



**Bureau Veritas Certification  
North America, Inc.  
SFI Forest Management Audit Report**

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PQC Code	E01E
Contract Number	US 2736092

Certification Audit:		Re-Certification Audit:		Surveillance Audit:	#2	Scope extension audit:	
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Audit Summary
<p align="center"><b>Introduction</b></p> <p>This report summarizes the results of the second surveillance audit conducted on the Missouri Department of Conservation’s (MDC’s) SFI program for forest management. The audit was conducted by Mr. Richard Boitnott, Bureau Veritas Certification lead auditor. Mr. Boitnott is an SAF certified forester, a Texas accredited forester, and has wildlife management expertise.</p> <p align="center"><b>Audit Scope, Objectives and Process</b></p> <p>The scope of this audit is “land management on Department of Conservation owned land in the state of Missouri”. The audit was conducted against the SFI 2015-2019 Standard Forest Management Edition. All SFI Objectives were covered during the audit. There was no substitution or modification of indicators. Specifically, two objectives of the SFI audit were to verify that the Program Participant’s SFI Program is in conformance with the SFI Objectives, Performance Measures, and Indicators, and any additional indicators that the Program Participant chooses, and verify whether the Program Participant has effectively implemented its SFI Standard program requirements on the ground. Standard Bureau Veritas Certification protocols and forms were applied throughout the audit as provided by the most recent version of the Bureau Veritas Certification SFI Auditor Handbook available on the auditor access website.</p> <p align="center"><b>Audit Plan</b></p> <p>The audit began with an opening meeting on 9/24/2019 followed by a review of system documentation in the morning for ½ day. This was followed by field audits on two conservation areas in the southeast region during the afternoon. The field audit continued on the 25<sup>th</sup> on three conservation areas, again in the southeast region. One conservation area was visited on the St. Louis region on the 26<sup>th</sup>. A closing meeting held at the close of business on the 26<sup>th</sup>. An audit plan was developed and is on file with Bureau Veritas Certification.</p> <p align="center"><b>Company Information</b></p> <p>The Missouri Conservation Department is a public entity tasked with restoring, conserving, and regulating Missouri’s fisheries, forests, and wildlife. The department manages more than 975,000 acres of land in the state, of which approximately 658,000 are forested and covered by the scope of this audit. The forest type is generally an oak-hickory forest, mixed with some shortleaf pine.</p>

However, a portion of the ownership is located in the Mississippi alluvial plain, consisting of a bottomland forest. Most of the ownership is moderately to relatively steeply dissected, with the exception of the bottomland areas. MDC manages its forest using natural regeneration. Very little clearcutting occurs, and the only herbicide use is for the control of invasive species and to conduct timber stand improvement.

### **Multi-Site Requirements**

MDC maintains a multi-site certification consisting of eight regions. Headquarters of the management system is in Jefferson City, Missouri. The agency qualifies for multi-site sampling since the management system is controlled and directed by the central office. The SFI manager operates an internal audit program that is one upon which Bureau Veritas Certification can place a high degree of reliance to ensure continued conformance with the SFI standard. Regions are responsible for developing corrective actions and reporting to the central office.

Two regions are required to be audited during each surveillance.

<b>Sites</b>	<b>Sites Audited During this Event</b>
Jefferson City	X
Northeast Region	
Southeast Region	X
Ozark Region	
St. Louis Region	X
Central Region	
Southwest Region	
Kansas City Region	
Northwest Region	

### **Audit Results**

The document review was conducted to determine if MDC’s system documentation continues to meet the requirements of the SFI 2015-2019 Standard Forest Management Edition. The central office audit also examined the company’s procedures for meeting multi-site requirements. The field audit consisted of a review of eight harvesting operations across six conservation areas on two regions. One of the harvest sites was active at the time of the audit. The lead auditor interviewed the logger to discuss training, BMP compliance, rutting guidelines, and spill response.

#### **Objective 1-Forest Management Planning:**

MDC has a stand-level inventory system in place. The agency uses a continuous inventory system to provide information on growth and yield. The agency uses the area control method to schedule harvests. MDC is using FVS for its growth and yield, while feeding data from the CFI. The agency is aware of potential impact of climate change on forest inventory. MDC has a GIS in place, including soils information. The agency has an ecological land classification system. No significant changes have occurred in the past year.

