FOREST MANAGEMENT AND STUMP-TO-FOREST GATE CHAIN-OF-CUSTODY SURVEILLANCE EVALUATION REPORT

Michigan Department of Natural Resources

Michigan State Forests
Michigan, USA

SCS-FM/COC-00090N

1732 W. M-32
Gaylord, MI 49735
Keith Kintigh, MI DNR Forest Resources Division
KintighK@Michigan.gov

CERTIFIED EXPIRATION
31 December 2015 30 December 2020

DATE OF FIELD EVALUATION 15-17 October 2019 DATE OF LAST UPDATE 28 January 2020

SCS Contact:

Brendan Grady | Director Forest Management Certification +1.510.452.8000

BGrady@SCSGlobalServices.com

SCSglobal

Setting the standard for sustainability

2000 Powell Street, Ste. 600, Emeryville, CA 94608 USA +1.510.452.8000 main | +1.510.452.8001 fax www.SCSglobalServices.com

Foreword

Cycle in annual surveillance evaluations				
☐ 1 st annual evaluation	☐ 2 nd annual evaluation	☐ 3 rd annual evaluation	□ 4 th annual evaluation	☐ Other (expansion of scope, Major CAR audit, special audit, etc.):
Name of Forest Management Enterprise (FME) and abbreviation used in this report:				
Michigan Department of Natural Resources, FME, MI DNR or DNR.				

All certificates issued by SCS under the aegis of the Forest Stewardship Council (FSC) require annual evaluations to ascertain ongoing conformance with the requirements and standards of certification. A public summary of the initial evaluation is available on the FSC Certificate Database http://info.fsc.org/.

Pursuant to FSC and SCS guidelines, annual / surveillance evaluations are not intended to comprehensively examine the full scope of the certified forest operations, as the cost of a full-scope evaluation would be prohibitive and it is not mandated by FSC evaluation protocols. Rather, annual evaluations are comprised of three main components:

- A focused assessment of the status of any outstanding conditions or Corrective Action Requests (CARs; see discussion in section 4.0 for those CARs and their disposition as a result of this annual evaluation);
- Follow-up inquiry into any issues that may have arisen since the award of certification or prior to this evaluation; and
- As necessary given the breadth of coverage associated with the first two components, an additional focus on selected topics or issues, the selection of which is not known to the certificate holder prior to the evaluation.

Organization of the Report

This report of the results of our evaluation is divided into two sections. Section A provides the public summary and background information that is required by the Forest Stewardship Council. This section is made available to the public and is intended to provide an overview of the evaluation process, the management programs and policies applied to the forest, and the results of the evaluation. Section A will be posted on the FSC Certificate Database (http://info.fsc.org/) no less than 90 days after completion of the on-site evaluation. Section B contains more detailed results and information for required FSC record-keeping or the use by the FME.

Table of Contents

SECTION A – PUBLIC SUMMARY	1
1. GENERAL INFORMATION	
1.2 Total Time Spent on Evaluation	1
1.3 Standards Used	1
2. CERTIFICATION EVALUATION PROCESS	
2.2 Evaluation of Management Systems	5
3. CHANGES IN MANAGEMENT PRACTICES	1
4. RESULTS OF EVALUATION	
4.2 History of Findings for Certificate Period	2
4.3 Existing Corrective Action Requests and Observations	3
4.4 New Corrective Action Requests and Observations15	5
5. STAKEHOLDER COMMENTS	
5.2 Summary of Stakeholder Comments and Evaluation Team Responses19	Э
6. CERTIFICATION DECISION	Э
7. ANNUAL DATA UPDATE	Э

SECTION A – PUBLIC SUMMARY

1. General Information

1.1 Evaluation Team

Auditor name:	Kyle Meister	Auditor role:	FSC lead auditor
Qualifications:	Kyle Meister is an FSC Forest Management (FM) and Chain of Custody (COC),		
•	Sustainable Biomass Partnership, and Roundtable on Sustainable Palm Oil Supply		
	Chain Certification Lead Auditor with SCS Globa		• • •
	FM pre-assessments, evaluations or surveillance	e audits in Bolivi	a. Brazil. Canada.
	Costa Rica, Dominican Republic, Indonesia, India		
	Spain, and all major forest producing regions of	• •	
	conducted COC assessments in Bolivia, Canada,		
	(California, Georgia, Kentucky, North Carolina, C	Dregon, Pennsyl	vania, South
	Carolina, Tennessee, Virginia, and West Virginia). Mr. Meister h	as successfully
	completed CAR Lead Verifier, ISO 9001:2008 Lea	ad Auditor, SA80	000 Social Systems
	Introduction and Basic Auditor, RSPO Supply Ch	ain Lead Audito	r, SBP Lead
	Auditor, and FSC Lead Auditor and Trainer Train	ing Courses. He	holds a B.S. in
	Natural Resource Ecology and Management and a B.A. in Spanish from the		
	University of Michigan; and a Master of Forestry from the Yale School of Forestry		
	and Environmental Studies.		
Auditor name:	Shannon Wilks	Auditor role:	SFI lead auditor
Qualifications:	Shannon Wilks has over 27 years of professiona	l experience in t	the forest industry.
	His roles have included procurement, supply chain management, contract		
	negotiations and environmental management compliance. His experience		
	includes 20 years with a global forest products company where he spent most of		
	his career in the southern United States. He has also managed industrial		
	properties with land management functions. Mr. Wilks is a Controlled Wood		
	Senior Lead Auditor for FSC® Chain of Custody, Lead auditor for Sustainable		
	Forestry Initiative (SFI®) Chain of Custody Standard, SFI® Fiber Sourcing, SFI®		
	Forest Management Standard, Programme for the Endorsement of Forest		
	Certification (PEFC®) Chain of Custody Standard and a Lead Auditor for		
	Sustainable Biomass Program (SBP). Mr. Wilks is a graduate of Louisiana Tech		
	University with a Bachelor of Science-Forest Ma	nagement degr	ee.

1.2 Total Time Spent on Evaluation

Α.	Number of days spent on-site assessing the applicant:	3
B.	Number of auditors participating in on-site evaluation:	2
C.	Number of days spent by any technical experts (in addition to amount in line A):	0
D.	Additional days spent on preparation, stakeholder consultation, and follow-up:	3
E. Total number of person days used in evaluation:		9

1.3 Standards Used

All standards used are available on the websites of FSC International (<u>www.fsc.org</u>) or SCS Global Services (<u>www.SCSglobalServices.com</u>). All standards are available on request from SCS Global Services via the comment form on our

website. When no national standard exists for the country/region, SCS Interim Standards are developed by modifying SCS's Generic Interim Standard to reflect forest management in the region and by incorporating relevant components of any Draft Regional/National Standard and comments from stakeholders. More than one month prior to the start of the field evaluation, SCS Draft Interim Standards are provided to stakeholders identified by FSC International, SCS, forest managers under evaluation, and the FSC National or Regional Office for comment. SCS's COC indicators for FMEs are based on the most current versions of the FSC Chain of Custody Standard, FSC Standard for Group Entities in Forest Management Groups (FSC-STD-30-005), and FSC Accreditation Requirements.

Standards applicable	☑ Forest Stewardship Standard(s), including version: FSC-US, V1-0
NOTE: Please include the full standard name	☑ FSC Trademark Standard (FSC-STD-50-001 V2-0)
and Version number	SCS COC indicators for FMEs, V7-0
and check all that apply.	\square FSC standard for group entities in forest management groups (FSC-STD-
	30-005), V1-1
	☐ Other:

