



Practice Task: Stormwater Pollution



PART 1: RESEARCH (Approx. 60-90 minutes)

Student Directions:

Your Task:

The PTA at your school is sponsoring a Stormwater Information Night to help protect our local waters. They have asked each child to write an essay explaining what stormwater is, how stormwater gets polluted, and two actions we can take to keep the stormwater clean. You will read an article, view a video, and study a diagram to build your knowledge of stormwater pollution. Then you will write an essay to share at the Parent Information Night.

Steps you will be following:

To plan and write your essay, you will do all the following:

1. Read an article and study a diagram.
2. Watch one video.
3. Answer three questions about the sources.
4. Plan and write your essay.

Directions for beginning:

You will now watch the video and read the article and the diagram. Take notes because you may want to refer to your notes while writing your essay. You can look at the sources as often as you like.

Source Information:

- Article:** *Let's Visit Stormville!* Sources: Dallas Stormwater Education for Kids, Chittenden County Vermont Regional Stormwater Education Program, City of Bellevue Stormwater Education Program
- Illustration:** *The Culprits Drain Ranger Curriculum Resource*
- Video:** *Fifteen to the River: Explaining Stormwater Runoff* (1:49)
https://youtu.be/c_6UkHuHGGA

Use the notetaking graphic organizer to take your notes on both sources.



Practice Task: Stormwater Pollution



My Notes

Source	What Stormwater is	How Stormwater gets polluted	What we can do to keep the water clean
Video: Fifteen Minutes to the River: Explaining Stormwater Runoff			
Article: Let's Visit Stormville!			



Practice Task: Stormwater Pollution



My Notes

Source	What Stormwater Is	How Stormwater gets polluted	What we can do to keep the water clean
Illustration: The Culprits			

Your notes will not be scored. You may use them to answer questions and to write your essay.

Let's Visit Stormville!

What is Stormwater?

Washington is called the Evergreen State for a reason. Over half of the land in our state is covered by forests. When rain falls in a forest, most of the water is soaked into the ground, evaporated back into the air, or absorbed by trees.

The forest acts like a sponge, capturing and holding the rainwater before it can enter streams and lakes. But when forests are replaced with hard surfaces, like streets, buildings, and parking lots, the water from the rain runs off because it can no longer soak into the ground.

This rain that does not soak into the ground is called stormwater runoff. Stormwater runoff flows into storm drains, which carry the stormwater in pipes and ditches to local streams, lakes, and Puget Sound.

Most of the time, the stormwater goes into these natural bodies of water without being treated.

What is Stormwater Pollution?

As stormwater flows over land, it can pick up pollution. Some of this pollution we can see, like trash, oil, and dirt. Other pollutants we can't see like chemicals sprayed on lawns, bacteria from pet waste, and chemicals leaked from cars and trucks.

Since stormwater runoff is not treated, the pollution in stormwater can enter directly into nearby streams, lakes, or Puget Sound. The pollution can then harm animals in the water or make playing and swimming in it unsafe for people.

75% of all pollution in Puget Sound comes from stormwater runoff that starts in our neighborhoods.

What types of pollution can get into storm drains and make our water unhealthy?

To help us learn about the different types of stormwater pollution, let's visit Stormville!

Stormville is a typical town located near a beautiful lake. The people in the picture live in Stormville and are taking care of their home and car, but they may not realize that they are doing many things that can make water unhealthy. Look at the picture above. What do you see that might cause stormwater pollution?

Let's learn about three different types of stormwater pollution: car washing on pavement, pet waste, and yard chemicals.



Illustration by
Joyce Bergen for
City of Bellevue

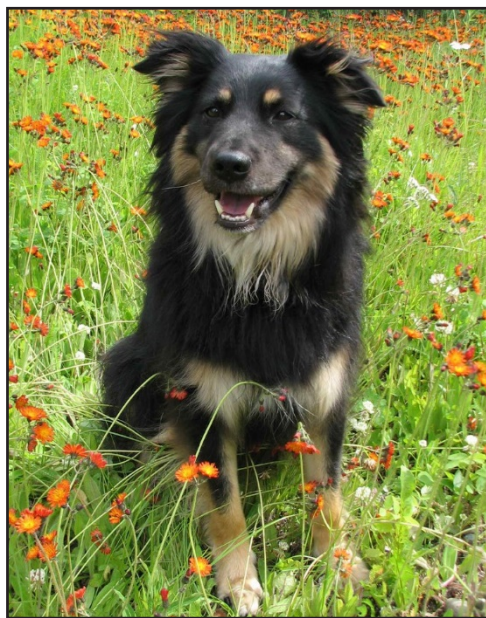
Car Washing on Pavement

When you wash the family car on pavement, the soap, oil, and other pollutants are washed into the storm drain and directly into our waterways.

Soap, oil, and other pollutants in the wash water are harmful to fish and other animals that live in the water. These pollutants can destroy the protective covering on fish and injure or even kill them and their eggs. Even biodegradable soap pollutes water because it needs to go through soil to properly breakdown.

Here's what you can do!

Suggest that your family take the car to a commercial car wash. These facilities filter the dirty wash water and send it to the sewer treatment plant to be cleaned.



Pet Waste

No one wants to swim in poop! Dog poop carries harmful bacteria and diseases that can make people very sick. Beaches are often closed because bacteria from poop has made the water unsafe to swim.

When it rains, pet waste that is left on the ground melts into the stormwater. The polluted stormwater flows into nearby storm drains and then into waterways like streams, lakes, or Puget Sound. Too much poop in the water means people can't swim, walk, or play in the water and they can't harvest shellfish to eat.

