

YOUR WATERSHED, YOUR BACKYARD

GLOSSARY

1. **Anadramous:** Pertaining to animals that are born in fresh water, spend adulthood in salt water, then return to fresh water to spawn.
2. **Anoxia:** A severe case of hypoxia, resulting in a total lack of oxygen in water.
3. **Aquifer:** An underground permeable bed of rock or soil that soaks up or contains ground water.
4. **Argument:** Support or defense of positions according to information presented.
5. **Bay:** A body of water partially enclosed by land but with a wide mouth, affording access to the sea. The Chesapeake Bay is the largest inlet of the Atlantic in the coast of the US and is bordered by Maryland and Virginia.
6. **Brackish water:** Water that contains a mixture of fresh and salt water. The salt content in this water is higher than fresh water.
7. **Catadramous:** Pertaining to animals that are born in salt water, spend adulthood in fresh water, then return to salt water to spawn.
8. **Chorion:** A membrane that surrounds the embryos of mammals, reptiles, birds, or an outer membrane that surrounds the eggs of certain animals such as insects and non-cartilaginous (bony) fish.
9. **Claim:** The evidence gathered from observation or data collection.
10. **Control:** The sample in an experiment that remains constant or unchanged.
11. **Dead zone:** An area where hypoxia makes it impossible for organisms to live.
12. **Dissolved oxygen:** The total amount of oxygen in water.
13. **Divide:** Points of higher ground that separate two adjacent streams or watersheds.
14. **Ecosystem:** A complex set of relationships among all the living and non-living things in a particular area. All of the elements of an ecosystem interact with each other in some way and, as a result, all depend on each other. The Chesapeake Bay ecosystem includes people, wildlife, fish, shellfish, trees, wetlands, water and all of the non-living elements necessary for the ecosystem to function.
15. **Embryo:** An organism in its early stages of development, especially before it is born, like humans, or hatched, like zebrafish.
16. **Erosion:** The process by which the surface of the earth is “shed,” or worn away by, the action of water, glaciers, winds, waves, etc.
17. **Estuary:** A body of water, open at one end to the ocean, where salt water from the ocean mixes with fresh water draining from surrounding land. The Chesapeake Bay opens to the Atlantic Ocean near Virginia Beach, Virginia.
18. **Eutrophication:** The process by which a body of water gets a high concentration of nutrients, especially phosphates and nitrates. These promote excessive growth of algae. As the algae die and decompose, high levels of living matter and the decomposing organisms deplete the water of available oxygen (hypoxia), causing the death of other organisms, such as fish.
19. **Ground water:** Water found underground between soil pore spaces or rock formations.
20. **Hypoxia:** The condition in which dissolved oxygen is below the level necessary to sustain most animal life.
21. **Lake:** A natural or manmade body of relatively still water surrounded by land.
22. **Larva (larvae):** The newly hatched, earliest stage of any of various animals that undergo metamorphosis – in zebrafish, after hatching and still having a yolk.

- 23. Macroinvertebrates:** Animals without a backbone that are visible without magnification. They are used to determine the water quality of the stream.
- 24. Model organism:** An organism used to represent another in experiments because of similarities and ease of use.
- 25. Native species:** An organism that lives in an area naturally, without human intervention.
- 26. Nitrates:** Naturally occurring form of nitrogen that serves as a nutrient for many organisms, especially plants. They are found in soil, fertilizers, and animal waste.
- 27. Non-native species:** An organism that lives outside of its original natural habitat because of human intervention.
- 28. Nonpoint source pollution:** Pollution that results from many sources, so one specific source cannot be singled out. Most nonpoint source pollution occurs as a result of runoff.
- 29. Permeable/impermeable surface:** Permeable surfaces (such as lawns) can absorb fluids, while impermeable surfaces (such as parking lots) are solid and do not allow fluids to penetrate or be absorbed.
- 30. Petri dish:** A shallow circular dish with a loose-fitting cover, used to grow bacteria or other microorganisms.
- 31. pH:** The measure of how acidic or basic a substance is.
- 32. Phosphates:** A naturally occurring form of phosphorus that is a vital nutrient for human, plant, and animal life. They are found in soil, fertilizers, and animal waste.
- 33. Pipette:** A narrow, usually calibrated glass tube into which small amounts of liquid are suctioned for transfer or measurement.
- 34. Plankton:** Microscopic organisms that can be found floating in fresh or salt water.
- 35. Point source pollution:** Any single identifiable source of pollution from which pollutants are discharged, such as a pipe, ditch, ship or factory smokestack. Factories and sewage treatment plants are two common types of point sources.
- 36. Pollution:** The contamination of water, land, or air by substances that can adversely impact the environment and human health. Examples of pollution include oil spills, smog, and noise. High concentrations of natural materials such as nitrates and phosphates can cause them to become pollutants.
- 37. Runoff:** Stormwater that flows over surfaces like driveways and lawns and carries pollutants and sediment from the land along with it. This untreated, polluted water runs directly into a sewer, storm drain, or stream.
- 38. Sediment:** Naturally occurring material that is broken down by processes of weathering and erosion. It is transported by wind, rain, and ice.
- 39. Sewage/sewer:** Solid or liquid waste (sewage), including household waste from toilets, carried by underground pipes (sewers) to sewage treatment plants or to streams.
- 40. Source/headwaters:** A spring, fountain, etc. that is the starting point of a stream.
- 41. Spring:** Water that flows naturally from underground to the land surface.
- 42. Steward/stewardship:** A steward is a person who helps take care of something. Environmental stewardship refers to taking responsibility for helping to improve the quality of the environment.
- 43. Storm drain:** Collects run-off and carries it to a stream.
- 44. Stormwater:** Water originating during precipitation (snow or rain). Stormwater that does not soak into the ground becomes surface runoff.
- 45. Temperature:** The measurement of molecules moving within a substance.
- 46. Topographic map:** A map showing the relief features or surface configuration of an area, usually by means of contour lines.
- 47. Total dissolved solids (TDS):** A combination of living and non-living invisible substances dissolved in a freshwater liquid.
- 48. Tributary:** A stream that flows to a larger stream or other body of water.

- 49. Turbidity:** The measure of how cloudy (or not clear) a substance is.
- 50. Variable:** Any factor, trait, or condition that can exist in differing amounts or types.
- 51. Watershed:** An area of land where rainwater “sheds” or drains into a particular river, lake, bay or other body of water. Land that has a slope will shed or drain rainwater to a lower point. We all live in a watershed: some are large (like the Chesapeake), while others are small (like your local stream or creek).
- 52. Wetlands:** A lowland area that is saturated with moisture, such as a marsh or swamp, especially when regarded as the natural habitat of wildlife.
- 53. Yolk:** The source of nutrition for an embryo in an egg.