MDC does not have income or harvesting targets. It conducts timber harvest to enhance forest health and provide wildlife habitat. Timber removal for 2018 was less than 1% of the estimated 562 billion bd. ft across its ownership. Estimated growth is 3%, so the agency is harvesting much less than growth. MDC only conducts conversions to achieve restoration objectives. The agency does not convert land to non-forest uses.

## Objective 2-Forest Health and Productivity:

Specific treatments for each stand, including regeneration and intermediate harvests, are identified during compartment inventory and analysis. Reforestation after final harvests is through natural regeneration, with the exception of some native plantings or seeding on sites following silvicultural recommendations and compatible with the appropriate ecological classification. Regeneration is evaluated during forest inventory processes. Natural regeneration is usually not a problem, but if less than 100 desirable TPA are present after 15-20 years, additional silvicultural treatments may be used. MDC does an excellent job of monitoring and diligently managing its forest to prevent impacts from pests.

MDC generally only uses herbicides for the treatment of invasive species and to conduct timber stand improvement. Employees responsible for herbicide applications are properly licensed. No herbicide use was observed during the audit. The agency does not use any WHO Type 1A or 1B pesticides, nor does it use any banned under the Stockholm Convention.

Soil productivity was very well protected in all resource units. No rutting or soil compaction was observed during the audit. Foresters and logging contractors were very consistent in their responses to acceptable rutting guidelines, which are spelled out in the Missouri Watershed Protection Practice document and included in logging contracts.

The agency has room to accelerate its forest management to create more forest diversity and improve forest health. This would also have a side benefit of improving wildlife habitat for those species needing early successional forests, which is generally lacking across the ownership.

## Objective 3-Protection and Maintenance of Water Resources:

Compliance with the Missouri Watershed Protection Practice (BMP) was evident on all harvest sites reviewed during the audit. Streamside management zones were very well established, generally wider than required, and included protection of ephemeral streams, which is not required by the Missouri Watershed Protection Practice document. Erosion control measures were in place on roads and skid trails. Timber harvests are monitored for BMP compliance, with results recorded on an inspection form. One instance was observed where logging debris was in the stream channel. The forester was aware of it and had instructed the logger to remove the material. However, it was not noted on the inspection form. The agency was issued an opportunity for improvement to encourage it to ensure inspections accurately reflect on-the-ground conditions. Logging contracts contain a requirement for compliance to BMPs. The agency attempts to design sale areas to eliminate the need for stream crossings. The only stream crossings observed during the audit were truck crossings on ephemeral drains.

The agency developed a new stream classification tool to reduce the confusion over determining the difference between ephemeral, intermittent, and perennial stream courses. While not eliminating professional judgement, the new tool utilizes a 30 meter digital elevation model (DEM) to provide stream orders, which then guide foresters as to which streams need SMZ protection. This tool was put in place to help address an issue found in the initial audit two years ago, demonstrating the agency's commitment to continual improvement.

## Objective 4-Conservation of Biological Diversity:

MDC continues to operate a robust wildlife management and biodiversity program, given its focus is on enhancing wildlife habitat. Input from the natural heritage program is obtained for every timber

sale, providing known locations and appropriate management practices. Harvest timing restrictions are in place on most sales due to the potential presence of federally listed bat species. The agency considers all G and S ranked species, in addition to T&E species. MDC uses the state wildlife action plan to determine priority species to incorporate into its forest management plans. The agency uses its ecological land classification system to document forest cover types.

Stand-level wildlife habitat elements were evident on all partial harvests reviewed during the audit. There was an obvious attempt to retain snags and legacy trees. The one small clearcut (seven acres) observed during the audit had ample retention, although not required in the lead auditor's estimation due to the small size of the harvest area. The agency has a policy to retain at least 10% of its land in old-growth or old-growth potential stands. MDC uses prescribed fire for wildlife habitat enhancements.

MDC is quite active in identifying and treating any significant occurrences of non-native invasive species. Employees were well aware of invasive species that could occur in their area of operations.

MDC has a division devoted to conducting biodiversity related research. Results are incorporated into area management plans and communicated through training.

#### Objective 5-Management of Visual Quality and Recreational Benefits:

One of the primary focuses of MDC is on aesthetics, so it has a very robust aesthetic management program. The primary way of addressing aesthetics is to slash logging debris to within 24 inches of the ground within defined distances depending on type of road. This includes haul roads, as these are used by the public. The manner in which the agency manages its forest also contributes quite well to visual quality. The average clearcut size for the few clear-cuts conducted in 2018 was 18 acres. What few clear-cuts the agency conducts have a considerable amount of standing retention. MDC has a policy to not clear-cut next to a stand unless the adjoining stand is at least 10 feet in height or 50% canopy cover, which takes longer than three years in Missouri. The few clear-cuts observed the past two years have all met the agency's green-up policy.

