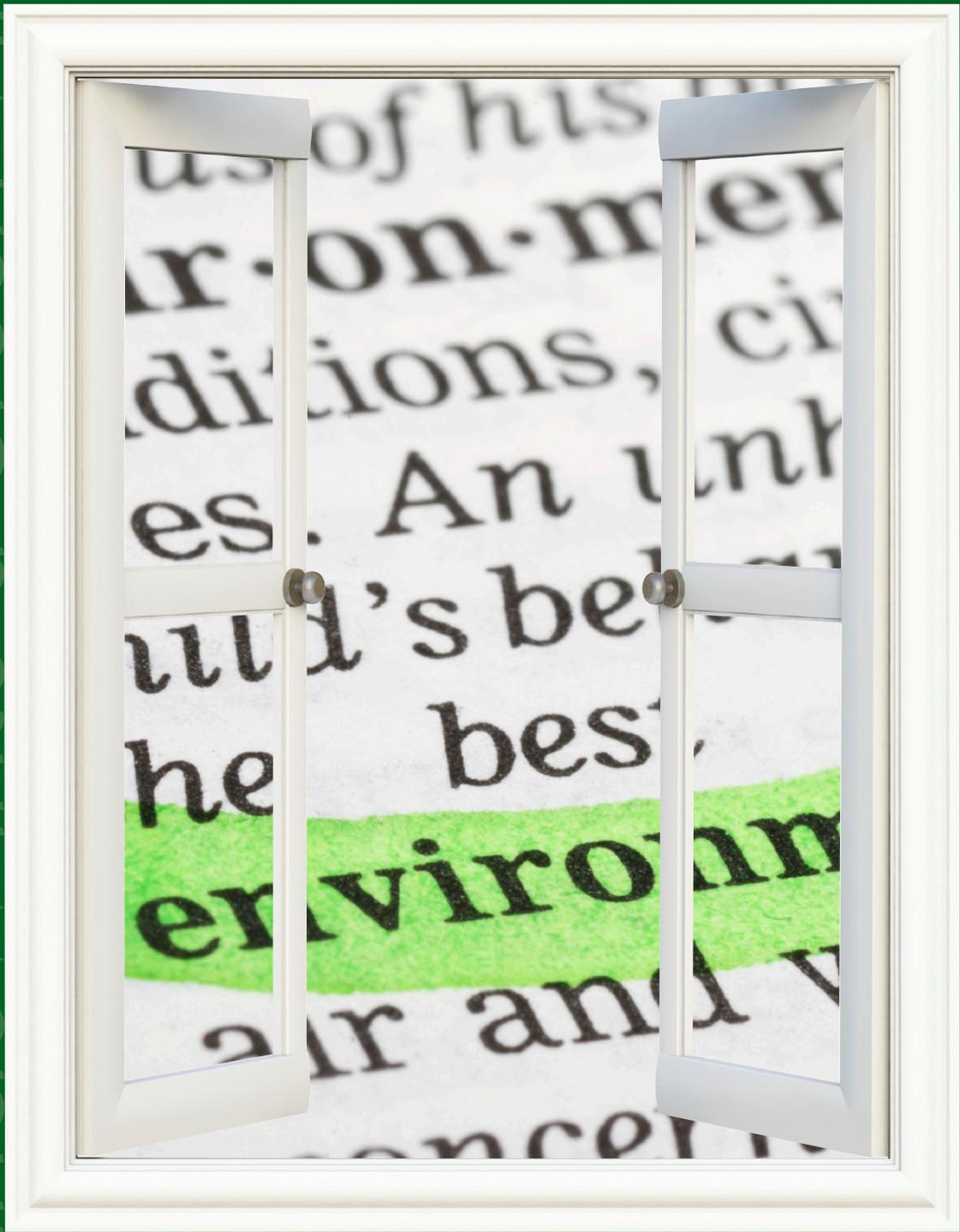


# XIII. Glossary



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- Acid Rain** precipitation that is more acidic than normal, usually caused by emissions of sulfur dioxide or nitrogen oxides (*Air*).
- Air Pollution** any particles or gases that are in the air, but not part of the air's natural composition (*Air*).
- Assimilation** process through which plants absorb ammonia and nitrate into their roots from soil or water (*Land Use and Natural Hazards*).
- Best Management Practices (BMP)** mandatory and voluntary practices farmers and others use to reduce erosion and prevent or control NPS pollution (*Agriculture*).
- Biodiesel** a conventional diesel fuel mixed with biologically derived oils in order to cut down on the use of fossil fuels (*Energy*).
- Biodiversity** many varieties of plants and animals (*Forestry and Wildlife*).
- Biofuels** a conventional gasoline fuel mixed with biologically derived alcohols in order to cut down on the use of fossil fuels (*Energy*).
- Biome** geographic area characterized by certain types of plant and animal communities that contains smaller ecosystems (*Forestry and Wildlife*).
- Boreal** pertaining to the arctic and Antarctic tundras (*Forestry and Wildlife*).
- Brownfield** a term used to classify abandoned or under-used plots of land or buildings (*Land Use and Natural Hazards*).
- Carbon Cycle** the combined processes, including photosynthesis, decomposition, and respiration, by which carbon as a component of various compounds cycles between its major reservoirs (*Energy*).
- Cluster Zoning** planning development to be concentrated and dense in some areas, leaving open space and environmentally sensitive lands undisturbed (*Land Use and Natural Hazards*).
- Cogeneration** a process in which an industrial facility uses its waste energy to produce heat or electricity (*Energy*).
- Conservation Easements** arrangement where the owner of a piece of property donates the development rights to that property to the government, thereby preventing development on the land (*Land Use and Natural Hazards*).
- Deciduous** type of trees found in temperate forests that shed their leaves seasonally (*Energy*).
- Deforestation** cutting or over-harvesting of trees, in which case the cutting down of trees occurs at a rate that surpasses re-growth (*Forestry and Wildlife*).
- Denitrification** process in which bacteria turn nitrate back into atmospheric nitrogen (*Land Use and Natural Hazards*).
- Electricity** electric current used or regarded as a source of power (*Energy*).



<b>Endangered Species</b>	organisms that face extinction, often because of loss of habitat ( <i>Curriculum Overview</i> ).
