

# Supply Base Report: Mohegan Renewable Energy MS, LLC

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### Completed in accordance with the Supply Base Report Template Version 1.3

For further information on the SBP Framework and to view the full set of documentation see <u>www.sbp-cert.org</u>

Document history

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## 1 Overview

Producer name:	Mohegan Renewable Energy Mississippi, LLC		
Producer location:	252 Hickory Street, Quitman MS 39355		
Geographic position:	32° 2.754'N, 88° 43.875'W		
Primary contact:	Terry Dunlap Mohegan Renewable Energy – Quitman 252 Hickory Street Quitman MS 39355 601-768-2556 TDunlap@MoheganRenewables.com		
Company website:	www.moheganrenewables.com		
Date report finalised:	22/Jul/2019		
Close of last CB audit:	Evaluation Audit (August 1, 2019)		
Name of CB:	SCS Global		
Translations from Englis	sh: Yes		
SBP Standard(s) used:	Standard 1 version 1.0, Standard 2 version 1.1, Standard 4 version 1.0, Standard 5 version 1.0		
Weblink to Standard(s)	used: https://sbp-cert.org/documents/standards-documents/standards		
SBP Endorsed Regiona	I Risk Assessment: Not Applicable		
Weblink to SBE on Con	npany website: Not Applicable		

Indicate how the current evaluation fits within the cycle of Supply Base Evaluations					
Main (Initial) Evaluation	First Surveillance	Second Surveillance	Third Surveillance	Fourth Surveillance	
X					



# 2 Description of the Supply Base

### 2.1 General description

Mohegan Renewable Energy Mississippi, LLC (MREQ) purchases primary & secondary feedstock in the form of hardwood and softwood chips, sawdust and shavings through its one primary feedstock supplier and thirteen (13) secondary feedstock suppliers. The supply base for the pellet mill and its suppliers includes three hundred fourteen (314) counties (42,361,486 hectares) in Alabama (67 counties), Florida (6 counties), Louisiana (17 parishes), Georgia (108 counties), Mississippi (82 counties), North Carolina (5 counties) and Tennessee (29 counties) within the United States. The suppliers identified were located using GIS technology. Their estimated supply area was determined through interviews to establish the counties they source from or a stated maximum haul radius was established for each supplier. The accumulation of these feedstock supplier areas was then used to identify the origin of wood fiber by states and counties from which MREQ purchases wood fiber.

Forests are the predominant land use in this supply base (65%). Hardwood forests comprise the largest forest type (47%) of the supply area's forestland followed by softwood forests (41%). The pine/oak forest comprises 11% of the supply area's forestland while about 1% of the forestland is considered non-stocked. About 72% of the supply area's forests are managed as natural forests while the remaining 28% of the supply area's forests are artificially regenerated.

The forest products industry is a very large part of the area's economy and is one of the top industries within the states generating \$18.5 billion in AL (2016), \$21.3 billion in GA (2017), \$12.79 billion in MS (2014) and \$24.3 billion in TN (2015) annually.

MREQ uses hardwood and pine chips, sawdust and shavings. Primary species used include loblolly pine (Pinus taeda), oak (Quercus spp.), Maple (Acre spp.), and many other hardwood species. None of these species are listed on the CITES list. Longleaf pine is on the IUCN Red List and is classified as endangered.

Pine forests are typically managed on an even-aged basis with a rotation age of 30 to 40 years. During this rotation the pine stand may be thinned one or two times during the middle of the rotation with a final harvest completing the rotation. Most pine forests are artificially regenerated with pine seedlings planted to defined stand densities. Chemical and/or mechanical site preparation is typically used to manage the less desirable hardwood species and herbaceous species at stand establishment. Chemical treatments are minimal or below label rates; do not kill all competing species and last about two years so the pine seedlings can become established. Fertilizers are not normally applied to these forests due to cost. Some private investment groups (REITS, TIMOs) may apply fertilizers on forests which are more intensively managed. These intensively managed pine forests represent a very small percentage of the overall pine forests in the supply basin.

Hardwood forests can be managed either as even-aged or uneven-aged stands. Most hardwood stands are 40 to 50 years when harvested if managed as an even-aged stand. No site preparation or fertilizers are used on hardwood forests.