#### Objective 6-Protection of Special Sites:

MDC manages the natural heritage database, which includes information on cultural and historical resources. The potential presence of these resources is examined during activity planning processes

#### Objective 7-Efficient Use of Fiber Resources:

All harvest units observed during the audit demonstrated proper utilization, given all harvest activities were conducted in a hardwood ecosystem, which results in more residual material, and a poor pulpwood market in portions of MDC's ownership. Utilization is monitored during harvest activities, with results recorded on an inspection form.

#### Objective 8: Recognize and Respect Indigenous People's Rights:

MDC has a policy in place to respect the rights of indigenous peoples. No known federally recognized tribes exist in Missouri, but the agency has a process to respond to public inquiries.

#### Objective 9-Legal and Regulatory Compliance:

MDC's system to achieve compliance consists of contract language, pre-activity planning processes, training, and monitoring. Employees and logging contractors were very well aware of spill reporting

requirements. The agency's system to ensure regulatory compliance consists of contract language, pre-activity planning processes, training, and monitoring

MDC has a written policy in place to comply with social laws. The agency has received no communication from interested parties concerning it or its supplier's performance relative to ILO core conventions.

#### Objective 10-Forestry Research, Science and Technology:

MDC has a substantial Resource Science Division, responsible for coordinating and conducting research on a variety of forest and wildlife related topics. One of the most significant pieces of research is the Missouri Forest Ecosystem Project, which is taking a long-term look at the impact of logging on a variety of ecosystem functions. The organization is also conducting studies on Black Bear and Hellbender restoration. MDC contributes a considerable amount of money to research efforts, both internally and externally. The agency has developed growth and drain assessments and the economic impacts of its operations. MDC has access to information on the potential impacts of climate change on forest health and productivity, and wildlife and wildlife habitat.

#### Objective 11-Training and Education:

The agency has a statement of commitment to the SFI standard that is available to all employees on the MDC intranet. All new employees are required to receive SFI orientation training. Other training, such as BMPs, T&E species, aesthetics, etc. are conducted as needed. Training records verified training has occurred as required by the agency's procedures. MDC employees receive a great deal of training. The agency requires loggers to have at least one person on each job who maintains current training status. MDC's written agreement with loggers contains a requirement for the use of qualified loggers. All loggers are required to have someone on each job who is either trained or a Master Certified logger in order to bid on an MDC sale, adding preference points if the buyer is a Master Certified logger. They must provide evidence of training at the time the contract is executed. The agency developed a procedure to ensure a trained logger is still on site if the sale takes more than one year to complete, which many do. This addressed an opportunity for improvement issued last year.

#### Objective 12-Community Involvement and Landowner Outreach:

There is no existing SIC in Missouri. Essentially, MDC is the Missouri SIC, since there are no other certified entities in the state. The agency has a landowner assistance program that provides a wealth of information to landowners, including the conservation of biological diversity and the protection of T&E and species of concern. MDC provides financial assistance to Forest Relief of Missouri, which distributes free trees for planting, and the Forest and Woodland Association of Missouri, which promotes healthy, productive, and sustainable forests in the state. The Missouri Managed Woods program promotes the conservation of forestland. MDC is very involved in public outreach, this being another focus area of the agency. In fact, the lead auditor was very impressed with the Cape Girardeau Conservation Nature Center, a commendable effort to provide conservation education to the public of all ages. The agency was issued a notable practice for its outreach efforts.

#### Objective 13: Public Land Management Responsibilities:

The agency is required to get input from the public and adjoining landowners as part of its area planning process.

#### Objective 14-Communications and Public Reporting:

MDC's initial audit report as found on the SFI, Inc. website was required for public review. The agency submitted its 2018 SFI annual progress report prior to the March 31 deadline. MDC has the GIS and accomplishment (RAPTOR) capabilities to provide information to complete the report.

#### Objective 15-Management Review:

MDC has developed a system for collecting information to provide to management to evaluate the agency's conformance to the SFI standard. The agency conducts internal audits which it uses to judge its conformance and provides this information to management. The most recent internal audit identified three minor BMP issues that have since been corrected. This provided evidence the agency is conducting a rigorous internal audit process. MDC conducts a review of the progress towards achieving SFI objectives during monthly staff meetings and quarterly manager meetings.

