



Ecosystems

The Human Factor

Table 1.2 Examples of Human Activities and Their Consequences for Ecosystems

Human Activity	Possible Abiotic and Biotic Consequences
 Construction of roads and buildings	<ul style="list-style-type: none">• Surface soil is removed, killing soil organisms and plants that were rooted in the soil.• The shape or slope of the land is changed, resulting in different patterns for drainage of rainwater.• Farmland that is taken over to build roads and buildings can no longer be used to grow crops and livestock.
 Dam-building	<ul style="list-style-type: none">• The courses of rivers and streams are changed so that water will flow to the specific place chosen for the dam.• Land is flooded to create lakes in places where none existed before.• Huge numbers of living things are killed.• Huge numbers of living things are displaced and must find new places to live. (This includes humans, too.)
 Manufacturing and consumption of goods	<ul style="list-style-type: none">• Soil and plant life are removed to make space to build factories and landfill sites for the solid wastes that the factories produce.• Factories consume energy to make products.• Production process creates wastes that can enter and pollute air, water, and soil.• Stores that sell goods consume energy to operate.• The packaging, transportation, and consumption of goods generate wastes that must be disposed of.• Disposal and recycling of wastes consumes energy.

Predict The Consequences

- ◆ Human affect ecosystems daily. The land that our school was built on was probably once a field or farmland.
- ◆ Brainstorm and identify some biotic and abiotic consequences that may have resulted from building our school.
- ◆ Ex: What are the effects on factors such as soil, sunlight, water, and air? What about the size of populations, and food webs?