

Pollution and the Chesapeake Bay

1. Question & Research Task

Pollution is an issue that has far reaching consequences on the environment and the organisms, including humans, that depend on that environment.

Jump-start your thinking by considering:

- What is impacting the Bay?
- How do the pollutants reach the Bay?
- How do the pollutants impact you?



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In this Slam Dunk, you will conduct brief, focused research to respond to the inquiry question:

How is pollution endangering the Chesapeake Bay ecosystem and surrounding community?

2. Information Sources

Use these sources to enhance your knowledge about pollution and its impact on the Chesapeake Bay, and to complete the Student Activity on Slide 3.

- Watch [Life in the Chesapeake Bay](#)
- Watch [Air Pollution and Water Pollution](#)
- Read [Watershed](#)
- Read about different [issues /pollution](#)
- Read [What is Killing the Bay?](#)



Nutrient Pollution	Sediment Pollution	Chemical Substances	Air Pollution
What is it?	CB Program	CB Program	Air Pollution
Excess Nutrients	Excess Sediment	Chemical Contamination	CB Foundation

- Read about [How To's and Tips](#) for restoring the Bay

3. Student Activity

A. Select a topic from the Air & Water Pollution list

Nutrient Pollution	Sediment Pollution
Chemical Substances	Air Pollution

B. Research the topic you selected using the sources on Slide 2.

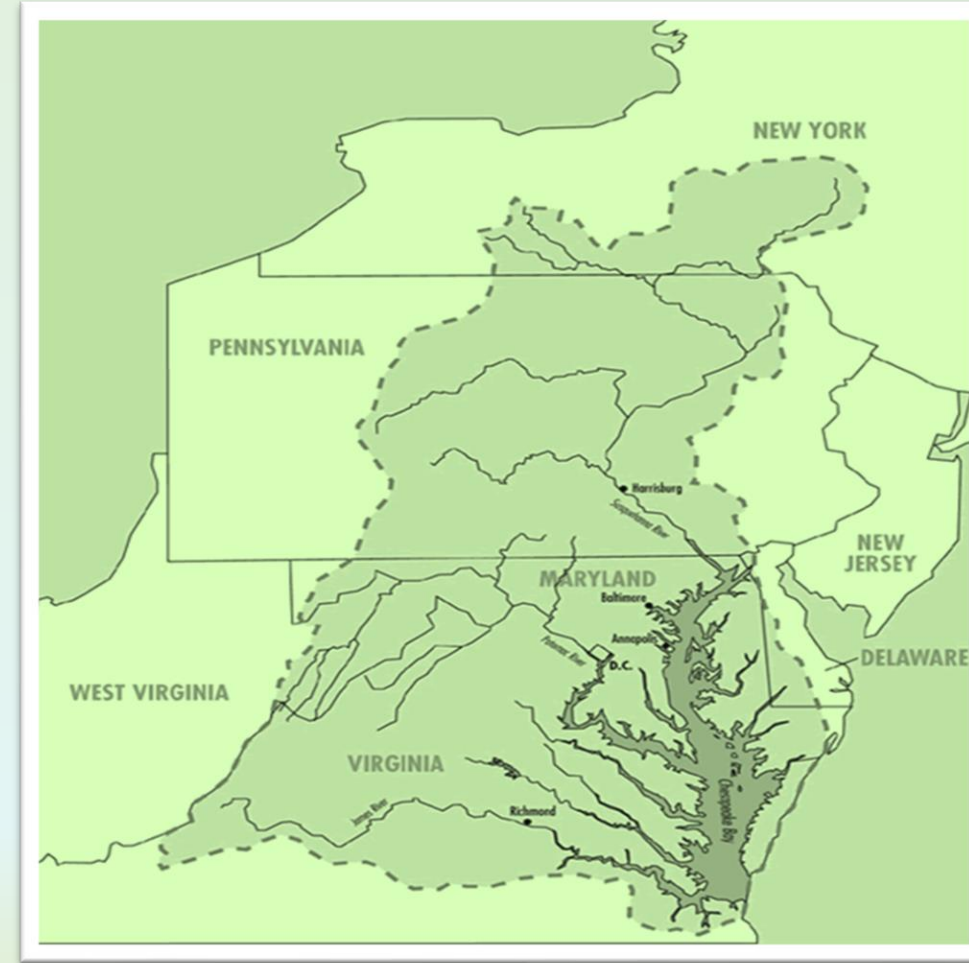
C. Record your responses on the [Air & Water Pollution Chart](#)

