

Local Contacts for Personal/Business Flood Planning Inquiries

Environmental Commission - *insert phone/email/website info*

Local Health Official - *insert phone/email*

Municipal Plumbing Inspector - *insert phone/email*

Municipal Floodplain Administrator (Construction Official) - *insert phone*

County Environmental Health Officer – *insert phone/email*

Insert information about any help the Environmental Commission is willing to provide, such as a visit to assess household storage, water testing, contacting a local official for advice, electronics waste disposal, email reminders about household waste collection dates, etc. If your town has a flood commission or committee, add them to the contact list above.

County Hazardous Household Waste and Electronics Recycling Schedule/Locations

*Insert local information such as “The County holds collections x times per year at x location(s). To see specific dates, see: xxx.xxx gov.” Or insert county HHW and electronics recycling schedule websites) or call (insert number). “
Insert locations for any area private recyclers that accept wood, metal and construction waste, or haulers that will collect junk.*

Resources/Information about Flood Preparation and Response

Certified Drinking Water Labs : *Obtain local labs list from Health Officer or local watershed association. Or insert information about a water-testing program available to residents.*

Septic Systems – What to Do after a Flood (USEPA)

<http://water.epa.gov/drink/emergency/flood/septic/systems.cfm>

Disinfecting Wells after a Disaster

<http://www.bt.cdc.gov/disasters/wellsdisinfect.asp>

Cleaning & Sanitizing with Bleach after a Flood

<http://www.bt.cdc.gov/disasters/bleach.asp>

To report suspected contamination or get advice on a spill, call your local health officer or police, or the NJDEP (New Jersey Department of Environmental Protection) 24-Hour Hotline : **1-877-WARNDEP**

Reducing Environmental Impacts of Flooding

Local Advice for Businesses and Residents in a Floodplain



Photo courtesy of Keith Koster

Information from the XXX Environmental Commission

PLUMBING AND WATER SUPPLY

- Backflows:** Sinks, toilets and floor drains in low areas such as a basement or garage can become a direct route for sewage to flow backwards into living areas and floodwaters. *Consult your local plumbing inspector to understand your options for avoiding sewage backflows.* Buildings in flood-prone areas can benefit from having a backflow preventer installed to block the route of sewage flowing backwards from the street network in a flood situation.

- Septic Systems:** A backflow preventer will also keep sewage from backing into the home from a septic system. If yours is a *manual* valve, put “close backflow valve” prominently on your checklist of things to do when a flood is looming. But realize that closing this valve means that you cannot use your toilets, sinks, dishwashers and laundry. With nowhere to go, that wastewater will back into your home.
In a flood, the soil over the septic field becomes saturated, which keeps the field from functioning properly. You will need to have a plan to minimize water use or flushing of toilets until the septic field is no longer saturated, which may take days or longer. This requires additional prior planning because you will likely be doing a lot of cleaning after a flood recedes, and will need somewhere to dispose of cleaning water. Be careful during cleanup to avoid loading your septic system with a lot of cleaning chemicals that will keep it from functioning properly.

- Wells:** Floodwaters can contaminate a well through any cracks in the casing. If you have a private well, you need to know what to do to sanitize your well after floodwaters recede, and how to test water quality after a flood. As a well owner, you will benefit from regular well testing during non-flood times, to protect your family’s health and also to have a ‘baseline’ against which to measure changes that could signal a problem. The Environmental Commission or health officer can direct you to a well-testing program or lab.

OUTDOORS

- Assess:** Look around your yard. What building, gardening or automotive supplies will be submerged or floating in a flood?
- Disposal:** Clean up the yard, dispose of bags and other containers of substances you would not want to see in the river. Take items to the hazardous waste collection, recycling center, compost center or dump. Secure large floatable items such as building materials, lawn furniture, trash receptacles, recreational items, fencing, and even sheds, or get rid of them, or store them somewhere else.
- Dumpsters:** Businesses and multi-family residence managers should contact their hauler to discuss how to arrange for an emergency pickup in the event of a predicted flood. Dumpsters do float, and floodwaters can easily overturn a dumpster.
- Vehicles:** Vehicles and equipment—including lawn mowers, boat engines, ORVs as well as cars and trucks—have tanks full of gasoline, diesel fuel and coolants that will contaminate water. Develop a plan for moving vehicles out of harm's way quickly. Pick a safe street on high ground where you can move your vehicles when a flood is predicted. Or make arrangements with someone who will let you park in their lot, or put your lawnmower in their shed when there is a major storm warning.

