



February 12, 2016

Water Docket  
Environmental Protection Agency  
Mailcode: 2822T  
1200 Pennsylvania Avenue, NW  
Washington, DC 20460

Attention Docket ID No. EPA-HQ-OW-2015-0668

Dear EPA Representative:

The National Association of State Foresters (NASF) is comprised of the chief forestry agency administrators for all fifty states, the US territories and the District of Columbia. Our member agencies are responsible for forest fire protection on state and private forest land, assistance to communities in the management of their urban forests, assistance to private forest landowners in the management of their properties, close coordination with forest industries and the management of state-owned forest resources.

In total, our work impacts sixty-seven percent of the nation's forests, encompassing more than 500 million acres. These lands are estimated to filter over fifty percent of the drinking water in the US and are essential for protecting water quality and quantity for other beneficial uses such as aquatic habitat and recreation. To that end we are pleased to provide information in response to EPA's Federal Register Notice of November 10, 2015 - [Notice of Opportunity To Provide Information on Existing Programs That Protect Water Quality From Forest Road Discharges.](#)

To provide some background, silvicultural Best Management Practices (BMP) programs have been established in all states to address nonpoint source pollution related to forestry operations, including forest roads. Most BMP programs date back to the passing of the Clean Water Act. These dynamic programs have undergone multiple revisions, based on new science and information, and changes in operations and policy since that time. Notably, pursuant to Section 319 of the Clean Water Act, states are required to develop assessment reports and management programs that address nonpoint sources of pollution. These assessments and programs contain the necessary policy guidance and direction for implementation of BMPs, thus meeting the provisions of Section 319 as required by EPA.

Looking nationally, two of the main hallmarks of state silvicultural BMP programs are their success at achieving water quality outcomes and their flexibility and diversity to meet local conditions in each state. These two items are inherently linked, as a principal reason that state BMP programs are successful is because they are allowed to be highly diverse and able to reflect

the extremely wide variety of ecological, geomorphological and socio-political conditions that exist across the country.

One of the primary ways in which the diversity of state BMP programs is manifested is in the degree of regulatory incorporation. In the BMP assessment work NASF has been engaged in (which will be described more fully later in these comments), states self-describe themselves as falling into one of three categories relative to water quality protection requirements: “regulatory” in which there are enforceable laws and regulations prescribing BMPs for water resource protection, “quasi-regulatory” meaning that laws are in place specifically prohibiting water quality degradation but not prescribing BMPs in statute or regulation, and “non-regulatory” where the use of BMPs is voluntary and promoted through extensive outreach and education.

Our latest survey indicates that eleven states describe themselves as regulatory, nineteen states as quasi-regulatory and the remaining twenty states as non-regulatory.

### **Implementation, effectiveness and scope of existing state BMP programs**

Periodically NASF has conducted nationwide surveys to gauge the scope and success of state forestry BMP programs. The latest survey was conducted in 2013 with all fifty states responding to a questionnaire covering BMP compliance monitoring, effectiveness evaluations, budget resources allocated to BMP programs and other data. A summary document based on survey results, an interactive map that links to state-by-state detailed information and a comprehensive literature review of BMP effectiveness can be found on the NASF website <http://www.stateforesters.org>. The summary report, entitled Protecting Water Quality through State Forestry Best Management Practices, is also attached to these comments.

Thirty-two states were able to report their latest monitoring data. An additional 11 states indicated that they conduct monitoring but had not produced reportable statistics. Seven states, for a variety of reasons, do not monitor forestry BMP implementation. Most often these are states with low levels of forest cover where forestry operations represent a very low level of risk to water resources.

Of the thirty-two states where data exists - thirteen identified as non-regulatory, eleven as quasi-regulatory and eight as fully regulatory. Quoting the summary document, *“Further analysis of the data reveals high implementation rates for such practices as logging roads, streamside management zones, skid trails and log landings. The mean implementation rates for all of these, regardless of whether a program was regulatory, quasi-regulatory or voluntary, was more than 87 percent.”*

Specific to forest road BMPs, non-regulatory states had over ninety percent compliance, quasi-regulatory had the same and regulatory states had just under ninety-four percent compliance. A principal reason that state BMP programs are successful is because they are allowed to be highly diverse and able to reflect the extremely wide variety of ecological, geomorphological and socio-political conditions that exist across the country. For example, California has a mature regulatory system that requires, among other things, harvest plan approval prior to implementation and achieved 96 percent compliance on forest road BMPs. Florida, a quasi-regulatory state, achieved

99 percent compliance by offering “courtesy checks,” conducting biennial monitoring, holding forest management activities accountable for not violating water quality standards and providing a detailed manual of recommended practices. Louisiana achieved 96 percent compliance through a strictly voluntary program geared toward logger and landowner education and assistance.

NASF also recently sponsored a comprehensive literature review of BMP effectiveness that was conducted by researchers at Virginia Polytechnic Institute and State University. The published journal article detailing that review can be found on our website and is attached to these comments. The review looked at over 80 research studies nationwide (30 from the South, 31 from the West and 20 from the North). From this review, researchers concluded that BMPs are effective when properly applied and effectiveness increases with pre-operational planning, professional forester involvement, logger training and landowner education.

States were frequent collaborators or sponsors of the research summarized in this article. Looking at the BMP survey results this involvement in effectiveness research cuts across all regions and regulatory situations from Washington (regulatory) to Indiana (non-regulatory). States in turn use this data to improve practices and programs where appropriate.

