# Timber Harvesting Effects on Sediment Accumulation After Sixteen Years. (S10-aust141141-Oral)

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## Abstract:

Riparian forests have the potential to remove sediments from overland flow and overbank flooding, thereby improving water quality. In 1985 a long-term study was established to evaluate the effects forest harvesting on soil, hydrologic, and vegetative properties in a tupelo (Nyssa aquatica)-baldcypress (Taxodium distichum) swamp. The study took place in a deltaic, red river bottom within the Mobile-Tensaw River Delta in southwestern Alabama. The site experiences multiple overbank floods annually. After one year of baseline data collection, nine replications of three disturbance treatments were installed immediately adjacent to a refernce area. Disturbance treatments were helicopter harvest, skidder harvest, and total vegetative removal with herbicides. Sediment rods were installed and monitored for 16 years. All disturbance treatments have trapped significantly more sediment than the forested reference, primarily because of the dense herbaceous layer that has developed within the stands.

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