## Human Impact

### What is a renewable energy resource?

 Renewable energy is natural energy which does not have a limited supply.

Renewable energy can be used again and again, and will never run out.

#### Types:

- \* Biomass
- \* Hydro-electric
- \* Geothermal
- \* Solar

\* Tidal \* Wave \* Wind

\* Wood

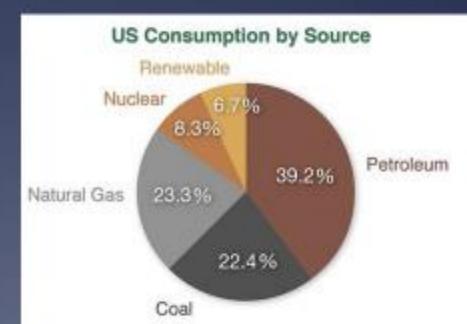


# What is a non-renewable energy resource?

- An energy resource that is not replaced or is replaced only very slowly by natural processes
- Fossil fuels are continually produced by the decay of plant and animal matter, but the rate of their production is extremely slow, very much slower than the rate at which we use them.

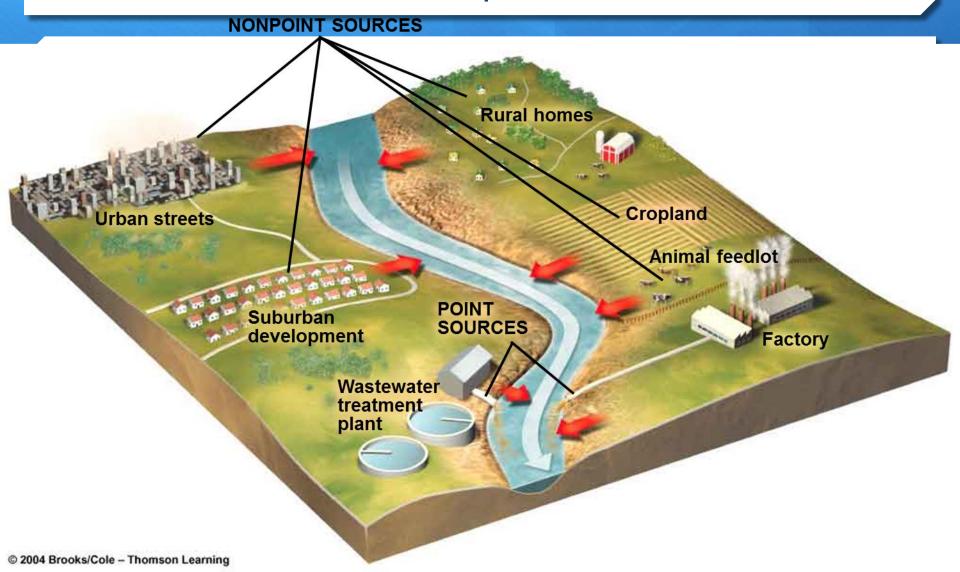
#### Types:

- \* Coal
- \* Oil
- \* Nuclear
- \* Natural Gas
- \* Tar Sands and Oil Shale



### Human Impact on Water

# Can trace back to the source ex. Factory Many sources cant pin point the source **Point Source Vs Non-point source Pollution**



#### Examples of water pollution

 Sediment- Makes water cloudy, blocks sunlight getting to plants (Turbidity- a measure of the cloudiness of water)



### Water pollution

- Sewage, industrial waste, oil, pesticides and fertilizers all pollute water.
- Fertilizers and sewage can easily be washed into rivers, streams and lakes. The nutrients, phosphates and nitrates in these substances cause eutrophication.
- Eutrophication is the accumulation of nutrients in water, which causes excessive algal growth. This leads to a reduction in oxygen levels and the death of aquatic life.

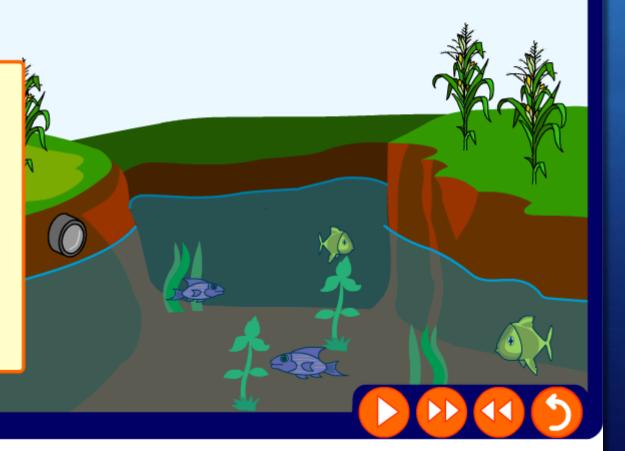


#### What is eutrophication?



serious problem caused by water pollution.

