

Natural Resources

Section 3: Land Resources & Human Impact

People use land as a natural resource in order to meet their needs. The use of land has a significant impact on our environment. Farming plays a vital role in society as farmers grow food in order to feed people. When farmers use chemical fertilizers, herbicides, and pesticides, they can hurt the environment. Fertilizers used to increase crop production contain nitrogen, potassium, and phosphorus and can leach into soil and run off into nearby streams and lakes. In order to preserve the soil, some farmers have adopted new practices like using natural fertilizers and biological pest control. Crop rotation is the process of planting different crops to improve soil health and nutrients. Contour plowing reduces the impact of gravity on the soil. No till farming leaves stalks and roots in place, which makes the land less vulnerable to erosion and damage. Terracing reduces the steepness of hills and prevents runoff or topsoil from washing away. Land is also used for livestock, which is then used for meat and dairy products. The trampling of the livestock on the soil can accelerate soil erosion due to overgrazing. Their activity allows soil to be exposed to wind and water, making it easy to be swept away.



Another way land is impacted by human use is through deforestation. Trees are cut down for fuel, for paper, and for lumber to build houses. Trees absorb carbon dioxide when they're alive, so less vegetation can cause higher levels of carbon dioxide, which is harmful. Deforestation leads to soil erosion and loss of habitats for plants and animals. It can be detrimental for ecosystems.

The development of highways, parking lots, and building infrastructure also impacts land. Paving prevents water from soaking into the soil and refilling the underwater supplies. Finally, landfills are areas where garbage is dumped and covered with soil. Many materials do not decompose and remain in place forever. As they fill, new ones need to be built. Many landfills are lined with plastic, concrete, or clay-rich soil to prevent seepage.

Natural preserves are created to protect land from environmental problems caused by humans. Recycling is using materials again by converting used materials into new and useful products.

