

North Carolina Department of Environment and Natural Resources
Division of Forest Resources
Forest Management
2006-2008

BMP Implementation Survey Form

Part I. General Information

Date: _____ County _____ District # _____ Region # _____
River Basin _____ # Acres in Harvest Operation _____
Name of Adjacent Highway _____ Location (Lat/Long) _____
Inspector Name _____

Logger Name: _____ Company Name: _____
Logger Address: _____

Home Phone: () _____ Work Phone: () _____

Ownership (check one): Government Private Non-industrial Private Industrial

Technical forestry assistance was provided for the harvest by (check all that apply):
 DFR Forester/Technician Industrial Forester Forestry Consultant None Received
 Timber Buyer Unknown Other _____

Is logger/contractor a graduate of the NCFA ProLogger Program? Yes No
(If Yes, answer questions below. Answer if logger onsite, otherwise CO will obtain information.)
Approximate month/year graduated _____ Course location _____

Logger has DFR reference material on-site: Yes No (If Yes, check all that apply)
 1989 Forestry BMP Manual 2006 Forestry BMP Manual (Desktop Pocket guide)
 Wetland Forestry BMP Manual BMP Checklist for Forest Harvest Operations
 FPG Booklet/Regulations Other Guidance Material: _____

DFR personnel notified of the logger's intent to harvest: County District None

Did the logger see a written Pre-Harvest Plan? Yes No
Pre-Harvest Plan completed by: Consultant DFR Staff
 Timber Buyer (Company) Other _____

Estimated completion (%) of harvest operation at time of survey:
 0-25% 25-50% 50-75% 75-100% complete

Comments: _____

Part II. Site Information and Characteristics

- Dominant forest management type prior to harvest treatment (check one):
 - Intensively Managed Forest
 - Passively Managed Forest
- Dominant Land Feature (check one):
 - Wetlands
 - Pocosin or Bay
 - Flatwoods
 - Rolling
 - Foothills
 - Mountain
 - Other: _____
- Physiographic Province (check one):
 - Coastal Plain
 - Piedmont
 - Mountain
- Principle Soil Class (check one):
 - Clay
 - Clay-loam
 - Loam
 - Sandy-clay-loam
 - Sandy-Loam
 - Sandy-clay
 - Sand
 - Organic
- Estimated slope of harvested/treated area **approaching predominant waterbody** (circle one):
 - 0-5%
 - 6-10%
 - 11-20%
 - 21-45%
 - 46+%
- Soil erodibility Class (circle one):
 - A - (LOW)
 - B - (MODERATE)
 - C - (HIGH)
- Soil Erosion Type **observed near waterbody**:
 - Sheet
 - Rill
 - Gully
 - Wind
 - None Observed

Part III. Forestry Operations

- Timber Harvest Method (check one – most applicable):
 - Clearcut
 - Selection (e.g. diameter limit)
 - Salvage Cut
 - Thinning
 - Seed tree / Shelterwood
 - Croptree Release
 - Other _____
- Primary (merchantable) timber species harvested:
 - N/A
 - Other Pine species & Mixed Pine
 - Loblolly Pine
 - Cypress/Juniper
 - Longleaf Pine
 - Hardwood species
 - Eastern White Pine
 - Pine-Hardwood Mix
- Primary Cutting Operation:
 - Chainsaw
 - Feller-buncher
 - Boom mounted cutting head
 - Other _____
 - Equipment has: Rubber Tires
 - High-flotation Tires (wide or doubles)
 - Tracks
 - N/A
- Primary Yarding System:
 - Cable skidder
 - Grapple skidder
 - Forwarder
 - Helicopter
 - High-lead
 - Other _____
 - Equipment has: Rubber Tires
 - High-flotation Tires (wide or doubles)
 - Tracks
 - N/A
- Are Forestry Roads present in Wetlands on this site? Yes No

6. If "Yes", do they appear to be in compliance with US Army Corps' 15 Mandatory Guidelines for Forest Roads in Wetlands? Yes No

NOTE: Wetland jurisdiction belongs to the US ACE, and in some cases NC DWQ. If you suspect that a site may not be in compliance with the above guidelines, you should inform the land owner about the potential problem in writing and urge them to make contact with the appropriate agency directly for guidance. It is not within DFR's authority to recommend or require any corrective action - refer to policy and procedure (4809) or contact your line supervisor with any questions.