2. Certification Evaluation Process

2.1 Evaluation Itinerary, Activities, and Site Notes

Date: 15 October 2019		
FMU / location / sites visited	Activities / notes	
LOCATION, AUDITORS	Introductions, client update, review scope of evaluation, audit	
Program-wide Opening Meeting	plan, intro/update to FSC and SCS standards, confidentiality and	
8:00 am – 10:00 am	public summary, conformance evaluation methods and review of	
	open CARs/OBS, emergency and security procedures for evaluation	
	team, reviewed audit itinerary.	
SFI lead: Gladwin FMU	Overview of FMUs forest and land management programs; review	
	of training, CoC, and pesticide use records; final site selection.	
Site 1: Bird Dawg Mix-HCVA-	Feature(s) of Interest: 80 acres. Cut winter of 2018 & 2019,	
Compartment #24Unit 11	road/skid trail construction, restoration & hunter walking trail. 40-	
	year old Aspen harvest with adequate regeneration observed.	
	Winter harvest to minimize conflict with recreational use.	
	Observed loop truck road, with debris and filed with slash.	
	Turnaround designed for chip and roundwood harvest. Chip	
	loading area utilized as parking lot/pull off for field trials and other	
	recreational uses. Future informational sign planned for	
	regeneration and lifecycle of Aspen. Informational signs for various	
	stages planned for 0-5 years. Closed road for access to northern	
	part of stand, seeded with chicory/clover mix. Use in restoration	
	sites based on soil types. Observed snag and green tree retention	
	through stand. Exemption for islands/clumps due to Grouse	
	habitat and Field trial area.	
Site 2: Gladwin Field Trial Area	Feature(s) of Interest: Road-no BMP issues but grading could be	
	utilized. High traffic due to field trial use. Recreational area.	
Site 3: Cruising Dog Aspen-Sale	Feature(s) of Interest: 445 acres over 7 units. Unit 1-Aspen	
#10-Compartment 095	harvest- Trembling and Quaking. Land cleared in 70s by state for	
	DRIP (Deer Range Improvement Program). Lack of markets for	

	Aspen to create habitat. Aspen harvest at maturity. Secondary
	road open to public traffic. No ORV (Off Road Vehicles). Sale
	harvested by SFI Trained Logging professional. Observed
	documentation and sale inspections. Unit 1-80.5 acres. Very wet
	and lowland area. Observation of rutting on sale area but no
	violations of guidelines (12 inches over 50 feet) or BMPs.
	Observation of drainage and rutting on public access road. No
	evidence of soil erosion due to flat topography. Aspen
	regeneration and no sign of trash or hydrocarbon spills.
Site 4: Active job on	Feature(s) of Interest: 39.6 acres. Interview with SFI trained
Compartment 095, Unit 7	logger. Observed rutting but no impacts to soil movement or water
	quality or violation of guidelines. Ground conditions were flat with
	high water table. Observation confirmed no evidence of trash or
	hydrocarbon spills. Personnel knowledgeable of spill requirements
	and confirmed all required mitigation (spill kits) maintained on-
	site. Observation of low crossing installed with treetops and soil
	covered to access for timber removal. Forester confirmed crossing
	will be removed and barriers installed to prevent motorized traffic
	from utilizing Administrative Road after harvesting is complete.
Site 5: Bemaltes Wald Mix-	Feature(s) of Interest: Active harvesting site- not operational due
Compartment 111; Unit #2	to 6+ inches rain. Precision Forestry purchased. Near Logging- SFI
	trained. Forester checks certification prior to beginning sales.
	Documentation observed in sale file. Stand 5 shelterwood- oak,
	maples with minimal aspen. Minimal damage to residual stand.
	Regeneration is planned to favor oaks and maples. Observation of
	roads with standing water-flat topography with sandy soils and
	high-water table. No observation of sedimentation or flowing
	streams. No evidence of trash or hydrocarbon spills. No BMP
	violations observed. Wood stacked and loaded on trailer. Forester
	estimates ground will need to be frozen to complete sale. Public
	road with standing water due to topography and recent 6+ inch
	rainfall event.
Site 6: Compartment 111; unit 4	Feature(s) of Interest: Aspen harvest with retention and snags.
& 5	Observed Grouse drumming logs. Good utilization for wildlife
	habitat.
Site 7: Bemaltes Wald Mix-	Feature(s) of Interest: Observation of "Chevron" road. Built with
Compartment 111; Unit 6	fabric, crowned with aggregate base. Well designed and
	operational pubic road. No BMP issues.
FSC lead: Gladwin FMU West	Overview of FMUs forest and land management programs; review
	of training, CoC, and pesticide use records; final site selection.
Site 1: Bird Dawg Mix Sale	Feature(s) of Interest: Unit 11; 40-year old aspen cut winter of
	2018 & 2019, road/skid trail construction, restoration & hunter
	walking trail. Horseshoe turnaround was created so that logging
	trucks could load at the landing without obstructing traffic on the
	main road. Turnaround was ripped and covered with logging slash.
	Pullout site created for trailers to use during birddog training.

	Educational signage posted at turnaround describing stages of
	young forest used for ruffed grouse and woodcock management.
Site 2: Trestle Junction,	Feature(s) of Interest: Trestle Junction; water quality and riparian
collaborative crossing project.	management. Old crossing under review for upgrade to improve
	fish passage, resilience to flooding, and reduce potential for
	sedimentation in trout stream. Discussion on climate change
	adaptation.
Site 3: Alibi Hall, State Forest	Feature(s) of Interest: Gladwin Field Trial Area (GFTA), HCVA &
Campground	Master Plan for GFTA. Bird dog field trail course for training and
	competitions for ruffed grouse and woodcock. Site managed for
	wild birds, which increases the difficulty of the field trial course.
	Discussion on recreation and hunting management to avoid
	conflict between different user groups. GFTA has several
	• •
	restrictions that allow for the preference of field trial activities.
Cita Antana Labana Cita	Deer hunting is only allowed outside of field trial season.
Site 4: Long Lake Mix Sale	Feature(s) of Interest: Units 1 & 2; snowmobile trail / timber sale
	interaction, FTP C73-998. Water quality, retention. Clearcut
	followed by herbicide site prep and trenching in 2018. Site planted
	with containerized red pine seedlings in spring of 2019. Use of
	island retention to improve survivability of retained trees during
	harvesting and aerial application activities. Inspection of vernal
	pool, which was buffered from trenching and aerial spray.
Site 5: Red Racer Sale, Leota KW	Feature(s) of Interest: Threatened endangered species
Block	management, cooperation with oil and gas industries. Cooperation
	with oil and gas industries on pipeline crossings. Area was clearcut
	for jack pine regeneration and alternating retention strips 66'-100'
	wide were left about ¼ mile apart to mimic fire-skips. Area to be
	replanted with mix of jack pine and red pine at different spacing to
	manage for Kirtland's warbler.
Site 6: Kirby Pine Sale	Feature(s) of Interest: Unit 1 & 2; archeological/historical site
, , , , , , , , , , , , , , , , , , , ,	documented and protected during harvest, RMZ management,
	cooperation with oil and gas industry. Red pine thinning area and
	shelterwood area with mix of red, jack, and white pines in the
	overstory. Mostly red pine left as shelter trees to shelter the oak
	regeneration. Discussion of timber sale preparation checklist to log
	any hits for RTE species and archeological sites.
Date : 16 October 2019	any mission the species and archieological sites.
	Activities / notes
FMU / location / sites visited	Activities / notes Overview of EMUs forest and land management programs; review
SFI lead: Gaylord FMU	Overview of FMUs forest and land management programs; review
C: 4 B: T: 5 ! 5:	of training, CoC, and pesticide use records; final site selection.
Site 1: Big Time Red Pine-	Feature(s) of Interest: Active site- Logger Timberline -SFI Trained-
Compartment 029- Unit 2	admin checked by DNR personnel. Sale consists of 4 payment
	units. Chip crew moved in 10/15. Harvesting complete, chipping
	operations began. Observation of high stumps. Discussion with
	personnel and review of sale inspections confirmed high stumps
	were discussed with contractor. No evidence of rutting or BMP

