How our activities on land connect to our water

In the past, most water pollution was caused by direct dumping into lakes and streams. Today, activities on dry land - how we care for our cars, yards, and homes - have increasing impacts on water quality. When it rains, pollutants on land are washed into the closest stormdrain, ditch or waterbody. From there, the pollutants are headed straight for your lake, river or stream. Reducing the negative impacts from this type of pollution (called "nonpoint source pollution" because the exact sources are not easily pinpointed) is the key to protecting our fresh water resources.

The biggest benefit of all!?! Reducing nonpoint source pollution means a clean, healthy lake, river or stream for you to enjoy every day.

RESOURCES:

Landscaping for Water Quality Center for Environmental Study. For pricing or to order, call 616-988-2854.

Lakescaping for Wildlife and Water Quality Minnesota DNR. For pricing or to order, call Minnesota's Book Store at 1-800-657-3757, or MSU Extension Bulletin Office at 517-353-6740.

Pet waste composter, instructions for making your own: www.cityfarmer.org/petwaste.html

Home toxics reduction, call Livingston County Solid Waste at 517-545-9609

Lawn care advice and soil testing, call Livingston County MSU Extension: 517-546-3950

Septic systems and water softeners, call Livingston County Environmental Health at 517-546-9858

To report illegal dumping in waterways, call the MDEQ Pollution Emergency Alert System at 800-292-4706. For hazardous or flammable spills, call 9-1-1 immediately.

Learn more about our waterways: Huron River Watershed Council www.hrwc.org

For water recreation resources:
Michigan United Conservation Clubs www. Mucc.org
State of Michigan Department of Natural Resources http://michigan.gov/dnr

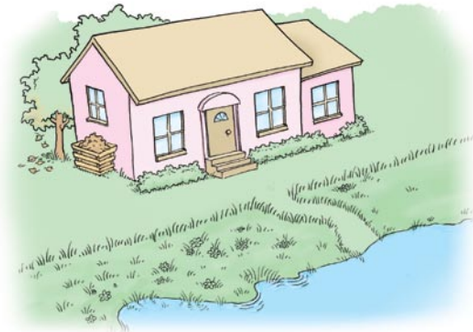
Livingston County
Drain Commissioner
Brian Jonckheere
2300 E. Gran River, Ste. 105
Howell, MI 48843
517-546-0040

web: http://co.Livingston.mi.us/drain
www.livingstonwater.org

RIPARIAN LIVING

Tips for getting the most out of your river, creek or lakeside property while protecting water quality.

brought to you by your Livingston County Drain Commissioner



ri•par•i•an *adj.*

1. of, adjacent to, or living on, the bank of a river or, sometimes, of a lake, pond, etc.

2. designating any right enjoyed by the owner of riparian land

If your home fits the definition of "riparian" noted above, congratulations! You live in a unique setting with many wonderful features and benefits, including but not limited to: recreational opportunities, wildlife viewing, aesthetic enhancement and increased property values.

As a riparian resident, you also have a unique set of responsibilities. You may not realize it but, by virtue of where you live, you are on the forefront of water quality protection. The actions you take on your property will have significant impacts on the lake, stream or river adjoining to your land. The good news? The simple steps recommended inside this brochure benefit you, too! Please take a look inside. Check off the things you already do that protect water quality, and seriously consider additional steps you can take within the next year. Share the results with friends and neighbors. ***Even if they don't live along the water, the advice in this brochure can help them protect water quality too. After all, most water pollutants are the result of our activities on dry land.*** Together, each small action can make a very big difference!

COMPOSTER:

Rake leaves and other yard waste into a compost pile, located away from the water's edge. Or mulch leaves and grass clippings back into your lawn for a nutrient boost with added organic matter. Never burn yard waste near the water or put yard waste in the water. You will benefit, too! Keeping leaves and yard waste out of the waterways reduces nutrient loads and keeps algae blooms down.

WATER SOFTENERS:

