

#### **PART 1: RESEARCH**

#### **Student Directions:**

Your Task:

Help! Our local waters are getting polluted and our fish are at risk of dying. Your class has been asked to help other students to learn about the importance of clean water for healthy fish. You will read an article and watch a video, taking notes on these sources. Through these sources, you will learn about stormwater pollution and how we can prevent it. You will also learn the importance of this phrase: Only rain down the drain! Your essay will help other students to understand the importance of clean water for healthy fish!

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

- 1. Read an article about stormwater pollution.
- 2. Watch one video.

Steps you will be following:

- 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. 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 Stop Stormwater Pollution! N. Skerritt, 2016

Video:

Freddy the Fish Teaches About Stormwater (4:28) https://youtu.be/8NTCq0h8azM

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

**Teacher note** Pre-teach what we mean by stormwater. It is rain that finds its way down our storm drains. Show a picture of a storm drain or take a walk in the school yard to locate a storm drain. The focus of the task is on how stormwater is polluted, why this is bad for fish, and what we can do to keep the water clean.



Source	How Stormwater gets polluted	Why pollution is bad for fish	What we can do to keep the water clean
Video:			
<b>Video:</b> Freddy the Fish Teachers about Stormwater			



## **My Notes**



Source	How Stormwater gets polluted	Why pollution is bad for fish	What we can do to keep the water clean
Article: Let's Stop			
Stormwater			
Pollution!			

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



# Let's Stop Stormwater Pollution!

What is water pollution?

Pollution: Things we put into the environment that are harmful Our water becomes polluted or unhealthy when things like car oil, pet waste and yard chemicals get washed into our rivers, lakes, and ocean. The Puget Sound is the home to many animals including shellfish like oysters and clams. These creatures must have clean water to grow and survive. Water pollution is a threat to these animals. When it rains, the rainwater picks up oil, pet waste, chemicals, soap, and other pollutants from our lawns and carries these pollutants into our rivers, lakes, and ocean. The polluted water goes into storm drains and then into the Puget Sound. Stormwater pollution is a huge problem for our sea life!

#### What can we do to stop this pollution and keep the water clean?

**First, we can pick up our pet waste.** Poop from our dogs has bacteria in it that can make us sick. We don't want to swim in polluted water or eat fish that comes from water that has pet waste in it. Too much poop in the water means that people can't swim, walk, or play in the water and they can't harvest and eat seafood like oysters and clams.

Next, we can use safe products for our lawns, vegetable gardens and other plants. There are products that are safe for the environment, and we can look for these products in the stores. We all want green lawns, great vegetables to eat, and healthy trees and shrubs. Some lawn products are safe, and some are harmful. We should choose products that don't pollute our water. We need to read the labels and choose fertilizers that are environmentally friendly!

**Finally, we can wash our cars at the car wash or on a grassy area.** When we wash our cars, we may use soap that has harmful chemicals in it. Also, we wash off the oil and grease from our cars and these harmful products go right down the storm drain and out to the ocean. We need to choose our car washing soap carefully and be sure to wash our car where the water sinks into the soil or is recycled like at a car wash.



#### How will this help the fish that live in our ocean?



Sea life in the Puget Sound must have healthy water to survive. If too many chemicals and too many bacteria get into our water, then the fish are poisoned and can die. For example, **Taylor Shellfish** on the Olympic Peninsula produces oysters that are shipped around the world. Many people rely on this company and other shellfish producers to grow and harvest healthy oysters and clams. If we don't stop pollution, then our sea life may die.



# We Can Make a Difference!

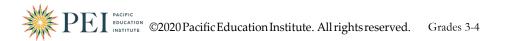
Here are three actions all of us can take to keep the water clean:

- Scoop our dog poop
- Wash our car at a car wash or on a grassy surface
- Buy lawn products that do not harm the environment

Tell your parents and your friends! All of us together can make a difference for our marine environment and the sea life that lives there!



