

MISSISSIPPI FORESTRY COMMISSION
BMP MONITORING FORM INSPECTIONS

The BMP Monitoring Form is used to collect field data on tracts that have been selected for inclusion in a Statewide BMP assessment.

The report will be completed in the field by MFC personnel specifically trained in BMP monitoring. The form will be submitted to the State Office for inputting into the database.

The following is an explanation of the information to be collect on the field report:

1. General Tract Information

- a. County: Enter the name of the County in which the BMP monitoring site is located.
- b. Site ID Number: Insert the appropriate Site ID number. The Site ID number is made up of the District number followed by three unique assigned to the tract by the District. The State Office will assign specific numbers to be used by each district.
- c. Respond to the following questions by placing an X or \checkmark in the appropriate box
 - i. Silvicultural Activity: Identify whether the silvicultural activity that took place on the site was a regeneration cut or thinning.
 - ii. Estimated Tract Size (Acres): Mark the appropriate box based n number of acres in the tract.
 - iii. Ownership Group: Select the appropriate ownership group based on ownership at the time of the forestry activity was carried out.
 - iv. Mississippi's River Basins: Select the river basin in which the tract is located based on Mississippi Department of Environmental Quality basin map. Select only one basin.

2. Site Characteristics

- a. Slope: Check the box that best describes the approximate average slope found on the site.
 - b. Predominant Soil Texture: Check the box that best describes the soil texture on the majority of the site.
 - c. Erodibility Hazard: Identify whether the potential for erosion to occur on the majority of the site is low, medium, or high.
 - d. Type Of Stream(s) Present: Check all that apply. Perennial, Intermittent, Ephemeral, or N/A.
 - e. Distance To Nearest Permanent Water Body: Check the box that best described how far the tract if from the nearest permanent water body (blue line stream or lake). Blue line streams are identified as such on topographic maps and are defined as having water present throughout the year. For the purpose of BMP monitoring, a lake is defined as a water body greater than five acres in size.
 - f. Evidence Of Spills Or Fuels On Site: Do you see any signs of oil or other chemicals spilled on the tract? Check Yes or No.
 - g. Trash, Oil Cans, Hoses, Or Other Containers Left On Site: Do you see trash around loading ramps, permanent roads, secondary roads, or other locations on the site? Check Yes or No.
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- h. Has Tract Been Regenerated Artificially? Indicate by checking either Yes or No if the tract has been regenerated since the timber was removed. If the tract was thinned, mark N/A.

For each of the following BMP practices, select N/A (Not Applicable), Yes, or No by placing an X or √ in the appropriate box. Also select Sig. Risk if a significant risk to water quality exists when considering the application of the BMP. Check N/A if a selected BMP does not apply; Yes if the BMP was implemented; No if the BMP item was not implemented.

Significant risk to water quality exists if, during a normal rainfall, sediment is likely to be delivered to a permanent water body. A significant risk is possible whether or not a BMP has been implemented. If a significant risk is noted on a site where a BMP has been implemented, use the comment section of this form to describe what the risk is and any details on the implementation of the BMP which might have resulted in the risk. Be as thorough as possible. Use additional paper if necessary.

3. Streamside Management Zones

- a. SMZ Width Established According To BMP Specifications: Does the width meet the guidelines established in Mississippi's BMP handbook?
- b. Harvesting/Thinning Within SMZ According To BMP Specs: At least 50 square feet of basal area per acre must be left within the SMZ in the absence of an understory.
- c. SMZ Integrity Honored: Was an effort made to stay out of the SMZ with skidders, landings, roads, etc. (except for designated stream crossings)? Is the SMZ free of chemicals, fertilizer, log decks, burning, firebreaks, etc?
- d. Stream Course Clear Of Debris: Are tops and limbs removed from perennial, ephemeral and intermittent stream channels? Has any brush or debris pushed into the stream channel been removed?
- e. SMZ Free Of Roads And Landings: Were guidelines followed in locating roads and landings outside of the SMZ?
- f. Stream Free Of Sediment Due To Silvicultural Activity? Logging debris, soil, etc., should not be in stream channel.
- g. Rutting Through Streams Or Drains Avoided: Rutting through sensitive areas is not allowed. Indicate Yes if this had been avoided, No if rutting is present.
- h. Prescribed Burning Avoided: Has burning been avoided in the SMZ?
- i. Blocking The Natural Flow Of Water Avoided: Indicate yes if the natural flow of water was not interrupted due to silvicultural activity.
- j. Stream Bank Integrity Honored: Impact to the stream bank should be minimized when harvesting near the edge of a stream. Banks of streams should be properly stabilized and/or vegetation applied to protect groundwater.

