Sedimentation

Lesson Four:
Sedimentation as Nonpoint Source Pollution

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Let's review what we have observed so far

- Dirty water and sedimentation
- Different types of soil are classified by particle size, amount of organic matter and mineral type
- Soils are part of the rock cycle that results from weathering
- Smaller particles of soil in water settle out more slowly than larger particles. Some are so small that they remain suspended in water

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Sedimentation

Why is sedimentation viewed as a nonpoint source of pollution?

Because sedimentation is detrimental to life.
How?

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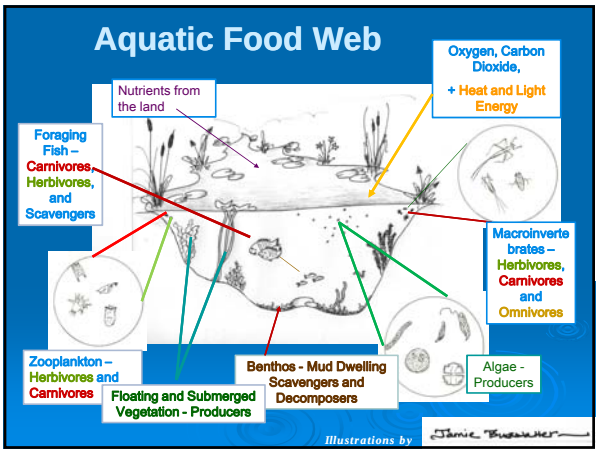

Let's review:

- What essential part of the ecosystem turns the energy from the sun into food for the animals?

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Plants

What do plants need to live?

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Plants need:

- Sunshine to carry out photosynthesis
- Water
- Soil (nutrients)
- Oxygen and carbon dioxide

- How does sediment effect these factors in an aquatic ecosystem?

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- Sediment in water reduces the sunlight that reaches the plants so the plants cannot make as much food for the rest of the ecosystem.

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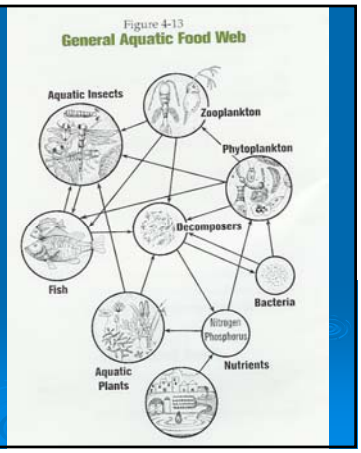
Remember that the organisms in an ecosystem are interdependent



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Animals

What do animals need to live?

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All animals, including aquatic animals, need:

- 1. FOOD
  - We have already seen how sediment reduces food
  - In addition, animals cannot see their food as well in cloudy water.
- 2. OXYGEN dissolved in water
  - Where does the oxygen come from?

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Oxygen in water

- Oxygen comes from the air
- It also comes from plants in the water when they carry out photosynthesis
- Since sediment in water reduces photosynthesis, it also reduces the oxygen in the water for the animals

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