

# **WATER POLLUTION and CONTROL**

## Eutrophication

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- Eutrophication is a process by which a water body slowly becomes rich in plant nutrients such as nitrates and phosphates due to soil erosion and run off from the surrounding land.
- Increasing human population, intensive agriculture and rapid industrial growth have led to an increasing release of domestic waste, agricultural residues, industrial wastes and land run-off into various water bodies.

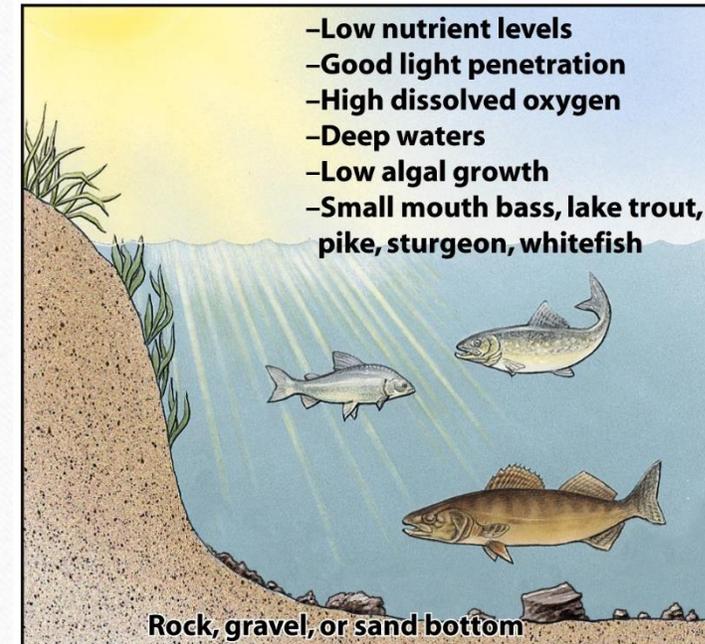
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- Dissolved oxygen is consumed in eutrophication process.
  - More and more organic matter enters a water body, more is the deoxygenation of the water body and larger is the production of nutrients. These nutrients fertilize an anourmous growth of algae and other large water plants.

- **Oligotrophic**

- Unenriched, clear water that supports small populations of aquatic organisms



**Oligotrophic lake**



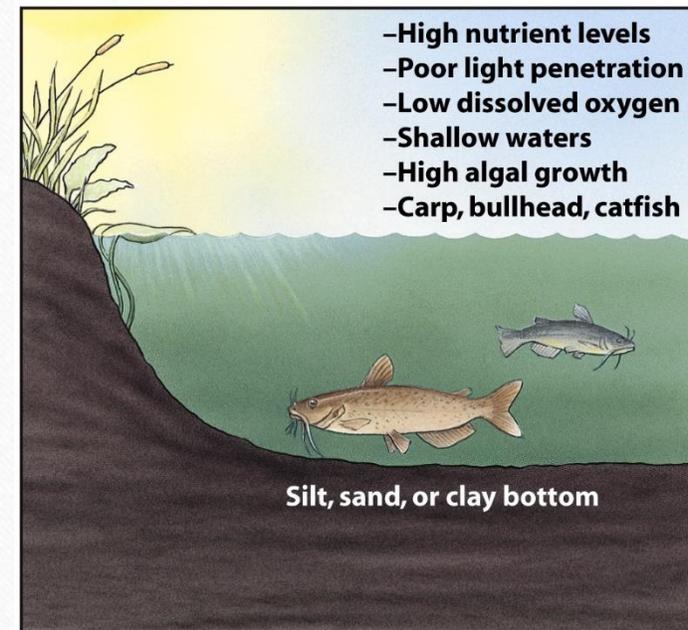
Taken from <http://www.nios.ac.in/media/documents/313courseE/L34.pdf>

