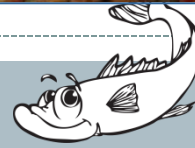


Davidson County Citizens For Improving Stream Health DC FISH



**We All Live in a
Watershed**





We All Need Clean Water

- Drinking
- Fish and wildlife
- Irrigating crops
- Recreation activities
- Energy

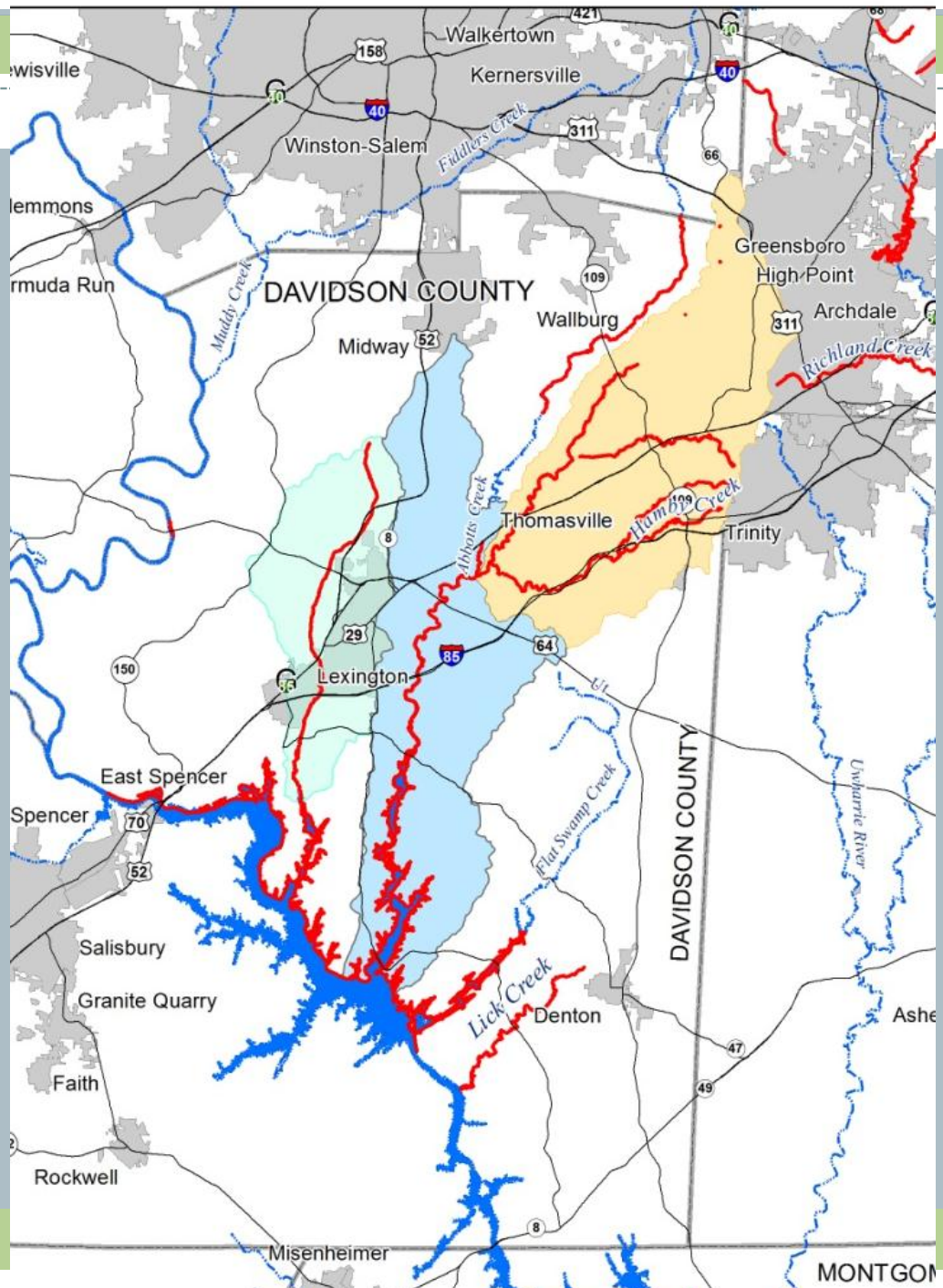
“Impaired” means it is not meeting one of those functions.





