

Stormwater at Evergreen

Protecting natural water sources from stormwater pollution



What is stormwater?

Stormwater is runoff from rain and snowmelt that flows over urban surfaces and carries pollutants to the nearest stream

What causes stormwater pollution?

- Human behavior
- Littering
- Vehicle washing
- Vehicle/equipment leaks
- Pet waste
- Poor material storage
- Sediment & stream bank erosion



Types of Pollutants

- Suspended solids/sediments
- Nutrients
- Metals
- Oil / greases
- Bacteria
- Bio-waste
- Pesticides & herbicides
- Trash and floatables

Hazards of runoff

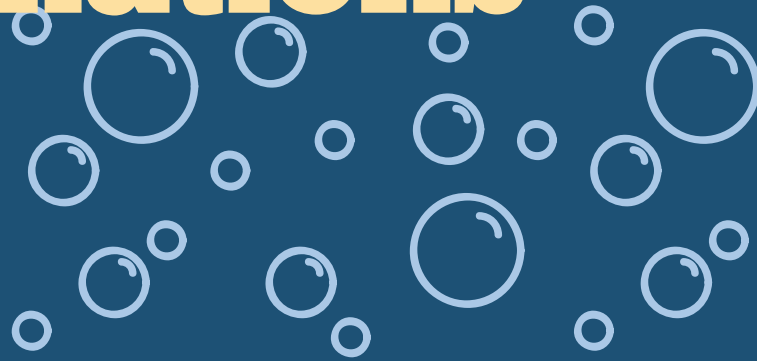
- Flooding of streams
- Raise in stream temperatures killing aquatic life
- Harm of waterways with pollutants

How to help prevent pollution

- Reduce or eliminate the runoff at its source
- Use appropriate trash receptacles
- Proper storage and disposal of hazardous products
- Use of storm resistant shelters
- Proper clean up of spills and leaks
- Proper disposal of pet waste



Vehicle related Contaminations



Car washes

Most soap contains phosphates and other chemicals that harm fish and water quality. If you live in the city and you wash your car in the driveway, the soap, together with the dirt and oil washed from your car, flows into nearby storm drains which run directly into natural water sources. The phosphates from the soap can cause excess algae to grow. Algae look bad, smell bad, and harm water quality. As algae decay, the process uses up oxygen in the water that fish need.

What you can do:

- Use a commercial car wash
- Use bio-degradable soaps
- Use nozzles with automatic shut off
- Limit wastewater
- Wash in a designated pervious area
- Divert wash water into sanitary sewer system
- Cover storm drains while washing



Vehicle maintenance

Oil and other petroleum products are toxic to people, wildlife, and plants. One pint of oil can make a slick larger than a football field. Oil that leaks from cars onto roads and driveways is washed into storm drains, which usually flow directly into natural water sources.

Oil does not dissolve in water. It lasts a long time and sticks to everything from beach sand to bird feathers. Oil and other petroleum products are toxic to people, wildlife, and plants. Oil that leaks from our vehicles onto roads and driveways is washed into storm drains, and then usually flows directly into natural water sources.

What you can do:

- Stop drips. Check you vehicle for leaks regularly and fix them promptly.
- Keep your vehicle tuned up.
- Use ground cloths or drip pans beneath your vehicle if you have leaks or are doing engine work. Clean up spills immediately. Collect used oil in containers with tight fitting lids.
- Never dispose of oil or other engine fluids down the storm drain, on the ground, or into a ditch.
- Recycle used motor oil. Many auto supply store and gas stations accept used oil.



Transportation Choices



Evergreen is located just five miles from downtown Olympia, Washington. While many students, staff, and faculty use alternative modes of transportation, such as biking or public transit, nearly 40% of Evergreen's annual greenhouse emissions are associated with traditional commuting. To reach our goal of carbon neutrality, Evergreen offers a variety of options for community members to green their commutes including:

- Bicycle amenities
- Free public transit passes for students, staff, and faculty
- Carpool and Vanpool benefits
- Electric vehicle charging stations
- Zipcar access

Faculty and staff also have access to the parking passport program to get a limited number of free days of parking if they use alternative commuting methods.



