

## Review of 2460 Timber Sale Narratives

### **Purpose:**

This review is part of DNR's response to a portion of the re-written CAR 2021.1. Specifically, fulfilling the directive of: *DNR must also review its internal systems for BMP compliance field review in order to ensure that its BMPs are consistently being met.*

### **Scope of Review:**

All timber sales that were completed on DNR state lands during 2021 were subject to this review process. DNR WISFIRS was used to collect documents. No foresters were contacted for this review.

### **Methodology:**

There were 209 sales completed on state lands in 2021. The DNR Forest Hydrologist looked at each timber sale map, if present, for review. If water features were present near the timber sale, the 2460 narrative was further reviewed. The BMP section of the 2460 was then evaluated to see how closely it described the water features identified using the timber sale map. Maps that identified multiple water features, lakes, streams or wetlands, were calculated using the most prominent water feature based on category: lakes were primary, streams were secondary, wetlands last. Meaning if there was a sale that had a lake and a wetland adjacent to it, it would be counted in the lake data. It was not double counted in the wetland data.

### **Results:**

Lakes were identified on 13.9% of sales, streams on 31.1% of sales and wetlands on 9.6% of sales. No water features were found on 21.1% of sales and 22% of the sales did not contain either a timber sale map, 2460 narrative, or both on WISFIRS. Many of the sales completed in 2021 were started before it was a requirement for documentation to be placed online in WISFIRS.

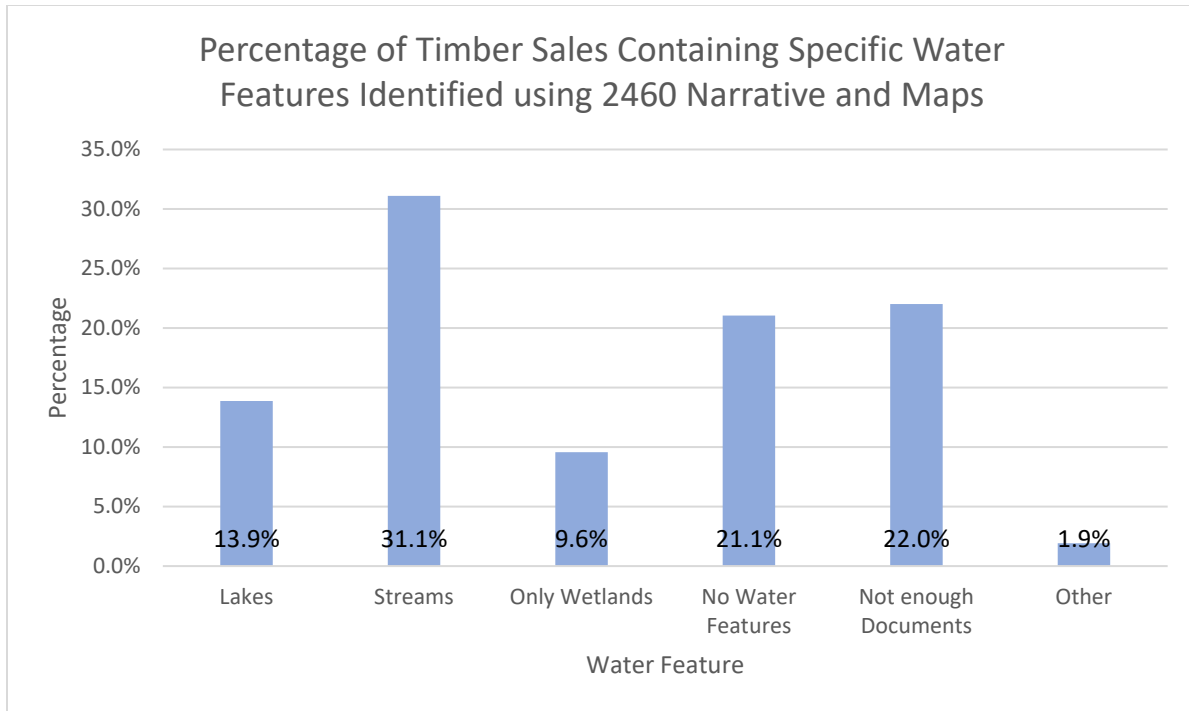


Figure 1. Water resources found on State Lands Timber sales for sales completed in 2021.

Focusing on those sales with water features, the review then focused on completeness of responses in the 15c BMP Section of the 2460 by the forester.