4. Stream Crossings

- a. Ditches That Dump Into Streams Avoided: Are water turnouts and water bars venting far enough from the stream to prevent sediment from entering the stream channel?
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- b. Stream Crossings Properly Installed: Streams or drains should be crossed at right angles only.
- c. Number Of Stream Crossings Minimized: Did contractor or landowner minimize the number of stream crossings?
- d. Stream Or Drain Crossings Installed: Cross streams or drains at right angles only.
- e. Stream Crossings Stabilized During Use: Stream banks should be properly stabilized and/or vegetation applied to protect groundwater.

5. Permanent Roads

- a. Roads Respect Sensitive Areas: Do roads avoid wet areas, SMZs, steep slopes, erosion prone areas, etc., if an alternative exists?
- b. Rutting Depth Does Not Exceed Six Inches For More Than Fifty Feet: Is the road free of ruts in excess of 6 inches deep for more than 50 feet?
- c. Roads Located Where Side Drainage Can Be Achieved: Are roads properly installed where side drainage can be achieved?
- d. Roads Wide Enough To Achieve Surface Drying: Are roads constructed wide enough for surface drying and is soil compaction minimized during wet periods?
- e. Roads Reshaped And/Or Stabilized: If needed, are roads reworked to minimize soil movement?
- f. Roads Meet Grade Specifications: Pertains to new roads or roads which are substantially reworked. Is road grade within 2-10 percent? Grade above 10 percent can be used for short distances. Avoid long steep grades to reduce the total number of drainage structures needed.
- g. Roads Are Well Drained With Appropriate Structures: Are roads constructed so that water will quickly drain from them to minimize soil movement?
- h. Side Ditches Do Not Dump Into Streams: Are water turnouts and water bars venting far enough from the stream to prevent sediment from entering the stream channel?
- i. Flat No Grade Roads Avoided: Make sure roads are located where drainage can be achieved.
- j. Streambeds, Rocky Places, And Steep Slopes Avoided: Area such as streambeds, rocky places, and steep slopes avoided.
- k. Potential Problem Soils Avoided: Avoid sensitive areas and problem soils.

6. Skid Trails/Temporary (Secondary) Roads

- a. Sensitive Areas Respected: Do skid trails and temporary roads avoid wet areas, SMZs, steep slopes, erosion prone areas, etc, if an alternative exists?
 - b. Majority Of Skid Trail Grades (Steepness) Below 15%: Majority of slopes is less than 15 percent, if possible.
 - c. Rutting Does Not Exceed Six Inches For More Than Fifty Feet: Are skid trails and temporary roads free of ruts in excess of 6 inches deep for more than 50 feet?
 - d. Water Bars, Turnouts, And Other Water Control Structures Present: Were BMPs installed effectively to reduce erosion from the road?
 - e. Roads And Skid Trails Are Stabilized: Are skid trails properly installed where side drainage can be achieved? Are water bars, turnouts, and logging slash present on skid trail to minimize soil movement?
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7. Site Preparation

