

Pollution Solutions



Water is a very valuable resource to all humans, animals, and the environment. Water pollution is the contamination of water bodies (e.g. rivers, lakes, oceans, aquifers, and groundwater).



It occurs when sources of pollution, called pollutants, are discharged directly or indirectly into bodies of water.

Water pollution can come from a variety of sources. Point source pollution is pollution that can be traced back to an identifiable source. An example of this is an oil spill, or a factory disposing toxic waste into a river

Pollution may also come from dispersed sources, called nonpoint source (NPS) pollution. It is caused by moving rainfall, called runoff, moving through and over the ground. Runoff can pick up and carry natural and human-made pollutants to other bodies of water.



Below are more example of water pollutants and what you can do to prevent them at the source.



PREVENTING POLLUTION IS AN EVERYDAY ACTIVITY

Make the connection between your home, the storm drain, and receiving waters.

Identify the 14 pollutant sources in the neighborhood below.

What can you do to prevent pollution from these sources?



1 Hosing down dirt or oil to the driveway, sidewalk, or street.

Solutions

- Sweep with a broom.
- Use dry absorbent, such as “kitty litter” to clean up oil.
- Wash using minimal water with a bucket and mop or absorbent cloth.
- Dispose all wastewater to a utility sink or toilet.

2 Washing a vehicle at a location where dirty wash water flows to the street and storm drain system.

Solutions

- Use a commercial car wash, or wash in an area that drains to vegetation so the water can soak into the ground.
- Avoid discharging soapy or dirty water to the street where it can enter a storm drain.
- Minimize detergent use and use low or no-phosphate detergents, as phosphates are a harmful nutrient in the environment.
- Save water by washing with a bucket and using a nozzle on the end of your hose.
- If you must wash a vehicle on the City street, minimize water and detergent use and be careful not to create a nuisance, traffic hazard, or environmental problem.

3 Disposing of dirt, leaves, or grass clippings to storm drains, clogging the drains and contributing harmful nutrients to the receiving waters.

Solutions

- Clean leaves and trash out of the street gutters.
- Do not blow grass clippings and leaves into the storm drain.
- Compost leaves and grass clippings, or use the green-waste recycle bin.
- When using a yard service, be sure they follow these guidelines.

4 Allowing motor vehicles to leak fluids.

Solution

- Check for leaks of oil and other vehicle fluids regularly and fix leaks promptly to prevent these hazardous fluids from polluting storm water and receiving waters.

5 Applying fertilizers or pesticides incorrectly, causing them to wash into the street and storm drains and contribute harmful nutrients or toxins to receiving waters.

Solutions

- Apply fertilizers and pesticides only as directed by the manufacturer and only when rain is not forecasted.
- Place fertilizer near plants rather than spreading it over the garden.
- Be careful not to apply lawn or landscape chemicals to paved surfaces where they will wash into the storm drain.
- Consider using compost in place of chemical fertilizers to increase the organic content of soil so it will retain more water and reduce runoff.
- Never pour pesticides, paints, cleaners, or other chemicals into a gutter or storm drain.

6 Disposing of trash without properly bagging and containing it.

Solution

- Tie trash bags securely and keep trash cans covered to prevent rubbish from blowing away or being scattered by animals.

7 Improper disposal of household hazardous wastes.

Solution

- Do not dispose of paints or other household chemicals into the street or storm drain. Visit www.opala.org for proper disposal of Household Hazardous Wastes or call the HHW line at 768-3201 for disposal information.

8 Dumping dirty wash water or other wastewater into the street or storm drain system.

Solution

- Dispose of all dirty, soapy, wash water and other wastewater in a utility sink or toilet so it will go to a wastewater treatment plant rather than polluting receiving waters.

9 Directing downspout discharge to paved areas that drain to the street.

Solutions

- Direct downspouts to vegetated areas, if possible, to prevent polluted “first flush” roof discharges, containing bird droppings, leaves, and other nutrient sources, from entering storm drains and discharging to receiving waters.
- Consider installing a rain barrel system to use roof runoff as a water source for landscape irrigation.

10 Having or storing exposed soil in an area draining to the street, storm drain, or stream, thus contributing sediment to receiving waters.

Solutions

- Cover all exposed soil with a well-secured tarp or other cover to prevent wind and rain erosion.
- Do not stockpile stored soil in a location where runoff flows to a stream, storm drain, or drainage channel.
- Provide vegetative cover for bare ground as soon as possible.
- Until vegetation is established, divert runoff from bare ground to vegetated or gravel areas to minimize the potential discharge of eroded soil to storm drains and receiving waters.

11 Allowing rubbish to accumulate in the street and sidewalk area.

Solutions

- Homeowners are responsible for keeping their street gutters and sidewalk areas clean.
- Remove leaves, sediment, and rubbish from the gutter and sidewalk areas before the next rain washes it into the drainage system and carries it to receiving waters where it contributes to nutrient and sediment pollution.

12 Littering.

Solutions

- Throw all rubbish in a trash can to prevent it from being carried into storm drains and to receiving waters.
- See recycling and disposal instructions at www.opala.org.
- Support community cleanups and storm water stenciling. Go to www.cleanwaterhonolulu.com and click on calendars for upcoming events.

13 Not picking up pet waste.

Solution

- Pick up pet waste and throw it in the garbage to prevent bacteria and nutrients from being carried into storm drains that discharge to streams and coastal waters.

14 Discarding trash in a stream or drainage channel.

Solutions

- Throw all rubbish in a trash can to prevent it from polluting our streams and coastal waters.
- Practice the 3 Rs – Reduce, Reuse, Recycle.



Remember, pollutants come in many shapes, sizes, and forms.

Let's mālama our waters and stop pollution the source!