What is Erosion and Sedimentation Control?

North Carolina Pipeline Watch: An initiative by Sound Rivers, Sierra Club, Winyah Rivers Alliance, and Cape Fear River Watch

What is Erosion?

- Erosion is when soil particles loosen and move due to wind, water, and gravity.
- Natural erosion is geologic erosion, which occurs slowly and has shaped the landscape around us.
- Accelerated erosion from construction activities is NOT natural.
- Accelerated erosion happens due to disturbed land, by activities like construction that loosen and move soil more than usual, and at a faster rate than normal.
- Accelerated erosion due to construction can strip the land of vegetation and topsoil which causes sediment to enter our swamps, creeks and rivers.

Accelerated Erosion





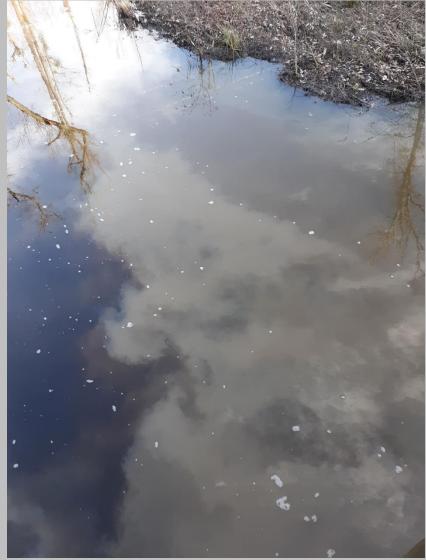
Photos Michael Mullen and Trout Unlimited

What is Sedimentation?

- Sedimentation is when soil that is eroded from the land is deposited into our swamps, creeks and rivers.
- Sediment builds up in the bottom of swamps, creeks and rivers.
- Sediment can decrease oxygen in our waterways, which can smother fish and the plants and animals they eat.
- Sediment can build up in the bottom of our waterways, decreasing how much water our swamps, creeks and rivers can hold, which can increase how often and how bad our waterways flood.
- **Sediment** in our water supply makes treating drinking water more expensive.
- Sediment causes our blackwater swamps, creeks and rivers to turn tan/brown and look cloudy.

Sedimentation in Waterway





Controlling Erosion and Sediment

- Best Management Practices (BMPs) are used to control erosion and sedimentation from construction.
- BMPs help to prevent erosion and/or keep eroded sediment from being washed into our swamps, creeks and rivers.
- BMPs help reduce the amount of sediment headed for our waterways.
- BMPs used properly help protect our water quality.

Some BMPs We Are Watching

- Buffer Zones
- Ground Cover
- Proper Construction Entrances
- Silt Fencing
- Wattle

Natural Buffer Zones Around Pipeline Site



Natural Buffer Zones Around Pipeline Site



Ground Cover – Construction Matting



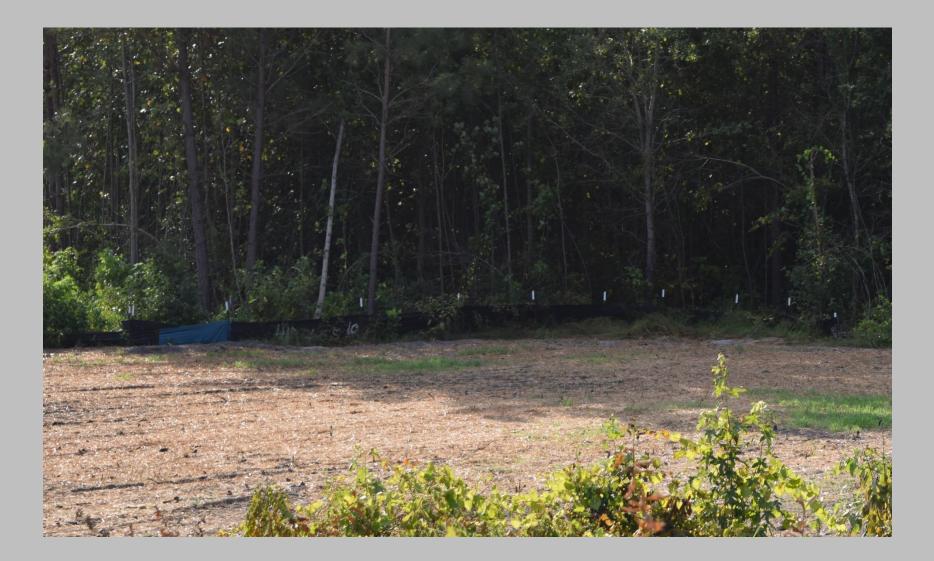


Photos Trout Unlimited

Construction Entrances



Silt Fences



Wattle



North Carolina Pipeline Watch

- Watch for impacts of pipeline construction on waterways in NC watersheds.
- Hold accountable the fossil fuel companies doing pipeline construction.
- **Recruit** Volunteers to help identify and report pollution issues during construction.
- Experts will follow up on your reports, interact with agency staff, push for strong enforcement response, and work with the media to highlight issues.

North Carolina Pipeline Watch

- Website: <u>http://ncpipelinewatch.org</u>
- Contact NC Pipeline Watch at (252) 495-8687 or <u>info@ncpipelinewatch.org</u>
- In the Lumber River watershed, please contact your Lumber Riverkeeper, Jeff Currie, at <u>LumberRK@winyahrivers.org</u>