7. Are Stream Crossings present on this site? Yes No -- If "Yes", how many? _____

Part IV. BMPs Applicable to Operations

BMP Description	Check if BMP applies*	Go To Page
Streamside Management Zones (SMZ)		
• SMZ Width	<input type="checkbox"/>	7
• SMZ Conditions	<input type="checkbox"/>	8
• Stream Temperature	<input type="checkbox"/>	8
Debris Entering Stream	<input type="checkbox"/>	9
Waste Entering Stream	<input type="checkbox"/>	9
Roads, Skid Trails, & Stream Crossings		
• Permanent Forest Roads	<input type="checkbox"/>	10
• Skid Trails	<input type="checkbox"/>	11
• Stream Crossings	<input type="checkbox"/>	12
• Access Road Entrances	<input type="checkbox"/>	13
Rehabilitation of Project Site	<input type="checkbox"/>	13

***Note: For the purpose of this survey, the DFR "surveyor" determines which BMPs apply, not the logger or landowner. Avoid bias resulting from the presence of BMPs that are not applicable and vice versa.**

Please indicate below the phase of the operation:

- Pre-harvest Planning
 Pre-harvest Planning/Logging Operation
 Logging Operation
 Logging Operation/Project Closeout
 Project Closeout
 Site closed / inactive

State and Local Buffer Protection Rules: Presently, there are state-mandated forest harvest compliance requirements for the Neuse and Tar-Pamlico River basins, a portion of the Catawba River Mainstem and the Randleman Watershed. This survey contains questionnaire components that address the above Four (4) rules only. Other specific watershed, stream, and local buffer rules and tree ordinances exist within NC that are not addressed in this survey. Should you be aware of additional buffer rule or tree ordinance applicability when completing this survey, please identify the following: (*Note: The purpose of this inquiry is to identify the rule/ordinance existence for information management; determining compliance for the purposes of this survey is not required.*)

Government Entity: _____

Applicable Ordinance (Including codification) _____

Other Comments: _____

If harvest operation is in the Neuse River Basin / Tar-Pamlico River Basin answer the following:

For Perennial Streams*

Fifty-foot SMZ width present: Yes No N/A

In first ten feet of Zone 1, "selective harvest" in compliance with Neuse/Tar-Pam Buffer Rule: Yes No

In outer twenty feet of Zone 1, "selective harvest" in compliance with Neuse/Tar-Pam Buffer Rule: Yes No

In twenty-feet of Zone 2, ground cover is in compliance with Neuse/Tar-Pam Buffer Rule: Yes No

For Intermittent Streams*

Fifty-foot SMZ width present: Yes No N/A

In first ten feet of Zone 1, "selective cut" in compliance with Neuse/Tar-Pam Buffer Rule: Yes No

In outer twenty feet of Zone 1, "selective cut" in compliance with Neuse/Tar-Pam Buffer Rule: Yes No

In Zone 2, ground cover is in compliance with Neuse/Tar-Pam Buffer Rule: Yes No

For Perennial Waterbody*

Fifty-foot SMZ width present: Yes No N/A

In first ten feet of Zone 1, "selective cut" in compliance with Neuse/Tar-Pam Buffer Rule: Yes No

In outer twenty feet of Zone 1, "selective cut" in compliance with Neuse/Tar-Pam Buffer Rule: Yes No

In Zone 2, ground cover is in compliance with Neuse/Tar-Pam Buffer Rule: Yes No

*Do not transfer responses to Overall BMP Implementation Summary page.

