

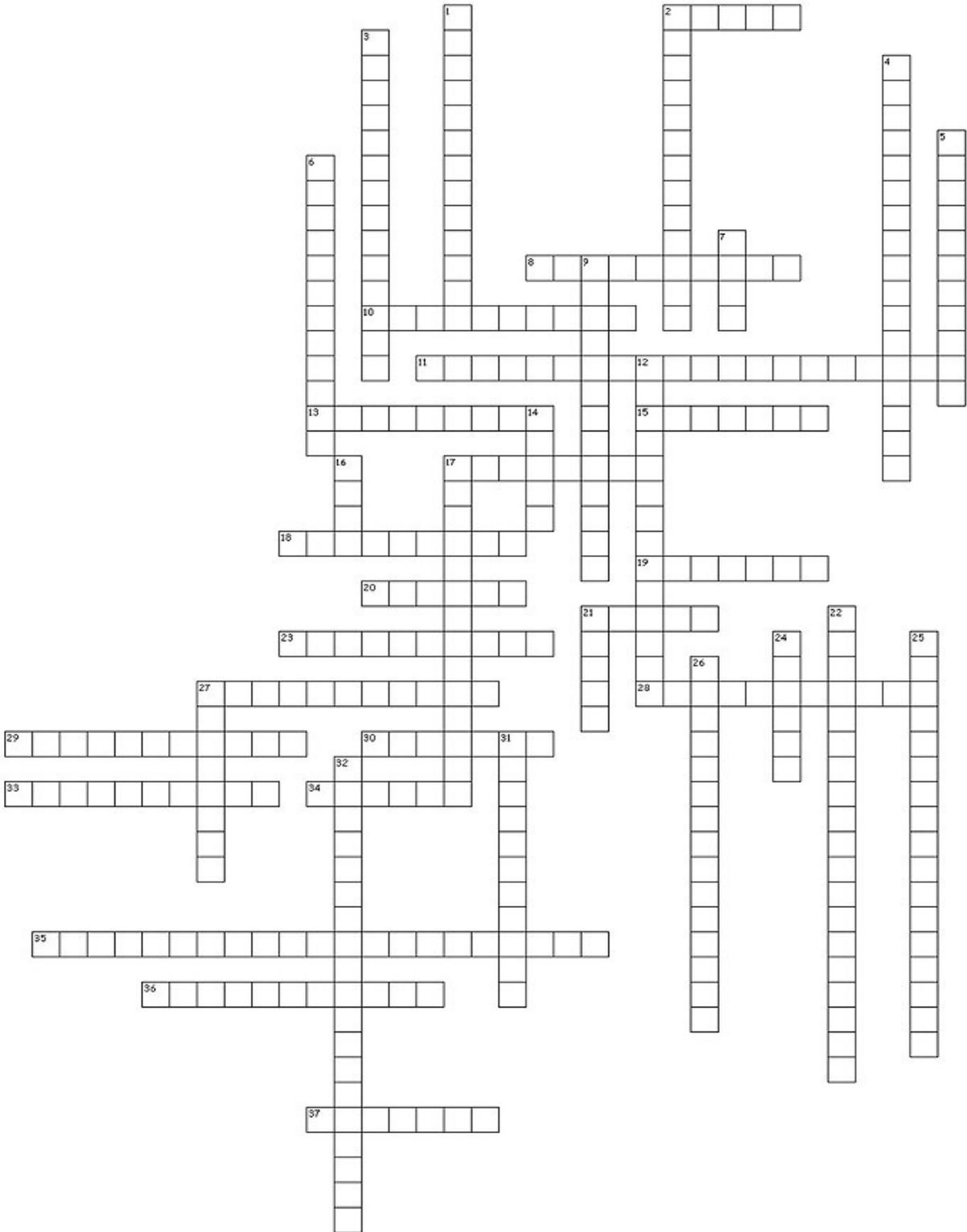
# Nonpoint Source Pollution Subject Review

