

STORMWATER RUNOFF IN FRIDAY HARBOR

Friday Harbor, like all urban centers, has a stormwater quality problem. The good news is we think the situation is improving. The better news is we can all do some things to help.

For nearly two years now, the animals in the aquarium at the end of Spring Street Landing have been struggling to survive. Many of the animals associated with the sediment have died. The aquarium pulls water out of the harbor from below the dock, near the primary stormwater discharge outfall at the base of Spring Street, and circulates this water through the aquarium and back into the bay. This system helps to make the aquarium an indicator of what is going into the harbor. If the animals in the aquarium (that we can see) are struggling, chances are some animals in the harbor (that we can't see) are struggling, too.

The aquarium animals are our 'canary' and the harbor is our 'coal mine'.

Part of the problem can be attributed to the quality of the stormwater runoff into the harbor. Town streets are subject to constant accumulation of lubricating fluids, antifreeze, brake dust, and fuels leaking from vehicles which end up in the harbor after each rain storm. Pesticides, herbicides, and fertilizers are often misapplied or over applied. Also, some people inappropriately use catch basins in the streets to dispose of soapy cleaning agents. During rain events (especially the first rain after a dry spell), the stormwater from the discharge pipe at the base of Spring Street is often a brownish-grey color, kind of like chocolate milk. At other times, I have seen a sheen on the water (likely from petroleum products) or even soap suds. So what can we all do to improve the situation?

If we want to have cleaner stormwater running into the harbor, we have two choices: we can treat the stormwater runoff before it enters the bay, or we can try to be cleaner and tidier in Town so that the water that enters the bay is cleaner without having to find a way to treat it.

Taking a look at these two options, the first option, to treat the stormwater before it enters the bay, may not be a practical alternative right now. First of all, this option would be expensive. Second, as the new sewer line installation project from last winter has reminded us, we live on a rock. Since most stormwater treatment options involve some form of encouraging stormwater to infiltrate into the ground, this option may not be practical here on Rock Island. Also, if we can do a good enough job with option number two, then maybe we don't need to treat a large volume of stormwater at the end of the system.

This leaves us with option number two: find practical, low or no cost ways to go about our business of living and working in the Town of Friday Harbor while minimizing the amount of pollutants carried away in runoff water. The dedicated, hard working employees for the Town already do a lot of cleaning up after us. The street sweeper can be seen nearly every morning trundling around Town sucking up dirt, sand and other

trash. The Town has installed lots of convenient trash cans, pet waste stations, and cigarette receptacles. So, what else can we do?

There are a number of things that we can do to help make sure that the stormwater that reaches our harbor is as clean as possible. During the week of November 2nd, I will be walking the streets of Friday Harbor, visiting with business owners and managers as part of a stormwater education outreach program. I will try to communicate a common-sense, low cost approach to help improve the quality of the stormwater entering the harbor. Here is a list of ideas and actions that each one of us can take to help solve this problem:

1. Stormwater flows downhill. It all ends up in the harbor, so never dump anything into a storm drain. The only thing that should be going into a stormwater system is rainwater. Dump mop buckets into the sink.
2. Even if a product is labeled as “Biodegradable”, it is still not allowed to go into the storm drains or roadside ditches.
3. Instead of hosing off the sidewalk, parking area or driveway, sweep up the dirt and put it in the trash. Rinse water will pick up dirt and other pollutants on the way to the water.
4. Leaky dumpsters can contribute pollutants to stormwater. Keep rainwater out of your dumpster by closing the lid. Notify your waste hauler if your dumpster is leaking and they can repair or replace it.
5. If you need to wash your car, either use a commercial car wash or direct the wash water to a grassy area where it can infiltrate into the ground without running into storm drains or roadside ditches.
6. Clean out your catch basins. Catch basins are the underground boxes beneath the grates that you see on streets and in some parking lots. These boxes allow some of the sediment and pollutants to settle out of the stormwater. Catch basins require maintenance, primarily sediment removal, to function correctly. Maintenance of catch basins located on private property is the responsibility of the land owner.
7. Maintain your car. Our notoriously drippy island cars have created some impressive staining in frequently used parking areas. Much of this residue eventually makes its way into the harbor.
8. Try not to use fertilizers, pesticides and herbicides. The chemical residue from these products can wash into the harbor with stormwater. Never use these products if rain is in the forecast.
9. Pick up after pets. Bacteria and pathogens from pet waste will wash into the harbor along with stormwater.
10. Deposit cigarette butts and other trash into the proper receptacles.
11. Plant vegetation or find another way to cover up exposed soil. Soil and sediment that is exposed can erode and wash into the harbor. Suspended sediments in stormwater can both impair marine animals directly and help to carry hydrocarbons, metals and other pollutants into our harbor.
12. Try to think about item #1 (above) as you go about your daily life.

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