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BENTON COUNTY STORMWATER PROGRAM -Point Source and Nonpoint Source Water Pollution-

Water quality is the most important factor in Watershed health and the biological food web it supports. Small changes in water quality that seem insignificant can have long lasting effects on plants and animals that live within the watershed. Negative effects on one organism will cause negative effects on other organisms that feed on them, or rely on their presence. Each organism fulfills a particular function and if that function is stopped, part of the system collapses.

Point Source Pollution - Visualizing water pollution typically brings up a picture of sludge pouring out of a pipe into a river, or an oil well spewing oil into the ocean (see Figure 1). These are accurate visualizations of one type of water pollution called *point source*. They are called point sources because they issue from a single point. Point source pollution can be traced, contained, stopped, and cleanup can begin. The effects can usually be fixed in a short period of time depending on the amount and type of toxic material entering the stream, river, lake or ocean.

Nonpoint source pollution is a much bigger problem for water quality. This type of pollution comes from many different, repeated sources and is difficult to trace (see Figure 2). The effects of nonpoint source pollution are cumulative, they add up over time. One example of nonpoint source pollution is the over-use of fertilizers for lawns and landscaping. Rain carries the excess fertilizer to streams and rivers where the fertilizer increases the pH (alkalinity) levels of the water. This is harmful to plants and animals that live in or near the water. A single over-application does not create a problem, but many people over-fertilizing lawns, landscaping, or fields on a regular basis causes extensive damage to water quality.

More examples of nonpoint source pollution include:

- Toxic substances in stormwater runoff from roads (oils, metals, copper, and much more)
- Animal waste is a primary source of fecal coliform (e-coli) in streams. One pile of dog droppings doesn't cause a problem. Thousands of piles will. See the following link: https://www.livescience.com/44732-eliminating-pet-poop-pollution.html





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What you can do...

Our waters should be clean enough to fish, swim, and drink. Non-point source pollution is a major threat to that standard.

Here are a few things you can do:

- Use less fertilizer on lawns and landscaping.
- Drive a little less, make your trips more efficient.
- Dispose of pet waste properly.

Did you know? Pet waste can contain disease-causing organisms that affect fish and wildlife (and people!). Here is how you can dispose of it safely:

- Bury it in the yard. Dig an at least 6" hole or a trench away from vegetable gardens, play areas, and at least 50 feet from streams, ditches and wells. Microorganisms in the soil break down the waste and release nutrients into the soil. Don't add pet waste or kitty litter to your compost pile. The compost won't get hot enough to kill disease-causing organisms.
- Flush it down the toilet. The water from your toilet goes to your septic tank or to the wastewater plant. Make sure your septic system can handle the increased load. To prevent plumbing problems, do not flush rocks, sticks, or kitty litter. Cat feces may be scooped out and flushed, but used litter should be put in a securely closed bag in the garbage.
- **Put it in the trash.** This is often the easiest solution, but not the best. Pet waste can cause health problems for garbage handlers and problems at the landfill. Securely wrap the waste before putting it in the trash. <u>Do</u> not put it in the yard waste container.
- Around your home if you leave pet waste to decay in your yard, prevent water pollution by cleaning up areas near wells, ditches, streams and storm drains.

Learn More!

Marys River Watershed Councilhttps://www.mrwc.org/Luckiamute Watershed Councilhttps://www.luckiamutelwc.org/Mid-coast Watershed Councilhttp://www.midcoastwatersheds.org/Long Tom Watershed Councilhttps://www.longtom.org/

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Or visit to learn more: co.benton.or.us/cd/page/stormwater-program