	violations. No observation of trash or hydrocarbon spills. Haul
	road accessing public highway observed with no issues.
Site 2: First Time Red Pine-	Feature(s) of Interest: 53.3 acres. Purchased Northwest
compartment 29; units 1&2	Hardwoods, IncHarvested by Timberline. Observation on site
	confirmed no BMP violations. Wet conditions with and minimal
	soil impacts.
Site 3: Twiced Iced Red Pine-	Feature(s) of Interest: Harvested by subcontractor to purchaser.
Compartment-029; Unit 2	No rutting or observation of trash or hydrocarbon spills.
Si: 4.5	Monitoring observed with Field Inspection Reports.
Site 4: Fowler Lake-RDR	Feature(s) of Interest: Recon by Forester identified illegal trespass
(Resource Damage Report)	use of trails by ORVs and illegal dumping. Utilized process and
	procedures to identify and plan mitigation efforts. Involved Conservation Officers for enforcement and notification for
	assistance from neighbors. Natural barriers placed to block trails
	and removal of trash and illegal construction of bridge across RMZ.
	RMZ contained stand of Hemlocks. No further actions reported. No
	observation during site visit of trespass activity.
Site 5: Bog ERA (Ecological	Feature(s) of Interest: Observed protected area and review of
reference area)	management plans. Access through private landowner. Site
,	protected due to species composition and plans for management
	are natural with no FM activity planned other than 10-year check.
	Management plans and documentation matched field conditions.
Site 6: Open Management Area	Feature(s) of Interest: Historical Sharp-tailed grouse habitat from
	1970s. No longer a population but area continued to be managed
	as open area800-acre area burned on 3-4-year rotation. Section
	prescribed burned in early 2019. Primary objective is habitat
	maintenance for open land. Interviews confirm notification of
	adjacent landowners and public through website.
Site 7: Type 2 OG (Old Growth)	Feature(s) of Interest: Observed 160-year old white pine with
	understory of maples and white pines. Site contained downed
	woody debris. Area designated for no FM activity and review of
	documentation confirmed. Wildlife personnel identified
	importance of old growth stand in proximity of river corridor and area managed for late successional species, especially for Bald
	Eagles and hawks.
Site 8: Syx Myx Compartment 6;	Feature(s) of Interest: 57.6 acres, harvested by Verified Logging
Units 1,2 & 3	Professional. Primary objective timber management. Horse trail
31113 1,2 Q 3	through middle of sale. All protections and no ORV allowed. Aspen
	in unit 1; Aspen/Oak units 2 & 3. Scattered oak retention for hard
	mast production and island retention.
FSC lead: Gaylord FMU West	Overview of FMUs forest and land management programs; review
	of training, CoC, and pesticide use records; final site selection.
	Feature(s) of Interest: Pole barn removed from state land. An
	adjacent landowner constructed a pole bard on state land, which
Site 1: Jerome T-pass	was removed after being surveyed by the state and the
	landowner's contracted surveyor. Communication records
	reviewed, which showed cooperation between the parties.

Site 2: Mancelona 1-28	Feature(s) of Interest: reclaimed well site. Site ripped and seeded using state-recommend seed mixes to recover soil and benefit wildlife. Site will be allowed to regenerate naturally from adjacent aspen stands and will be resurveyed during regularly scheduled reentry.
Site 3: Sand Lake Red Pine #5201119	Feature(s) of Interest: 1st entry red pine thinning. Interview with logging crew and inspection of site. Cut-to-length system being used. Good distribution of slash over the site and good utilization. Head logger is SFI-trained. No first aid and spill kits present onsite.
Site 4: Sand Lake Mix #5200719	Feature(s) of Interest: Final Harvest - restart red pine. Clearcut of red pine and mixed hardwood. Interview with logging crew and inspection of site; one logger had SFI training qualification. Both workers did not have recent first aid/CPR certifications.
Site 5: Mesic Forest ERA #18768	Feature(s) of Interest: ERA recently inventoried. Resource Damage Report (RDR) for unauthorized trail. Review and discussion of ERA plan, which does not describe which activities are allowed. Presence of invasive plants along trail and cutting of fallen trees noted.
Site 6: TOMMBA Bike Trail Use Permit	Feature(s) of Interest: Bike trail created by use permit. Site to be maintained under MOU to be established with local mountain biking club. Site was constructed under a use permit.
Site 7: Excogitate Hdwds #5202717	Feature(s) of Interest: Northern Hdwd Thinning. Interview with logger and inspection of site. Logger has all training (e.g., SFI) and safety equipment/kits (e.g., spill kit, first aid kit, fire extinguisher).
Site 8: Five Corners Hdwd #5202618	Feature(s) of Interest: Northern Hdwd Thinning. Interview with logging crew and inspection. Staff does not have first aid/CPR training. Trailer with spill kit not onsite. First Aid kits were present in machinery and transport vehicles.
Date: 17 October 2019	
FMU / location / sites visited	Activities / notes
SFI lead: Shingleton FMU (North)	Overview of FMUs forest and land management programs; review of training, CoC, and pesticide use records; final site selection.
Site 1: Kabooki Hardwood- Compartment 182,183; Units 1, 2, 3 4	Feature(s) of Interest: 218.8 acres. Northern hardwood single tree selection. Higher quality stand. Marking contracted. Logger is SFI trained. Subcontract cutters-felled by chainsaw. Previously harvested in 90s. Regeneration from thinning release to un-even age stand for High quality sugar maple.
	Observed all required documents, including contract with BMP language and use of qualified loggers, inspection and monitoring. External contact interviewed. No evidence of BMP violations, trash or hydrocarbon spills. No RMZ on timber sale. Significant regeneration of Sugar Maple. No evidence of damage to residual stand or regeneration. No road issues observed. Wet and no harvesting operations were active at time of visit.
Site 2: Mixed Timber- Compartment 167, 170-Unit 1	Feature(s) of Interest: 26 acres. Archaeological notice on adjacent sale. Field inspection did not locate but sale was red-lined with no equipment entry as precaution. Open area maintained for wildlife-

Site 3: Kingston Lake State Forest Campground	Petrol deer wintering complex. Used for green up right after winter (highest mortality rates). Spruce Budworm Initiative- 30% or higher spruce/fir. Salvage to prevent outbreak. Response to industry outcry. Removed targeted species and left protected cherry and other hardwoods. Observations on site: No BMP violations, minimal damage to residual stand. No evidence of trash, trespass or hydrocarbon spills. Feature(s) of Interest: Manage Invasive species grant for campground and lake by Conservation District in cooperation with DNR. Phragmites treatment in 2018-(.47 acres). Checks in 2019 confirmed footprint less than 1000 sq ft. Public posting of treatment confirmed. Use of Rodeo (glyphosate) utilize 2% solution less than label. Application post flowering enables less concentration. Request by FM Manager to delay after Labor Day due to public exposure. Largest challenge for Conservation District is funding to provide eradication and monitoring. External Interview conducted.
Site 4: Kingston Lake State Forest Campground	Feature(s) of Interest: 1st or 2nd busiest in UP. Stocked Muskie lake. Observation of high water and ring of dead trees due to high water level due to above average rainfall. Utilizing for habitat structures in lake. Fisheries management for structure through approval process. 21 structures sunk in lake for fish habitat. Observed enforcement of recreation fees with "p" designation on license plates.
Site 5: Compartment 101- Critical Dunes HCVA	Feature(s) of Interest: Reviewed through Public Meeting-held 10/15. Comments from North Country Trail-trail runs through land, no negative comments confirmed during interview. DNR agreed to utilize sale specifications to keep trail free and leave higher basal area higher along trail. Permitting required from Dept of Environment Great Lakes and Energy (EGLE). Dunes management and erodible soils. Stay off slopes greater than 20%. Observed jack pine harvested about 5 years ago and island retention left due to steep slope. Piping Plover critical coastal habitat. Nest on cobble laden sandy beaches. Predators include blue jays, hawks. Listed as endangered and population declined to less than 20. Nests are guarded by volunteers. Population on increase but still not to target of 100 pairs.
Site 6: C103- Compartment 103	Feature(s) of Interest: Sale sold but not active. Only road widening and grading observed. Sold to Longyear. SFI trained-Qualified Logging Professional. Plantation Jack Pine- rotation age 60. Break up age classes for future diversity of stands. 90% of sale-jack pine with small island of aspen and red pine stand (thinned). Increased buffer of 300 ft along Blind Sucker River (High Priority Trout Stream). Objective to discourage beaver activity along stream. Observed buffer with well-defined slope to river. More than adequate buffer.