### Findings

#### Previous non-conformances:

No non-conformances were issued during the previous audit.

#### Non-conformances:

No non-conformances were issued during this audit.

#### Opportunities for Improvement:

One opportunity for improvement was issued, which should be considered in light of how it could affect conformance in the future.

1. PM 3.1, Ind. 3: The agency should make sure its recording of inspections match on-the-ground conditions.

#### Notable Practices:

One notable practice was observed during the audit:

1. PM 3.1: MDC has done a commendable job of addressing confusion on stream classification to determine the need to implement SMZs. The agency has developed a stream classification system using a 30 meter digital elevation model (DEM) to determine stream order. While not intended to eliminate professional judgement, this model does take a lot of the guesswork out of determining which stream courses require SMZs. This is one of the best systems for determining stream classification the auditor has seen outside of the western U.S.
2. PM 12.2, Ind. 1: The agency does a commendable job of outreach to the public. The Cape Girardeau Conservation Nature Center is a first class facility to provide educational opportunities, particularly to youth, but caters to people of all ages. While not the only such facility in the agency, it is the one observed by the lead auditor.

#### Logo/label use:

MDC is using the SFI logo on its website with approval from SFI, Inc. It does not intend to use the BVC logo.

#### SFI reporting:

The first surveillance audit report was found on the SFI, Inc. website as required for public review.

#### Review of Previous Audit Cycle

N/A

### Conclusions

Since no non-conformances were issued, MDC was issued a recommendation for continued certification to the SFI 2015-2019 Standard Forest Management Edition.

**SEE SF61 FOR AUDIT NOTES**

Summary of Audit Findings:									
Audit Date(s):		From: Sept. 24, 2019				To: Sept. 26, 2019			
Number of SF02's Raised:			Major:		0		Minor:		0
Is a follow up visit required:			Yes		No	X	Date(s) of follow up visit:		
Follow-up visit remarks:									
Team Leader Recommendation:									
Corrective Action Plan(s) Accepted		Yes		No		N/A	X	Date:	
Proceed to/Continue Certification		Yes	X	No		N/A		Date:	9/26/2019
All NCR's Closed		Yes		No		N/A	X	Date:	
Standard audit conducted against:									
1)	SFIS 2015-2019 FM Edition			3)					
2)				4)					
Team Leader (1):		Team Members (2,3,4...)							
Richard Boitnott; CF, TX AF		2)							
		3)							
		4)							
		5)							
Scope of Supply: (scope statement must be verified and appear in the space below)									
Land management on Department of Conservation owned land in the state of Missouri									
Accreditation's		ANAB							
Number of Certificates		1							
Proposed Date for Next Audit Event									
Date	Sept 22-24, 2020								
Audit Report Distribution									
MDC : Marty Calvert-marty.calvert@mdc.mo.gov									
BVC: Lorisa love-lorisa.love@us.bureauveritas.com									

<b>Clause</b>	<b>Audit Report</b>
Opening Meeting	<p>Participants: Marty Calvert, Rich Blatz, Mike Morris, George Kipp, John Tuttle, Mike Keeley, Ross Glenn, Justine Gartner, Matt Thompson</p> <p>Discussions:</p> <ul style="list-style-type: none"> <li>➤ Scope of the audit</li> <li>➤ Audit schedule/plan</li> <li>➤ Nonconformance types – Major / Minor</li> <li>➤ Review of previous nonconformances – 0</li> <li>➤ Process approach to auditing and audit sampling</li> <li>➤ Confidentiality agreement</li> <li>➤ Termination of the audit</li> <li>➤ Appeals process</li> <li>➤ Closing meeting timing</li> </ul>
Closing Meeting	<p>Participants: Marty Calvert, Rich Blatz, Mike Morris, George Kipp, Gus Raeker, Matt Thompson, Mike Keeley, Matt Bowyer, Kevin Brunke</p> <p>Discussions:</p> <ul style="list-style-type: none"> <li>➤ Introductions and appreciation for selecting Bureau Veritas Certification.</li> <li>➤ Review of audit process - process approach and sampling.</li> <li>➤ Review of OFIs and System Strengths</li> <li>➤ Nonconformances – 0</li> <li>➤ Date for next audit.</li> <li>➤ Reporting protocol and timing</li> </ul>