

What are BMPs?

Best Management Practices (BMPs) are proper forest stewardship practices to follow during any forestry activity to protect the water quality of nearby streams, lakes or ponds.

The Kentucky Forest Conservation Act (KRS 149.344) requires loggers to use appropriate BMPs. Scientific research has determined that the following four areas associated with timber harvesting operations have the greatest impact on water quality:

- **Log Landings**
- **Access Roads and Skid Trails**
- **Stream Crossings**
- **Streamside Management Zones (SMZs)**

Log Landing Assessment:

- Should be located away from streams, lakes or ponds.
- Should have good drainage and sunlight.
- Should be free of trash and hydraulic fluids.
- Should be seeded when no longer active.



A properly retired landing such as this can provide valuable wildlife openings and food.



Log Landings such as this are not only an eye sore but will likely cause water quality problems.

Access Road/Skid Trail Assessment:

- Should be planned and laid out in advance.
- Should be located away from streams and lakes.
- Grades should be kept to a minimum.
- Water control structures must be installed where erosion may occur, these include:
 - Water bars (after use).
 - Broad-base dips.
 - Slope road surfaces (out-slope, in-slope with cross drains and crowning).
 - Turnout ditches.
- Should be avoided when conditions will likely cause excess rutting.
- Steep slopes or highly erodible areas should be seeded when no longer active.
- Access should be restricted once roads are retired.



Roads that are placed on contours help reduce road grade and erosion potential.



Water bars should be angled downhill, and the outlet should be clear of any debris.



Broad-based dips are well suited for roads that will remain open after the timber harvesting operation.



Lack of water control structures washed out this road.



Seeded roads can be valuable for wildlife.



Road lacks water control structures and was used in wet conditions.

Stream Crossings Assessment:

- Roads and skid trails should cross at right angles.
- Bridges and culverts should be used where possible.
- Fords should only be used on streams with firm bottoms and stable banks.
- Stream crossings should be kept to a minimum.



Portable bridges cause the least amount of stream disturbance.



Fords with hard bottoms and stable banks are an acceptable stream crossing method.



To be effective, culverts must be properly installed, large enough to handle the water flow, and be kept free of debris.



A ford was used at this stream crossing. The sediment and rutting makes it evident that a bridge or culvert should have been used.

Streamside Management Zones (SMZ) Assessment:

- A minimum of 50 percent of the overstory should be left on streams that flow year round.
- SMZ should be 25' - 60' wide depending on slope or stream type.
- Machinery should be kept out of the SMZ as much as possible.
- Tree tops should not be left in streams.



Buffer strips such as the one left in this harvest help cool water temperatures and filter out sediment.

Glossary:

- **Access Road** - Road used to haul logs from the landing to the main road.
- **Ford** - Low water stream crossing suitable for light vehicle traffic.
- **Grade** - Steepness of the road.
- **Log Landing** - Place where logs or tree-length material is processed for loading and transporting.
- **Skid Trail** - A temporary trail over forest soil for dragging felled trees to the landing.
- **Streamside Management Zone** - A strip of woodland adjacent to a stream where only limited disturbance is desirable.

For more information on best management practices contact your local Kentucky Division of Forestry office or call 1-800-866-0555.



627 Comanche Trail
Frankfort, KY 40601
Phone: 1-800-866-0555
Fax: 502-564-6553
<http://forestry.ky.gov>



Forestry Best Management Practices (BMPs):

What Landowners Should Know



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