Click "**play**" to find out more.



#### Water Pollution

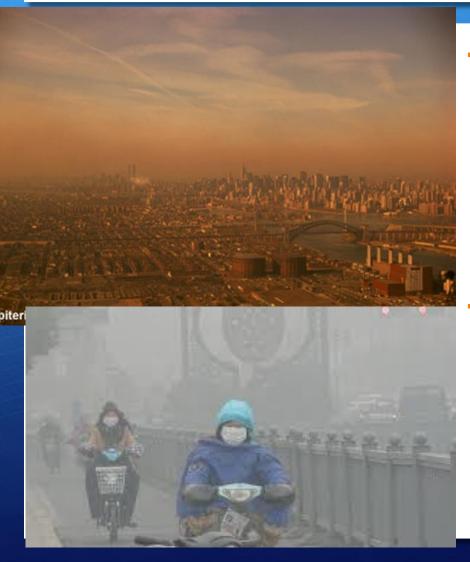
+ Thermal pollution- heated water released from industrial factories can reduce oxygen available for organisms or change the temperature they need to survive.





### Human Impact on Air

### **Air Pollution**

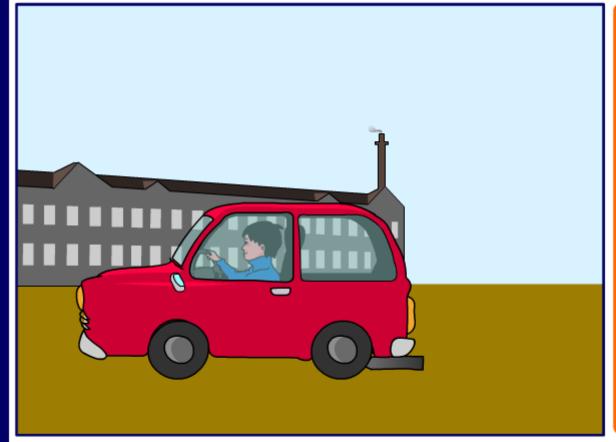


Smog is a mixture of air pollutants and particulates that is sometimes found in the lower levels of the atmosphere. It has a distinctive brownish haze.

 Smog can reach dangerous levels in built-up areas, causing irritation to the eyes and lungs.

### Air Pollution-Acid Rain

#### What is acid rain?



Acid rain can cause a lot of damage to the environment.

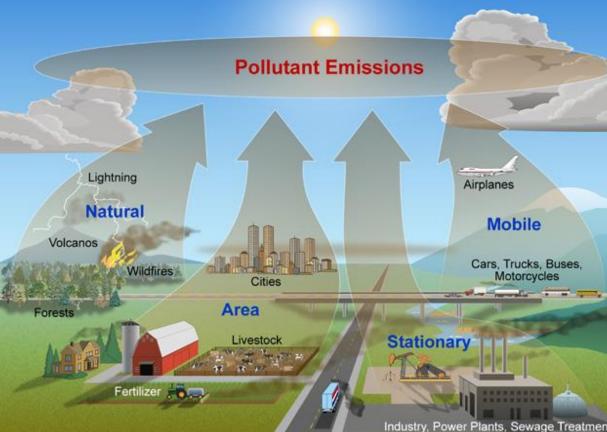
Click "**play**" to find out about the causes and effects of acid rain.