For taking care of our environment!







#### Questions

**1.** Explain how stormwater gets polluted. Use information from either the video, or the article. Be sure to name your source. *(Claim 4, Target 2)* 







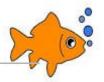
2. Which of the following types of pollution are discussed in the video but not in the article? {Claim 4, Target 2)

Select all that apply:

- 1. Grass Clippings
- 2. Oil from Cars
- 3. Pet Waste
- 4. Lawn Chemicals
- 5. Litter
- 6. Soap from Car Washing







**3.** Support this statement using information from the two sources. Be sure to name your sources.

"We can take actions that keep our water clean and our fish healthy." (Claim 4, Target 4)







#### Part 2: FIELD INVESTIGATION

Teachers are encouraged to take the children to a local stream, lake, or river to observe the habitat of sea life, specifically fish. What are they noticing about the habitat? Do they observe litter or other pollutants? What questions do the students have about their observations?

Visiting a local fish hatchery is another option for observing and learning about healthy habitats for fish.

In addition, students might act by labeling storm drains and/or creating informational posters to remind people of "Only rain down the drain." Discussion questions might include the following:

- What actions can we take to keep our water clean for our fish?
- What local waters might be in danger of pollution?
- Why is it important to label storm drains?

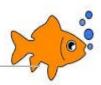
In addition, teachers may want to consider the following field investigation:

Drain Rangers (Lesson 4): Introduction to Water in the Schoolyard: https://pacificeducationinstitute.org/wpcontent/uploads/2017/03/FINAL-Elementary-Drain-Rangers.pdf

Other ideas for field investigations:







#### PART 3: ESSAY Student Directions:

You will now have time to review your notes and sources, and then 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:

You have been asked to help other students learn about the importance of clean water for healthy fish. In your essay, explain how stormwater gets polluted, why this is bad for fish, and actions we can take to keep our ocean water clean. Your essay will be shared with other students so that more people can learn about the simple things we can do so that our fish in the Puget Sound stay healthy.

#### 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 essay
- revise and edit for a final draft



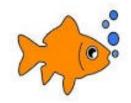




#### Organizing My Essay: Keeping Our Water Clean

Introduction	
How stormwater	
gets polluted	
Why this is bad for fish	
What we can do to keep	
stormwater	
clean: Idea #1	
What we can	
do to keep	
stormwater clean: Idea #2	
Conclusion	





#### Grades 3-5

1. Explain how stormwater gets polluted. Use information from either the video or the article. Be sure to name your source. (*Claim 4, Target 2*)

Analyze/Integrate Information Rubric (Claim 4, Target 2)			
2	<ul> <li>The response gives sufficient evidence of the ability to locate, select, interpret, and integrate information within and among sources of information.</li> </ul>		
1	• The response gives limited evidence of the ability to locate, select, interpret, and integrate information within and among sources of information.		
0	A response gets no credit if it provides no evidence of the ability to locate, select, interpret, and integrate information within and among sources of information.		

#### Scoring Notes:

Article: Stormwater gets polluted by car oil, pet waste, soap, and yard chemicals. When it rains, these things get washed into the rivers, lakes, and ocean.

Video: When it rains, stormwater picks up and carries litter or trash to the storm drains. Stormwater also carries oil, dirt, grass clippings, pet waste, and other bad things into the storm drains.

#### 2-Point Responses:

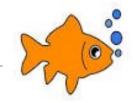
- Uses information from either the article or the video.
- Names which source is used.
- Correctly describes how stormwater gets polluted: The rain carries pollutants like pet waste and yard chemicals into storm drains and then into the rivers, lakes, and ocean.

#### 1-Point Responses:

- $\circ$   $\;$  Uses information from either the article or the video but fails to name the source
- Correctly describes how stormwater gets polluted: The rain carries pollutants like pet waste and yard chemicals into storm drains and then into the rivers, lakes, and ocean.