In terms of the scope of state programs, data from a 2012 survey indicated that, in total, state forestry agencies spent roughly 32 million dollars on water quality protection/BMP programs. As with federal budgets, most state budgets have seen contractions and forestry programs are no exception to these general declines. As a result, states have found many unique ways to stretch limited state dollars by involving partners in strategies to protect water quality. In addition, all states have completed State Forest Resource Assessments and Action Plans. These can also be found on the NASF website and a summary of all plans indicate that proactively addressing water quality concerns is a consistent theme with all forestry agencies. Strategies dealing with water quality and quantity can be found in nearly all plans.

### **BMP Program Elements**

We believe the most important element of an effective BMP program is an instructive, scientifically up-to-date BMP manual that covers road design, construction and maintenance and is tailored to local conditions. State forestry agencies provide this element across the country. Scientific and stakeholder involvement in BMP development provides stronger credibility to programs. Another important element is a robust program of logger training and landowner education, and again, most states are heavily involved in these activities. Also important are monitoring programs which provide the ability to learn where improvements are warranted and are also good teaching opportunities. The most recent NASF survey indicates that 43 states have implementation monitoring programs. For the few states that do not, they either lack the authority for a monitoring program or have low levels of forest cover where forestry operations represent a very low level of risk to water resources.

Beyond these basic elements, state forestry BMP programs need to be allowed to vary according to each state’s ecological and geomorphological systems. States have varying capacities for supporting programs, varying authorities for implementing programs and varying levels of water resource risk. Currently the program diversity engendered by this ecological and political

diversity has created a high level of success as reflected by the data we have provided above and in the attached resources.

### **Definitions of “forest road” and “logging road”**

NASF does not feel that a common, nationwide definition for “forest roads or “logging roads” is practical or feasible. As described earlier, regardless of whether they are regulatory, quasi-regulatory or non-regulatory, every state forestry agency has developed BMPs to minimize risk to water resources that might otherwise be caused by forest management activities. All include recommendations on forest roads and are generally assumed to be roads owned and operated by the landowner.

In addition, forest or logging roads are defined in many different ways reflecting the diversity of conditions that exist across the country. For example, Oregon (regulatory) distinguishes between “active roads” and “inactive roads” to describe requirements. South Carolina (quasi-regulatory) distinguishes between “permanent main access roads” and “temporary limited use roads” in making recommendations. And, Missouri (non-regulatory) distinguishes between “temporary roads,” “permanent seasonal roads” and “permanent all-season roads” in the development of their guidelines. The multitude of definitions and descriptions found in the fifty different state BMP manuals reflects each agency’s expertise in communicating in a manner that most effectively addresses water resource protection concerns.

In terms of roads that later serve other purposes, as noted above some states do distinguish between permanent roads and temporary roads. This presumes that permanent roads may be used for other purposes than commercial timber harvest alone or they may be gated and only left in place to serve future harvests. In either case, design specifications would need to accommodate a higher standard with proper crowning, ditching, culverts or whatever else the site, climate and expected uses dictated. This is in contrast to a temporary road that is expected to be reshaped and revegetated as needed after harvesting is completed.

Compounding the problematic nature of defining forest roads are instances where publicly owned roads pass through an extensive single private ownership. Even though large landowners might assist with maintenance, neither maintenance nor road design and construction are ultimately their responsibility. Unfortunately, when the public perceives that these roads may represent water resource risks they may be inclined to label them a “forest road” and expect the forest owner or operator to be held accountable.

### **Additional Considerations**

One of the most significant risks to water quantity and quality is the conversion of forest lands to other uses. EPA’s own 2006 National Assessment Database indicated that, of the 3.5 million miles of impaired rivers and streams in the US, less than three percent were impaired due to forestry – a statistic which includes federally owned forests where catastrophic fire and a severe backlog of road maintenance are significant water risks. Maintaining forest cover should be a high EPA priority and EPA should recognize that adding regulatory cost only encourages private

forest landowners to look to other uses for their land. This negates any positive contribution their well-managed forests could have to water quality and quantity.

Despite the fact that state forestry programs are key to meeting federal Clean Water Act (CWA) goals where forest management is involved, there is little to no federal support for these efforts. Many of these programs were initiated through the use of CWA Section 319 grants, but today few states continue to receive money through this authority. Substantially increased federal funding support would allow programs to continue to evolve and improve, and would assist states in providing the kind of information that would help EPA achieve accountability for protecting water resources during the use of forest roads and related forest management activities.

## **Conclusion**

We appreciate this opportunity to provide the EPA information on state silvicultural BMP programs. A significant number of our member states as well as the Southern Group of State Foresters are also submitting information during this comment period, which we encourage the EPA to examine closely. Each of these comments provides additional specificity to the nationwide picture painted here, and should help the EPA recognize program diversity, both of the BMP items themselves, as well as in monitoring, enforcement and adaptive management elements. In addition, these comments should convey the operational difficulties that would result from trying to define “forest roads”, “logging roads”, or any similar term at a national level.

In summation, NASF supports flexibility in managing storm water discharges from forest roads. We firmly believe that retaining the current diversity of state BMP programs is the correct approach to successfully controlling runoff from forest roads across the nation. For decades, these programs (both regulatory and non-regulatory in nature) have resulted in an effective, measureable and sustainable approach to protecting water quality during forestry operations – including forest road construction and maintenance.

Over the next year NASF plans to institute a process that will regularly update the data we have quoted here from our most recent BMP survey and we look forward to sharing that new information with EPA as this information becomes available.

Sincerely,



Paul DeLong, NASF President & Wisconsin State Forester

Attachments:

- 1) Report: Protecting Water Quality through State Forestry Best Management Practices
- 2) Literature Review: Effectiveness of forestry best management practices in the United States; Richard Cristan; Forest Ecology and Management