**Water Quality**

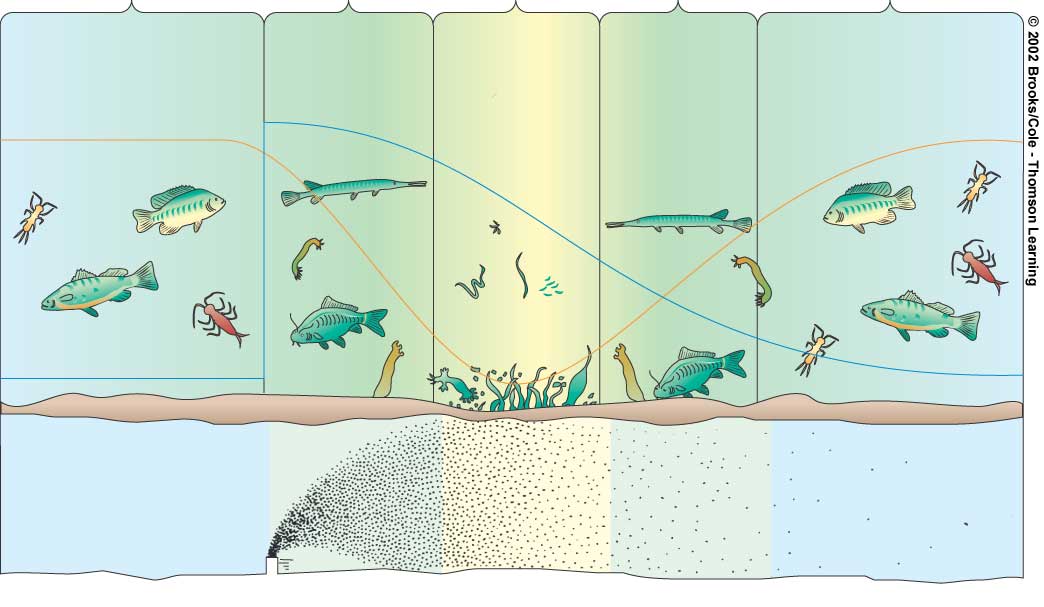
Chapter 14

1. Importance of Water for life:
2. Water Issues-
3. Quantity
4. Quality
5. Water Terms to Know
   1. Evaporation=
   2. Humidity=
   3. Condensation=
   4. Solution=
   5. Suspension=
   6. Fresh water=
   7. Salt Water=
   8. Brackish Water=
   9. Hard water=
   10. Soft Water=
   11. Polluted Water=
   12. Purified Water=
6. Purifying water - Processes
   1. Distilation
   2. Filtration
   3. Chemical Absorption
   4. Biological oxidation
   5. Disinfection
7. Water Pollution =
   1. Point source pollution
   2. Nonpoint sources –
8. Human Waste Water concerns:

**A. DO** =

BOD =

Oxygen Sag Curve -



**Clean Zone**

**Septic Zone**

**Recovery Zone**

**Clean Zone**

Normal clean water organisms

(Trout, perch, bass,

mayfly, stonefly)

Trash fish

(carp, gar,

Leeches)

Fish absent, fungi,

Sludge worms,

bacteria

(anaerobic)

Trash fish

(carp, gar,

Leeches)

Normal clean water organisms

(Trout, perch, bass,

mayfly, stonefly)

**8 ppm**

**Dissolved oxygen**

**Oxygen sag**

**2 ppm**

**8 ppm**

**Time of distance downstream**

**Direction of flow**

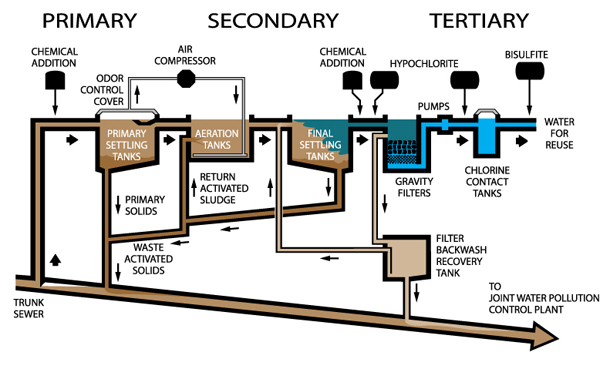
**B. Eutrophication**

Dead Zone =

1. **Disease and waste water**

Water Treatment for sewage

* 1. Septic Tanks
  2. sewage Treatment plants



* 1. Manure Lagoon-

1. Other pollutants
   1. Lead
   2. Arsenic
   3. Mercury
   4. Acids
      1. Acid Rain
      2. Acid Mine Drainage
   5. Synthetic Compounds
      1. Pesticides
      2. Pharmaceuticals and hormones
      3. Military compounds
      4. Industrial Compounds
2. Oil spills and Oil pollution
3. Other types of water pollution:
   1. Solid waste
   2. Sediments
   3. Thermal
   4. Noise
4. Preventing Water Pollution

|  |  |
| --- | --- |
| Nonpoint sources | Point Sources |
|  |  |
|  |  |
|  |  |

1. Water Pollutants

|  |  |  |
| --- | --- | --- |
| Pollutant | Source | Effects |
|  |  |  |
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|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

1. Bottled Water
2. Water Legislation

|  |  |  |
| --- | --- | --- |
| Year | Act or Bill | What it does: |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
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