Wisconsin’s 2014 BMP Monitoring for Water Quality
Executive Summary for Large Landowners

Background and Timber Sale Information
In 2014, large landowners were monitored for the application and effectiveness of Wisconsin’s Forestry Best Management Practices (BMPs) for Water Quality. Twenty-nine sales were selected out of 969 to ensure statistically valid results. All sites had water resources in, or adjacent to, the sale in order to be eligible for monitoring in the BMP program. Twenty-one of the sites were harvested between 1-2 years before the monitoring took place, with an average size of 104.4 acres. The total acres monitored were 3027.25 with a range from 7.25 acres all the way up to 500 acres. Large landowners completed the harvests over more than one season (9 sites), and spring was the least common season of harvest (1 site). Selection harvests were the most abundant (12 sites) with maple/basswood being the most harvested dominant tree stand classification type (20 sites). The least harvested timber type was tied between swamp conifers and spruce/fir (1 site each).

BMP Application
The 29 sites were each evaluated for BMP application, which consisted 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

Most (71.5%) of the BMPs were determined to be not applicable to the sites. Of the applicable BMPs, the vast majority (94.7%) were correctly applied to the timber sales. Breaking down applicable BMPs into five monitoring categories, ‘forest roads’ received the lowest correct application rate (90.6%) and ‘wetlands’ received the highest correct application rate (98.0%). The 2014 BMP application rates were the highest since the start of Wisconsin’s BMP program in 1995.

![Graph showing BMPs applied correctly by Federal Landowners: Comparison of Three Monitoring Cycles](image)
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

When BMPs were ‘applied correctly where needed’ the BMP effectiveness rating was very good (99.9%). However, when BMPs were ‘applied incorrectly where needed’ or ‘not applied where needed’, the BMP effectiveness was really reduced, 11.8% and 48.6% respectively. This implies that impacts to water quality were found, 88.2% for BMPs ‘applied incorrectly where needed’ and 51.4% for BMPs ‘not applied where needed’. The BMP effectiveness rating was found to be similar in 2014 compared to past results in 2006, when BMPs were ‘applied correctly where needed’.

![Water Quality Impacts: Comparison of Three Application Ratings](image-url)