- a. Sensitive Areas Respected: Effort to prevent site prep intrusion into sensitive areas? Effort to prevent heavy equipment intrusion into sensitive areas? Effort to prevent fire intrusion into sensitive areas? Are perennial, intermittent, or ephemeral streams free of debris?
- b. Contour Followed: Are windrows on contour on hilly lands rather than up and down slopes? Was soil disturbance minimized? Was soil in windrows minimized?
- c. SMZ Integrity Honored: Effort to prevent site prep intrusion into the SMZ? Effort to prevent heavy equipment intrusion into the SMZ? Effort to prevent fire intrusion into the SMZ? Are perennial, intermittent, or ephemeral streams free of debris?
- d. Soil Disturbance Kept To A Minimum: Is there no soil movement on site? Was soil disturbance minimized? Was soil in windrows minimized?
- e. Excessive Soil Compaction Avoided: Were efforts made to avoid soil compaction?
- f. Does It Appear That Chemicals Were Used According To Label Specs.: Has chemical treatment remained on site and out of water bodies?
- g. Disturbance On Slopes Minimized: Does it appear that site has serious erosion problems on slopes?
- h. Water Diverted From Site Prep Area To Vegetated Surface: Does it appear that runoff water is being directed to vegetated area?
- i. Extremely Hot Burns Avoided: Does it appear that prescribed burn has altered soil's physical properties in a manner, which decreases water infiltration, resulting in an increase of surface water runoff?

8. Landings

- a. Located Outside Of SMZ: Was the landing located outside SMZ so as to minimize traffic and erosion in the SMZ?
- b. Well-Drained Location: Were the landings located so as to minimize soil degradation and soil movement? Does it appear that landing is in a well-drained location?
- c. Number And Size Minimized: Were the number and size of landings kept to a minimum?
- d. Sensitive Areas Respected: Were landings kept out of wet areas, SMZs, steep slopes, erosion prone areas, etc., if an alternative exists?
- e. Restored/Stabilized: Has the landing been back bladed or otherwise restored as per guideline recommendations? Has erosion been minimized through spreading bark, seeding, water bars, or other recommended BMP practices?

9. Wetlands (*Wetlands BMP's are mandatory practice*)

- a. Hydrology Of Site Unaltered: Were ruts and soil compaction kept to a minimum?
 - b. Roads, Drainage Structures Applied Properly: Were BMPs installed to effectively maintain the flow of water and keep erosion to a minimum in the wetland?
 - c. Mandatory BMPs Followed: Were the 15 federal mandatory BMPs followed?
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10. Fireline Construction

- a. Fireline Erosion Controlled: If present, has potential erosion from firebreaks been minimized as per guideline recommendations?
- b. Majority Of Fireline Constructed Around Slopes Or Grade Of Less Than 10%: Does it appear that the majority of the fireline is constructed at a grade of less than ten percent, if possible?
- c. Water Bars, Turnouts, And Other Water Control Structures Properly Installed: Are water diversion structures placed on firelines?
- d. Diversion Ditches Not Constructed At The Head Of Drains: Avoid installing diversion ditches at the head of drains.
- e. Fireline Not Constructed Down The Slopes Of Natural Gullies: Do not construct firelines down slopes of shallow, natural gullies since this eliminates all possibility of leading water away from the line.
- f. SMZs Left Between The Fireline And Streams: Leave a streamside management zone between the fireline and stream.
- g. Avoid Constructing Firelines Into A SMZ: Does fireline run directly into an SMZ? Firelines should not run directly into an SMZ. When anchoring a fireline to a SMZ, turn the line at the edge of the SMZ so that the line parallels the zone.

11. Follow Up Questions

The following questions may be answered based on the evaluator's knowledge of the site and/or the availability of the landowner, timber buyer, or logger to respond to the questions. Response to these questions is optional. For each question, select N/A if the information is not available, Yes, or No.

- a. Was activity supervised by a professional forester?
- b. Was landowner familiar with BMP handbook?
- c. Was logger familiar with BMPs?
- d. Were BMPs included in contract?
- e. Has logger completed logger education courses?
- f. Are recommendations planned for landowners, if needed?

A compliance percentage is required to be determined at the end of each section. This number is determined by dividing the number of questions receiving a yes answer by the total applicable questions in each section. (Y/N)

Inspected By/Date: Insert the name of the inspector doing the inspection and the date the inspection was completed.

Comments: Use this section to note any additional information that might be pertinent in doing the final report or following up with a landowner.
