Wisconsin's 2019 BMP Monitoring for Water Quality Executive Summary for Large Landowners

Background and Timber Sale Information

The 19 sales monitored on large landowners included a total of 1,938 acres for an average of just over 100 acres per sale. Eleven of the sales were monitored 1-2 years after the sales were finished being harvested. Selection harvests were the most common silvicultural prescription utilized, with 14 sites listing that as a method. Ten sales had maple/basswood listed as a dominant timber type, making this the most common timber type for large landowner sales.

The most common water resources on large landowner sites were wetlands, with 18 of the 19 sites containing or adjacent to them. Streams were the next most common water resource with seven sites documenting streams present. Only three sites contained lakes and one site contained springs/seeps. For water resources that recommended an RMZ, 11 out of 12 RMZs had either been expanded or used the recommended distance. Only one site did not contain a forest road and 15 of the 18 sites contained active forest roads. Only seven of the sites had either new roads built or roads which undergone improvement. All four sites that used drainage structures had existing drainage structures present and one of those sites had both new and existing drainage structures, making drainage structures in general not very common on large landowner sites. Stream crossings were also rare, with only six sites utilizing stream crossings and all stream crossings except one were on a forest road system. Contrary to federal sites, large landowner sites only recorded one site where severe weather had occurred.

BMP Application

Large landowner sites contained a moderate rate of BMPs being applicable to each of their sites. On average, 27.5% of BMPs were applicable to each site. Of the BMPs which were applicable, 90.5% were *applied correctly*, which is a slight drop from 94.7% correct application recorded in 2014. BMPs were *not applied* where they were needed at 7.2% of the time. Correct application varied over the five different monitoring categories. Although no monitoring category received 100% correct application, three categories had 96% or above. 'Wetlands' and 'forest roads' were the two categories that brought down the overall correct application rating, only receiving an 89.8% and 79.9% respectively.

BMP Effectiveness

The effectiveness for protecting water quality remains exceptionally high when BMPs are used correctly at 99.3%. Three of the five monitoring categories received 100% effectiveness when BMPs are used correctly. When BMPs are *not applied* however, adverse impacts to water quality are observed 64.4% of the time, with 46.7% of these observations being determined to have had a *minor-long term* water quality impact. One site contained two *major-short term* impacts to water quality found on the site's forest road system.