D. When you have completed the graphic organizer, choose a topic from the Land & People list that relates to your pollutant and research using the Information Sources on Slide 2:

Population Growth	Development
Storm Water	Land Use
Impervious Surfaces	Transportation

E. Use the [graphic organizer](#) assigned by your teacher in Schoology to record your findings.

When recording the effect and solution, consider the human and environmental factors.



The Chesapeake Watershed
Map courtesy of [Chesapeake Bay Foundation](#)

4. Assessment Activity

How is pollution endangering the Chesapeake Bay ecosystem and surrounding community?

You will create a visual presentation for your **Assessment Activity**. Based upon your research, select a pollutant to create a visual product to be shared with your peers which shares your findings.

Be sure to include the following:

- *Definition of the pollutant and its land use issue*
- *How the issues relate*
- *The effect on the environment and people*
- *What you/your peers can do to help and the positive impact of that solution*

[Chesapeake Bay Program Image Galleries](#) – be sure to cite your photos!

How can you visually communicate the effect air and water pollution have on the land and its inhabitants?



5. Enrichment Activities

SLIDE NAVIGATION

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Additional resources to enhance your knowledge of pollution:

- [The Great Pacific Garbage Patch](#)
- [Huge Atlantic Garbage Patch](#)
- Watch [The Life Cycle of a Plastic Bottle](#)

Extension- Our Schoolyard Ecosystem

Document instances of water/air pollution in your school habitat and brainstorm possible solutions to alleviate these problems. Share your ideas with your teacher and/or principal.

6. Teacher Resources

Learning Standards Alignment

Content Learning Standards

MS-ESS3-3. Apply scientific principles to design a method for monitoring and minimizing a human impact on the environment.*

[Common Core State Standards for English Language Arts & Literacy](#)

Reading: 1. Read closely to determine what the text says explicitly and to make logical inferences from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text.

Writing: 7. Conduct short as well as more sustained research projects based on focused questions, demonstrating understanding of the subject under investigation.

[AASL Standards Framework for Learners](#) Inquire: Build new knowledge by inquiring, thinking critically, identifying problems, and developing strategies for solving problems.

Think: Learners display curiosity and initiative by:

I.A.2 Recalling prior and background knowledge as context for new meaning.

Create: Learners engage with new knowledge by following a process that includes:

I.B.1 Using evidence to investigate questions. I.B.3 Generating products that illustrate learning.

Share: Learners adapt, communicate, and exchange learning products with others in a cycle that includes:

I.C.1 Interacting with content presented by others.

Grow: Learners participate in an ongoing inquiry-based process by:

I.D.2 Engaging in sustained inquiry.

[P21 Framework: 21st Century Student Outcomes](#)

3. Information, Media & Technology Skills: Information Literacy: Access information efficiently and effectively; Use information accurately and creatively for the issue or problem at hand.

ICT Literacy: Use technology as a tool to research, organize, evaluate and communicate information.

SLIDE NAVIGATION

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Grade 8 Science

Objective: Students will be conduct brief, focused research in order to explain how pollution is endangering the Chesapeake Bay ecosystem and surrounding community?

Time Frame: 2-3 hours

Differentiation strategies for this lesson:

- Have students use learning supports provided in BCPS Digital Content found in the [Apps Portal](#). Refer to [Digital Content Snapshot/Support pages](#) as needed.

Notes to the teacher:

- Collaborate with your school library media specialist to plan and implement this lesson.
- **The [graphic organizer](#) created for Slide 3 is Google Drive assignments that can be assigned to students using the [Schoolology Assignment App](#) or printed out**
- Provide students with login information as needed to authenticate BCPS Digital Content. Login information is available on the **BCPS Digital Content** page found via the [Apps Portal](#)

Last updated: July 2022 Use this form to [Report Broken Links](#)

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