Site 7: Fish Passage Reclamation	Feature(s) of Interest: Capital Outlay project to replace aging
	culverts. Grants utilized from Great Lakes Watersheds. 1-month
	assembly to finish product including 700-man hours. No evidence
	of sedimentation or BMP issues.
FSC lead: Shingleton FMU	Overview of FMUs forest and land management programs; review
(South)	of training, CoC, and pesticide use records; final site selection.
	Feature(s) of Interest: Active Timbersale lowland spruce and jack
	pine. Inspection of site and interview with logging crew. Fire
Site 1: Southside Fragments	extinguishers, First AID (logging machinery and transport vehicles)
	and spill kits (trailer) present onsite. No crew member has recent
	first aid/CPR certification.
	Feature(s) of Interest: Closed Sale, Rx Burn, Trenching. Site was
Site 2: Red Turns Green	clearcut of natural red pine, but white pine regenerated. Site was
Site 2. Red Turns Green	burned and trenched in 2019. Will be planted in 2020 to red pine
	to maintain the cover type.
	Feature(s) of Interest: ERA. Inspection of forested dune and swale
Site 3: Lake Michigan Wooded	complex with several conifer species and open wetlands within
Dune & Swale Complex	depressions and swales on top of dunes. Discussion of allowed
	activities per review of ERA plan and how often site is monitored.
Shingleton office	Review of HCV plans and monitoring reports; interviews with staff
	Closing Meeting Preparation: Auditor(s) take time to consolidate
	notes and confirm evaluation findings
	Closing Meeting: Review preliminary findings (potential non-
	conformities and observations) and discuss next steps

2.2 Evaluation of Management Systems

SCS deploys interdisciplinary teams with expertise in forestry, social sciences, natural resource economics, and other relevant fields to assess an FME's conformance to FSC standards and policies. Evaluation methods include reviewing documents and records, interviewing FME personnel and contractors, implementing sampling strategies to visit a broad number of forest cover and harvest prescription types, observing implementation of management plans and policies in the field, and collecting and analyzing stakeholder input. When there is more than one team member, each member may review parts of the standards based on their background and expertise. On the final day of an evaluation, team members convene to deliberate the findings of the assessment jointly. This involves an analysis of all relevant field observations, interviews, stakeholder comments, and reviewed documents and records. Where consensus among team members cannot be achieved due to lack of evidence, conflicting evidence or differences of interpretation of the standards, the team is instructed to report these in the certification decision section and/or in observations.

3. Changes in Management Practices

☑ There were no significant changes in the management and/or harvesting methods that affect the FME's conformance to the FSC standards and policies.

☐ Significant of	changes (occurred	since the	last evalua	ation that	t may	affect the	FME's c	onforman	ice to FSC
standards and	policies ((describe)):							

4. Results of Evaluation

4.1 Definitions of Major CARs, Minor CARs and Observations

Major CARs: Major nonconformances, either alone or in combination with nonconformances of all other applicable indicators, result (or are likely to result) in a fundamental failure to achieve the objectives of the relevant FSC Criterion given the uniqueness and fragility of each forest resource. These are corrective actions that must be resolved or closed out before a certificate can be awarded. If Major CARs arise after an operation is certified, the timeframe for correcting these nonconformances is typically shorter than for Minor CARs. Certification is contingent on the certified FME's response to the CAR within the stipulated time frame.

Minor CARs: These are corrective action requests in response to minor nonconformances, which are typically limited in scale or can be characterized as an unusual lapse in the system. Most Minor CARs are the result of nonconformance at the indicator-level. Corrective actions must be closed out within a specified time period of award of the certificate.

Observations: These are subject areas where the evaluation team concludes that there is conformance, but either future nonconformance may result due to inaction or the FME could achieve exemplary status through further refinement. Action on observations is voluntary and does not affect the maintenance of the certificate. However, observations can become CARs if performance with respect to the indicator(s) triggering the observation falls into nonconformance.

4.2 History of Findings for Certificate Period

FM Principle	Cert/Re-cert	1 st Annual	2 nd Annual	3 rd Annual	4 th Annual
	Evaluation	Evaluation	Evaluation	Evaluation	Evaluation
No findings					
P1					
P2					
P3					
P4	OBS 4.4.a	OBS 4.4.a	OBS 4.1.b		Minor 4.2.b
P5			Mn 5.3.b		
P6	OBS 6.3.h; OBS		Mn 6.5.b;		
	6.6.e; Mn 6.7.a		Emergency		
			Dero, 6.6.a		
P7	Mn 7.1.p				
P8	OBS 8.5.a			OBS 8.4.b	OBS 8.5.a
P9	OBS 9.1.b/c				OBS 9.3.a
P10					
COC for FM					OBS 1.2 (2.3)
Trademark					
Group					
Other					

4.3 Existing Corrective Action Requests and Observations

Finding Number: 2018.1
Select one: Major CAR Minor CAR X Observation
FMU CAR/OBS issued to (when more than one FMU):
Pre-condition to certification/recertification 3 months from Issuance of Final Report 12 months or next regularly scheduled audit (surveillance or re-evaluation) X Observation – response is optional Other deadline (specify):
FSC Indicator: 8.4.b
Non-Conformity (or Background/ Justification in the case of Observations): Interviews of Division of Forestry, Parks, and Wildlife Divisions confirmed ongoing efforts to implement strategic plans with objectives related to road inventory and related infrastructure system needs. For example, Management Units are using the Resource Damage Report system, to record and prioritize infrastructure needs. This monitoring indicates an accumulation of road issues across Management Units. The DNR has already Identified road maintenance issues as an area of focus and is currently in process of inventorying, classifying and recording related infrastructure for all roads in the state forest system in response to new legislation, PA 288. This effort is ongoing. Re-construction and maintenance of permanent, open forest roads continues to be a challenge for the DNR. The program would be greatly strengthened by improvements in planning and subsequent implementation of a maintenance program for the permanent road system. During the 2018 audit, many portions of permanent forest roads observed and/or traveled during the audit could be improved for drainage. However, no cases of inadequate road Best Management Practices (BMPs) leading to sedimentation of streams or wetland were observed. Many sections of road are embedded slightly below grade, have two-tracks, have a grading berm, and/or have no crown to disperse surface water. One road for which significant road improvement work is in progress has not been completed or graded in over a year.
The DNR should consider strengthening and supporting development of road maintenance planning for forest management staff. This would, in turn, help manage changes expected from PA 288, which is highly likely to increase recreational traffic on forest roads. This would also help meet Objective 4 of the "Forest Resources Division Strategic Plan, 2014-2018". In summary, MI DNR monitoring shows accumulating road maintenance needs that suggests the DNR should update its strategic planning relative to road maintenance to address accumulating road quality issues, particularly in consideration of changes driven by PA 288. Because the FME has already identified this issue, is currently taking actions towards solutions, and is otherwise in conformance with the forest management standard this finding is justified as an Observation rather than a Minor Non-conformity.
Corrective Action Request (or Observation): Where monitoring indicates that management objectives and guidelines, including those necessary for conformance with this Standard, are not being met or if changing conditions indicate that a change in management strategy is necessary, the management plan, operational plans, and/or other plan

implementation measures are revised to ensure the objectives and guidelines will be met. If monitoring

shows that the management objectives and guidelines themselves are not sufficient to ensure conformance with this Standard, then the objectives and guidelines are modified.

Changes in objectives and guidelines for the road maintenance program under PA 288 should be considered. MI DNR should also consider changes in management strategies to strengthen the ability for continued conformance with the standard, particularly around provisions relative to road maintenance.

FME response (including any evidence submitted)

We plan to provide a presentation at the opening meeting on steps we have taken to improve our State Forest Roads infrastructure. With the passage of Public Act 288 of 2016, the Michigan DNR created a comprehensive road inventory and mapping system for state forest roads, which will facilitate forest planning, road maintenance and access for recreation. To date, over 13,000 miles of forest roads have been mapped statewide. Forest roads have been specifically highlighted in Forest Resources Division's update Strategic Plan (2019-2023). Goal 1, Objective 5 of the Strategic Plan states that Forest Resources Division will: "Develop a comprehensive maintenance, repair and replacement plan for roads, bridges and culverts". Strong timber sale revenues are allowing us to invest in improvements to state forest roads and bridges, facilities and other infrastructure. MDNR has contributed significant Capital Outlay towards State Forest Road improvements. In addition, a culvert inventory RFP was submitted and awarded this past spring. The goal of the inventory is to find structures on the ground, map them, take measurements and assess them for future replacement schedules as well as whether they meet resilient infrastructure goals with respect to climate change and other factors that may cause them to need to be replaced. A pilot inventory will be conducted in the central UP with the goal of completing the rest of UP by end of 2020 and the NLP by 2021.

SCS review

FME provided a presentation on its actions taken to address this OBS during the opening meeting. PA 288 was considered in the development of the plan to identify and prioritize road infrastructure. Most recently, a contract for culvert inventory was awarded to an NGO. Information on culverts and their conditions (basic attributes and habitat) are being recorded in GIS (ArcGIS Online). As part of the FME's strategic plan, the inventory will be used to develop a replacement schedule based on the condition of each culvert and establish budgets for repair and/or replacement. The data is being collected in the field using hand-held devices equipped with an app to standardize data collection. The project is being started with a pilot in the Western Upper Peninsula so that any changes necessary to complete the inventory can be made before scaling to the rest of the FMU. The objective is to complete this project by 2021.

The FME presented a summary of its capital outlay budget for road infrastructure for 2016-19 (e.g., roads, bridges, culverts), which demonstrates that it has a plan to invest in this and other infrastructure projects related to the road system.

