



# MARINE POLLUTION

# WHAT IS MARINE POLLUTION?

- Pollution of oceans caused by sewage sludge, industrial effluents, detergents, agrochemicals, solid wastes, plastics, metals and waste heat is called marine pollution.
- The causes of Marine Pollution

The main sources of marine pollution are

- (i) rivers, which bring pollutants from their drainage basins,
- (ii) Catchment area i.e. coastline where human settlements in the form of hotels, industry, agricultural practices have been established, and
- (iii) oil drilling and shipment.



# EFFECTS OF MARINE POLLUTION

- Oil in the sea water affects sensitive flora and fauna. Phytoplankton, zooplankton, algal species, various species of invertebrates, coral reefs, fish, birds and mammals are affected by oil pollution.
- Fishes show mortality (death) because the fish gills get laden with oil after the slimy mucus of gills is affected. Oil disrupts the insulating capacity of feathers. Death occurs due to loss of buoyancy and subsequent drowning of birds.
- Leakage from oil tanker near Alaska in 1989 caused damage to coral reefs and resulted in death of about 390 thousand birds. Some important incidents of bird mortality due to oil have been reported at Brittany, France where 20 thousand birds died due to more than 220 tonnes of oil spillage in 1978.



# CONTROL OF MARINE POLLUTION

- ★ Toxic pollutants from industries and sewage treatment plants should not be discharged in coastal waters.
- ★ Run off from non-point sources should be prevented to reach coastal areas.
- ★ Sewer overflows should be prevented by having separate sewer and rain water pipes.
- ★ Dumping of toxic, hazardous wastes and sewage sludge should be banned.



# CONTROL OF MARINE POLLUTION



- ★ Developmental activities on coastal areas should be minimized.
- ★ Oil and grease from service stations should be processed for reuse.
- ★ Oil ballast should not be dumped into sea.
- ★ Ecologically sensitive coastal areas should be protected by not allowing drilling.