- **Eutrophic-**

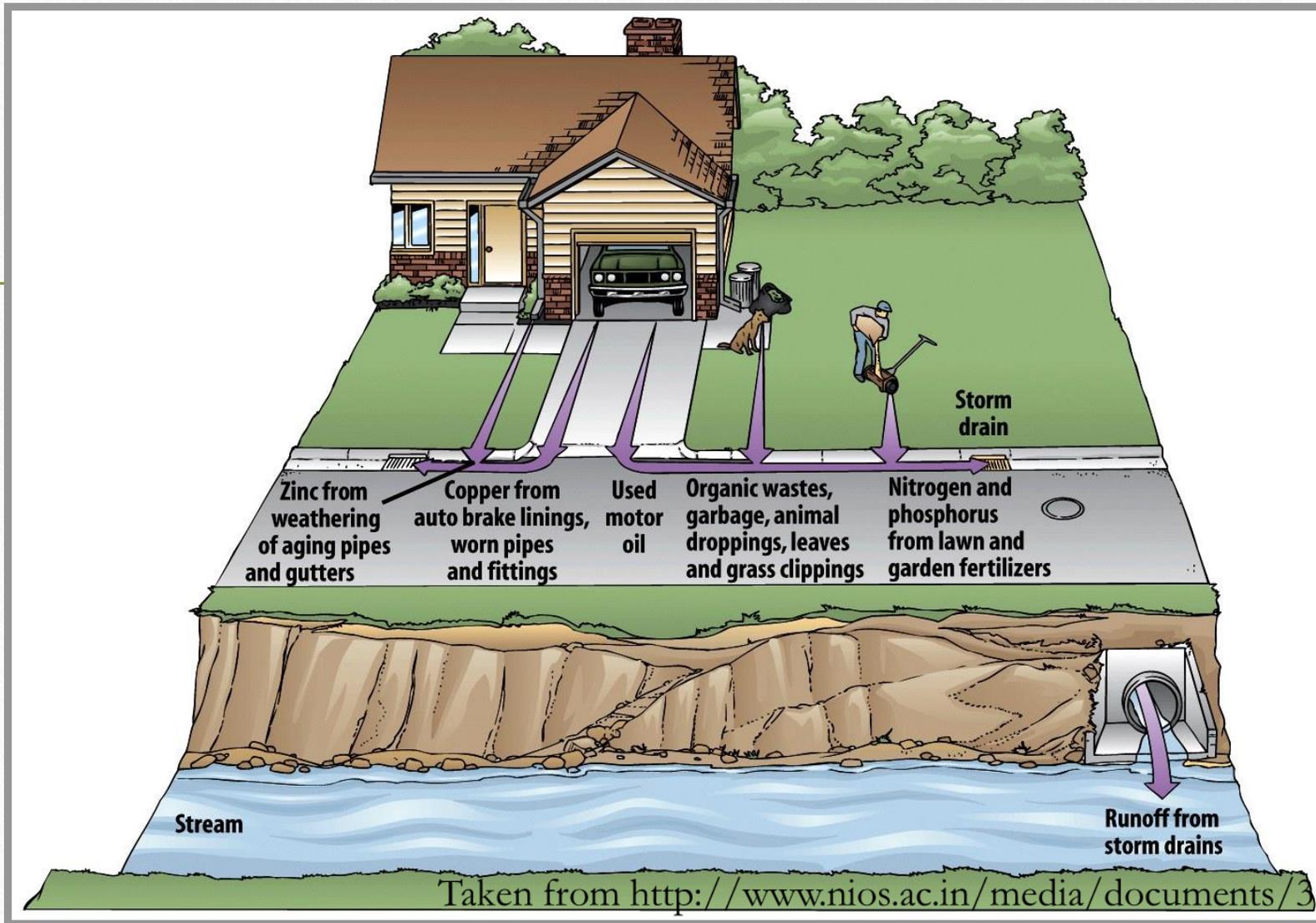
- Slow-flowing stream, lake or estuary enriched by inorganic plant and algal nutrients such as phosphorus
  - Often due to fertilizer or sewage runoff
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**Eutrophic lake**



Taken from <http://www.nios.ac.in/media/documents/313courseE/L34.pdf>



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- **Eutrophication of a water body results due to the release of large amount of nutrients by the action of aerobic bacteria on organic wastes entering a water body naturally or by human activity.**