Once data has been compiled and analyzed, specific roads and infrastructure can prioritized during management planning. As the FME has initiated action to address the changing conditions of the road system, this OBS is closed.

Status of CAR:	X Closed				
	Upgraded to Major				
	Other decision (refer to description above)				
	Citier decision (rejer to description above)				
4.4 New Correctiv	ve Action Requests and Observations				
	Finding Number: 2019.1				
•	or CAR X Minor CAR Dobservation				
FMU CAR/OBS issued	to (when more than one FMU):				
Deadline	Pre-condition to certification/recertification				
	3 months from Issuance of Final Report				
	12 months or next regularly scheduled audit (surveillance or re-evaluation)				
	Observation – response is optional				
FSC Indicator:	Other deadline (specify): FSC-US 4.2.b				
	ackground/ Justification in the case of Observations): The FME's logging contract				
• •	contractors adhere to MIOSHA requirements, some of which are detailed here:				
,	n.gov/documents/CIS WSH part51 51263 7.pdf. MIOSHA R408.15114 Injuries,				
	training: Rule 5114 of MIOSHA-STD-1135 includes the minimum requirements for				
· ·	ing, as well as how many people on the job site must be trained.				
_	I site inspection, inconsistencies in health & safety practices were detected. The				
_	ere observed on different sites visited with loggers present:				
, ,	ging contractors and/or owner-operators did not have First Aid and CPR training or				
•	as trained in First Aid/CPR was not present onsite;				
	est sites inspected had no First Aid kit accessible onsite.				
	quest (or Observation): The FME and its employees and contractors shall demonstrate				
a safe work environm	ent. I				
FME response					
(including any evidence submitted)					
SCS review					
Status of CAR:	П .				
	Closed				
	Upgraded to Major				
	Other decision (refer to description above)				

	Finding Number: 2019.2
Select one:	or CAR Minor CAR X Observation
FMU CAR/OBS issued	to (when more than one FMU):
Deadline	Pre-condition to certification/recertification
	3 months from Issuance of Final Report
	12 months or next regularly scheduled audit (surveillance or re-evaluation)
	Observation – response is optional
	Other deadline (specify):
FSC Indicator:	FSC-US 8.5.a
	ackground/ Justification in the case of Observations): ERA and/or Natural Community
Monitoring Reports ha	ave not been updated on the DNR's webpage since 2014. Per interviews with staff,
	nese on the webpage has been placed. FME staff also noted other issues with lack of
	bsite. This should be updated by the 2020 recertification assessment to avoid a
potential nonconform	
	uest (or Observation): While protecting landowner confidentiality, either full
-	an up-to-date summary of the most recent monitoring information should be
	the Indicators listed in Criterion 8.2, and is available to the public, free or at a
nominal price, upon re	equest.
FME response	
(including any	
evidence submitted)	
SCS review	
Status of CAR:	Closed
	Upgraded to Major
	Other decision (refer to description above)
	— Other decision (rejet to description above)
	Finding Number: 2019.3
Select one:	or CAR Minor CAR X Observation
FMU CAR/OBS issued	to (when more than one FMU):
Deadline	Pre-condition to certification/recertification
	3 months from Issuance of Final Report
	12 months or next regularly scheduled audit (surveillance or re-evaluation)
	Observation – response is optional
	Other deadline (specify):
FSC Indicator:	FSC-US 9.3.a.

Non-Conformity (or Background/ Justification in the case of Observations): FME is in the process of initiating its 5-year review process for evaluation and ranking of Ecological Reference Areas (ERAs). There are at least five documents that include the description of ERAs, their goals/objectives, and activities that are consistent with their maintenance and/or enhancement (e.g., 2008 management plan as amended in 2014, Work Instruction 1.4 – Biodiversity Management, Guidance for Land Use Activities within DNR-administered Ecological Reference Areas, Natural Community Management Guidance, and ERA plans). Other areas that may qualify as HCVs per these documents include Special Conservation Areas (SCAs), Legally Dedicated Natural Areas, Wilderness or Wild Areas, Natural Rivers, and Dedicated Habitat Areas.

There is variation in the quality and detail included in the ERA plans reviewed (e.g., Lake Michigan Wooded Dune & Swale Complex ERA, Mesic Northern Forest ERA #18768). For example, the Lake Michigan Wooded Dune & Swale Complex includes more detail on the goals and objectives, threats, and measures to maintain or enhance the ERA. It also cites other relevant documents that include information on activities consistent with ERA management. The Mesic Northern Forest ERA reviewed lacks a clear linkage between the Threats Assessment, Management Objectives, and Management Actions. In fact, even though the threats include invasive species and habitat fragmentation, the management actions state "none". On the ground, the FME has registered Resource Damage Reports (RDRs) to this area due to unauthorized trails. Invasive plant species were also observed on this trail, though at low levels currently. The overarching management planning documents, the 2008 FMP as amended in 2014 and Work Instruction 1.4, describe that measures to control fragmentation and invasive species are consistent with management of ERAs.

The quantity and quality of ERAs and associated documents is an issue that the FME has identified in its ERA planning update process. For example, where possible, the FME is considering lumping some ERA plans into a single plan. The FME uses a template for ERAs that includes some standard language that may be removed or modified as desired by plan writers.

In the quantity of documents and areas that may qualify as FSC HCVs 1-6, there is risk that the management system could become overly complex or inconsistent. There is also risk that the FME could improperly define which designated areas meet the six FSC HCV designations (if at all).

Corrective Action Request (or Observation): The management plan and relevant operational plans should describe the measures necessary to ensure the maintenance and/or enhancement of all high conservation values present in all identified HCVF areas, including the precautions required to avoid risks or impacts to such values (see Principle 7).

FME response (including any	
evidence submitted)	
SCS review	
Status of CAR:	Closed Upgraded to Major Other decision (refer to description above)

	Finding Number: 2019.4					
Select one: Major CAR Minor CAR X Observation						
FMU CAR/OBS issued	to (when more than one FMU):					
Deadline	Pre-condition to certification/recertification 3 months from Issuance of Final Report 12 months or next regularly scheduled audit (surveillance or re-evaluation) Observation – response is optional					
FSC Indicator:	Other deadline (specify): SCS COC indicators for FMEs, indicator 1.2 (see also COC 2.3)					
Non-Conformity (or Background/ Justification in the case of Observations): Appendix G of the FME's Vegetative Management System (VMS) procedures and its Timber Sale Administration training ensure that a system to track and trace all forest products is implemented. Review of training and timber sale contract records, and interviews with staff confirm implementation. While the timber sale contract includes the correct FSC certificate code and claim, Appendix G of VMS contains an outdated FSC claim (FSC Pure). No outdated claims were communicated to timber sale purchasers.						
Corrective Action Request (or Observation): The FME should consider updating its COC procedures to						
avoid potential record	ling of incorrect FSC claims.					
FME response (including any evidence submitted)						
SCS review						
Status of CAR:	Closed Upgraded to Major Other decision (refer to description above)					

5. Stakeholder Comments

In accordance with SCS protocols, consultation with key stakeholders is an integral component of the evaluation process. Stakeholder consultation takes place prior to, concurrent with, and following field evaluations. Distinct purposes of such consultation include:

- To solicit input from affected parties as to the strengths and weaknesses of the FME's management, relative to the standard, and the nature of the interaction between the FME and the surrounding communities.
- To solicit input on whether the forest management operation has consulted with stakeholders regarding identifying any high conservation value forests (HCVFs).

Stakeholder consultation activities are organized to give participants the opportunity to provide comments according to general categories of interest based on the three FSC chambers, as well as the SCS Interim Standard, if one was used.

5.1 Stakeholder Groups Consulted

Principal stakeholder groups are identified based upon results from past evaluations, lists of stakeholders from the FME under evaluation, and additional stakeholder contacts from other sources. Stakeholder groups who are consulted as part of the evaluation include FME management and staff, consulting foresters, contractors, lease holders, adjacent property owners, local and regionally-based social interest and civic organizations, purchasers of logs harvested on FME forestlands, recreational user groups, tribal members and/or representatives, members of the FSC National Initiative, members of the regional FSC working group, FSC International, local and regionally-based environmental organizations and conservationists, and forest industry groups and organizations, as well as local, state, and federal regulatory agency personnel and other relevant groups.

5.2 Summary of Stakeholder Comments and Evaluation Team Responses

The table below summarizes the major comments received from stakeholders and the assessment team's response. Where a stakeholder comment has triggered a subsequent investigation during the evaluation, the corresponding follow-up action and conclusions from SCS are noted below.