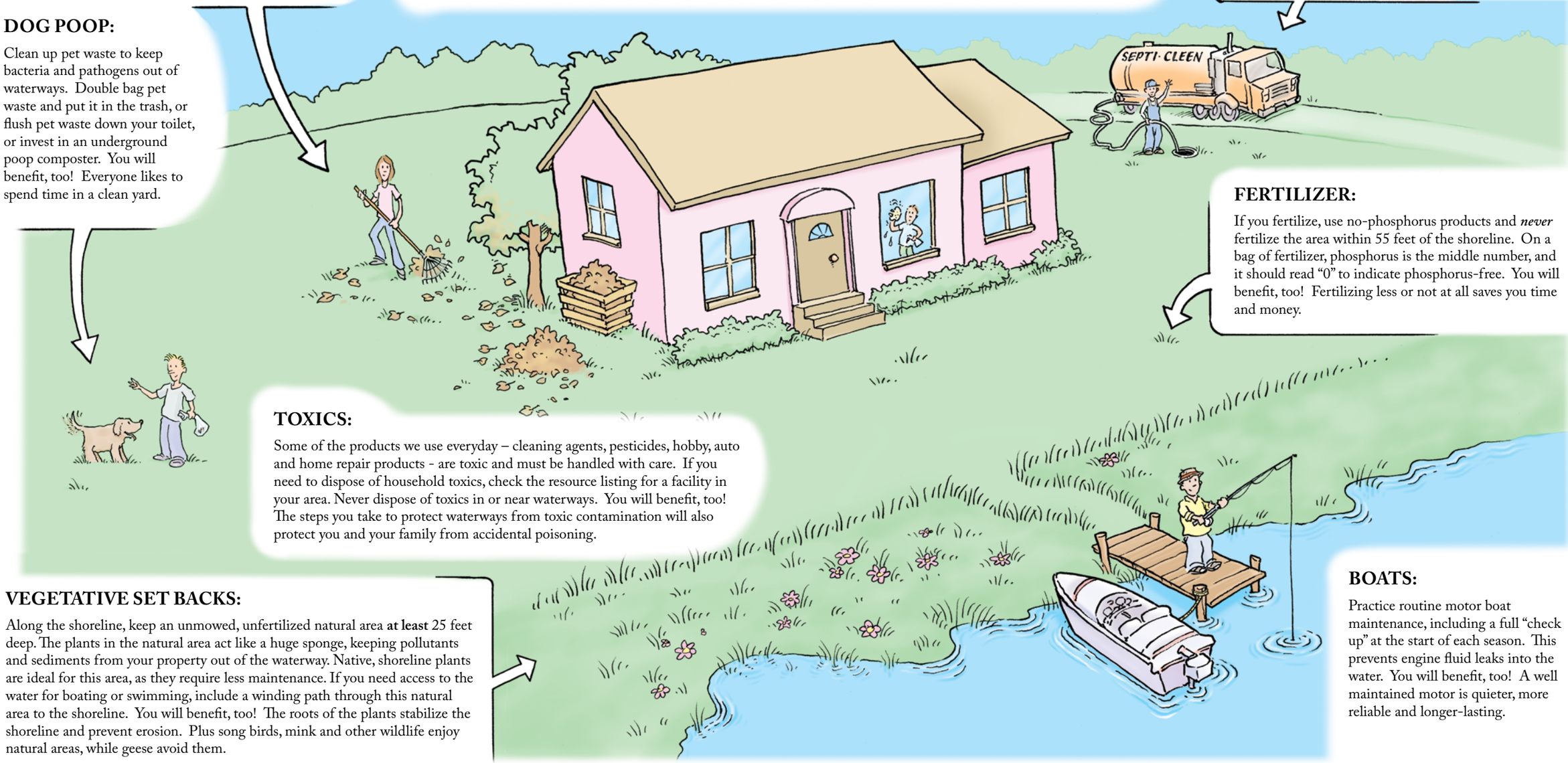
Keep excess sodium from contaminating water resources. Adjust your water softener settings to use less salt. You can also install a flow meter that will recharge the sodium brine only after a certain amount of water has been used, rather than at preset intervals. Convert a water tap in your home to discharges unsoftened water and use this source whenever practical. Use potassium chloride instead of sodium chloride (while potassium chloride may cost more, it causes less damage to your septic system and water resources - plus potassium is a beneficial plant nutrient, which bodes well for the plants near your septic field or dry well.) If you are on municipal water service, rather than a private well, you probably do not need a water softener - call your municipal office if you are unsure. You'll benefit, too!! Steps you take to reduce the sodium content in your water softener discharge will reduce damage to your plants, gardens and septic system.

SEPTIC:

Maintain your septic system, including routine inspection of the tank and drain field. Pump out your tank as recommended, on average every three years. Failing septic systems contaminate surface and groundwater resources, plus they can be very expensive to repair. You will benefit, too! Maintaining your septic system means protecting your home investment.

DOG POOP:

Clean up pet waste to keep bacteria and pathogens out of waterways. Double bag pet waste and put it in the trash, or flush pet waste down your toilet, or invest in an underground poop composter. You will benefit, too! Everyone likes to spend time in a clean yard.



FERTILIZER:

If you fertilize, use no-phosphorus products and ***never*** fertilize the area within 55 feet of the shoreline. On a bag of fertilizer, phosphorus is the middle number, and it should read "0" to indicate phosphorus-free. You will benefit, too! Fertilizing less or not at all saves you time and money.

TOXICS:

Some of the products we use everyday – cleaning agents, pesticides, hobby, auto and home repair products - are toxic and must be handled with care. If you need to dispose of household toxics, check the resource listing for a facility in your area. Never dispose of toxics in or near waterways. You will benefit, too! The steps you take to protect waterways from toxic contamination will also protect you and your family from accidental poisoning.

VEGETATIVE SET BACKS:

Along the shoreline, keep an unmowed, unfertilized natural area **at least** 25 feet deep. The plants in the natural area act like a huge sponge, keeping pollutants and sediments from your property out of the waterway. Native, shoreline plants are ideal for this area, as they require less maintenance. If you need access to the water for boating or swimming, include a winding path through this natural area to the shoreline. You will benefit, too! The roots of the plants stabilize the shoreline and prevent erosion. Plus song birds, mink and other wildlife enjoy natural areas, while geese avoid them.

BOATS:

Practice routine motor boat maintenance, including a full "check up" at the start of each season. This prevents engine fluid leaks into the water. You will benefit, too! A well maintained motor is quieter, more reliable and longer-lasting.