...Of Storm Sewers and Dogs...

By Greg Sykes (greg@grsykes.com)

Storm sewers are the primary means of removing rainwater from Kings Park West (KPW). The theory is that any precipitation quickly gets funneled into these sewers, which empty into stream tributaries. The streams and wildlife get rejuvenated with fresh rainwater while humans need not worry about flooding.

This theory is seriously flawed. In addition to rainwater, storm sewers carry engine oil residue, sediment, litter, animal waste, lawn chemicals, road salts, and a number of other contaminates into the streams. Furthermore, <u>rose-of-Sharon</u> and other invasive plants that specialize in seed dispersal are commonly found growing along storm sewer outlets; these outlets literally inject problematic plants from people's yards into the forests. With concrete lining the sewers, none of the contaminants are filtered along the way. Even if the flow was pristine water, the concrete blocks water from being absorb into the earth and replenishing groundwater. As a result, rains have more of a "feast or famine" effect on the streams. Without the ground slowly releasing as much water back into the streams, severe droughts have a higher impact on the streams, as seen with creeks drying up this year.

Modern engineers recognize storm sewers' shortcomings, which is why new construction projects implement "green" runoff features. These schemes rely on strategically dissipating water towards a bed of gravel/sand and plants. The substrates and selected plant species help to scrub the water and reduce erosion. Unfortunately, replacing existing storm sewers is cost prohibitive, but here are a few ways to help:

- Keep the sewers clear. Stuffing leaves around or down storm sewers adds concentrated nutrients to the waterways. It also clogs sewers, leading to back-up and flooding. Due to no fault of my own, this flooding happened in front of my home—NO FUN!!
- If you must fertilize your lawn, do it in the fall, following the label, and keep the chemicals off of paved surfaces.
- Prevent erosion with plantings or physical barriers.
- Pick up trash before it gets washed down.
- Fix that leaky car, and dispose of oil, antifreeze, and other hazardous waste in a lawful manner.
- Check out http://www.fairfaxcounty.gov/dpwes/stormwater/ for more information.

<u>Storm sewers are not sanitation sewers!</u> Sanitation sewers send water from toilets, sinks, and bath tubs to be processed at a treatment plant. Prior to treatment, this waste water does not enter any streams.

On a related note, picking up after your pet and throwing away the bag into the garbage is great, and thank you to the many KPW residents who do so. However, a few people are throwing the bag into storm sewers. Such actions completely defeat the purpose of waste clean-up as that is how brooks get contaminated with both fecal bacteria and excessive nutrients. I received multiple reports of this activity through both witnesses and park clean-up volunteers uncovering "the evidence." Not picking up at all is just as bad since rainwater carries the contaminants. The feces is contaminating the land and streams, not to mention the human children and park volunteers whose hands and feet accidentally get in it. Even worse is when dogs are set off leash to defecate as those owners are both creating a health hazard and a potential safety risk when dogs charge after other walkers and volunteers.

Again, thanks to all of you animal owners who lawfully care for your pet in public places, and thank you in advance to those who will tend more closely to your pet's care after reading this article. To the others who continue to defy moral conduct and county laws, know this: KPW has *Mephitis mephitis*, a.k.a. skunks. I've received multiple "live skunk sighting" reports this past autumn. If your loose pet "discovers" a shy, harmless skunk, that's one mess none of the park volunteers will be cleaning!

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