
**Understanding Nonpoint Source Pollution Lesson Five:
“Best Management Practices for Nonpoint Source Pollution”**

Academic Question: What are the policies and programs for nonpoint source pollution?

Objective(s):

- To research and assess different agricultural and urban management strategies to reduce nonpoint source pollution
1. Ask students where they think most nonpoint source pollution comes from. Explain that the leading source of nonpoint source pollution of water is agriculture.
 2. Have students research nonpoint source pollution best management practices. Best management practices are those practices recommended to prevent and/or reduce the threat of nonpoint source pollution. Divide students into two groups. Have one group conduct an Internet search for agricultural pollution best management practices. Have the second group conduct an Internet search for urban pollution best management practices. (See the resource section for helpful web sites.)
 3. Each group should record their findings on large note cards that can be stored in a file box for later use. Each note card should contain the following information:
 - a. Name of best management practice
 - b. Type of nonpoint source pollution that is prevented
 - c. Assign a star rating of effectiveness of practice (allow students to determine a rating system)
 - d. People most likely to use best management practice
 - e. Description of management practice and how it prevents or reduces nonpoint source pollution
 - f. Type of activity this practice replaces or improves upon
 - g. Cost of practice (if information is available)

Product/ Application: Have students return for a final time to the nonpoint source pollution scenarios they created in lesson two and three. Ask students to conclude the scenario by recommending a best management practice that would help prevent or reduce the nonpoint source pollution they modeled. Students will need to research the different best management practice note cards in order to make this determination.

Assessment: Allow the agricultural pollution best management practices group and the urban pollution best management practices group to present their findings. Create an evaluation checklist with your students that they will use to measure the successful completion of a best management practice note card.

Resources:

Best Nonpoint Source Documents
U.S. Environmental Protection Agency
<http://www.epa.gov/owow/nps/bestnpsdocs.html>

Nonpoint Source Pollution Control Measures - Source Categories
<http://h2osparc.wq.ncsu.edu/info/bmps.html>

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The Minnesota Pollution Control Agency, *Protecting Water Quality in Urban Areas Manual*

<http://www.pca.state.mn.us/water/pubs/sw-bmpmanual.html>

Time Frame: One to three 45 minute lessons

Grade Level: 6th- 10th

TEKS Correlation:

Science

Grade 6: 6.1, 6.2, 6.3, 6.4

Grade 7: 7.1, 7.2, 7.3, 7.4, 7.8, 7.12

Grade 8: 8.1, 8.2, 8.3, 8.4

Biology: (b)1, 12.D

Aquatic Science: (b)1, 4.B, 7B,C, 8.C, D

Environmental Science: (b)1, 5.A, B, C, E, F

Geology, Meteorology, and Oceanography: 10.C

Mathematics

Grade 6: 6.1, 6.8, 6.11, 6.12, 6.13

Grade 7: 7.3, 7.4, 7.9, 7.13, 7.14, 7.15

Grade 8: 8.5, 8.14, 8.15

Geometry: 6

Precalculus: 2

Technology Applications (Computer Literacy)

Grades 6-8: 2, 4, 5, 7, 8

Social Studies

Grade 6 6.21, 6.22, 6.23

Grade 7 7.8, 7.21, 7.22, 7.23

Grade 8 8.10, 8.30, 8.31, 8.32

English

Grade 6: 6.1, 6.2, 6.5, 6.13, 6.17, 6.20, 6.22, 6/24

Grade 7: 7.1, 7.2, 7.5, 7.13, 7.17, 7.20, 7.22, 7.24

Grade 8: 8.1, 8.2, 8.5, 8.7, 8.10, 8.13, 8.17, 8.18, 8.20, 8.22, 8.24

English I: 1, 4, 6, 8, 13, 15, 16, 21

English II: 1, 4, 6, 7, 8, 13, 15, 16, 21