Davidson County Impaired Waters

Davidson County has
91 miles of streams
and 11 square miles of
impaired lakes
including High Rock
Lake



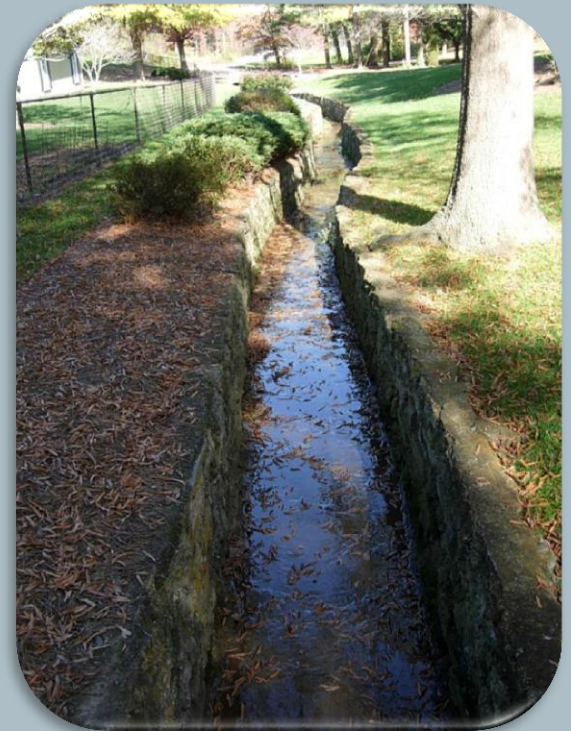


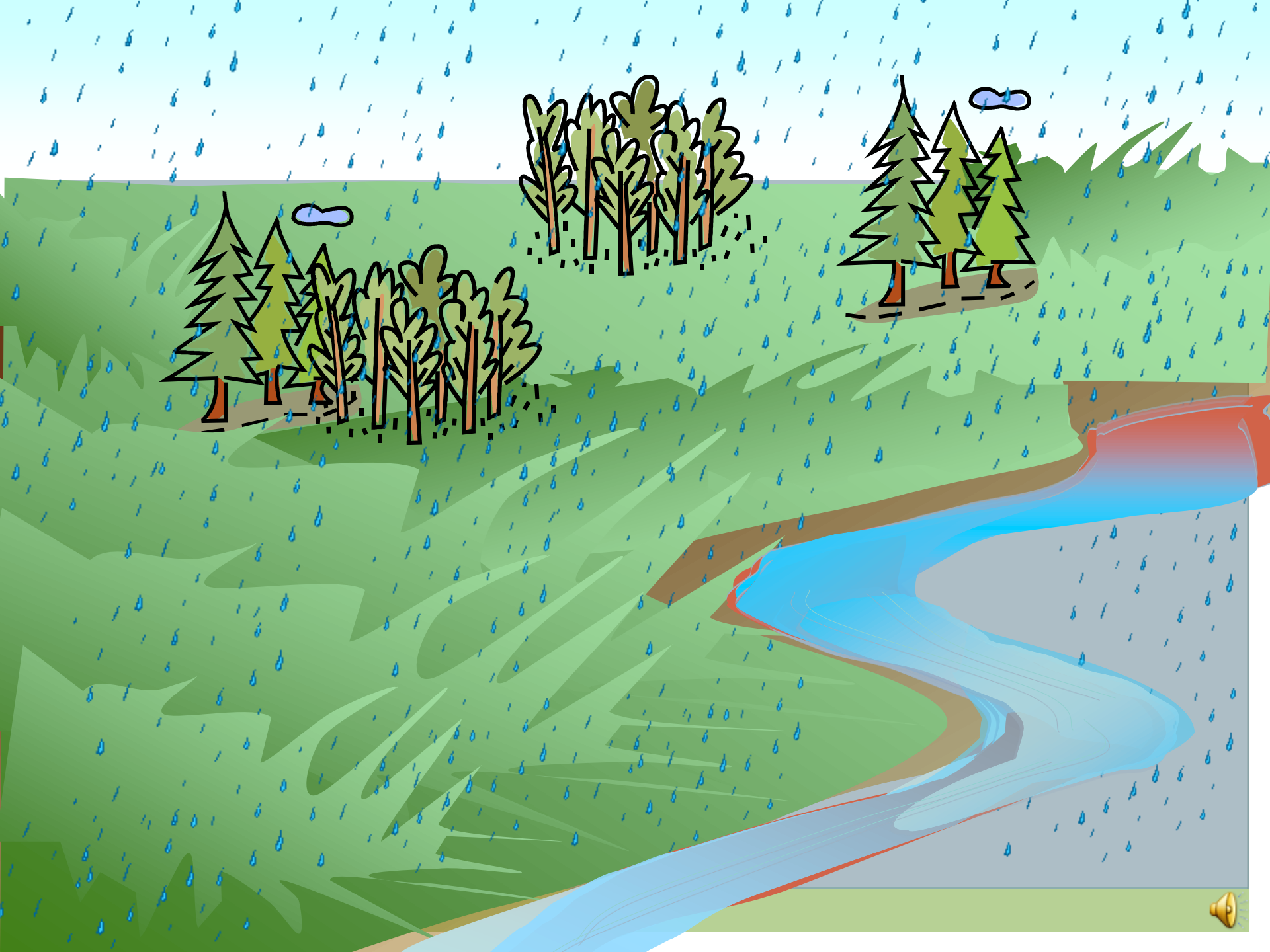
Lower Abbotts Creek Impairment

Turbidity

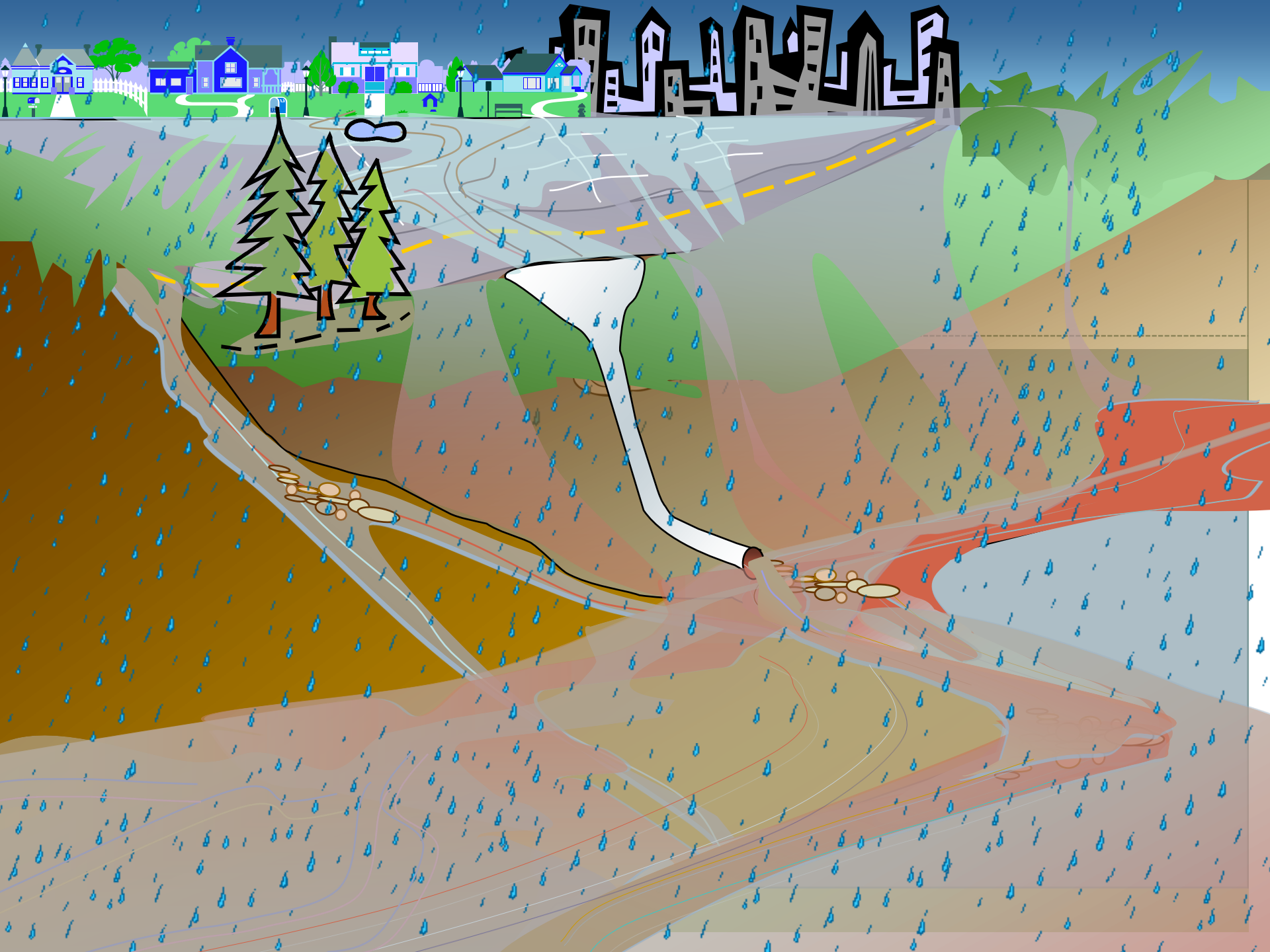
*Poor
Habitat*

*Chlorophy
ll-a*











The cost of stress is no reproduction.



Environmental Stressors

Polluted Runoff

- Nutrients
- Bacteria
- Sediment

Sewage Overflow and spills

- Clogged pipes





