

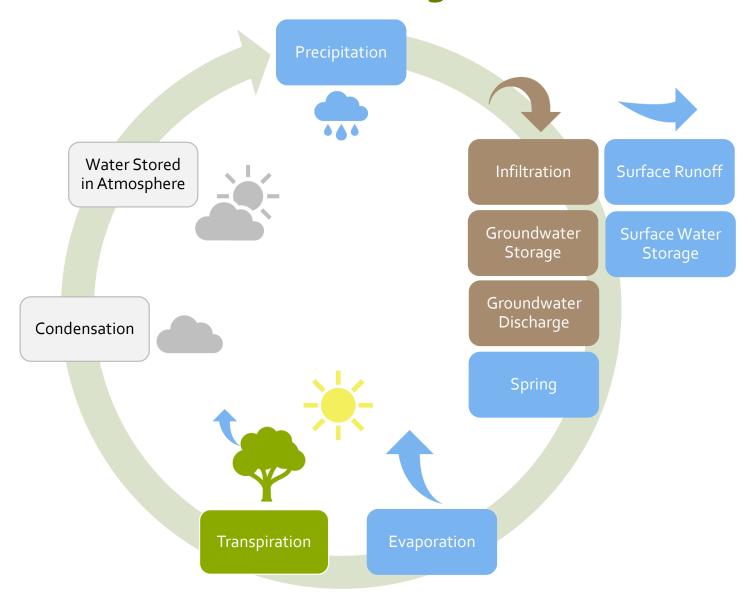
We All Live in a Watershed

Lesson One



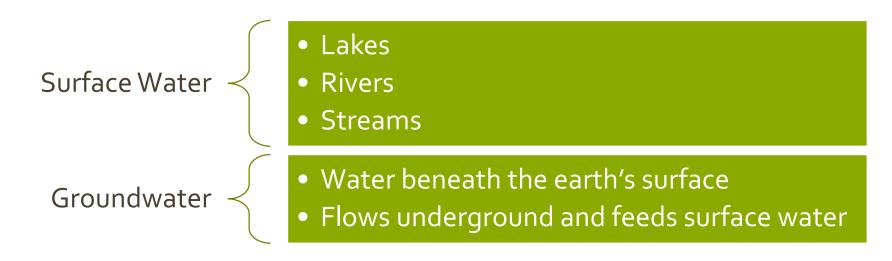


How does water move through the environment?



What is a Watershed?

- A watershed or drainage basin, is an area of land from which all water drains to a common waterway, such as a river, a lake or the ocean.
- Watersheds consist of all the surface water lakes, streams, reservoirs and wetlands and all the water held underground in soil or pores and crevices in rock as groundwater



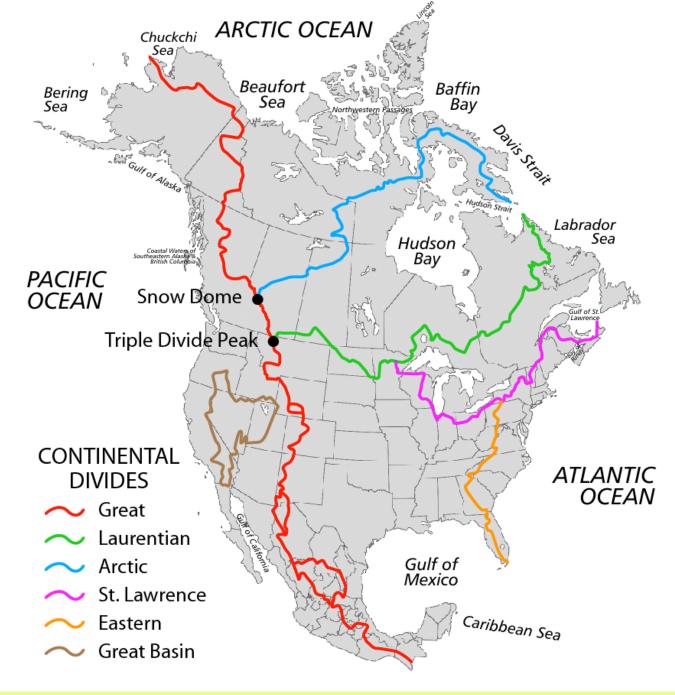
Why are watersheds important?

- They provide drinking water and water for recreation
- They provide food and water for plants and animals.
- We all live downstream and our everyday activities can affect downstream waters.



10/30/2018

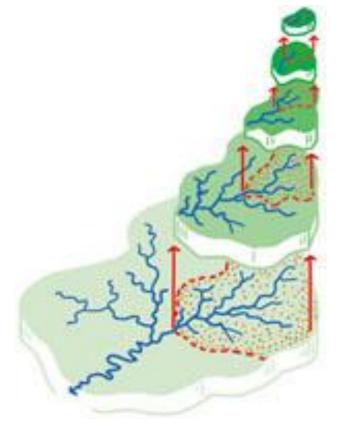
Watersheds can be very large!