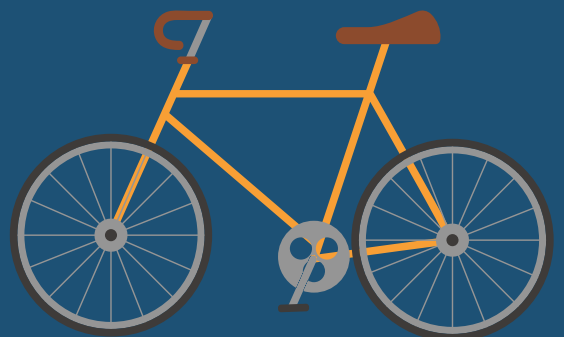
Evergreen Transportation Page



Biking on campus

Bicycle amenities include:

- Commuter lockers
- Air stations
- Parking & security
- Bike registration (which allows your bike to be returned should it be stolen and recovered)



Carpools & Vanpools

Carpools -

To register for carpool, all members of the carpool must visit the parking office together to sign up. Participants may register as many vehicles and people as they want, but will be issued one permit to share among the vehicles. The permit prices are the same as non-carpoolers, however, you may share the cost of parking and vehicle cost among carpool partners.

Vanpools -

A vanpool refers to an arrangement where several people (7-15) share the ride to work or school in a van provided by a local transit agency. The vanpool group travels from home or meeting place to work/school and back in a single round trip.



Electric vehicles

The college provides level two (220 - volt) charging stations on the east side of Lot C. The stations are part of the blink network. Charging rates range from \$0.39/kWh from blink plus members to \$0.49/kWh for Blink Guests. A valid parking permit is still required for electric charging spots.

Parking in the electric vehicle charging spot is allowed only while you vehicle is actively charging. Please be considerate and move your vehicle to another parking space once you have finished charging your vehicle.



Pesticides & Fertilizers



Many people use fertilizers, weed killers, and pesticides to enhance their yards and gardens. However, if you use too much of these products or apply them at the wrong time, they can end up in natural water sources.



Weed killers & Pesticides

Weed killers and pesticides are designed to kill plants and animals. However, when they get into our waters, they can kill plants and animals that are not a problem and supposed to be there.

Fertilizer

Fertilizer in lakes and streams makes plants grow. But too much algae and other aquatic plant growth can make boating, fishing, and swimming unpleasant. As the algae and other plants decay, they use up the oxygen in the water that fish and other aquatic life need.



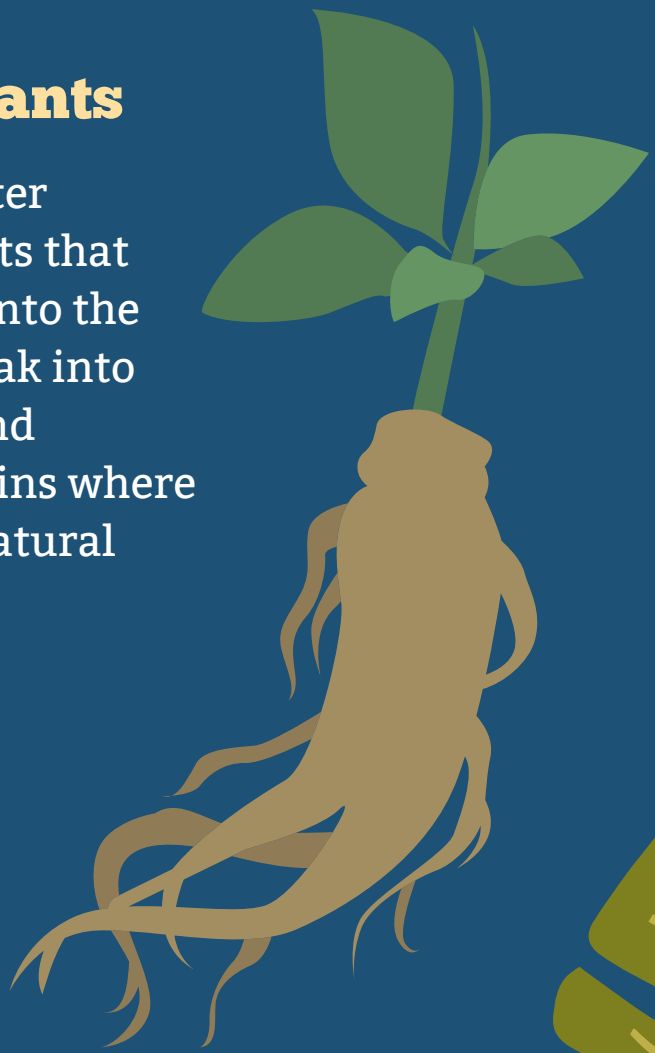


Benefits of using native and well adapted vegetation

Evergreen's 1000-acre campus includes about 800 acres of woods, forest, and saltwater beach used for teaching and learning, but also incorporates nature and learning within its more developed areas. The college is continuing to change it's landscape for the better with green roofs, replacement of non-native plants with native vegetation, and installation of teaching gardens.