The cost of sediment pollution is estimated at \$16 billion every

Sediment Just Dirt, right?

- Smothers Fish Eggs
- Prevents Photosynthesis
- Removes habitat (Riffles)
- Drinking Water
- Recreation





*# 1 complaint by
Davidson County
Residents*



Trash

- Attracts disease-carrying mosquitoes or rodents
- Leaches Chemicals into the ground and water
- People are injured
- Wildlife mistakes litter for food





24,649 dogs in Davidson County = 2,968,972 lbs of raw sewage a year

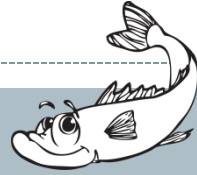
Nutrients

Are good, right?

- Photosynthesis reduced
- Low Oxygen results
- Dead Zones
- Recreation degraded



Ways to Measure Stream Health



Chemical tests

pH, turbidity, dissolved oxygen, temperature.

Visual survey

Bank erosion, vegetation, tree cover/shade, woody debris

Biological survey

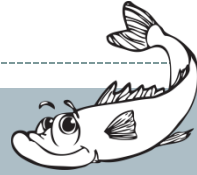
Aquatic macroinvertebrates – snails, crayfish, worms, insect larvae



Photo: USGS



Chemical Measures of Stream Health



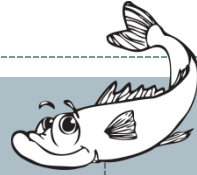
- Turbidity
- Bacteria
- Nutrients
- Dissolved Oxygen
- Toxic Substances
- pH
- Temperature