Here's what you can do!

Scoop the poop, put it in bag, and place it in the trash. When walking your pet, take bags with you to clean up their poop.

Yard Chemicals

Many people use fertilizers and pesticides to improve their green lawns and flower gardens. However, stormwater runoff can carry these chemicals into storm drains and waterways.

People use pesticides to kill unwanted plants and bugs in their yards. But when pesticides get into a lake or stream, they harm good fish and wildlife too.

Here's what you can do!

Ask the adults in your household to only use yard chemicals when necessary. Ask them to read the labels on yard care products and follow the instructions. Also, make sure that any yard chemicals are put away correctly so that they can't leak or spill.



Thanks for visiting Stormville! Take what you have learned from this visit and use it to make good decisions that protect the health of our rivers, lakes, and streams. Thank you for helping stop stormwater pollution!

The CULPRITS



When it rains, water that is not absorbed into the ground, intercepted by vegetation, or evaporated flows into surface waters such as rivers, canals and coastal waters. This flow is called runoff. As the runoff flows over the roads and land, it picks up pollutants.

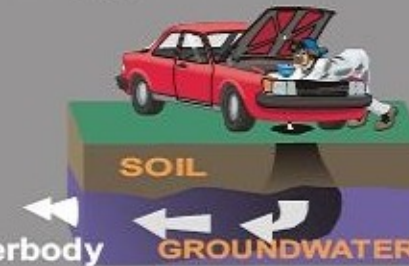
Roads are a source of pollution. Oils, grease, construction dirt, trash & cigarette butts wash off roads when it rains.



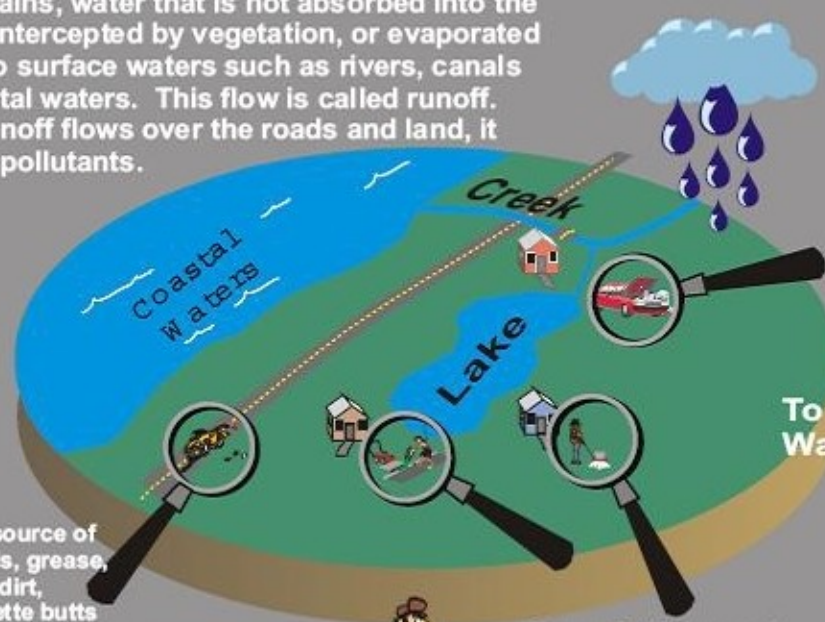
Excess fertilizers wash off lawns & gardens when it rains & flow into surface water.



Surface water can be polluted through groundwater.



Things put into stormdrains and on the street can end up in our rivers, canals, & coastal waters





Practice Task: Stormwater Pollution



PART 2: ESSAY (Approx. 60-90 minutes)

Student Directions:

You will now have about 60-90 minutes to review your notes and sources, plan, draft, and revise your essay. While you may use your notes and refer to the sources, you must work on your own. Now read your assignment and the information about how your essay will be scored, and then begin your work.

Your Assignment:

The PTA at your school is sponsoring a Stormwater Information Night to help keep our local waters healthy. They have asked each child to write an essay explaining what stormwater is, how stormwater gets polluted, and two actions we can take to keep the stormwater clean. Write your essay using information from the three sources, naming the sources you use. Your essay will be shared at the Parent Information Night.

How your essay will be scored:

The people scoring your essay will be assigning scores for

1. **Statement of Purpose/Focus** – how well you clearly state and maintain your controlling idea or main idea.
2. **Organization** – how well the ideas progress from the introduction to the conclusion using effective transitions and how well you stay on topic throughout the essay.
3. **Elaboration of Evidence** – how well you provide evidence from sources about your topic and elaborate with specific information.
4. **Language and Vocabulary** – how well you effectively express ideas using precise language that is appropriate for your audience and purpose.
5. **Conventions** – how well you follow the rules of usage, punctuation, capitalization, and spelling.

Now begin work on your essay.

Manage your time carefully so that you can:

- Plan your essay
- Write your
- Revise and edit for a final draft



Practice Task: Stormwater Pollution



Organizing My Essay: Stormwater Pollution

Introduction	
What Stormwater is	
How stormwater gets polluted	
What we can do to keep stormwater clean? Idea #1	
What we can do to keep stormwater clean? Idea #2	
Conclusion	

Except where otherwise noted, this work developed by [Pacific Education Institute](#) (PEI) for the [Washington Office of Superintendent of Public Instruction](#), is available under a [Creative Commons Attribution 4.0 License](#). All logos and trademarks are the property of their respective owners.