☐ FME has not received any stakeholder comments from interested parties as a result of stakeholder outreach activities during this annual evaluation.				
Stakeholder Comment SCS Response				
The audit team interviewed and inspected several active logging operations. Loggers confirmed the presence and/or absence of safety equipment and training through interviews and by permitting the audit team to observe vehicles and equipment.	Through review of timber sale contracts and applicable MIOSHA rules cited therein, SCS confirmed that lack of First Aid/CPR training, and absence of First Aid kits and spill kits may be considered a breach of contract. Refer to CAR 2019.1.			

6. Certification Decision

The certificate holder has demonstrated continued overall conformance to the applicable Forest Stewardship Council standards. The SCS annual evaluation team recommends that the certificate be sustained, subject to subsequent annual evaluations and the FME's response to any open CARs.	Yes ⊠ No □			
Comments:				

7. Annual Data Update

\square No changes since previous evaluation.
oximes Information in the following sections has changed since previous evaluation.

☐ Name and Contac	□ Pesticide and	☑ Pesticide and Other Chemical Use			
☐ FSC Sales Informa	☐ Production Forests				
☐ Scope of Certifica	te	☐ FSC Product Classification			
□ Non-SLIMF FMUs	☐ Conservation 8	☐ Conservation & High Conservation Value Areas			
Social Informatio	n	☐ Areas Outside	of the Scor	oe of Certification	
			'		
Name and Contact	Information				
Organization name	Michigan Department of Na	tural Resources			
Contact person	Keith Kintigh, Forest Certific	ation and Conservat	ion Special	ist	
Address	DNR Gaylord Customer	Telephone		3541x5016	
	Service Center	Fax	989-732-	0794	
	1732 W. M-32	e-mail	kintighk@	michigan.gov	
	Gaylord, MI 49735	Website	http://wv	ww.michigan.gov/dnr/	
FSC Sales Informati FSC salesperson Address	Same as above	Telephone			
Address		•			
		Fax e-mail			
		Website			
Scope of Certificate Certificate type		T			
Certificate type			L N	Multiple FMU	
		☐ Group			
SLIMF if applicable		☐ Small SLIMF	☐ Small SLIMF ☐ Lo		
		certificate	certi	ficate	
		☐ Group SLIMF ce	rtificate		
# Group Members (if applicable)				
	scope of certificate	1			
	of non-SLIMF FMU(s)	Latitude & Longitude:			
Forest zone				nperate	
		☐ Subtropical	☐ Trop	pical	
Total forest area in	scope of certificate which is:	·	Unit	s: \square ha or \boxtimes ac	
privately ma	naged				
state manag	3,799,368				
community					
Number of FMUs in					
less than 100 ha in area					
		100 - 1000 ha in ar			
1000 - 10 000 ha in area		100 - 1000 ha in ard more than 10 000 l		1	

Total forest area in scope of certificate which is include	ed in FMUs that: Units: \Box ha or $oxtimes$ ac
are less than 100 ha in area	0
are between 100 ha and 1000 ha in area	0
meet the eligibility criteria as low intensity SLIMF	0
FMUs	

Division of FMUs into manageable units:

The State Forest is located throughout the Northern Lower Peninsula (LP) and across the Upper Peninsula (UP). The State Forest is organized into 15 management units, 8 in the LP and 7 in the UP:

- Lower Peninsula: Cadillac, Gladwin, Roscommon, Grayling, Traverse City, Atlanta, Gaylord, and Pigeon River Country
- Upper Peninsula: Sault Ste. Marie, Newberry, Shingleton, Escanaba, Gwinn, Crystal Falls, and Baraga

Social Information

Number of forest workers (including contractors) working in forest within scope of certificate				
(differentiated by gender):				
male workers: 544 female workers: 148				
Number of accidents in forest work since previous	Serious: 0 Fatal: 0			
evaluation:				

Pesticide and Other Chemical Use

☐ FME does no	ot use pesticides.			
Commercial name of pesticide / herbicide	Active ingredient	Quantity applied since previous evaluation (kg or lbs.)	Total area treated since previous evaluation (ha or ac)	Reason for use
Weedar	2,4 Dichlorophenoxyacetic acid	2 gal	6.5	Maintenance
Milestone	Aminipyralid tri- isopropanolamonium	1.6 gal	107.7	Utility
VectoBac12AS	Bacillus thuringiensis	75 gal	2400.43	Mosquito Control
VectoBacG	Bacillus thuringiensis	1,278 lbs	511.13	Mosquito Control
Copper Sulfate	Copper Sulfate, EPA Reg No 73020-2	70 lbs	6.5	Walleye Mgmt
Amine 400 2, 4-D	Dimethylamine salt of 2,4-dichlorophenoxyacetic ac	10.75 gal	87.8	Utility
Accord XRT	Glyphosate	5.5 gal	7.5	Red Pine Site Prep
Accord XRT II	Glyphosate	5.5 gal	7.4	Red Pine Site Prep

Accord XRT II	Glyphosate	7 gal	9.4	Red Pine Site Prep
Accord XRT II	Glyphosate	17 gal	22.5	Red Pine Site Prep
Accord XRT II	Glyphosate	34.1 gal	45.5	Jack Pine Site Prep
Accord XRT II	Glyphosate	27 gal	48	Site Prep
Accord XRT II	Glyphosate	34 gal	60.4	Site Prep
Accord XRT II	Glyphosate	46.9 gal	62.5	Jack Pine Site Prep
Accord XRT II	Glyphosate	49.25 gal	87.6	Site Prep
Accord XRT II	Glyphosate	54.5 gal	96.8	Site Prep
AquaNeat	Glyphosate	.52 oz	0.1	Phragmites
AquaNeat	Glyphosate	1.04 oz	0.2	Phragmites
AquaNeat	Glyphosate	3.12 oz	0.5	Phragmites
AqueNeat	Glyphosate	1.04 oz	0.2	Phragmites
AqueNeat	Glyphosate	1.56 oz	0.3	Phragmites
Cygnet	Glyphosate	1 gal	1	Site Prep for
AquaNeat	diyphosate	1 8u	_	Restoration
Mad Dog Plus	Glyphosate	3.02 gal	4.02	Site
Widd Dog i ids	Gryphosate	3.02 gai	7.02	Preperation
Rodeo	Glyphosate	4 oz	0.023	Phragmites
Rodeo	Glyphosate	.25 gal	0.03	Wild Parsnip
Rodeo	Glyphosate	9.7 oz	0.53	Phragmites
Rodeo	Glyphosate	40 oz	0.65	Phragmites
Rodeo	Glyphosate	5 gal	0.71	Wild Parsnip
Rodeo	Glyphosate	4.32 oz	0.72	Utility
Rodeo	Glyphosate	10 oz	1	Phragmites
Rodeo	Glyphosate	49.9 oz	1.1	Invasive
Roueo	Glyphosate	49.9 02	1.1	Species Control
Rodeo	Glyphosate	11.25 gal	2	Wild Parsnip
Rodeo	Glyphosate	3.1 gal	8	Red Pine
Noueo	diyphosate	3.1 gai	8	Release
Rodeo	Glyphosate	23.25 gal	12.57	Wild Parsnip
Rodeo	Glyphosate	6.8 gal	13	Release Red
Noueo	diyphosate	0.6 gai	13	Pine
Rodeo	Glyphosate	23 gal	16.394	Invasive
Noueo	diyphosate	25 gai	10.554	Species Control
Rodeo	Glyphosate	6.1 gal	17	Red Pine
Noueo	diyphosate	0.1 gai	17	Release
Rodeo	Glyphosate	12.9 gal	17.1	Release
Rodeo	Glyphosate	11.25 gal	19	Red Pine Site
		-		Prep
Rodeo	Glyphosate	7.4 gal	19.7	Release
Rodeo	Glyphosate	8 gal	22.5	Jack Pine Release