#### 0-Point Responses:

- Vague: Partially describes how stormwater get polluted: Does not name specific pollutants or say that the pollutants go into the stormwater
- $\circ \quad \text{Off Topic} \quad$



Sample 2-Point Responses:

Example #1: Did you know that you pollute the water and you do not know it? Here are some ways that you pollute the water. You pollute the water when dirt, grass, gas, oil, animal waste, trash and other things get into the water. I found this in the video.

Example #2: Stormwater gets polluted when you leave your dog's waste on the ground, when you litter and when you leave your grass cuttings in the road because all of this goes down the storm drain. (Source 2- video) Soap, oil, and gasoline also go down the storm drain. (Source 1-article)

Example #3: Stormwater gets polluted when people wash their cars with bad soap and when you leave animal waste on the ground. When you blow your grass clippings into the street. When you litter because the animals could get stuck in the litter. Like they say, only rain down the drain! (The video).

Example #4: Stormwater gets polluted when people do not pick up their animal waste. When people do not pick up animal waste, it goes in the stormwater. When animal waste goes in the stormwater it leads out into the nearest creek, river, pond, lake, bay of ocean. Which means all the fish eat it or breath it. Could you imagine eating fish and other seafood and it has eaten animal waste? Yuck! The fish must swim through all the animal waste. I learned this from the Freddy the Fish movie.

Sample 1-Point Responses:

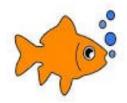
Example #1: Stormwater gets polluted when it rains, and the rain picks up grass clippings, dirt, and oil. These flow into the storm drains and then into lakes, creeks, and rivers and pollutes the water. (Fails to name a source for the information.)

Example #2: Stormwater gets polluted when you throw trash into the water. And when you do not pick up after your dog. When you wash your cars in the road. When you dump oil in the water. (Fails to name a source for the information.)

Sample 0-Point Responses:

Example #1: Stormwater gets polluted when dog waste, dirt, gas/oil, lawn clippings and other wastes.
 If you made a mess, you need to clean it up! (Vague: Partially describes how stormwater get polluted:
 does not say that the pollutants go into the stormwater)





- 2. Which of the following types of pollution is discussed in the video but not in the article?
  - o Grass Clippings
  - o Oil from cars
  - o Pet Waste
  - o Lawn Chemicals
  - o *Litter*
  - Soap from Car Washing (Claim 4, Target 2)

Analyze/Integrate Information Rubric (Claim 4, Target 2)			
2	<ul> <li>The response gives sufficient evidence of the ability to locate, select, interpret, and integrate information within and among sources of information.</li> </ul>		
1	• The response gives limited evidence of the ability to locate, select, interpret, and integrate information within and among sources of information.		
0	A response gets no credit if it provides no evidence of the ability to locate, select, interpret, and integrate information within and among sources of information.		

Scoring Notes:

Correct response is Grass Clippings and Litter, numbers 1

and 5. 2-Point Responses:

• Names both Grass Clippings and Litter by circling the numbers 1 and 5, showing on a chart, or naming the two types of pollution.

1-Point Responses:

- $\circ$   $\;$  Names one of the two correct responses
- Does not include any incorrect responses

**0-Point Responses:** 

- Names a mix of incorrect and correct responses
- Only names incorrect responses

Sample 2-point responses:

Example #1: Student created a chart showing which were not in the article but in the video: Grass clippings and litter.

Example #2: Circles number 1 and number 5

Example #3: Writes out grass clippings and litter.



#### Sample 1-point responses:

Example #1: Circles number 1 only (Correct response but only names one of the two correct responses.)

