

Preventing Water Pollution

Tips for Boat Repair Businesses

Boat repair practices can produce:

- paint chips and dust
- metals
- fuel and oil
- soaps and cleaning chemicals

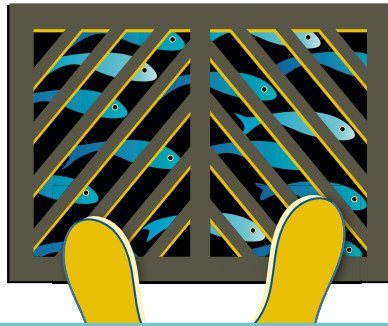


If these pollutants reach waterways,
they can cause significant water
pollution problems.

YOU can prevent that.

Standing on the edge of a storm drain is like standing on the shore of a stream.

Stormwater carries pollutants that harm aquatic life and impact swimming and fishing. According to the Washington State Department of Ecology, stormwater is the number one source of water pollution in the urban areas of Western Washington. Thousands of small spills from many of us add up to our biggest pollution problem.



MORE INFO:

Washington Stormwater Center
<http://www.wastormwatercenter.org/>

**Department of Ecology's
Spills Report Hotline**
425-649-7000

**Boat Repair Guide
Puget Soundkeeper Alliance**
<http://pugetsoundkeeper.org/files/Do-It-Yourself.pdf>

**Department of Ecology's
Hazardous Waste Services Directory**
<http://apps.ecy.wa.gov/hwsd>

THE POLLUTION PROBLEM

Polluted stormwater runoff can be deadly to fish and other aquatic life.

Some pollutants are obvious, like oil, soap and metals. But even simple things like temperature, pH (acidity) and turbidity (clarity of the water) are considered pollutants.



Metals are very toxic to fish and aquatic organisms. Zinc can wash off galvanized metal roofs or metal parts stored outside. Copper can enter water from vehicle brake pads and paint. Salmon and other fish are especially sensitive to even low levels of copper because copper inhibits their sense of smell.



Oil, fuel, grease, and other compounds degrade aquatic habitat and make water unhealthy for animals and humans. Spilled petroleum products may evaporate, sink into sediment, dissolve in the water, or be absorbed by living organisms where they can enter the food chain.



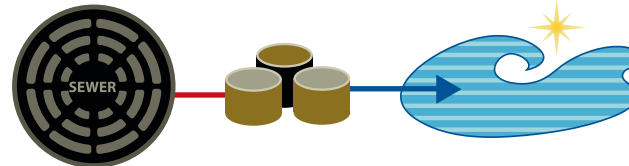
Soapy water can suffocate fish. All soaps, even non-toxic and biodegradable soaps, can harm aquatic life. Soaps coat the gills of fish and the aquatic insects they eat. Soaps can also destroy the natural protections (like external mucus layers) fish have against bacteria and parasites, and inhibit the ability of fish to reproduce. Many soaps also contain phosphorus, a nutrient which causes excessive algae growth. Bacteria that feed on dying algae use up the dissolved oxygen in water that fish need to breathe.



Even dirt can be deadly. Fine silt and dust can smother and kill fish eggs. Sediment can clog fish gills and obscure their vision, making it difficult for fish to find food and to see predators. Pollutants and bacteria can attach themselves to particles of dirt.

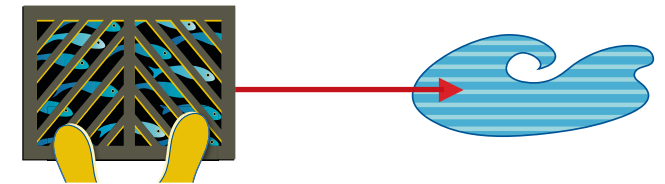
Temperature and pH are also pollution. Aquatic organisms are negatively affected by minor changes in temperature and pH. Hazardous wastes, including solvents and concrete dust, can affect pH and can kill aquatic life.

WASTEWATER (sewer system)



Indoor drains collect water from sinks, toilets, washing machines, and other sources. This water is treated at a wastewater treatment facility. The solids are removed and the cleaned water is discharged into a nearby water body.