Rodeo	Glyphosate	17.6 gal	23.4	Release
Rodeo	Glyphosate	9.6 gal	25	Red Pine
				Release
Rodeo	Glyphosate	16 gal	28	Release Red
				Pine
Rodeo	Glyphosate	10.7 gal	29	Red Pine
				Release
Rodeo	Glyphosate	11.5 gal	30	Red Pine
				Release
Rodeo	Glyphosate	12.3 gal	32	Release Red
				Pine
Rodeo	Glyphosate	12.3 gal	32.7	Release
Rodeo	Glyphosate	16 gal	34	Release Red
				Pine
Rodeo	Glyphosate	13.7 gal	36.3	Release
Rodeo	Glyphosate	17 gal	45.3	Release
Rodeo	Glyphosate	3.48 gal	52	Utility
2	,	21.20		Maintenance
Rodeo	Glyphosate	25.4 gal	66	Red Pine
	0.7,0	2011 801		Release
Rodeo	Glyphosate	60.9 gal	78	Red Pine Site
	0., p000.00	oois 8a.	7.0	Prep
Rodeo	Glyphosate	64.65 gal	84	Red Pine Site
	0.7,0	5 8		Prep
Rodeo	Glyphosate	31.3 gal	85	Red Pine
	0., p000.00	02.0 8		Release
Rodeo	Glyphosate	33 gal	87.7	Release
Rodeo	Glyphosate	65.6 gal	88	Red Pine Site
	0., p000.00	gone Ban		Prep
Rodeo	Glyphosate	36.25 gal	96.7	Release
Rodeo	Glyphosate	38.1 gal	99	Red Pine
	5.7 p.105dcc	33.2 84.		Release
Rodeo	Glyphosate	44.5 gal	120	Red Pine
		50.		Release
Rodeo	Glyphosate	48.25 gal	128.4	Release
Rodeo	Glyphosate	103.2 gal	138	Red Pine Site
1.5000	Gryphosacc	103.2 gai	130	Prep
Rodeo	Glyphosate	150 gal	200	Red Pine Site
1.5000	Gryphosacc	130 801	200	Prep
Rodeo	Glyphosate	168.75 gal	225	Red Pine Site
	Gryphosacc	100.73 gai	223	Prep
Rodeo	Glyphosate	32 gal	242	Utility
Rodeo	Glyphosate	92.75 gal	247.4	Release
	• • • • • • • • • • • • • • • • • • • •		6.5	Maintenance
Roundup	Glyphosate	2 gal		
Roundup	Glyphosate	3.75 gal	15	Opening
				Maintenance

Roundup	Glyphosate	10 gal	40	Opening
Arranal Di	las a sa a sa us	1.2	7.4	Maintenance
Arsenal PL	Imazapyr	1.2 gal	7.4	Red Pine Site Prep
Arsenal PL	Imazapyr	1.3 gal	9.4	Red Pine Site
Arsenarre	ППагаруг	1.5 gai	3.4	Prep
Arsenal PL	Imazapyr	4.3 gal	45.5	Jack Pine Site
7 (I SCHOLL E	Ппагарут	4.5 gui	45.5	Prep
Arsenal PL	Imazapyr	5.9 gal	62.5	Jack Pine Site
7.11.0011.01.1.2	azapy.	3.3 gai	02.0	Prep
Stalker	Imazapyr	3.45 gal	273.27	Utility
Esplanade	Indaziflam	1.26 oz	0.72	Utility
Arsenal AC	Isopropylamine	4.5 gal	48	Site Prep
Arsenal AC	Isopropylamine	5.75 gal	60.4	Site Prep
Arsenal AC	Isopropylamine	8.25 gal	87.6	Site Prep
Arsenal AC	Isopropylamine	9.1 gal	96.8	Site Prep
Escort	Metsulfuron-methyl	2 oz	1.8	Utility
Escort	Metsulfuron-methyl	3 oz	4.2	Utility
Escort	Metsulfuron-methyl	3 oz	5.4	Utility
Escort	Metsulfuron-methyl	4 oz	11.2	Utility
Escort	Metsulfuron-methyl	10 oz	14	Utility
Escort	Metsulfuron-methyl	12 oz	21.6	Utility
Escort	Metsulfuron-methyl	22.5 oz	26.1	Utility
Escort	Metsulfuron-methyl	25.5 oz	33.2	Utility
Escort	Metsulfuron-methyl	32 oz	41.6	Utility
Escort	Metsulfuron-methyl	20.5 oz	48.4	Utility
Escort	Metsulfuron-methyl	78.5 oz	64.8	Utility
Frenfish	Rotenone EPA Reg No	2 gal	3	Prep Walleye
Toxicant	655-422			Pond
Prenfish	Rotenone EPA Reg No	7 gal	20	Prep Walleye
Toxicant	655-422			Pond
Oust XP	Sulfometuron	3 lbs	48	Site Prep
Oust XP	Sulfometuron	3.8 lbs	60.4	Site Prep
Oust XP	Sulfometuron	5.5 lbs	87.6	Site Prep
Oust XP	Sulfometuron	6.1 lbs	96.8	Site Prep
Garlon 4 Ultra	Ticlopyr	8.2 gal	32	Release Red Pine
Garlon 3A	Triclopyr	4 qt	1.8	Utility
Garlon 3A	Triclopyr	7.5 qt	3	Utility
Garlon 3A	Triclopyr	9 qt	3.6	Utility
Garlon 3A	Triclopyr	9 qt	3.6	Utility
Garlon 3A	Triclopyr	4.5 qt	4.2	Utility
Garlon 3A	Triclopyr	6 qt	5.4	Utility
Garlon 3A	Triclopyr	2.5 gal	7.5	Red Pine Site
		2.J gai		Prep
Garlon 3A	Triclopyr	12 qt	11.2	Utility

Garlon 3A	Triclopyr	15 qt	14	Utility
Garlon 3A	Triclopyr	28.5 qt	21.6	Utility
Garlon 3A	Triclopyr	7.4 gal	22.5	Red Pine Site Prep
Garlon 3A	Triclopyr	53 qt	26.1	Utility
Garlon 3A	Triclopyr	70.5 qt	33.2	Utility
Garlon 3A	Triclopyr	80 qt	41.6	Utility
Garlon 3A	Triclopyr	60 qt	48.4	Utility
Garlon 3A	Triclopyr	131 qt	64.8	Utility
Garlon 3A	Triclopyr	24 gal	120	Red Pine Release
Garlon 3A	Triclopyr	836.89 oz	168.3	Invasive Species Control
Garlon 4 Ultra	Triclopyr	1.5 gal	8	Red Pine Release
Garlon 4 Ultra	Triclopyr	4.7 gal	13	Release Red Pine
Garlon 4 Ultra	Triclopyr	8.75 gal	17.1	Release
Garlon 4 Ultra	Triclopyr	9.5 gal	19	Red Pine Site Prep
Garlon 4 Ultra	Triclopyr	5 gal	19.7	Release
Garlon 4 Ultra	Triclopyr	11.75 gal	23.4	Release
Garlon 4 Ultra	Triclopyr	4.8 gal	25	Red Pine Release
Garlon 4 Ultra	Triclopyr	10.5 gal	28	Release Red Pine
Garlon 4 Ultra	Triclopyr	5.4 gal	29	Red Pine Release
Garlon 4 Ultra	Triclopyr	3.5 gal	30	Red Pine Release
Garlon 4 Ultra	Triclopyr	8.25 gal	32.7	Release
Garlon 4 Ultra	Triclopyr	10.9 gal	34	Release Red Pine
Garlon 4 Ultra	Triclopyr	9.25 gal	36.3	Release
Garlon 4 Ultra	Triclopyr	11.5 gal	45.3	Release
Garlon 4 Ultra	Triclopyr	82 qt	64.8	Utility
Garlon 4 Ultra	Triclopyr	16.7 gal	66	Red Pine Release
Garlon 4 Ultra	Triclopyr	42.63 gal	84	Red Pine Site Prep
Garlon 4 Ultra	Triclopyr	15.3 gal	85	Red Pine Release
Garlon 4 Ultra	Triclopyr	22 gal	87.7	Release
Garlon 4 Ultra	Triclopyr	43.75 gal	88	Red Pine Site Prep
Garlon 4 Ultra	Triclopyr	24.25 gal	96.7	Release

Garlon 4 Ultra	Triclopyr	2.8 gal	99	Red Pine
				Release
Garlon 4 Ultra	Triclopyr	32.25 gal	128.4	Release
Garlon 4 Ultra	Triclopyr	68.75 gal	138	Red Pine Site
				Prep
Garlon 4 Ultra	Triclopyr	100 gal	200	Red Pine Site
				Prep
Garlon 4 Ultra	Triclopyr	112.5 gal	225	Red Pine Site
				Prep
Garlon 4 Ultra	Triclopyr	62 gal	247.4	Release
Garlon 4 Ultra	Triclopyr	27.6 gal	273.27	Utility
Garlone 4	Triclopyr	3.1 gal	17	Red Pine
Ultra				Release
Garlone 4	Triclopyr	40.13 gal	78	Red Pine Site
Ultra				Prep
Garlon 3A	Triclopyr triethylamine	10.75 gal	87.8	Utility
	salt			
Garlon 4A	Triclopyr-2-butozyethyl	7.3 gal	19.9	Utility
	ester			

