

Wisconsin's 2015 BMP Monitoring for Water Quality Executive Summary for Non-Industrial Private Landowners

Background and Timber Sale Information

In the late fall of 2015, non-industrial private forestland (NIPF) was monitored for the application and effectiveness of Wisconsin's Forestry Best Management Practices (BMPs) for Water Quality. There were a total of 36 sites monitored, with 26 landowners enrolled in the MFL program – 10 were not. These sites were selected due to water resources in, or adjacent, to the sale. Over 90% (33:36) sites had wetlands listed as a water resource, along with 23 sites containing streams. Only 3 sites had lakes within proximity of the sale. The average harvest size for all NIPF sites monitored in 2015 was 30 acres, with a total of 1083 acres monitored. The two most abundant dominant cover types were maple/basswood (16 sites) and aspen (15 sites). Selection harvest (13 sites) was the most commonly used harvest method. Culverts were the most common type of stream crossing (8) on forest roads systems, while frozen crossings (2) were the most common stream crossing on skid trails. Most sites (27:36) had forest roads in place for the harvest and over half (16:27) were either constructed or improved for the harvest.

BMP Application

The 36 sites were each evaluated for BMP application, which consists of 119 BMPs on the monitoring worksheet. Each BMP was rated as either:

- Not applicable to the site
- Insufficient information to rate
- Applied correctly where needed
- Applied incorrectly where needed
- Not applied where needed

Of the possible 119 BMPs, the number of applicable BMPs per site averaged 30%, which is higher than 2008, where only 20% of all BMPs were applicable per site. The correct application rate of BMPs was relatively high, for NIPF lands, at 90% of the time (tied for the highest since the start of the BMP program). The difference in correct application of BMPs between MFL and Non-MFL Landowners is the smallest since the programs start at only 0.4%. BMPs that are *applied incorrectly* and BMPs that are *not applied* make up small percentage of all BMPs (2.4% and 7.6% respectively). Of the five monitoring categories, 'RMZs' received the highest correct application (94.6%) whereas 'forest roads' received the lowest rating (85%). However, this rating on 'forest roads' is up 15% from 2008.

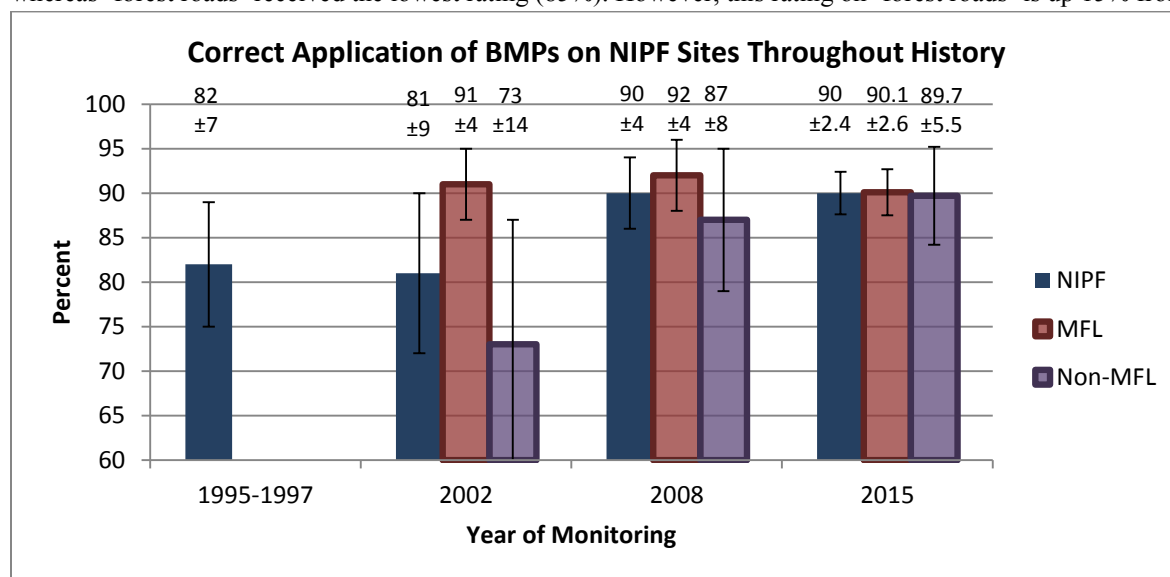


Figure 1. The initial monitoring (1995-1997) did not break down NIPF lands into MFL or Private ownership.