Watersheds are nested

- The largest watersheds are called Regions e.g. Mid Atlantic
- Subregion
- Basin
- Subbasin
- Watershed
- Subwatershed



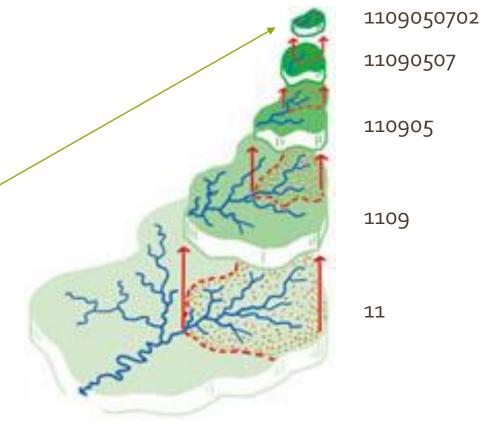


Source: Marsh, 1998 p.170

Hydrologic Unit Codes (HUC)

Used to identify drainage areas

- Regions (2 digits)
- Subregion (4 digits)
- Basin (6 digits)
- Subbasin (8 digits)
- Watershed (10 digits)
- Subwatershed (12 digits)



Source: Marsh, 1998 p.170

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Discover your watershed

- Discover Your Watershed Worksheet
- https://streamstats.usgs.gov/ss/

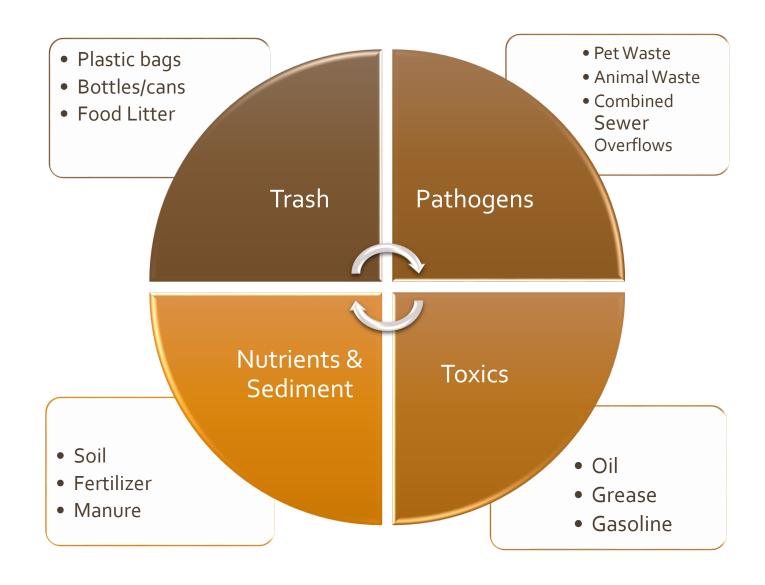


Sources of Pollution

Lesson Two



Examples of Pollutants in Watersheds



Where does the pollutant come from?

Point Source

• A source of pollution that comes from a specific identifiable source.

Non-point Source

• A combination of pollutants from a large area rather than from a specific identifiable source.





What are possible pollutants?



What are possible pollutants?







What are possible pollutants?



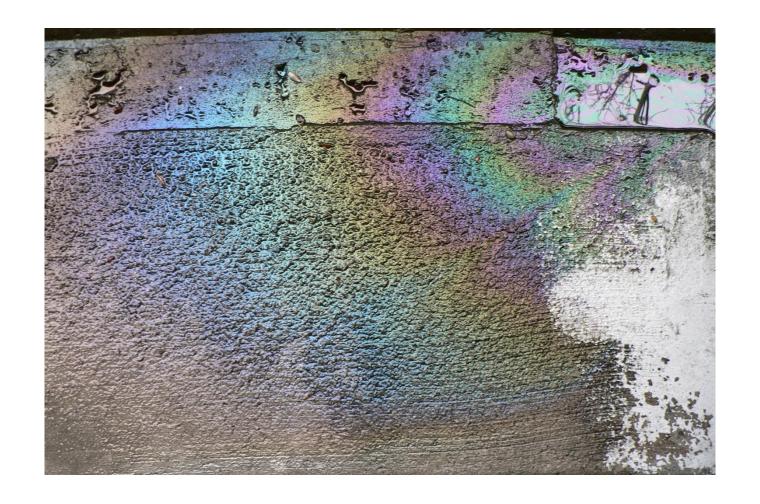
What are possible pollutants?



Photo from EPA.gov/npdes



Photo by Bill Stangler, SCPR



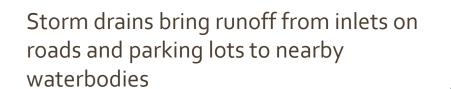


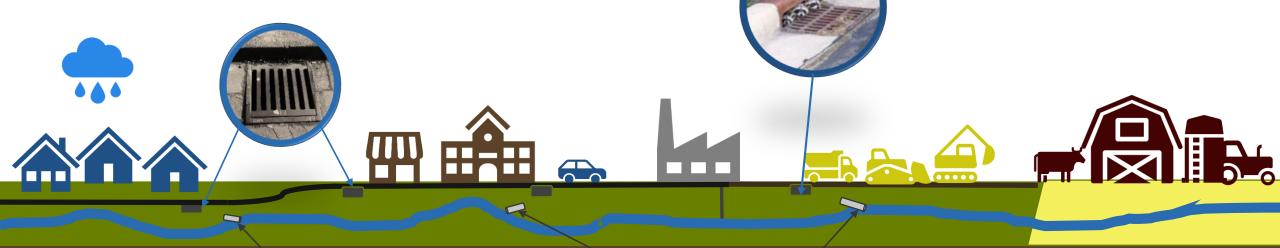


Pollution Prevention

Lesson Three









Runoff enters the stream through storm drains at outlets/outfalls



Restore streambanks and plant riparian buffers

- -Prevent erosion by stabilizing banks
- -Flood protection
- -Provide habitat
- -Remove pollutants



-Place fences to prevent erosion of streams and construction sites









- -Properly throw away litter
- -Pick up pet waste
- -Compost yard waste

Build Green Infrastructure









Slow down, collect, and infiltrate stormwater runoff

- -Rain barrels
- -Stormwater planters
- -Green roofs
- -Rain Gardens
- -Pervious Pavers

Use Best Management Practices (BMPs) to control water pollution in your watershed



Is it easier to take pollutants out of the water or prevent them from getting into water?

