


Sedimentation


Lesson 1: “Dirty” Water



Texas Stream Team
Caring for Our Waters

What will we study in this unit?


- Dirt (soil) in water
- Soil in the water is an important nonpoint source of pollution



Texas Stream Team
Caring for Our Waters

It's time for a demonstration

- In front of you, you have two containers
- How should you label these containers?



Texas Stream Team
Caring for Our Waters

What is sedimentation?

- *Sediment* is the dirt (soil) that goes into water and eventually settles down
- *Sedimentation* is the process of the soil going into the water
- *Total Suspended Solids* is how sediment is measured while suspended in water

 Texas Stream Team
Caring for Our Waters

What does sediment in water look like?



 Texas Stream Team
Caring for Our Waters

Water with very little sedimentation



 Texas Stream Team
Caring for Our Waters

Let's look back at the water containers:

- It is clear which container is "dirty" with soil
- Do we know for sure that the clear container has no pollution?

 Texas Stream Team
Caring for Our Waters

Water Pollution

- Pollution is anything in the water that is harmful to life
- Water pollution can come from different sources:
 - Point source
 - Nonpoint source

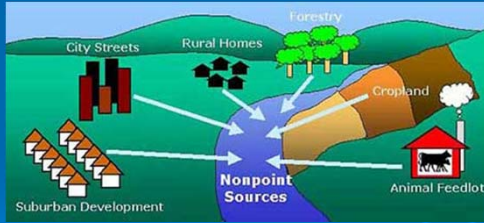
 Texas Stream Team
Caring for Our Waters

Point Source Pollution



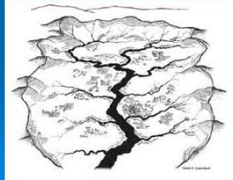
 Texas Stream Team
Caring for Our Waters

Nonpoint Source Pollution



Texas Stream Team
Caring for Our Waters

What is the word used to describe the area over which the runoff water from rain flows into a body of water (lake, river, stream)?



Texas Stream Team
Caring for Our Waters

Watershed

- All land is in a watershed of some body of water (stream, river, lake, ocean)
- A watershed is the area of land whose runoff water feeds a specific body of water
- Are we in a watershed?

Texas Stream Team
Caring for Our Waters

Sedimentation in a watershed

- Particulate matter (sediment) gets into the water from soils in the watershed
- There are many sources of sediment, and therefore it is a nonpoint source



Important terms:

- Sediment
- Sedimentation
- Pollution
- Nonpoint source pollution
- Point source pollution
- Watershed