Note: The Neuse and Tar-Pamlico Buffer Rules require that the property be under present use valuation or managed according to a forest management plan prepared or approved by a registered professional forester. Within the first 10 feet of Zone 1, selected high value trees (defined within the rule) may be cut, so long as the tree has no exposed primary roots in the streambank. In the outer 20 feet of Zone 1, up to 50% of the trees greater than 5 inches in DBH may be removed, with reentry no more frequent than 15 years. In plantations, reentry is allowed every 5 years. In Zone 2, harvesting and regeneration is allowed provided that sufficient ground cover is maintained to provide for diffusion and infiltration of surface runoff. Please consult the buffer rules for further details or call the Central Office staff. If buffer rule violations are suspected, follow DFR policy and procedure. Contact your ADF and the Wetlands and Water Quality Staff Forester for guidance before making a referral to DWQ.

Comments: _____

If harvest operation borders the mainstem of the Catawba River and/or mainstem lakes including Lake James, Lake Rhodhiss, Lake Hickory, Lookout Shoals Lake, Lake Norman, Mountain Island Lake, and Lake Wylie (NC portion) answer the following:

For Zone 1*

Thirty-foot SMZ width present: Yes No N/A

**In first ten feet of Zone 1, "selective harvest" in compliance with Catawba Buffer Rule:
 Yes No

**In outer twenty feet of Zone 1, "selective harvest" in compliance with Catawba Buffer Rule:
 Yes No

Specific Harvest Requirements For Zone 1**:

Timber felling has been directed away from the waterbody:
 Yes No N/A

Tracked and wheeled vehicles have been kept out of the buffer except at stream crossings:
 Yes No N/A

Skidding, by alternative methods, has been directed away from the waterbody in a manner that minimized soil disturbance and is in compliance with the FPGs:
 Yes No N/A

Logging decks and sawmill sites are located outside the buffer:
 Yes No N/A

For Zone 2*

Twenty-foot SMZ width present: Yes No N/A

Specific Harvest Requirements For Zone 2:

Harvesting and regeneration of Zone 2 is in compliance with the FPGs.
 Yes No N/A

*Do not transfer responses to Overall BMP Implementation Summary page.

****Note:** The Catawba Buffer Rule establishes a 50-foot buffer width divided into two zones; Zone 1 (closest to the waterbody) being 30-feet and Zone 2 being 20-feet. Selective harvesting requirements allows removal of individual high value trees (trees greater or equal to 18 inches stump diameter for both pines and hardwoods) in the first 10 feet of Zone 1; this includes removal of trees with exposed primary roots in the streambank. In the outer 20 feet of Zone 1, trees greater than 12-inch diameter stump may be cut and removed. There is no requirement that a certain percentage of trees are left but the remaining trees should be evenly spaced. Application of fertilizer (prohibited except for permanent stabilization), natural regeneration/tree planting (permitted provided soil disturbance is minimized), and high intensity prescribed burns (prohibited) are not addressed in the context of the survey. If you should notice a violation of any of these three, please make a note in the Comments section below. Other buffer rule compliance issues should be commented on as well. Please consult the buffer rules for further details or call the Central Office staff should other questions arise. If buffer rule violations are suspected, follow DFR policy and procedure. Contact your ADF and the Wetlands and Water Quality Staff Forester for guidance before making a referral to DWQ.

Comments: _____

If harvest operation is in the Randleman Watershed, answer the following:

For Intermittent and Perennial Streams and Lakes and Ponds

Fifty-foot SMZ width present: Yes No N/A

In first 30 feet (Zone 1), are the following conditions met:

A minimum of 5 trees > 12" DBH for every 100 feet of stream length: Yes No

Less than half of the remaining trees > 12" DBH were harvested: Yes No

No trees < 12" DBH cut unless they met exceptions: Yes No

Tracked or wheeled equipment kept out of Zone 1: Yes No

Fertilizer not used in Zone 1: Yes No

In second 20 feet are the following conditions met:

Adequate ground cover is maintained: Yes No

Comments: _____

*Do not transfer responses to Overall BMP Implementation Summary page.