Photo: USGS



Visual Measures of Stream Health



- Riffles
- Pools
- Erosion
- Tree Cover
- Pollution Sources

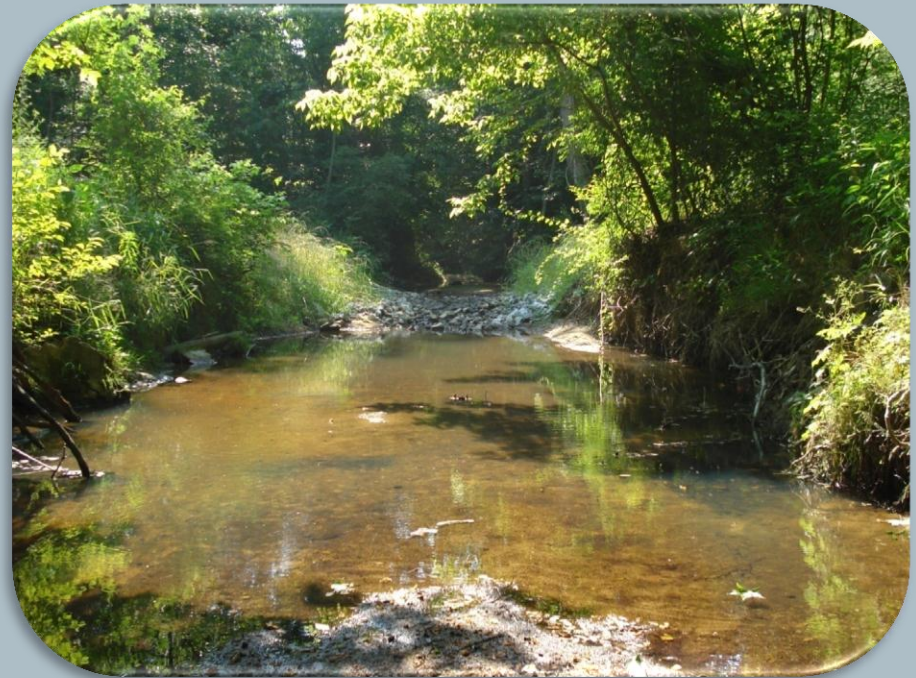
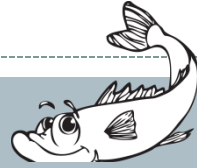


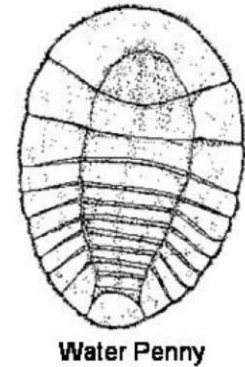
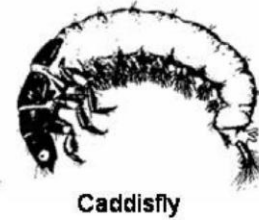
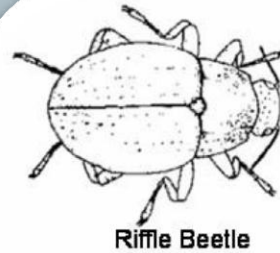
Photo: PTRC

Biological Measures of Stream Health

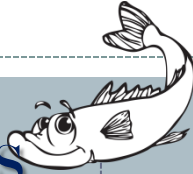


- **Biological Indicators**

- **Polluted**
- **How long?**



Pollution Tolerant Species



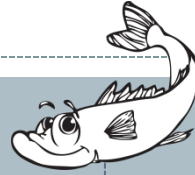
- **Rat-tailed maggots**
 - **Breathe air**
- **Midges**
 - **High levels of hemoglobin**
- **Aquatic Worms**



Photos: Haw River Assembly

Facultative Species

- Can tolerate some pollution



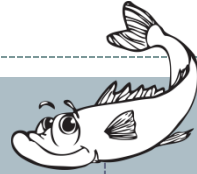
Damselfly Larvae



Dragonfly Larvae

Photos: Haw River Assembly

Pollution Intolerant Species



- **Pollution intolerant**

Mayfly Larvae

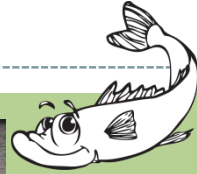


Photos: Haw River Assembly



Caddisfly Larvae

Opportunities to get involved



- Make choices that keep pollution out of our water
- NC Big Sweep
- NC Stream Watch- DC FISH



Davidson County Citizens For Improving Stream Health DC FISH



PIEDMONT TRIAD REGIONAL COUNCIL

336.294.4950

WESTERN OFFICE

400 West Fourth Street
Suite 400
Winston-Salem

EASTERN OFFICE

2216 West Meadowview Road
Suite 201
Greensboro

