

Sediment

# Where does sediment come from?

- Bare soil erodes when rain and snowmelt washes the surface away into drains, ditches and lakes and streams. This eroded soil is sediment.
- Even if there is not a body of water visible nearby, the sediment can run into a roadside ditch, farm drain, or a storm drain and make its way to lakes and streams.
- Plants hold the soil in place so it cannot be washed into a lake or stream by rain, but bare soil contributes sediment to a body of water because rain easily washes it away.

- Construction sites are a major contributor of sediment to lakes and streams.
- When land is cleared of vegetation to make way for development, soil is exposed and can be easily washed away by rainfall.
- All construction activities require a permit and a plan to prevent sediment from washing off their construction site.
- This usually includes the proper installation of a sediment fence and/or a buffer strip of vegetation between the bare soil and waterways, including storm drains.

- Farm fields and/or livestock pens can also contribute sediment to a body of water if there is soil exposed during a rainstorm.
- Farmers can prevent this by having buffer strip of vegetation between their fields and/or livestock pens and a lake or stream.
- Gullies and drain tiles in agricultural land can send a large amount of sediment to a river when it rains. This can be remedied by planting in the gullies so roots can hold the soil in place or redesigning tile outlets.

# Why is sediment a problem?

- Sediment is the most common pollutant in Michigan waterways.
- When fine sand and silt enter a river, they cloud the water, making it difficult for beneficial plants to grow and fish to survive.
- Sediment also covers up the gravel in the bottom of a stream, where many fish prefer to lay eggs, and where aquatic critters that serve as food for the fish prefer to live.
- Nutrients, such as phosphorus, and other forms of contamination also stick to the sediment and pollute streams.

# How can sediment problems be prevented?

- There are four simple steps you can take to prevent sediment pollution:
  - Plant native vegetation in areas where bare soil is exposed
  - Use vegetation buffer strips and silt fences to protect waterways
  - Never wash dirt or debris into a storm drain

**STORM DRAINS SUCH AS THOSE FOUND IN PARKING LOTS  
USUALLY GO DIRECTLY TO RIVERS AND STREAMS**



# EROSION FROM FARM FIELDS CAN POLLUTE STREAMS





# SILT FENCES HOLD SOIL DURING A RAIN EVENT



**THE FLINT RIVER NEAR ITS MOUTH IS FLOODED AND FULL OF SEDIMENT AFTER HEAVY SPRING RAIN**