Note: The Randleman Lake watershed drain portions of SW Guilford County and adjoining areas of Forsyth and Randolph Counties. The Randleman Lake Watershed Buffer Rule establishes a 50-foot buffer width divided into two zones; Zone 1 (closest to the waterbody) being 30-feet and Zone 2 being 20-feet. In Zone 1, some trees greater than 12" DBH may be removed providing at least 5 trees greater than 12" DBH remain for every 100' of buffer length. In addition, only half the remaining trees greater 12" DBH may be cut. Use of fertilizer and tracked or wheeled equipment is prohibited in Zone 1. Harvesting may be done in Zone 2 as long as vegetative cover is re-established for any area disturbed as a result of the forestry operation. Concentrated flow occurring as a result of any new ditches or diversions must be disbursed before entering the SMZ. Other buffer rule compliance issues should be commented on as well. Please consult the buffer rules for further details or call the Central Office staff should other questions arise. If buffer rule violations are suspected, follow DFR policy and procedure. Contact your ADF and the Wetlands and Water Quality Staff Forester for guidance before making a referral to DWQ.

**BMP:
Streamside Management Zone (SMZ) Width**

(Refer to 12-16 of the 1989 Forestry BMP Manual for more information about these categories)

1. Was a braided stream present in the harvest zone? Yes No
2. If stream, indicate Stream Order (circle all that apply): **1st 2nd 3rd 4th Higher**
3. Pre-harvest stream canopy provides: 0-25% 26-50% 51-75% 76-100% shade.
4. Post-harvest stream canopy provides: 0-25% 26-50% 51-75% 76-100% shade.
5. Perennial streams on site drain to state listed trout waters? (rated as "Tr") Yes No
6. Are streams on site designated public water supply waters? (rated as WS - _) Yes No

	Stream determination (Check one)	Stream Bank*	SMZ follows BMP guidelines?	Average SMZ Width (Circle one)	Risk to Water Quality?
Stream #1	<input type="checkbox"/> Intermittent <input type="checkbox"/> Perennial	Left:	Yes No N/A	0 10 20 30 40 50 60 70 80 90 100+	Yes No
		Right:	Yes No N/A	0 10 20 30 40 50 60 70 80 90 100+	Yes No
Stream #2	<input type="checkbox"/> Intermittent <input type="checkbox"/> Perennial	Left:	Yes No N/A	0 10 20 30 40 50 60 70 80 90 100+	Yes No
		Right:	Yes No N/A	0 10 20 30 40 50 60 70 80 90 100+	Yes No
Stream #3	<input type="checkbox"/> Intermittent <input type="checkbox"/> Perennial	Left:	Yes No N/A	0 10 20 30 40 50 60 70 80 90 100+	Yes No
		Right:	Yes No N/A	0 10 20 30 40 50 60 70 80 90 100+	Yes No
Stream #4	<input type="checkbox"/> Intermittent <input type="checkbox"/> Perennial	Left:	Yes No N/A	0 10 20 30 40 50 60 70 80 90 100+	Yes No
		Right:	Yes No N/A	0 10 20 30 40 50 60 70 80 90 100+	Yes No

* Determine left or right by facing downstream. Use comment line for additional streams.