With planning and preparation, we can reduce many of the environmental impacts of flooding:

- Contamination of floodwater with toxic household chemicals — petroleum, paints, solvents, pesticides, pool supplies and deicing chemicals stored in basements, garages and sheds — as well as bacteria from septic and sewer systems, garbage and pet wastes. When floodwaters recede, traces of the contaminants remain in the soil and on structures.
- Floodwaters move floatable items like plastic bags and other trash from normally stable storage areas and containers, transporting them to anywhere the floodwaters reach. On land, deposits of trash harbor bacteria and create mosquito breeding areas. Large quantities of plastics wash into rivers, lakes and the ocean, where they persist for years and can strangle or sicken fish, marine animals and birds.
- In the chaotic months of cleanup following a big flood, important environmental practices and systems often fall by the wayside, resulting in toxics and recyclables, including electronic wastes, being disposed of in the regular trash stream instead of separated out and recycled or detoxified.
- Waste of raw materials and energy occurs when massive quantities of furniture, drywall, wood, appliances, vehicles and other possessions and materials must be discarded and replaced.
- Floodwaters kill vegetation, particularly in coastal areas where salt water inundation is toxic to many landscape plants. Removal and replacement of landscaping is another waste of energy and materials that can be minimized in coastal areas by selecting salt-tolerant species for yards.

The Environmental Commission is providing this handbook for residents and businesses as a guide for non-flood times, to help people in flood-prone areas plan and prepare to avoid contributing to environmental degradation and waste when the next flood does occur.

This brief handbook addresses environmental preparedness issues that are not stressed by existing flood preparedness programs, *and which individual residents and businesses can do something about!* The booklet does not cover the safety and rescue aspects of planning for floods addressed by local emergency, fire and police agencies, Red Cross, FEMA and others. Nor does it discuss the land use aspects of flood risk, such as where and how buildings should be built or rebuilt in proximity to flood zones.



You would never think of pouring toxic substances into the nearest stream because you know it would harm fish and contaminate the water, possibly a source of drinking water. But when these same substances end up in floodwaters, the effect is just like dumping – the final destination is the local stream or river. In a flood, hazardous chemicals and materials can be coming from many properties.

What can we do?

The most important thing is not to wait until the flood is coming. Take stock now of the things in and around your property that could become a problem in a flood, and figure out how to minimize or eliminate the risks.



FLOOD PLANNING ENVIRONMENTAL CHECKLIST

INDOORS:

- Assess:** Take a good look at the containers in the basement, garage and shed. Are there chemicals such as pesticides, solvents, oil, paint, cleaning products and de-icing products? Are they in well-sealed containers? Are those containers loose such that in a flood they will float out of the area where they are stored?
- Dispose of potential problems:** Take remnants of toxic products that you can't or won't use to your county's household hazardous waste collection. Or give them to someone who will use them, or move them to higher ground.
- Only buy what you need:** When you purchase toxic or hazardous products, don't buy in bulk unless you are planning to use it up quickly. Buy only the amount you will use now, to avoid having to store the rest.
- Secure what you have:** Make sure any materials you do store are secured in sealed, labeled, leak-proof containers that are in locked cabinets. For example, store pesticides or fertilizer in water-tight 5-gallon paint buckets. This will prevent these materials from dissolving in floodwaters and contaminating your home and beyond.
- Share your experience:** If you have new neighbors who have never experienced a flood, explain the possible hazards to them, and the extent to which water has risen in the past. Encourage them to think proactively. Their toxics will be floating around your property, too!