BMP Effectiveness

For every BMP that was found to be applicable to the site, one of five effectiveness ratings was given:

- No adverse impact to water quality
- Minor short-term impact to water quality
- Minor long-term impact to water quality
- Major short-term impact to water quality
- Major long-term impact to water quality

The effectiveness of BMPs that were *applied correctly* was extremely high (99.6%) at protecting water quality, but when BMPs were *applied incorrectly* or *not applied* water quality rates woefully dropped (6.3% and 9.4% respectively). Even with the low water quality protection of BMPs that were *applied incorrectly* and *not applied*, no major impacts were reported on any NIPF sites. Even though these two categories make up only 10% of applicable BMPs, reducing this 10% is still the greatest way to achieve higher water quality protection.

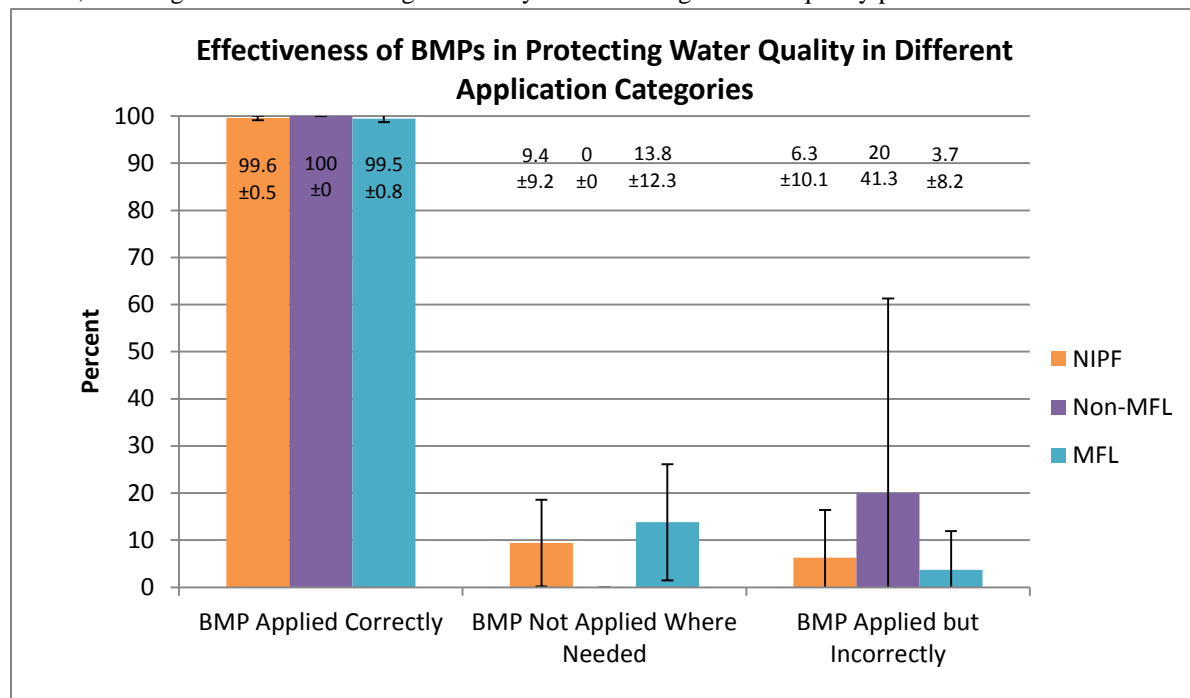


Figure 2. Application categories are the determining factor for BMP effectiveness and the difference between each landowner type is not significant.