Comments: _____

BMP: Streamside Management Zone (SMZ) Conditions Note: Exclude stream crossing areas when answering these questions. (Refer to pages 12-16 of the 1989 Forestry BMP Manual for more information about these categories)	BMP PROPERLY IMPLEMENTED AND MAINTAINED			THREATS OR RISKS TO WATER QUALITY	
	Yes	No	N/A	Yes	No
Overall SMZ Width was adequate to provide effective sediment protection to waterbodies.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SMZ uniformly maintained along intermittent & perennial streams/waterbodies. (i.e. without large gaps)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Roads or trails minimized in SMZ.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Trees were felled away from stream channel.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Skidders and other equipment use was minimized in SMZ.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Forest floor/ground cover is adequately maintained - no more than 20% bare ground for perennial streams; 40% for intermittent streams.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
No visible sediment from operations traveling through the SMZ and entering the stream.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Machinery kept out of SMZ in areas where ephemeral streams intersect intermittent/perennial waters.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Logging decks and/or sawmill sites located outside of SMZ.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
When <u>no other feasible option exists</u> , logging decks and/or sawmill sites in SMZ \geq 10 feet from stream/waterbody. (Exception)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Innovative BMP utilized: <input type="checkbox"/> Yes <input type="checkbox"/> No. If yes, describe in Comments.					
Total Responses for Streamside Management Zone (SMZ) Conditions					
BMP: Stream Temperature (Refer to page 13 of the 1989 Forestry BMP Manual for more information about these categories)	BMP PROPERLY IMPLEMENTED AND MAINTAINED			THREATS OR RISKS TO WATER QUALITY	
	Yes	No	N/A	Yes	No
Adequate shade (\geq 75% pre-harvest shade) maintained on the <u>stream channel</u> to protect perennial/intermittent streams from adverse temperature fluctuations.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Innovative BMP utilized: <input type="checkbox"/> Yes <input type="checkbox"/> No. If yes, describe in Comments.					
Total Responses for Stream Temperature					

BMPs were not applied to: SMZ Width / SMZ Conditions / Stream Temperature, but no threat to water quality (WQ) exists.

Comments: _____

BMP: Debris Entering Stream (Refer to pages 12-16 of the 1989 Forestry BMP Manual for more information about these categories)	BMP PROPERLY IMPLEMENTED AND MAINTAINED			THREATS OR RISKS TO WATER QUALITY	
	Yes	No	N/A	Yes	No
Logging and site preparation debris kept out of stream channels or when introduced is removed promptly.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Stream channel/course has not been altered by obstruction(s).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Stream obstructions or impairment from soil / sediment from forestry operation(s) nonexistent.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Stream obstructions or impairment from logging debris from forestry operation(s) nonexistent.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Innovative BMP utilized: <input type="checkbox"/> Yes <input type="checkbox"/> No. If yes, describe in Comments.					
Total Responses for Debris Entering Stream					
BMP: Waste Entering Streams, Waterbodies, or Groundwater (Refer to pages 13 & 47-48 of the 1989 Forestry BMP Manual for more information about these categories)	BMP PROPERLY IMPLEMENTED AND MAINTAINED			THREATS OR RISKS TO WATER QUALITY	
	Yes	No	N/A	Yes	No
Equipment servicing was done in a way that avoids fluid leakage or spills.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Forest Chemicals (herbicide or fertilizer) appear to be stored and applied in a way that avoids fluid leakage or spills.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
All petroleum and chemical containers were removed from logging site.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Chemical and fuel loading and storage was conducted outside of SMZ.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Innovative BMP utilized: <input type="checkbox"/> Yes <input type="checkbox"/> No. If yes, describe in Comments.					
Total Responses for Waste Disposal					

BMPs were not applied to: debris in stream / waste in stream, but no threat to WQ exists.

Comments: _____

BMP: Forest Access Roads Note: This section applies to temporary or permanent hauling roads only. Skid trails will be addressed in other section. Exclude stream crossing areas when answering questions in this section. (Refer to pages 17-20 and 33-38 of the 1989 Forestry BMP Manual for more information about these categories)	BMP PROPERLY IMPLEMENTED AND MAINTAINED			THREATS OR RISKS TO WATER QUALITY	
	Yes	No	N/A	Yes	No
Roads established a year or more in advance of operation.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Roads are a minimum width of 10-14 feet for single track road.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Roads placed on gentle side slopes and not ridge tops where possible.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Roads are located outside of SMZ.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Roads follow contour lines.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Roads have grades of 1-10% or where steeper grades must be used, they do not exceed 200 feet.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Drainage and diversion structures implemented where necessary to maintain good road drainage and stabilize road surface.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Drainage and diversion structures implemented: (check all that apply)					
<input type="checkbox"/> turnouts	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> outsloping road bed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> wing ditches	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> broad based dips	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> rolling grade or dips	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> cross-drain culverts	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> waterbars	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> crushed stone (on steeper slopes)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
All drainage outfalls stabilized with <u>riprap</u> , <u>heavy brush</u> , or <u>logs</u> (circle all that apply).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Innovative BMP utilized: <input type="checkbox"/> Yes <input type="checkbox"/> No. If yes, describe in Comments.					
Total Responses for Permanent Roads					