The first question in section 15c is: “Lake, stream or wetland within sale or impacted by sale? Yes or No (if yes, insert comments).” When the Forest Hydrologist identified a lake close by, timber sale administrators answered *yes* to this question 79% of the time and had comments 62% of the time. When the Forest Hydrologist identified a stream close by, the forester answered *yes* 57% of the time and commented 57% of the time. Lastly, wetlands had 55% answered *yes* and 60% had comments.

The next question on the current 2460 is: “BMP’s. Yes or No (if yes, describe).” When a lake was identified by the forest hydrologist, 97% of the time, BMPs were checked as *yes* and 62% of the time there was additional comments made. When a stream was identified as by the forest hydrologist, 88% of the time BMPs were checked as *yes* and 69% of the time there were additional comments made. Wetlands follow a similar trend of 95% the BMPs were selected *yes* and 80% of the time there were additional comments made.

The last section of the 2460 asks for other comments. When lakes were present, 62% of the time the forester added additional comments. When streams were present, 32% of the time the forester added additional comments.

One question not asked on the 2460 but was collected based on the several sections asking for comments was how often an “RMZ” or “buffer” was articulated within the comments when stream or lakes were present. When lakes were present, 69% of the time the forester included language about an “RMZ” or “buffer”. When streams were present, 58% of the time the forester included language about an “RMZ or “buffer”.

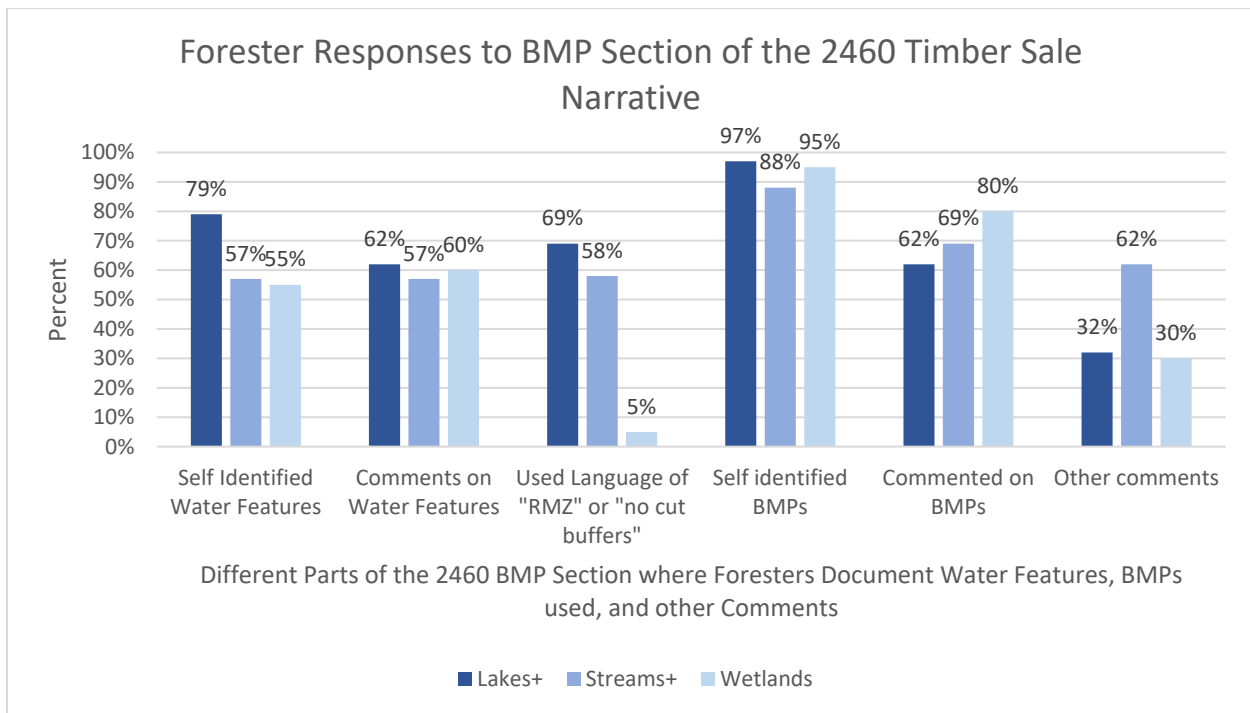


Figure 2. Responses rates to 2460 BMP section for different types of water features present on state lands timber sales.

