

2015 BMP Survey Results

- We used the following formula from the USFS to determine how many sites had to be inspected:

$$N = \frac{4p(100 - p)}{M^2}$$

Where: N = # of sites to monitor
P = % of estimated BMP rate (85%)
M = margin of error (5%)

*Using this formula, I determined that **204** sites needed to be inspected.

Using the Severance Tax Report, I determined the total amount of boardfoot harvested statewide. I divided this number by 204 which told me that for every 4 million boardfeet harvested, there needed to be one site inspected. Again using the severance tax report, I took the breakdown of the harvest report for each parish and took the total amount harvested in each parish and divided that by 4 million which told me how many sites needed to be inspected in each parish. This number ranged from 0 to 17 sites.

The pilots tried to find about twice the amount of sites needed in each parish to turn in to the foresters. The foresters then randomly picked the number of sites needed from this number. One parish did one more than was required, bringing the total amount of parishes inspected to **205**.

-Total number of tracts chosen by pilots for foresters to randomly choose from was **416**. This number was used to determine a 95% confidence interval.

-**Percent compliance based on a 95% confidence interval: 95.75% +/- 4.88%**

BMP MONITORING	Tracts
Silvicultural Activity:	Surveyed
Regeneration Cut - 89.76%	184
Thinning - 7.32%	15
Other - 2.92%	6
Tract Size:	
10-40 Acres - 20.00%	41
41-80 Acres - 29.27%	60
81-120 Acres - 19.02%	39
121-160 Acres - 20.98%	43
161 + Acres - 10.73%	22
Ownership:	
PNIF - 53.17%	109
Industry - 45.37%	93
Federal - 0.49%	1
State - 0.97%	2

3. Streamside Management Zone:

A. SMZ Width Established According to BMP Specifications	152 - YES	5 - NO	48 - N/A
	96.82%	3.18%	
B. Harvesting/Thinning with SMZ According BMP Specifications	147 - YES	4 - NO	54 - N/A
	97.35%	2.65%	
C. SMZ Integrity Preserved	153 - YES	2 - NO	50 N/A
	98.71%	1.29%	
D. Stream Course Clear of Logging Debris	149 - YES	8 - NO	48 - N/A
	94.90%	5.10%	
E. SMZ Free of Roads and Landings	155 - YES	2 - NO	48 - N/A
	98.73%	1.27%	
F. Stream Free of Sediment Dute to Silvicultural Activity	151 - YES	6 - NO	48 - N/A
	96.18%	3.82%	
G. Rutting Through Steams or Drains Avoided	152 - YES	4 - NO	49 - N/A
	97.44%	2.56%	
H. Hot Site Prep Fire Avoided in SMZ	90 - YES	0 - NO	115 N/A
	100.00%	0.00%	
I. Blocking The Natural Flow of Water Avoided	153 - YES	3 - NO	49 - N/A
	98.08%	1.92%	
J. Stream Bank Integrity Preserved	153 - YES	3 - NO	49 - N/A
	98.08%	1.92%	

Percent Compliance	97.63%
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4. Stream Crossings

A. Ditches That Dump Into Streams Avoided	117 - YES	9 - NO	79 - N/A
	92.86%	7.14%	
B. Streams Crossing Properly Installed	110 - YES	4 - NO	91 - N/A
	96.49%	3.51%	
C. Number of Stream Crossing Minimized	117 - YES	2 - NO	86 - N/A
	98.32%	1.68%	
D. Stream or Drain Crossing at Right Angle Only	114 - YES	2 - NO	89 - N/A
	98.28%	1.72%	
E. Stream Crossing Stabilized During Use	114 - YES	2 - NO	89 - N/A
	98.28%	1.72%	

Percent Compliance	96.85%
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5. Permanent Roads

A. Road Respect Sensitive Areas	168 - YES	2 - NO	35 - N/A
	98.82%	1.18%	
B. Rutting is Not Excessive	165 - YES	7 - NO	33 - N/A
	95.93%	4.07%	
C. Roads Located Where Side Drainage Can Be Achieved	166 - YES	2 - NO	37 - N/A
	98.81%	1.19%	
D. Roads Wide Enough to Achieve Surface Drying	169 - YES	1 - NO	35 - N/A
	99.41%	0.59%	
E. Roads Reshaped and/Or Stabilized If Needed	160 - YES	8 - NO	37 - N/A
	95.24%	4.76%	
F. Roads Meet Grade Specifications	167 - YES	2 - NO	36 - N/A
	98.82%	1.18%	
G. Roads Are Well Drained with Appropriate Structures	156 - YES	5 - NO	44 - N/A
	96.89%	3.11%	
H. Side Ditches Do Not Dump Into Streams	151 - YES	4 - NO	50 - N/A
	97.42%	2.58%	
I. Flat No Grade Road Avoided if Possible	166 - YES	3 - NO	36 - N/A
	98.22%	1.78%	
J. Streambeds, Rocky Places, And Steep Slopes Avoided	166 - YES	0 - NO	39 - N/A
	100.00%	0.00%	
K. Potential Problems Soils Avoided	169 - YES	0 - NO	35 - N/A 1 - S/R
	100.00%	0.00%	

Percent Compliance	98.14%
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6. Skid Trails/Temporary (Secondary) Roads**A. Sensitive Areas Respected**