1. Contamination of air, land, or water by substances that can adversely impact human health and the environment is known as \_\_\_\_\_.
2. Polluting substances are usually \_\_\_\_\_ materials.
3. Pollution is something in the \_\_\_\_\_ place at the \_\_\_\_\_ time in the \_\_\_\_\_ quantity. (one word)
4. Sometimes, it is not the type of material, but its \_\_\_\_\_ that determines whether or not the material is a pollutant.
5. Epidemics in the Middle Ages such as cholera and typhoid fever were directly related to \_\_\_\_\_ conditions caused by human and animal waste and garbage.
6. In 1347, a bacterium carried by rats and spread by fleas resulted in the outbreak of \_\_\_\_\_. (two words)
7. Any single identifiable source of pollution from which pollutants are discharged is known as \_\_\_\_\_. (three words)
8. \_\_\_\_\_ refers to storm water that flows over surfaces like driveways and lawns.
9. A \_\_\_\_\_ is a system in which waste material is mixed with urban runoff. (three words)
10. Large farms that raise many animals such as cows and chickens are known as \_\_\_\_\_. (abbreviation)
11. The Clean Water Act established the \_\_\_\_\_ under which factories, sewage treatment plants, etc. must obtain a permit to discharge wastes into any body of water. (abbreviation)
12. Most nonpoint source pollution occurs as a result of \_\_\_\_\_.
13. Nonpoint source pollution not only affects ecosystems; it can also have harmful effects on the \_\_\_\_\_.
14. Water can run off of \_\_\_\_\_ surfaces without being absorbed.
15. In many towns and cities, the water flowing into \_\_\_\_\_ is not treated before emptying into nearby waterbodies. (two words)
16. Approximately two-thirds of the lead and mercury that enter the Great Lakes originate from \_\_\_\_\_ sources.
17. \_\_\_\_\_ is created when sulfur and nitrogen oxides react with oxygen, water, and other atmospheric compounds. (two words)
18. Prolonged exposure to acid rain can cause soils to lose important \_\_\_\_\_ such as calcium and magnesium.

19. As acid rain flows over and through soils, it releases \_\_\_\_\_ into lakes and streams, which can cause fish to become chronically stressed.
20. Heavy machinery used by forestry and mining operations increases the risk of \_\_\_\_\_. (two words)
21. In the mid-Atlantic and Appalachian regions of the United States, acid drainage and associated contamination from \_\_\_\_\_ have caused pollution in various water bodies. (two words)
22. The primary \_\_\_\_\_ of concern in nonpoint source pollution are nitrogen and phosphorus.
23. \_\_\_\_\_ results in an overproduction of organic matter, especially algae.
24. Very low levels of oxygen in water bodies is known as \_\_\_\_\_.
25. Eutrophication may be associated with conditions that result in harmful \_\_\_\_\_. (two words)
26. When fish and shellfish feed on HABs, they can accumulate \_\_\_\_\_ that the algae produce.
27. Lawn fertilizers and pet wastes can cause pollution from excess \_\_\_\_\_.
28. Combustion of \_\_\_\_\_ is a major source of nutrients in the atmosphere. (two words)
29. Muddy water is caused by soil in the water known as \_\_\_\_\_. (two words)
30. Pesticides can enter a waterbody as \_\_\_\_\_ which occurs when wind blows sprayed pesticide into a nearby waterbody. (two words)
31. The process in which substances build up in the tissues of animals is called \_\_\_\_\_.
32. Hydrocarbons and heavy metals from automobiles and factories eventually end up in water bodies through \_\_\_\_\_ or runoff. (two words)
33. Disease-causing microbes are said to be \_\_\_\_\_.
34. The \_\_\_\_\_ virus causes intestinal illness and is transmitted to humans by food or water contaminated with feces.
35. \_\_\_\_\_ is a program designed to monitor levels of chemicals in oysters, mussels, and sediments. (two words)
36. \_\_\_\_\_ capture runoff or storm water to trap sediments and contaminants. (two words)
37. \_\_\_\_\_ slow runoff, absorb contaminants, and provide habitat for wildlife. (two words)

38. \_\_\_\_\_ paving materials allow rainwater and stormwater to drain into the ground beneath the paving. (two words)
39. \_\_\_\_\_ are strips of grass located between a farm field and a body of water. (two words)
40. Conservation \_\_\_\_\_ involves leaving some crop residue from a previous harvest while planting a new crop.
41. To ensure that nutrients are applied only as needed, farmers \_\_\_\_\_ their fields prior to the growing season.
42. Lady bugs, praying mantis, and spiders are examples of \_\_\_\_\_. (two words)
43. \_\_\_\_\_ on fuel pumps on docks help limit spillage into water bodies. (two words)
44. One of the most important things you can do to reduce nonpoint source pollution is to plant grass, trees, and shrubs in \_\_\_\_\_ areas.