BMPs were not applied to: forest roads, but no threat to WQ exists.

Comments: _____

BMP: Skid Trails (Refer to pages 25-27 of the 1989 Forestry BMP Manual for more information about these categories)	BMP PROPERLY IMPLEMENTED AND MAINTAINED			THREATS OR RISKS TO WATER QUALITY	
	Yes	No	N/A	Yes	No
Skidder traffic concentrated on primary trails that are laid out in a way that minimizes site impact.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Skid trails are located outside of SMZ (except at stream crossings).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Skid trails do not follow along the natural drainageway of a dry hollow.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Excessive "rutting" was avoided.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Long steep grades avoided where possible.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Water bars/water diversions constructed where needed.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Logging slash and debris placed on bare ground to prevent erosion.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Skid trails follow contours when possible.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Skid trails do not exceed grades of 25%.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
"Closed" skid trails protected by adequate waterbars or brush piles.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Innovative BMP utilized: <input type="checkbox"/> Yes <input type="checkbox"/> No. If yes, describe in Comments.					
Total Responses for Skid Trails					

BMPs were not applied to: skid trails, but no threat to WQ exists.

Comments: _____

BMP: Stream Crossings (Refer to pages 28-32 of the 1989 Forestry BMP Manual for more information about these categories)	BMP PROPERLY IMPLEMENTED AND MAINTAINED			THREATS OR RISKS TO WATER QUALITY	
	Yes	No	N/A	Yes	No
Roads or trails intersect stream and SMZ at as close to a right angle as possible.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Road surfaces and cut banks (all bare soil) within SMZ stabilized as soon as is practical using effective measures (gravel, mulch, seed, etc...)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Stream crossing approachways have water control devices to minimize erosion and control runoff (turnouts, sediment pits, check dams, etc...).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Stream channel use as access road or skid trail avoided.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Stream crossings do not impede or obstruct streamflow.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Debris and soil movement into stream channel at crossing is minimized or prevented.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
When temporary stream crossings are removed, the stream channel is cleared of debris and banks and approachways are properly stabilized.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Type of stream crossing: (check all that apply)					
<input type="checkbox"/> culvert	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> bridge	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> rock ford	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> natural ford	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> dragline/bridge mat (<input type="checkbox"/> wood/ <input type="checkbox"/> steel)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> pole crossing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> other _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Stream crossing(s) are:					
<input type="checkbox"/> Permanent					
<input type="checkbox"/> Temporary					
<input type="checkbox"/> Both Permanent and Temporary					
Innovative BMP utilized: <input type="checkbox"/> Yes <input type="checkbox"/> No. If yes, describe in Comments.					
Total Responses for Stream Crossings					

BMPs were not applied to: stream crossings, but no threat to WQ exists.