Example #2: Circles number 5 only <mark>(Correct response but only names one of the two correct responses.)</mark> Sample 0-point responses:

Example #1: Circles 1,2,3, and 5 (correct mixed with incorrect responses) Example #2: Circles 2,3,4 (All are incorrect responses)

**3.** Defend this statement using information from the two sources. Be sure to name your sources. "We can take actions that keep our water clean and our fish healthy." (Claim 4, Target 4)

Use Evidence Rubric (Claim 4, Target 4)			
2	The response gives sufficient evidence of the ability to cite evidence to support opinions and ideas.		
1	The response gives limited evidence of the ability to cite evidence to support opinions and ideas.		
0	A response gets no credit if it provides no evidence of the ability to support opinions and ideas.		

Scoring Notes:

Article: Pick up our pet waste; use safe products for our lawns, vegetable gardens and other plants; Wash our cars at a car wash or on a grassy area

Video: Throw away your trash; pick up after pets; pick up grass clippings and other yard waste and don't leave these in the streets; tell your parents what you have learned: "Only rain down the storm drain"

2-Point Responses:

- Uses information from both the video and the article.
- Names the sources
- Information is accurate and shares specific things we can do like pick up litter to "keep our water clean and our fish healthy."

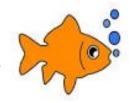
1-Point Responses:

- Uses information from one of the two sources or
- Fails to name the sources used or
- Only shares one thing we can do to keep the water clean and the fish healthy.

**0-Point Responses:** 

- Off Topic
- Names sources but fails to give any actions we can take.
- Vague

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#### Sample 2-point responses:

Example #1: Actions we can take to keep the water clean: In source 1, Freddy the Fish, it said to clean up after your pet-throw away pet waist! and make sure that your cut grass is not left on the ground. In source 2, Let's Stop Stormwater Pollution, it says the same as Freddy the Fish about cleaning up after your pet.

Example #2: First source is the video: Stormwater gets polluted by dog waste. Also, by yucky dirt that has oil in it. Another thing is when people mow their lawn and then sweep the clippings into the street.

Second source is the story: Stormwater gets polluted by oil from cars like when they have a leak. By chemicals because the chemicals affect the fish just like soap does because soap has chemicals.

Example #3: We can take actions to keep our water clean and our fish healthy. In the video, one way I saw that I can do this is do not put trash in ponds, lakes, or rivers. "Only rain down the storm drain." In the article, I read that car oil, pet waste in our yards, and chemicals get washed by the rain. So, we need to not put these pollutants into our stormwater. We should pick up pet waste, wash our car in a car wash, and use chemicals that are safe for our environment!

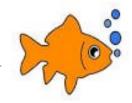
#### Sample 1-point responses:

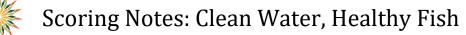
Example #1: If everyone cleans up, we can keep the water clean and our fish healthy and full of life. Clean up pet waste, wash your car on the lawn or other grassy area, pick up trash, and make sure only rain goes down the drain! (Fails to name sources.)

Example #2: By not littering. Only rain down the drain. Pick up after your dog. Wash your cars in the grass. (Fails to name sources.)

Example #3 If everyone cleans up and does not let garbage go down the storm drain, the fist will be healthy and happy. So, we all need to help. One of the ways to keep our fish happy and healthy is by keeping grass cuttings and waste from getting into the storm drain. It goes to the river without being cleaned. I learned this from the Freddy the Fish video. (only refers to one of the two sources.)







Sample 0-point responses:

Example #1: We can pick up stuff off the ground and not pollute. (Vague response)

Example #2: First source is Freddy the Fish Teaches about Stormwater. The second source is Let's stop stormwater pollution. The second source supports the sentence because it says some of our actions, we could do to help stop stormwater pollution. (Names the two sources but does not give any specific action we can take to keep our water clean and our fish healthy.)

Example #3: We can take actions that keep our water clean and our fish healthy. In the article, one way I read that I can do this. (Vague response. No specific ways are mentioned.)



