



January 2011

Total Suspended Solids (TSS)



What are they?

Solid materials, including organic and inorganic, that are suspended in the water. These would include silt, plankton,

Why test for them?

High concentrations of suspended solids can lower water quality by absorbing light. Waters then become warmer and lessen the ability of the water to hold oxygen necessary for aquatic life. Because aquatic plants also receive less light, photosynthesis decreases and less oxygen is produced. The combination of warmer water, less light, and oxygen makes it impossible for some forms of life to exist.

Suspended solids affect life in other ways. They can clog fish gills, reduce growth rates, decrease resistance to disease, and prevent egg and larval development. Particles that settle out can smother fish eggs and those of aquatic insects, as well as suffocate newly-hatched larvae. The material that settles also fills the spaces between rocks and makes these microhabitats unsuitable for various aquatic insects such as, mayfly nymphs, stonefly nymphs, and caddisfly larva.

Where do they come from?

Suspended solids can result from erosion from urban runoff, agricultural land, industrial wastes, bank erosion, bottom feeders (such as carp), algae growth, or wastewater discharges.



How can we prevent them from entering our surface waters?

Protection of the land in our watershed from erosion, by use of conservation tillage measures and giving urban runoff time to settle out before reaching our surface waters.

For more information about the Nonpoint Source Pollution Management Program contact:
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