Production Forests

Timber Forest Products	Units: ☐ ha or ☒ ac
Total area of production forest (i.e. forest from which timber may be harvested)	2.4 million
Area of production forest classified as 'plantation'	0
Area of production forest regenerated primarily by replanting or by a combination of replanting and coppicing of the planted stems	600,000
Area of production forest regenerated primarily by natural	1.9 million
regeneration, or by a combination of natural regeneration and	
coppicing of the naturally regenerated stems	
Silvicultural system(s)	Area under type of management
Even-aged management	
Clearcut (clearcut size range 1 to 215 acres in FY17)	1.7 million
Shelterwood	200,000
Other:	
Uneven-aged management	
Individual tree selection	500,000
Group selection	
Other:	
Other (e.g. nursery, recreation area, windbreak, bamboo, silvo-pastoral system, agro-forestry system, etc.)	
Non-timber Forest Products (NTFPs)	
Area of forest protected from commercial harvesting of timber and managed primarily for the production of NTFPs or services	0

Other areas managed for NTFPs or services	0
Approximate annual commercial production of non-timber forest	0
products included in the scope of the certificate, by product type	

Species in scope of joint FM/COC certificate: Scientific/Latin Name (Common/Trade Name)

Black ash (Fraxinus nigra); green ash(Fraxinus pennsylvanica); white ash (Fraxinus americana); bigtooth aspen (Populus grandidentata); Trembling aspen (Populus tremuloides); balm of Gilead (Populus balsamifera); balsam fir (Abies balsamea); basswood (Tilia Americana); paper birch (Betula papyrifera); yellow birch (Betula alleghaniensis); white cedar (Thuja occidentalis); black cherry (Prunus serotina); Eastern Hemlock (Thuja Canadensis); sugar maple (Acer saccharum); red maple (Acer rubrum); northern red oak (Quercus rubra); northern pin oak (Quercus ellipsoidalis); white oak (Quercus alba); jack pine (Pinus banksiana); red pine (Pinus resinosa); white pine (Pinus strobes); black spruce (Picea ,mariana); white spruce (Picea glauca); tamarack (Larix laricina);

FSC Product Classification

Timber products			
Product Level 1	Product Level 2	Species	
W1 Rough Wood	W1.1 Roundwood (logs)	All	
W1 Rough Wood	W1.2 Fuel Wood	All	
W1 Rough Wood	W1.3 Twigs	All	
W2 Wood charcoal			
W3 Wood in chips or particles	W3.1 Wood chips	All	
Non-Timber Forest Products			
Product Level 1	Product Level 2	Product Level 3 and Species	
N1 Bark		All	

Conservation and High Conservation Value Areas

Conservation Area	Units: ☐ ha or ☒ ac
Total amount of land in certified	184,000 acres
area protected from commercial	
harvesting of timber and	Note 1: Comprised of:
managed primarily for	Dedicated and Proposed Natural Areas, National Natural
conservation objectives (includes	Landmarks, TNC Natural Area Registry, Critical Dunes, Natural
both forested and non-forested	Rivers, Ecological Reference Areas, and Type 1 & 2 Old Growth.
lands).*	Note: These areas are not mutually exclusive of the HCV Types as
	described below.
	Note 2: This total may or may not match HCV areas as some HCV
	areas must be managed to maintain, enhance or restore those
	attributes of interest.

^{*}Note: Total conservation and HCV areas may differ since these may serve different functions in the FME's management system. Designation as HCV may allow for active management, including commercial harvest. Conservation areas are typically under passive management, but may undergo invasive species control, prescribed burns, non-commercial harvest, and other management activities intended to maintain or enhance their integrity. In all cases, figures are reported by the FME as it pertains local laws & regulations, management objectives, and FSC requirements.

High C	onservation Value Forest / Areas	Un	its: \square ha or $oxtimes$ ac
Code	HCV Type	Description & Location	Area
HCV1	Forests or areas containing globally, regionally or nationally significant concentrations of biodiversity values (e.g. endemism, endangered species, refugia).	Designated Kirtland's Warbler Management Unit Eastern Massasauga Rattlesnake Managed Land and Piping Plover Critical Habitat.	
HCV2	Forests or areas containing globally, regionally or nationally significant large landscape level forests, contained within, or containing the management unit, where viable populations of most if not all naturally occurring species exist in natural patterns of distribution and abundance.	Common Ecological Reference Areas, Dedicated State Natural Areas (SNAs), State Natural Rivers (SNR), and Dedicated Habitat Area for Interior Core Forest Species	,
HCV3	Forests or areas that are in or contain rare, threatened or endangered ecosystems.	Critical Dunes, Coastal Environmental Areas, and Rare/Sensitive/Vulnerable Ecological Reference Areas	. 107,131
HCV4	Forests or areas that provide basic services of nature in critical situations (e.g. watershed protection, erosion control).	None located upon the Michigan State Forest system.	0
HCV5	Forests or areas fundamental to meeting basic needs of local communities (e.g. subsistence, health).	None located upon the Michigan State Forest system.	0
HCV6	Forests or areas critical to local communities' traditional cultural identity (areas of cultural, ecological, economic or religious significance identified in cooperation with such local communities).	The Michigan DNR currentl utilizes other mechanisms identify, conserve, and manage areas critical to local communities' traditional cultural identity such as THPO, SHPO, Compartment Review, land use permits, and designation as "Special Conservation Areas".	to
Total a	rea of forest classified as 'High Conservation Va		338,585 * ³

^{*1} The approximately 149,000 of dedicated Kirtland's warbler habitat are intensively managed jack pine stands.
*2 Approximately 10,376 acres of dedicated Interior Core Species habitat is available for timber production.

Areas Outside of the Scope of Certification (Partial Certification and Excision)

\square N/A – All forestland owned or managed by the applicant is included in the scope.
☐ Applicant owns and/or manages other FMUs not under evaluation.

^{*3} The reported HCV 1-3 categories are not cumulative. The reported 338,585 acres total reflects elimination of 57,060 acres of overlap among the HCV 1-3 categories.

Applicant wishes to excise portions of the FMU(s) under evaluation from the scope of certification.			
Explanation for exclusion of FMUs and/or excision:	This certificate excludes: long-term military lease lands, lands leased to Luce County, Wildlife and Fisheries Areas that do not go through the compartment review process, and included in Midland County mosquito control.		
	Note 1: The certified State Forest system includes all lands which are inventoried under the MiFi forest inventory system, are identified in a State Forest Compartment, and go through the Michigan DNR compartment review process. Note 2: Areas excluded are done so primarily because the DNR does not exercise full control over management activities, or because the purposes for which the lands are held are not necessarily benefited by forest certification (e.g. the lands are not jointly co-managed by the DNR Forest Management and Wildlife Divisions and are devoted primarily to Wildlife or Fisheries management or State Parks).		
Control measures to prevent	Any timber harvests in non-certified forests are not sold or		
mixing of certified and non-	advertised as certified. Fisheries Research/ Hatcheries and		
certified product (C8.3):	agricultural areas are outside of the scope of FSC certification as		
Description of FDMI and I dealfor	no forest products or services are directly managed.		
Description of FMUs excluded from or forested area excised from the scope of certification:			
Name of FMU or Stand	Location (city, state, country)	Size (\square ha or \boxtimes ac)	
Long Term Military Lease Lands	Otsego, Crawford, and Kalkaska Counties in the Northern Lower Peninsula of Michigan	101,567 acres	
Lands Leased to Luce County	Luce County in the Upper Peninsula of Michigan	2,786 acres	
Michigan State Park System	Throughout Michigan	286,000 acres	
Wildlife Management Units administered by DNR Wildlife Division	Primarily located in the Southern Lower Peninsula of Michigan	350,000 acres	
Fisheries Research Areas/Hatcheries	Southern and Northern Lower Peninsula of Michigan	4,145 acres	
Lands available for planting to GMO corn/soybeans	Northern Lower Peninsula of Michigan	424 acres	
Lands included in contingency adulticide treatment as part of Midland County Mosquito Control Program	Midland County in the Lower Peninsula of Michigan	316 acres	