

Pollution Pathways

Pollution results from the introduction of harmful materials into the environment. Pollution can be spread in different ways, including through the land or soil, through the air, and by water. Here are some examples of pollution sources:



Chemicals

Chemicals are compounds that may come from factories, farms, mines, and even our own homes. Agricultural runoff contains pesticides and fertilizers. Factories and mines release toxic chemicals such as furans and dioxins, as well as heavy metals like mercury and lead. Ocean vessels may discharge oil directly into the water. Harmful household chemicals include cleaning products, solvents, paint, motor oil, and medications.



Litter

Litter is waste that is in the wrong place as a result of being improperly discarded or unintentionally transported. It can end up along our sidewalks and in parks, ponds, lakes, rivers, and oceans. It includes everything from cans, bottles, plastic bags, and fast food containers to abandoned fishing gear and nets. Litter can be harmful to wildlife, as they may mistake it for food or become entangled in it.



Sewage & Wastewater

Wastewater is water that has been used, such as in a home or as part of an industrial process. Sewage is the waste that flows down drains and through pipes from toilets and sinks. In some municipalities, sewage and wastewater is not cleaned or treated before it is released into rivers, lakes, or oceans. Ocean vessels often release their untreated wastewater directly into the water.



Light

Light pollution is the presence of unwanted, inappropriate, or excessive artificial lighting. Ships, industrial operations, office buildings, streetlamps, and light from inside our homes emit artificial light that interferes with the natural rhythms of people and wildlife.

For additional resources visit:

CanadianWildlifeFederation.ca/Education

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Noise

Noise pollution is unwanted or excessive sound. On land, it is created by traffic, construction, and industry. In aquatic environments, ships, oil drills, sonar devices, and seismic tests create noise that interferes with the ability of animals like whales and dolphins to use echolocation.



Thermal

Industrial facilities can cause thermal pollution by withdrawing local water for cooling machinery, then releasing it back into rivers and lakes at a higher temperature. Raising the temperature of the water can negatively affect aquatic wildlife, who are sensitive to rapid temperature changes.



Natural Processes

Volcanic eruptions and forest fires release chemicals, ash, and debris into the air, which can eventually settle on land or water. Floods cause an influx of silt into water bodies. Harmful algal blooms block sunlight, deplete oxygen levels, and cause the closure of recreational areas.

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