WATER POLLUTION

SOURCES OF WATER POLLUTION Point and Non-point Sources

Point Source Pollution

- A point source of pollution is a single identifiable localized source of water pollution.
- It enters the water body through a discrete and confined source such as pipe, ditch, tunnel, etc.
- They include municipal sewage treatment plant discharges and industrial plant discharges, etc.

Point Sources

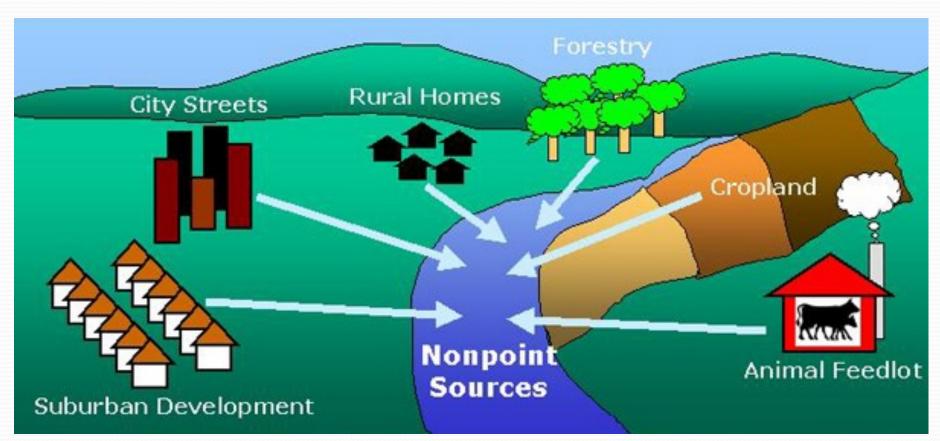




Nonpoint Source Pollution

- Non-point sources are those that affect a water body from several sources.
- As water moves across the land it picks up pollutants, which can then be deposited in water bodies.
- Nonpoint-source pollution is usually found spread out throughout a large area and is difficult to trace the exact origin of these pollutants.
- Nonpoint pollutants include sediment, nutrients, microorganisms and toxics.

Nonpoint Sources

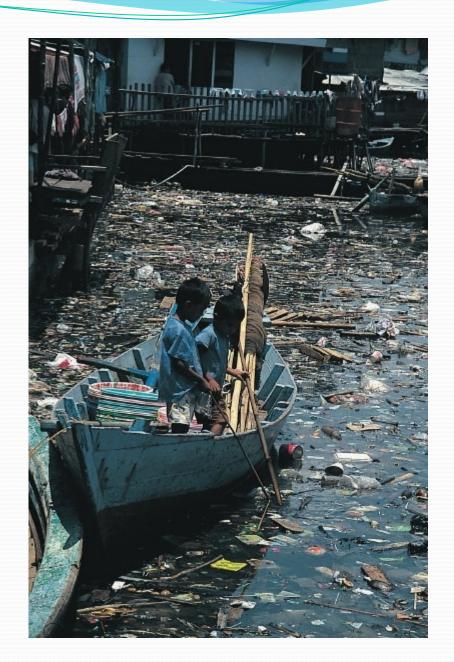


Nonpoint Sources



Definition

 Presence of foreign substances or impurities in water which lowers the water quality and makes it unfit for use.



Sewage

Waste water released from domestic, commercial and municipal institutions are called Sewage

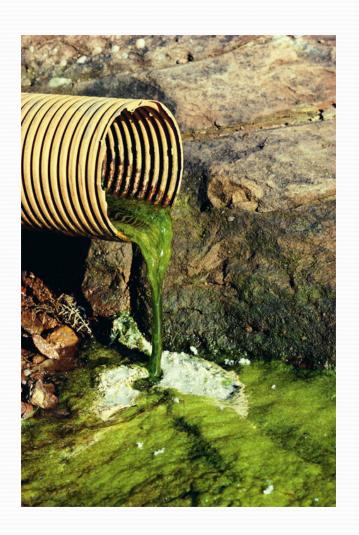
Effluents

Discharge of waste water from various industries is termed as Effluents



Sewage

Effluents



Causes of Water Pollution









Water Pollution









Signs of water pollution

- Bad taste
- Offensive odour
- Decrease in number of fishes
- Unchecked growth of plants and weeds
- Oil and grease floating on water surfaces

Water Pollutants

- Organic and Inorganic compounds
- Mineral salts and toxic chemicals
- Oils and detergents
- Suspended/colloidal/dissolved impurities
- Bacteriological impurities
- Radioactive Pollutants

Effects of Water Pollution

- Colour, taste, odour, turbidity, alteration of pH, hardness, etc
- Water borne diseases due to the presence of bacteria, virus, fungi, etc
- Presence of heavy metal sulphates, chlorides, nitrates, etc is injurious to health
- Dissolved Oxygen content is removed

Oil spills affect aquatic life







Contaminated water causes health problems



Sewage water affects both aquatic and human life



Control of Water Pollution

- Water management strategies
- Enforcement of laws to curb water pollution
- Monitoring pollutant level in water bodies
- Appropriate treatment methods
- Judicious use of pesticides and fertilizers