194 - YES 1 - NO 10 - N/A
 99.49% 0.51%

B. Majority of Skid Trail Grades Below 15 Percent

193 - YES 3 - NO 9 - N/A
 98.47% 1.53%

C. Excessive Tract Rutting Area Does Not Exceed 25%

197 - YES 1 - NO 7 - N/A
 99.49% 0.51%

D. Water Bars, Turnouts, and Other Water Control Structures

145 - YES 30 - NO 30 - N/A
 82.86% 17.14%

E. Roads and Skid Trails are Stabilized

180 - YES 10 - NO 14 - N/A 1 - S/R
 94.74% 5.26%

Percent Compliance	95.01%
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7. Site Preparation**A. Sensitive Areas Respected**

127 - YES 0 - NO 77 - N/A 1 - S/R
 100.00% 0.00%

B. Contour Followed

112 - YES 2 - NO 91 - N/A
 98.25% 1.75%

C. SMZ Integrity Preserved

111 - YES 0 - NO 94 - N/A
 100.00% 0.00%

D. Soil Disturbance Kept To A Minimum

129 - YES 1 - NO 75 - N/A
 99.23% 0.77%

E. Excessive Soil Compaction Avoided

124 - YES 6 - NO 75 - N/A
 95.38% 4.62%

F. Does It Appear That Chemicals Were Used to Label Specs

91 - YES 1 - NO 113 - N/A
 98.91% 1.09%

G. Disturbance On Slope Minimized

123 - YES 2 - NO 80 - N/A
 98.40% 1.60%

H. Water Diverted from Site Prep Area to Vegetated Surface

103 - YES 12 - NO 89 - N/A 1 - S/R
 89.57% 10.43%

I. Extremely Hot Burns Avoided

74 - YES 1 - NO 130 - N/A
 98.67% 1.33%

Percent Compliance	97.60%
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8. Landings**A. Location Outside of SMZ**

192 - YES 1 - NO 12 - N/A
 99.48% 0.52%

B. Well-Drained Location

203 - YES 2 - NO 0 - N/A
 99.02% 0.98%

C. Number and Size Minimized

205 - YES 0 - NO 0 - N/A
 100.00% 0.00%

D. Sensitive Areas Respected

198 - YES 1 - NO 5 - N/A 1 - S/R
 99.50% 0.50%

E. Restored/Stabilized

188 - YES 6 - NO 11 - N/A
 96.91% 3.09%

Percent Compliance	98.98%
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9. Wetlands (Wetlands BMPs Are Mandatory Practices)**A. Hydrology of Site Unaltered**

20 - YES 1 - NO 184 - N/A
 95.24% 4.76%

B. Roads, Drainage Structures Applied Properly

20 - YES 0 - NO 184 - N/A 1 - S/R
 100.00% 0.00%

C. Mandatory BMPs Followed If Indicated

20 - YES 1 - NO 184 - N/A
 95.24% 4.76%

Percent Compliance	96.83%
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10. Fireline Construction**A. Fireline Erosion Controlled**

60 - YES 2 - NO 143 - N/A
 96.77% 3.23%

B. Majority of Fireline Constructed Around Slopes/Grades <10%

61 - YES 0 - NO 144 - N/A
 100.00% 0.00%

C. Water Bars, Turnouts, & Other Water Control Structures Properly Installed

49 - YES 6 - NO 150 - N/A
 89.09% 10.91%

D. Diversion Ditches Not Constructed At the Head of a Drain

58 - YES 0 - NO 147 - N/A
 100.00% 0.00%

E. Firelines Not Constructed Down the Slope of Natural Gully

59 - YES 0 - NO 146 - N/A
 100.00% 0.00%

F. SMZs Left Between the Fireline and Streams

54 - YES 1 - NO 150 - N/A
 98.18% 1.82%

G. Avoid Constructing Firelines Into An SMZ

55 - YES 2 - NO 148 - N/A
 96.49% 3.51%

Percent Compliance	97.22%
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PERCENTAGES COMPILED FROM PARISHES IN EACH DISTRICT

		# Tracts
%	Parish	Surveyed
98.56	Bienville	16
93.75	Bossier	4
95.50	Caddo	4
97.00	Claiborne	8
99.31	Jackson	13
100.00	Lincoln	4
100.00	Union	9
94.60	Webster	5
100.00	Catahoula	1
100.00	Concordia	1
100.00	Morehouse	1
100.00	Ouachita	3
94.25	Caldwell	4
98.33	DeSoto	9
98.25	Lasalle	4
92.50	Natchitoches	12
93.25	Rapides	8
100.00	Red River	4
97.41	Sabine	17
97.93	Winn	14
92.00	Acadia	1
100.00	Allen	8
97.77	Beauregard	13
100.00	Calcasieu	1
99.00	Evangeline	4
97.25	Vernon	15
100.00	Avoyelles	1
100.00	Pointe Coupee	1
32.00	St Landry	1
100.00	East Baton Rouge	1
100.00	E Feliciana	2
100.00	Grant	2
100.00	Livingston	2
95.25	St Helena	4
95.00	St Tammany	1
97.50	Tangipahoa	4
88.00	W Feliciana	1
94.00	Washington	2

GRAND TOTAL OF ALL 205 SURVEYS

95.75%