Comments: _____

BMP: Access Road Entrances (Refer to page 19 of the 1989 Forestry BMP Manual for more information about these categories)	BMP PROPERLY IMPLEMENTED AND MAINTAINED			THREATS OR RISKS TO WATER QUALITY							
	Yes	No	N/A	Yes	No						
Gravel, wooden mats or other similar device placed within first 100' of public road entrance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>						
Excessive soil on the highway adjacent to access was avoided.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>						
Logging debris or trash on the highway adjacent to access was avoided.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>						
Drainage easement/ditch between main highway and access road (1) bridged by appropriate means; (2) properly stabilized and (3) not impeding storm water flow.	1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/>	1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/>	1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/>	1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/>	1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/>						
Innovative BMP utilized: <input type="checkbox"/> Yes <input type="checkbox"/> No. If yes, describe in Comments.											
Total Responses for Access Road Entrances											
<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width: 20%;"></td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> </tr> </table>											
BMP: Rehabilitation of Project Site (Refer to pages 51-66 of the 1989 Forestry BMP Manual for more information about these categories)	BMP PROPERLY IMPLEMENTED AND MAINTAINED			THREATS OR RISKS TO WATER QUALITY							
	Yes	No	N/A	Yes	No						
Groundcover and/or vegetation established promptly after completion of activities on soil areas in close proximity to water bodies, and in locations where uncontrolled runoff may flow directly into waterbodies.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>						
Where ground was seeded, soils were properly prepared.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>						
Where ground was seeded, lime and fertilizer properly incorporated into soils where needed.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>						
Where ground was seeded, it was accomplished in an effective manner.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>						
Mulching (following seeding) allows for: (1) 25% ground surface visibility standard; (2) mulch properly anchored.	1 <input type="checkbox"/> 2 <input type="checkbox"/>	1 <input type="checkbox"/> 2 <input type="checkbox"/>	1 <input type="checkbox"/> 2 <input type="checkbox"/>	1 <input type="checkbox"/> 2 <input type="checkbox"/>	1 <input type="checkbox"/> 2 <input type="checkbox"/>						
Innovative BMP utilized: <input type="checkbox"/> Yes <input type="checkbox"/> No. If yes, describe in Comments.											
Total Responses for Rehabilitation of Project Site											

BMPs were not applied to: access road entrances / rehab of site, but no threat to WQ exists.

Comments: _____

Overall BMP Implementation Summary

BMP Description	Number of Yes Responses	Number of No Responses	Total Yes + No	% Yes	Total Number of Threats or Risks to Water Quality
Streamside Management Zones (SMZ)					
• SMZ Width					
• SMZ Conditions					
• Stream Temperature					
Debris Entering Stream					
Waste Entering Stream					
Roads, Skid Trails, & Stream Crossings					
• Permanent Forest Roads					
• Skid Trails					
• Stream Crossings					
• Access Road Entrances					
Rehabilitation of Project Site					
Totals					
Overall Implementation (%)					
Total Practices with threats or risks to water quality (%)					

4808 Information

On ___/___/___ this forestry operation was inspected for compliance with the Forest Practices Guidelines, applicable buffer rules, and other water quality regulations.

- This forestry operation is currently **in compliance** with the Forest Practices Guidelines.
- This forestry operation is currently **in non-compliance** with the Forest Practices Guidelines because of the following marked violations:
- | | | |
|--|---|---|
| <input type="checkbox"/> .0201 Streamside management zone | <input type="checkbox"/> .0204 Access road entrances | <input type="checkbox"/> .0207 Fertilizer application |
| <input type="checkbox"/> .0202 Stream obstruction | <input type="checkbox"/> .0205 Prohibition of waste entering streams, waterbodies and groundwater | <input type="checkbox"/> .0208 Stream temperature |
| <input type="checkbox"/> .0203 Access road and skid trail stream crossings | <input type="checkbox"/> .0206 Pesticide application | <input type="checkbox"/> .0209 Rehabilitation of project site |

CORRECTIVE ACTION(S) NEEDED:

On _____ (month/day/year) I invested a total of _____ hours and _____ mileage to capture _____ survey(s).

On _____ (month/day/year) I attempted, without success, to conduct a survey in the county(ies) checked below. This attempt yielded no viable harvest operations that fit the survey's site selection criteria. My time and mileage investment in this effort was about _____ hours and _____ mileage.