<b>Erosion</b>	wearing away of soil caused by wind or rain ( <i>Water</i> ).
<b>Eutrophication</b>	the buildup of nutrients in freshwater lakes and ponds that leads to an increase in algae growth ( <i>Forestry and Wildlife</i> ).
<b>Fecal Coliform</b>	bacteria that live in the intestines of humans and animals and become infectious when released through feces ( <i>Water</i> ).
<b>Fertilizer</b>	nutrients added to the soil to increase productivity ( <i>Water</i> ).
<b>Fossil Fuel</b>	ancient underground deposits of organic matter, such as coal or oil ( <i>Energy</i> ).
<b>Generator</b>	a machine that converts mechanical energy into electrical energy ( <i>Energy</i> ).
<b>Geothermal Reservoirs</b>	underground pools of water heated by the earth ( <i>Energy</i> ).
<b>Green Building Design</b>	process of using “green” features such as recycled materials and energy efficient heating systems when planning buildings ( <i>Green Building</i> ).
<b>Green Roof</b>	relatively flat roof with plants growing on it; the plants serve as a natural source of insulation ( <i>Energy</i> ).
<b>Greenfield</b>	open, natural, or agricultural lands that provide habitats for wildlife, ecosystem benefits, timber and food production, and aesthetics of a community ( <i>Land Use and Natural Hazards</i> ).
<b>Greenhouse</b>	structure designed to collect heat from the sun’s rays ( <i>Green Building</i> ).
<b>Greenhouse Gases</b>	any of the atmospheric gases that contribute to the greenhouse effect, i.e., global warming ( <i>Energy</i> ).
<b>Groundwater</b>	water beneath the earth’s surface, often between saturated soil and rock, that supplies wells and springs ( <i>Water</i> ).
<b>Growth Management</b>	using government policies to plan development in a community ( <i>Land Use and Natural Hazards</i> ).
<b>Habitat</b>	living area that includes the resources necessary to support wildlife ( <i>Forestry and Wildlife</i> ).
<b>Hydric</b>	characterized by, relating to, or requiring an abundance of moisture ( <i>Water</i> ).
<b>Hydrophytic</b>	adapted to grow in water ( <i>Water</i> ).
<b>Impervious Surfaces</b>	surfaces that water cannot penetrate ( <i>Land Use and Natural Hazards</i> ).
<b>Land Trust</b>	non-profit organizations that work to conserve land by purchasing or accepting donations of land or conservation easements ( <i>Land Use and Natural Hazards</i> ).
<b>Methane</b>	an odorless, colorless, flammable gas, CH <sub>4</sub> , the major constituent of natural gas, that is used as a fuel and is an important source of hydrogen and a wide variety of organic compounds ( <i>Energy</i> ).
<b>Mixed-Use Development</b>	occurs when buildings for different purposes (such as homes and stores) are located in the same area ( <i>Land Use and Natural Hazards</i> ).