STORMWATER



Outdoor drains and ditches collect water from hard surfaces like roofs, pavement and hard-packed ground. This water is piped through the stormwater system and discharged directly into nearby waterways like creeks, streams and marine waters.

THE POLLUTION SOLUTION

REMEMBER: ONLY RAIN DOWN THE STORM DRAIN. Help keep pollution out of our water by following these simple steps:

Keep a clean site. Prevent rainfall from mixing with sources of pollution or loose soils.

Get to know the drainage on your site. This can help you prevent problems.



Prevent spills and leaks. Keep all chemicals in closed, labeled containers. Store drip pans, paint, and batteries inside or under cover, where they are not exposed to rainfall. Keep dumpster areas clean and check often for leaks.



Keep a clean bilge. Clean up contaminated water with oil absorbing materials. Remove contaminated water and check with your municipal hazardous waste program for proper disposal instructions.



Clean up and report spills and leaks. Keep absorbent materials handy, and clean up spills promptly. Don't hose down spills! Clean dirt and grime using dry methods like sweeping and vacuuming. Limit spill damage by reporting spills of any size to: **Department of Ecology (425-649-7000).**



Pre-clean oily parts with a rag. Avoid hose-off degreasers. Reusable rags should be washed by a commercial laundry service. Disposable rags soiled with waste oil can be thrown in the garbage. Disposable rags soiled with solvent-based cleaners or paints must be disposed of as hazardous waste.



Check storm drains at least every six months and remove sediments before they fill 60% of the capacity beneath the outlet pipe. Sediments may be removed with a shovel, bagged, and disposed of in the garbage unless chemical spills have occurred. Contaminated sediments may need to be managed as hazardous waste. Call your local solid waste authority for management options.



Contain all dust from sanding, grinding and fiberglass repair. Tent projects with tarps and sheeting that can't blow loose in the wind. Use a secure indoor facility if your dust and debris cannot be contained. Use vacuum sanders and grinders. Vacuum frequently to prevent dust and paint chips from accumulating on the tarps and from contacting stormwater.



Dispose of wash water to an approved sewer system. If you do not have an approved wash area, collect your wash water and divert it to the sewer or bring your boat to a commercial car wash. These businesses are constructed to properly dispose of dirty wash water.



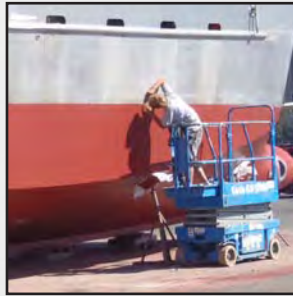
Motor work. Prevent oil and grease from leaking onto the ground. Use absorbent pads to catch drips and spills. If stored outside, motors and parts need to be covered and in tubs or in a bermed, paved area. Utilize municipal hazardous waste programs or certified contractors for disposal of unwanted gasoline, antifreeze, and oil.



Block storm drains before starting any outdoor work that might impact stormwater. In most cases, you will need to collect the dirty water and dispose of it via the sewer system (toilet or sink) or at a permitted off-site facility.



Pressure washing, hull refinishing and major topside repairs should always be done at boat yards with a Boatyard Permit from the Washington State Department of Ecology. These facilities monitor their impact on water quality and take measures to minimize pollution.



Anything ignitable, reactive, corrosive, or toxic must be disposed of as hazardous waste.



CONTACT YOUR LOCAL STORMWATER DEPARTMENT.

Many cities and counties in Washington have a stormwater permit that requires them to manage stormwater. These communities provide public education and take steps to control runoff and improve water quality. They can answer detailed questions about your area.



Whatcom County
(360) 715-7450
[www.co.whatcom.wa.us/
publicworks/water](http://www.co.whatcom.wa.us/publicworks/water)



Skagit County
(360) 336-9400
www.skagitcounty.net



City of Bellingham
(360) 778-7979
www.cob.org/stormwater



City of Ferndale
(360) 685-2378
[www.cityofferndale.org/
stormwater](http://www.cityofferndale.org/stormwater)



City of Mount Vernon
(360) 336-6204
www.ci.mount-vernon.wa.us



City of Burlington
(360) 755-9715
www.ci.burlington.wa.us



City of Sedro-Woolley
(360) 855-0771
www.ci.sedro-woolley.wa.us

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