NPS Subject Review: Crossword Puzzle



## Across

2. Large farms that raise many animals such as cows and chickens are known as \_\_\_\_\_. (abbreviation)
8. Epidemics in the Middle Ages such as cholera and typhoid fever were directly related to \_\_\_\_\_ conditions caused by human and animal waste and garbage.
10. Water can run off of \_\_\_\_\_ surfaces without being absorbed.
11. Any single identifiable source of pollution from which pollutants are discharged is known as \_\_\_\_\_. (three words)
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17. \_\_\_\_\_ is created when sulfur and nitrogen oxides react with oxygen, water, and other atmospheric compounds. (two words)
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19. The \_\_\_\_\_ virus causes intestinal illness and is transmitted to humans by food or water contaminated with feces.
20. \_\_\_\_\_ refers to storm water that flows over surfaces like driveways and lawns.
21. Pollution is something in the \_\_\_\_\_ place at the \_\_\_\_\_ time in the \_\_\_\_\_ quantity. (one word)
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27. Eutrophication may be associated with conditions that result in harmful \_\_\_\_\_. (two words)
28. Heavy machinery used by forestry and mining operations increases the risk of \_\_\_\_\_. (two words)
29. Combustion of \_\_\_\_\_ is a major source of nutrients in the atmosphere. (two words)
30. Nonpoint source pollution not only affects ecosystems; it can also have harmful effects on the \_\_\_\_\_.
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34. When fish and shellfish feed on HABs, they can accumulate \_\_\_\_\_ that the algae produce.

35. Hydrocarbons and heavy metals from automobiles and factories eventually end up in water bodies through \_\_\_\_\_ or runoff. (two words)

36. Approximately two-thirds of the lead and mercury that enter the Great Lakes originate from \_\_\_\_\_ sources.

37. Very low levels of oxygen in water bodies is known as \_\_\_\_\_.

## Down

1. In 1347, a bacterium carried by rats and spread by fleas resulted in the outbreak of \_\_\_\_\_. (two words)

2. Sometimes, it is not the type of material, but its \_\_\_\_\_ that determines whether or not the material is a pollutant.

3. \_\_\_\_\_ results in an overproduction of organic matter, especially algae.

4. Muddy water is caused by soil in the water known as \_\_\_\_\_. (two words)

5. In many towns and cities, the water flowing into \_\_\_\_\_ is not treated before emptying into nearby waterbodies. (two words)

6. \_\_\_\_\_ are strips of grass located between a farm field and a body of water. (two words)

7. One of the most important things you can do to reduce nonpoint source pollution is to plant grass, trees, and shrubs in \_\_\_\_\_ areas.

9. \_\_\_\_\_ on fuel pumps on docks help limit spillage into water bodies. (two words)

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16. To ensure that nutrients are applied only as needed, farmers \_\_\_\_\_ their fields prior to the growing season.

17. In the mid-Atlantic and Appalachian regions of the United States, acid drainage and associated contamination from \_\_\_\_\_ have caused pollution in various water bodies. (two words)

21. Polluting substances are usually \_\_\_\_\_ materials.

22. \_\_\_\_\_ slow runoff, absorb contaminants, and provide habitat for wildlife. (two words)

24. \_\_\_\_\_ paving materials allow rainwater and stormwater to drain into the ground beneath the paving. (two words)

25. Lady bugs, praying mantis, and spiders are examples of \_\_\_\_\_. (two words)

26. The process in which substances build up in the tissues of animals is called \_\_\_\_\_.

27. As acid rain flows over and through soils, it releases \_\_\_\_\_ into lakes and streams, which can cause fish to become chronically stressed.

31. \_\_\_\_\_ is a program designed to monitor levels of chemicals in oysters, mussels, and sediments. (two words)

32. A \_\_\_\_\_ is a system in which waste material is mixed with urban runoff. (three words)

# WORD BANK

runoff  
combined sewer system  
CAFOs  
wrong  
concentration  
unsanitary  
bubonic plague  
point source pollution  
economy  
aluminum  
soil erosion  
pollution  
waste  
tillage

NPDES  
test  
beneficial insects  
storm drains  
atmospheric  
acid rain  
nutrients  
retention ponds  
constructed wetlands  
porous  
atmospheric deposition  
fossil fuels  
suspended sediment  
spray drift

pathogenic  
Norwalk  
Mussel Watch  
buffer strips  
impervious  
abandoned mines  
eutrophication  
hypoxia  
algal blooms  
toxins  
shutoff valves  
bare  
bioaccumulation