**Discussion:**

Foresters are selecting *yes* to the question on the 2460 regarding BMPs at higher rates for all water resources when compared to answering *yes* to the question on the 2460 regarding “Lake, stream, or wetland within or impacted by the sale? *Yes* or *No* (if *yes*, insert comments).” This is likely occurring for one of two reasons. The first reason *no* might be selected when *yes* would be more appropriate is the forester might not want to expand on the selected *yes* as the question directs, because BMPs are not optional and therefore further explanation is unwarranted. Or the second possibility is they are interpreting the word “impacted” in a manner that causes them to answer *no*. Since applying BMPs is supposed to protect water quality and not impact the water resource, one reasonable interpretation is by selecting *yes* to BMPs then the “impacted” questions should be *no*. Since BMP monitoring reveals that BMPs are used on state lands over 95% of the time, it is unclear if foresters don’t want to write specifics in the 2460 narrative, or they are read into the question different than its original intent.

There is a discrepancy between how much foresters write in the 2460 and which questions are answered. While a complete analysis by individual property was not conducted, it was observed that certain properties, especially certain state forests, were more likely to answer questions and provide detailed BMP analysis compared with other foresters from other properties. All DNR state lands foresters receive training specifically about BMPs thus property wide differences should be held to a minimum. However, some might go through field refresher classes upon their supervisor requests. The level of differences observed would likely come from either further training at the property or team

level, individual DNR Team Leader's approval process. For example, a Team Leader may establish a culture of thoroughly describing and not just correctly implementing BMPs through their own process.

The discrepancy of 2460 language has never been described in BMP monitoring reports for timber sale BMP application rates between properties or state forests. It can therefore be concluded that while not all DNR foresters appropriately describe BMPs in their 2460s, they do correctly implement BMPs universally across state lands. This reiterates that DNR foresters know BMPs are not optional. They set-up and administer timber sales according to the BMP manual. However, this review reveals that additional clarity, through training or otherwise, would be beneficial to have foresters more consistently describe the BMPs in the 2460 that they are implementing on the timber sale.

There is one element from BMP monitoring that matches closely to this internal 2460 review. BMP application rates from BMP monitoring were strikingly similar to this internal 2460 review's finding of the rates in which foresters answered *yes* under the basic "BMPs" question on the 2460. The application rate found in BMP monitoring reports was 97.2% on state lands as of 2018. This review found BMPs were selected *yes* by foresters 97% for lakes, 88% for streams, and 95% for wetlands. However, the comments that foresters are directed to add after selected *yes*, do always follow. This is another indication that foresters do not see additional benefit thoroughly describing BMPs that are relative to the individual sales, possibility because BMPs are mandatory.

**Take Away:**

Changing the language in the BMP section of the 2460 to help improve the clarity on what and how the foresters will answer that section. One recommendation is going from this:

<b>c. Water Quality Considerations</b>
Lake, Stream or wetland within sale or impacted by sale? <input type="checkbox"/> Yes <input type="checkbox"/> No (If yes insert comments)
BMP's: <input type="checkbox"/> Yes <input type="checkbox"/> No (If yes, describe)
Chpt.30 Permits Needed? <input type="checkbox"/> Yes <input type="checkbox"/> No
15c. Comments

To this:

<b>c. Water Quality Considerations</b>
Is there a lake within 200 feet of the sale? If yes, describe the RMZ and its management.
Is there a stream within 200 feet of the sale? If yes, describe the RMZ and its management.
Was a stream crossed within or for direct access to the timber sale? If yes, describe by answering the sections below: a. Was the crossing new or existing? b. Was the crossing permanent or temporary? c. What type of structure is being used? (Examples: timber mats, culverts. Etc.) d. Is a Chapter 30 permit needed?

Is there a Wetland within, adjacent to, or being crossed by harvesting equipment for the sale? Yes or no. (If yes, insert comments).

Where any BMPs modified? Yes or no. (If yes, which BMP was modified, the extent and rationale).

Other Comments:

Adding a direct distance from the lake or stream to the sale will take out some of the ambiguity out of the former phrasing. Expanding on the stream crossings section will help foresters think about permitting and BMPs ahead of the timber sale. Specifically addressing any BMPs which were modified removes restating generic language such as “all BMPs will be applied”.

Foresters are not always describing what they are doing in the field, and DNR needs to continue to reinforce the importance of the detailed descriptions in the 2460 which match the conditions on the ground. DNR Team leaders should work to ensure consistency in filling out the 2460 appropriately and provide their teams trainings with the forest hydrologist if questions in the 2460 BMP section are not matching what the maps show with water resources.

Nether of these steps will change the management done on the ground-level, but it will provide better understanding of which BMPs were applied, which where modified, and which did not apply to the specific sale. This will help internal staff, external partners, auditors, and the public have an increased understanding of the management decisions made by the field forester with respect to protecting water quality.