

Activity 1B: Stormwater in Your Community

Tell the students that they are going to learn about stormwater in their community and solutions to protect our watersheds. First, they are going to learn about stormwater and pollution and will make a site analysis map.

1. Gather students into group learning space.
2. Tell the students that you are going to be discussing stormwater, water pollution, and ways to improve management in your watershed over the next few activities.
3. Ask students to recall what a **watershed** is. Who lives in a watershed? Remind students a watershed defines an area of land that flows into a common body of water like a stream, river, or lake. A watershed can be a small local area that drains into a local pond, or can be made up of thousands of square miles like Lake Champlain basin.
4. Ask students to think back to the last time it rained or when snow or ice melted. The water that fell as precipitation, or that melted from the snow or ice is **stormwater**. When that water moves across land instead of seeping into the ground it is called **runoff**.
5. **Pervious** surfaces, especially plants and healthy soils help to reduce runoff by allowing water to **infiltrate** or seep into the ground. Harder, **impervious** surfaces like roads and roofs make more runoff because there is nowhere for the water to go.
6. Runoff from different land surfaces can pick up **pollutants** along the way and transport them to streams, rivers and lakes and impact **aquatic ecosystems**.
7. Tell students now they are going to learn about some of the common ways that **pollutants** can enter our waterways.
8. Tell students that the examples in “*Stop Pointless Pollution*” and “*Streams in the City: It’s a Hard (Surface) Life*” demonstrate how some of our activities at our homes and in our communities can impact our watershed, but these are not the only ways that pollutants enter streams, rivers, and lakes.
9. Next, tell students they are going to do an activity where they brainstorm the different types of possible stormwater pollutants that may be carried in stormwater that flows from a variety of places.
10. Tell students to complete the “What types of pollutants might be in stormwater?” worksheet. First, students will have 10 minutes to complete it alone, then will discuss with a partner (for 5 minutes).
11. As a class, review students’ responses. The main objective is for students to think about where pollution comes from and how it enters our waterways.
12. By understanding the different sources of pollutants in runoff from common places, we can design better systems to prevent them from entering into our waterways.

Activity 1B Worksheet: What Types of Pollutants Might be in Stormwater?

Pollutant Types:

- **Litter**
- **Sediment**
- **Bacteria**
- **Nutrients**
- **Pesticides**
- **Heavy Metals**
- **Salt**

Directions: For each area below identify the types of pollutants that could potentially be found in stormwater runoff from these places.

<i>Area</i>	<i>Potential Pollutants</i>
<i>Example: Forest</i>	<ul style="list-style-type: none"> • <i>Excessive sediment may be present if the area has a lot of exposed roots and dirt</i> • <i>Nutrients would be bound to sediment and travel in stormwater</i> • <i>Potentially: litter if there are hiking trails or a roadway nearby where litter could have been left</i>
Meadow	
Fertilized Lawn	
Parking Lot	
Dog Park	
Roof	
Road	