#### **Informative / Explanatory** Performance Task Writing Rubric (Grades 3-5)



Score	4	3	2		1
Statement of Purpose/Focus	The response is fully sustained and consistently and purposefully focused: • controlling or main idea of a topic clearly communicated, and the focus is strongly maintained for the purpose, audience, and task	The response is adequately sustained and generally focused: • controlling or main idea of a topic is clear, and the focus is mostly maintained for the purpose, audience, and task	The response is somewhat sustained and have a minor drift in focus: • controlling or main idea may be somewhat unclear, or the focus may be insufficiently sustained for the purpose, audience, and task		The response has little or no discernable organizational structure: • controlling or main idea may be confusing or ambiguous; response may be too brief or the focus may drift from the purpose, audience, and task
Organization	<ul> <li>The response has a clear and effective organizational structure creating unity and completeness:</li> <li>consistent use of a variety of transitional strategies to clarify the relationship between and among ideas</li> <li>effective introduction and conclusion</li> <li>logical progression of ideas from beginning to end; strong connections among ideas with some syntactic variety</li> </ul>	The response has an evident organizational structure and a sense of completeness, though there may be minor flaws and some ideas may be loosely connected: • adequate use of transitional strategies with some variety to clarify the relationship between and among ideas • adequate introduction and conclusion • progression of ideas from beginning to end; strong connections among ideas	The response has an inconsistent organizational structure, and flaws are evident: • inconsistent use of transitional strategies and/or little variety • introduction and conclusion, if present, may be weak • uneven progression of ideas from beginning to end; and/or formulaic; inconsistent or unclear connections between and among ideas		The response may be related to the topic but may provide little or no focus: • few or no transitional strategies are evident • introduction and/or conclusion may be missing • frequent extraneous ideas may be evident; ideas may be randomly ordered or have an unclear progression
Elaboration of Evidence	The response provides thorough and convincing support/evidence for the controlling idea and supporting idea(s) that includes the effective use of sources, facts, and details: • comprehensive evidence from sources is integrated; references are relevant and specific • effective use of a variety of elaborative techniques*	The response provides adequate support/evidence for the controlling idea and supporting idea(s) that includes the use of sources, facts, and details: • adequate evidence from sources is integrated, some references may be general • adequate use of some elaborative techniques*	The response provides uneven, cursory support/evidence for the controlling idea and supporting idea(s) that includes partial or uneven use of sources, facts, and details: • some evidence from sources may be weakly integrated, imprecise, or repetitive; references may be vague • weak or uneven use of elaborative techniques*; development may consist primarily of source summary		The response provides minimal support/evidence for the controlling idea and supporting idea(s) that includes little or no use of sources, facts, and details: • evidence from the source material is minimal or irrelevant; references may be absent or incorrectly used • minimal, if any, use of elaborative techniques*
Language	<ul> <li>The response clearly and effectively expresses ideas, using precise language:</li> <li>vocabulary is clearly appropriate for the audience and purpose</li> <li>effective, appropriate style enhances content</li> </ul>	The response adequately elaborates ideas, employing a mix of precise and more general language: • vocabulary is generally appropriate for the audience and purpose • generally appropriate style is evident	The response expresses ideas unevenly, using simplistic language: • vocabulary use is uneven or somewhat ineffective for the audience and purpose • inconsistent or weak attempt to create appropriate style		<ul> <li>The response is vague, lacks clarity, or is confusing:</li> <li>vocabulary is limited or ineffective for the audience and purpose</li> <li>little or no evidence of appropriate style</li> </ul>
Score	2	1		0	
Conventions	<ul> <li>The response demonstrates an adequate command of conventions:</li> <li>adequate use of correct sentence formation, punctuation, capitalization, grammar usage, and spelling</li> </ul>	of conventions:		<ul> <li>The response demonstrates little or no command of conventions:</li> <li>infrequent use of correct sentence formation, punctuation, capitalization, grammar usage, and spelling</li> </ul>	

Unintelligible, in a language other than English, off-topic, copied text. (Off-purpose writing will still receive a score in Conventions.)

\*Elaborative techniques may include the use of personal experiences that support the controlling idea.



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