



THE TRUTH ABOUT FOREST MANAGEMENT AND WATER QUALITY

PROFESSIONAL FOREST MANAGEMENT

*protects water for fish,
people and wildlife*

While forests cover only about a third of the nation's land, they produce nearly 80 percent of America's freshwater resources. Watersheds are areas where natural drainage patterns direct precipitation into underground or above-ground bodies of water. Many Indiana residents receive their drinking water from forested watersheds.

As water travels through watersheds, it can cause erosion, which describes a process through which soil particles are detached and moved. Strategies to minimize erosion during forest management help protect the quality of fresh water.

PROFESSIONAL PRACTICES PROTECT WATER QUALITY

- Forest Best Management Practices (BMPs) used by foresters are a foundation for water-quality protection and provide guidelines during forest operations to minimize impacts on soil and water quality.
- Forestry BMP monitoring has shown these practices have very high rates of application and effectiveness in Indiana forests.
- Herbicides used by professional foresters are highly targeted and short-lived, posing minimal threats to aquatic organisms.
- Prescribed fire is used for wildlife habitat improvement and ecosystem restoration. Prescribed fires in Indiana forests are low intensity and cause minimal impacts to water quality.

FORESTS RECOVER QUICKLY

- Where timber is harvested, much of the surface of the soil remains undisturbed.
- Just 2 to 10 percent of soil in the harvested area is disturbed, according to a study of timber harvests on Indiana state forest properties, generally below the standards set by the U.S.D.A. Forest Service.

EROSION IS MINIMIZED IN INDIANA

- Most harvests remove single or small patches of trees at a time, which leaves canopy cover over streams, and results in less soil disturbance and smaller increases in water runoff.
- Reforestation in Indiana generally occurs from natural regeneration, allowing existing seedlings and understory to grow and establish the next generation of forest, and requiring less manipulation of soil.

Two Types of Water

Indiana's water supply includes two types of water. Surface water is the visible water that flows over the ground into streams, rivers, and lakes. Groundwater describes water beneath the surface.

As precipitation seeps into the ground, the water is filtered as it travels through rocks, soil, and roots. The groundwater returns to the surface through springs, seeps, and wells.

The majority of compounds that present a documented threat to drinking water quality are associated with agricultural and urban land-use applications rather than forestry.

– U.S. GEOLOGICAL SURVEY

Maintaining healthy and diverse forests, avoiding land use conversion to agricultural and urban land-use applications rather than forestry, and maintaining forested buffers along our stream channels are keys to good water quality.

IN Forests Forever is a coalition of wildlife and forestry organizations with a common interest in supporting the health of Indiana's forests and the use of science-based management to sustain and enhance those forests and the wildlife they support. We are committed to increasing public understanding of Indiana's wonderful woodlands, and supporting the use of the most current science and firsthand experience to manage them for the benefit of all.