<b>Natural Lighting and Cooling</b>	the use of the sunlight indoors through building design instead of relying on artificial lighting, as well as design and technology that limit the need for air conditioning ( <i>Green Building</i> ).
<b>Nitrification</b>	the formation of nitrite (NO <sub>2</sub> <sup>-</sup> ) and then nitrate (NO <sub>3</sub> <sup>-</sup> ) as bacteria get their energy from ammonia ( <i>Land Use and Natural Hazards</i> ).
<b>Nitrogen Fixation</b>	Nitrogen Fixation: the process in which atmospheric nitrogen is converted into nitrate by bacteria in the soil, water, or in the roots of some plants ( <i>Land Use and Natural Hazards</i> ).
<b>Non-Point Source Pollution</b>	Non-Point Source Pollution: a form of pollution with an unidentifiable specific origin of release ( <i>Water</i> ).
<b>Non-Renewable Resources</b>	resources that are in finite supply ( <i>Energy</i> ).
<b>Nutrient</b>	substance assimilated by organisms that promotes growth ( <i>Water</i> ).
<b>Organic Matter</b>	relating to or derived from living organisms ( <i>Energy</i> ).
<b>Particulates</b>	small particles of dust and soot that may be found in the atmosphere ( <i>Air</i> ).
<b>Passive Solar Homes</b>	homes that are positioned to face southward and passively collect the sun's warmth for heat ( <i>Energy</i> ).
<b>Percolation</b>	the seeping of surface and groundwater through soil and subsurface strata ( <i>Agriculture</i> ).
<b>Point Source Pollution</b>	a form of pollution in which the specific origin of release into the environment is identifiable ( <i>Water</i> ).
<b>Proffers</b>	agreements and modifications developers make to protect the environment in order to get a permit to build a new subdivision, malls, office buildings, etc. ( <i>Land Use and Natural Hazards</i> ).
<b>Property Rights</b>	legal ownership of the rights to engage in a certain activity ( <i>Air</i> ).
<b>PV (Photovoltaic) Cells</b>	small cells or panels capable of producing a voltage when exposed to radiant energy, especially light ( <i>Energy</i> ).
<b>Radioactive Elements</b>	any materials of, exhibiting, or caused by radioactivity ( <i>Energy</i> ).
<b>Recharge</b>	the replenishment of groundwater or an aquifer with surface water ( <i>Water</i> ).
<b>Recycling</b>	practice of reusing materials for new purposes ( <i>Energy</i> ).
<b>Renewable Energy</b>	energy that comes from a source that is constantly renewed; e.g., the wind keeps blowing, the sun keeps shining, water continuously flows in a river ( <i>Energy</i> ).
<b>Renewable Resource</b>	a natural resource that may be replenished through natural cycles and sound management. The sun, wind, wetlands, forests, and croplands are examples of renewable resources ( <i>Energy</i> ).
<b>Reservoir</b>	natural or artificial pond or lake used for the storage and regulation of water ( <i>Energy</i> ).



**Retrofitting** to substitute new or modernized parts or systems for older equipment (*Energy*).

**Rural Area** area with a low population and building density (*Agriculture*).

**Segregated Use** zoning by allowable land use function (*Land Use and Natural Hazard*).

**Smart Growth** development that protects natural resources while creating healthier human habitat (*Land Use and Natural Hazard*).

**Smog** mixture of pollutants in the air that reduces visibility and can have negative effects on health and the environment (*Air*).

**Solar Energy** our ability to convert the sun's power into electricity (*Energy*).

**Sprawl** the resulting spread of developed areas when metropolitan areas grow and expand at the fringes, pushing development into rural areas (*Agriculture*).

**Subsidize** to provide money, or another incentive, to encourage people to engage in a particular activity, such as buying energy-efficient appliances (*Air*).

**Surface Water** water that exists in bodies on the Earth such as rivers, lakes, ponds, oceans (*Water*).

**Sustainable Agriculture** a production and distribution system that minimizes the negative impacts on health, safety, wildlife, water quality and the environment, as well as optimizing use of available resources (*Agriculture*).

**Sustainable Development** any construction that can be maintained over time without damaging the environment; development balancing near-term interests with the protection of the interests of future generations (*Water*).

**Sustainability** has enough resources and small enough impact to be used for a long time (*Energy*).

**Temperate** area between tropical and polar zones, characterized by seasonal weather changes (*Forestry and Wildlife*).

**Topographic** referring to the shape of the surface (natural features) of the land, determined by elevation, relief, and land forms (*Land Use and Natural Hazards*).

**Tributary** a stream that flows into a larger stream or other body of water (*Water*).

**Tropical** type of forests found in an area near the equator, receives direct sunlight all year so temperatures are warm (*Forestry and Wildlife*).

**Turbine** a device with propeller blades and an axle turned by water, wind, or steam (*Energy*).

**Urban Area** area with a higher population and building density (*Agriculture*).

**Watershed** geographic area in which water, sediments, and other materials drain into a common body of water (*Water*).

**Wetland** land areas that contain hydric soils and hydrophytic plants and are saturated with water for a portion of every year (*Water*).