<input type="checkbox"/> Alamance	<input type="checkbox"/> Cumberland	<input type="checkbox"/> Johnston	<input type="checkbox"/> Randolph
<input type="checkbox"/> Alexander	<input type="checkbox"/> Currituck	<input type="checkbox"/> Jones	<input type="checkbox"/> Richmond
<input type="checkbox"/> Alleghany	<input type="checkbox"/> Dare	<input type="checkbox"/> Lee	<input type="checkbox"/> Robeson
<input type="checkbox"/> Anson	<input type="checkbox"/> Davidson	<input type="checkbox"/> Lenoir	<input type="checkbox"/> Rockingham
<input type="checkbox"/> Ashe	<input type="checkbox"/> Davie	<input type="checkbox"/> Lincoln	<input type="checkbox"/> Rowan
<input type="checkbox"/> Avery	<input type="checkbox"/> Duplin	<input type="checkbox"/> Macon	<input type="checkbox"/> Rutherford
<input type="checkbox"/> Beaufort	<input type="checkbox"/> Durham	<input type="checkbox"/> Madison	<input type="checkbox"/> Sampson
<input type="checkbox"/> Bertie	<input type="checkbox"/> Edgecombe	<input type="checkbox"/> Martin	<input type="checkbox"/> Scotland
<input type="checkbox"/> Bladen	<input type="checkbox"/> Forsyth	<input type="checkbox"/> McDowell	<input type="checkbox"/> Stanly
<input type="checkbox"/> Brunswick	<input type="checkbox"/> Franklin	<input type="checkbox"/> Mecklenburg	<input type="checkbox"/> Stokes
<input type="checkbox"/> Buncombe	<input type="checkbox"/> Gaston	<input type="checkbox"/> Mitchell	<input type="checkbox"/> Surry
<input type="checkbox"/> Burke	<input type="checkbox"/> Gates	<input type="checkbox"/> Montgomery	<input type="checkbox"/> Swain
<input type="checkbox"/> Cabarrus	<input type="checkbox"/> Graham	<input type="checkbox"/> Moore	<input type="checkbox"/> Transylvania
<input type="checkbox"/> Caldwell	<input type="checkbox"/> Granville	<input type="checkbox"/> Nash	<input type="checkbox"/> Tyrrell
<input type="checkbox"/> Camden	<input type="checkbox"/> Greene	<input type="checkbox"/> New Hanover	<input type="checkbox"/> Union
<input type="checkbox"/> Carteret	<input type="checkbox"/> Guildford	<input type="checkbox"/> Northampton	<input type="checkbox"/> Vance
<input type="checkbox"/> Caswell	<input type="checkbox"/> Halifax	<input type="checkbox"/> Onslow	<input type="checkbox"/> Wake
<input type="checkbox"/> Catawba	<input type="checkbox"/> Harnett	<input type="checkbox"/> Orange	<input type="checkbox"/> Warren
<input type="checkbox"/> Chatham	<input type="checkbox"/> Haywood	<input type="checkbox"/> Pamlico	<input type="checkbox"/> Washington
<input type="checkbox"/> Cherokee	<input type="checkbox"/> Henderson	<input type="checkbox"/> Pasquotank	<input type="checkbox"/> Watauga
<input type="checkbox"/> Chowan	<input type="checkbox"/> Hertford	<input type="checkbox"/> Pender	<input type="checkbox"/> Wayne
<input type="checkbox"/> Clay	<input type="checkbox"/> Hoke	<input type="checkbox"/> Perquimans	<input type="checkbox"/> Wilkes
<input type="checkbox"/> Cleveland	<input type="checkbox"/> Hyde	<input type="checkbox"/> Person	<input type="checkbox"/> Wilson
<input type="checkbox"/> Columbus	<input type="checkbox"/> Iredell	<input type="checkbox"/> Pitt	<input type="checkbox"/> Yadkin
<input type="checkbox"/> Craven	<input type="checkbox"/> Jackson	<input type="checkbox"/> Polk	<input type="checkbox"/> Yancey

Summary Comments: _____
