S. Army Corps of Engineers | Jacob K. Javits Federal Building  
26 Federal Plaza, Room 2109  
New York, NY 10278-0090 | Main Office for Permits  
(917)-790-8511 |