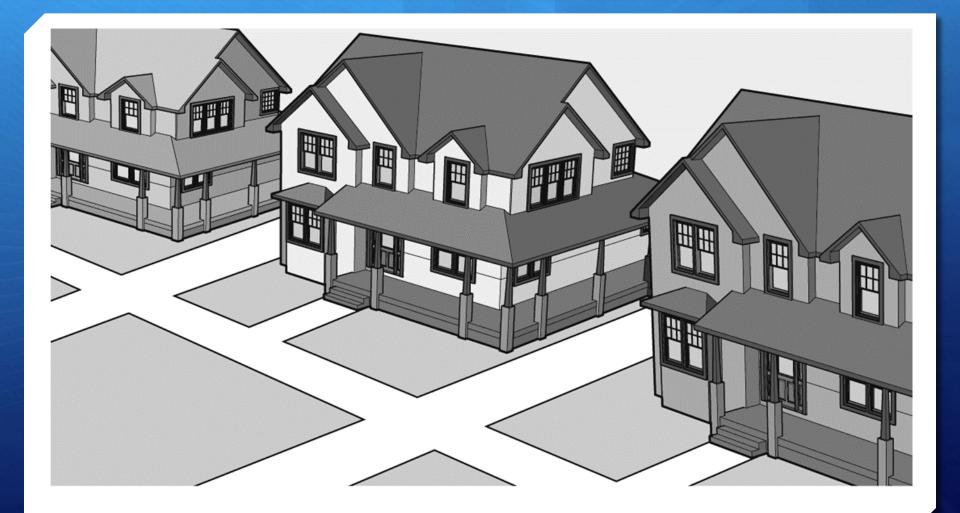
### Air pollution

#### Natural Events- materials from ash, dust, and gases can cause health problems

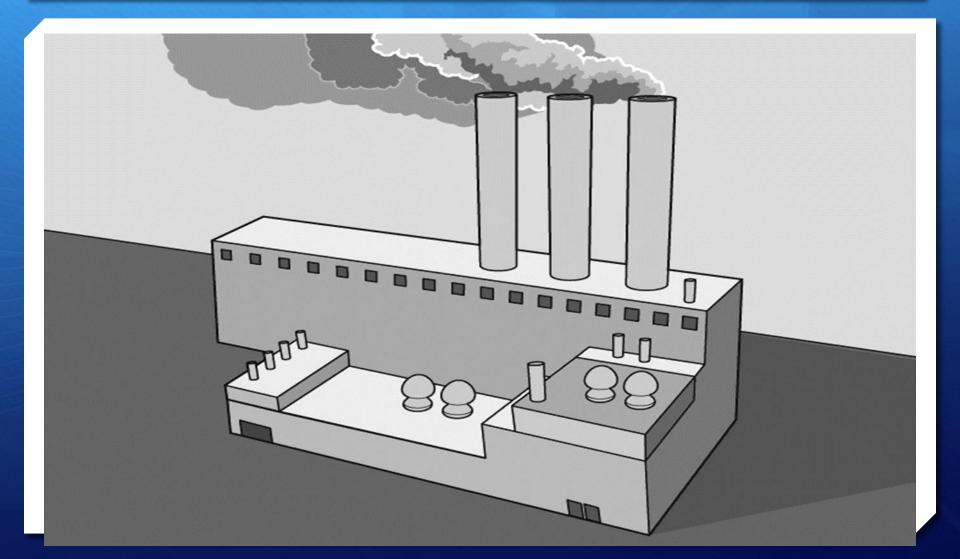




### Human Impact on LAND









#### What is deforestation? is when humans remove or

clear large areas of forest lands and related ecosystems for non-forest use (Textbook pg. 213)

#### <u>Why do humans clear</u> <u>forest lands?</u>

Trees are cut down (deforestation) for many reasons including:

- + To be used, sold or exported as timber, wood or fuel (charcoal). This is called logging.
- + To be used for farming purposes (grazing fields for livestock, or large scale farming activities)
- + To make room for human settlement and urbanization (these include making space for shelter, industries and roads)
- + To make room for mining

#### **Effects of deforestation**

- + Soil erosion destruction.
- + Water Cycle
- + Loss of Biodiversity
- + Climate Change



### **Desertification-** the process by which land becomes

more desert like and unable to support life

What Causes Desertification?

- + Overgrazing
- + Urbanization
- + Poor farming methods

The Effects Of Desertification

- + Soil becomes less usable
- vegetation is Lacked or Damaged
- + Food Loss



### Using land-Agricultural

#### + Crop rotation

#### + Overgrazing



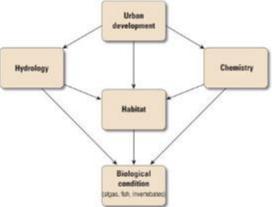


### Urbanization - is the growth of urban areas caused by

people moving into cities (Textbook pg. 209

#### Causes

- + Industrial revolution
- + Job opportunities
- + Emergence of large manufacturing centers
- + Availability of easy transportation



#### **Effects**

+ Urban Development Can Alter Stream Channels



- Concentrations of Contaminants in Water Increase with Urban Development
- + Loss of Sensitive Species



## **Erosion** - is the wearing away of the land by forces such as water, wind, and ice

#### What causes erosion?

- Water is the main cause of erosion on Earth
- Wind can erode by picking up and carrying loose particles and dust away
- Glaciers are giant rivers of ice that slowly move carving out valleys and shaping mountains.

#### effects

- + Poor soil quality
- runoff can cause water pollution