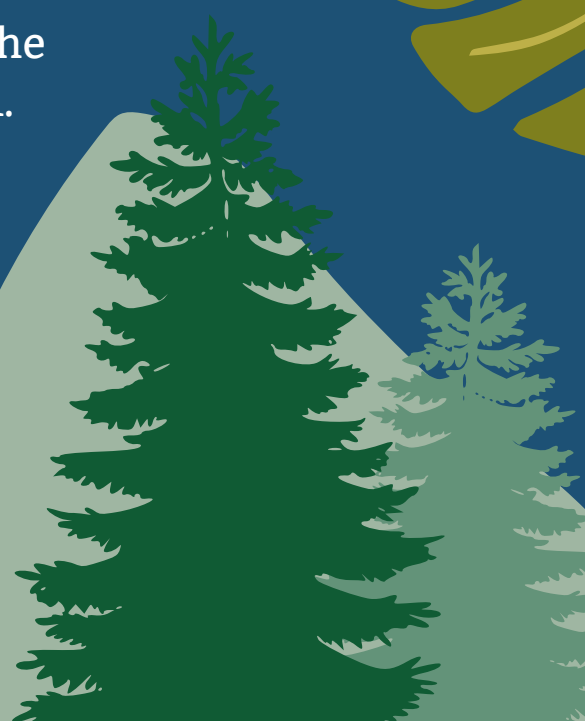
Benefits of native plants

Native plants help reduce water pollution. They have deep roots that allow rainwater to soak well into the ground. Rain that does not soak into the ground flows off lawns and pavement and into storm drains where it is carried away to nearby natural water sources.



Trees

Trees reduce stormwater runoff by capturing and storing rainfall in their canopy and releasing water into the atmosphere. Tree roots and leaf litter create soil conditions that promote the infiltration of rainwater into the soil.



Disposing of Hazardous Waste

Household Hazardous Waste

Household hazardous wastes are products that contain potentially hazardous ingredients that require special care when disposing of them. They contain corrosive, toxic, ignitable, or reactive ingredients, such as oil-based paints, cleaners, oils, batteries, and pesticides. Improper disposal of household hazardous waste can pollute the environment and pose a threat to human health.



Thurston Co. HazoHouse



Disposal Options

Evergreen community members can properly dispose of household hazardous waste by taking it to Thurston County HazoHouse. For hazardous waste generated on campus coordinate with either the Residential & Dining Office or the Environmental Safety & Health office at Evergreen.

Common Household Hazardous Waste Items

Some examples of hazardous waste include (but are not limited to):

- Auto products (antifreeze, brake fluid)
- Motor oil and filters
- Cooking oil
- Batteries
- Paint
- Thinners and solvents
- Glues and adhesives
- Pesticides
- Pool and hobby chemicals
- Kerosene and gasoline
- Light bulbs
- Propane containers



Litter Control & Pet Waste



Littering on Evergreen land occurs most noticeably in the old forest area where informal gatherings are held and campers are known to reside periodically. Police Services conducts regular patrols of this area to remove campers and Evergreen Facilities works with cleaning contractors to remove any remaining debris.

Littering

Litter is not only an eyesore, but it also contains hazardous contaminants and bacteria that can affect wildlife and water quality

With heavy rainfall and high winds, litter blows around and can get carried away by rain eventually making its way into storm drains which directly flow into natural water sources.

Pet Waste

During rainfall, pet waste left on lawns, beaches, trails, and sidewalks washes into storm drains. These wastes and the pathogens they contain (bacteria, parasites, and viruses) end up flowing directly into streams, lakes, and the ocean where they can harm human health and the environment. As pet wastes decompose, they demand a high level of oxygen from water. This demand can kill fish and plant life by reducing the amount of dissolved oxygen available to them.

In order to keep pet waste out of natural water sources make sure to bring a waste collection bag when walking your pet and dispose of it in a proper manner.

Litter Prevention

- Place garbage in appropriate waste receptacle
- Seal trash bags
- Ensure garbage can and recycling lids stay closed
- Ensure there are no loose/light items in open truck beds