The vast majority of forests in the MREQ supply area are managed according to state forestry best management practices (BMPs). Overall BMP compliance reported for the various states within the supply base are: AL - 98.2% (2016); FL - 99.6% (2017); GA - 93.17% (2017); LA - 95.75% (2015); MS - 96.1% (2016); NC - 85% (2016) and TN - 88.5% (2017).

Sustainable forestry certification is present in MREQ's supply base. Based on state-wide reporting approximately 21.7% of the forestland is certified (SFI - 18.3%; FSC - 3.0% and ATF - 0.4%). No FSC certified fiber has been purchased to date.



# 2.2 Actions taken to promote certification amongst feedstock supplier

MREQ promotes certification through its own certification and the certification of its suppliers. MREQ is certified to the Forest Stewardship Council<sup>®</sup> (FSC<sup>®</sup>) chain of custody and controlled wood standards (SCS-COC-006774 and SCS-CW-006774). The facility was also SBP certified under different ownership. This facility maintained the SBP certificate (SBP-03-01).

MREQ also promotes certification through its certified suppliers. Five (5) of the fourteen (14) feedstock suppliers are certified to the Sustainable Forestry Initiative<sup>®</sup> (SFI) Fiber Sourcing standard. These certifications are validated at least once annually as part of the secondary supplier annual audit.

### 2.3 Final harvest sampling programme

MREQ's one primary feedstock supplier has their own in-woods chipping operation. In-woods chips accounted for about 10% of the overall feedstock used at the facility.

# 2.4 Flow diagram of feedstock inputs showing feedstock type [optional]

### 2.5 Quantification of the Supply Base

#### Supply Base

- a. Total Supply Base area (ha): 42,361,486 ha / 27,374,837 ha (Forestlands)
- b. Tenure by type (ha): 24,102,565 ha (privately owned) / 3,272,272 ha (public)
- c. Forest by type (ha): 27,374,837 ha (temperate)
- Forest by management type (ha): 7,675,366 ha (plantation) / 19,245,784 ha (managed natural) / 453,687 ha (natural)
- e. Certified forest by scheme (ha):

Cert Hectar	es by Standa	rd by State						
	AL	FL	GA	LA	MS	NC	TN	Total
ATF	22,312	11,858	26,923	13,443	10,050	8,765	10,455	103,805
FSC	271,512	51,154	33,023	250,895	101,523	77,285	40,645	826,035
SFI	1,179,130	713,185	939,249	1,397,197	852,984	466,128	173,874	5,721,747
								6 651 588

#### Feedstock

- f. Total volume of Feedstock: tonnes or m3 0 200,000 tonnes\*
- g. Volume of primary feedstock: tonnes or m<sup>3</sup> 0 200,000 tonnes
- h. List percentage of primary feedstock (g), by the following categories.
  - Certified to an SBP-approved Forest Management Scheme 0%
    - Not certified to an SBP-approved Forest Management Scheme 100%
- i. List all species in primary feedstock, including scientific name



Species List					
Genus and Species	Common Name		Genus and Species	Common Name	
Softwood Species			Hardwood Species		
Pinus taeda	Loblolly Pine		Liriodendron tulipifera	Yellow Poplar	
Pinus elliottii	Slash Pine		Morus rubra	Red Mulberry	
Pinus palustris	Longleaf Pine		Nyssa biflora	Swamp Tupelo	
Pinus echinata	Shortleaf Pine		Nyssa sylvatica	Blackgum	
Hardwood	Species		Nyssa sylvatica	Water Tupelo	
Acer rubrum	Red Maple		Platanus occidentalis	American Sycamore	
Acer saccharum	Sugar Maple		Populus deltoids	Eastern Cottonwood	
Aesculus glabra	Ohio Buckeye		Prunus serotine	Black Cherry	
Betula nigra	River Birch		Quercus alba	White Oak	
Carpinus caroliniana	Hornbeam		Quercus falcata	Southern Red Oak	
Carya cordiformis	Bitternut Hickory		Quercus laurofolia	Laurel Oak	
Carya glabra	Pignut Hickory		Quercus lyrata	Overcup Oak	
Carya laciniosa	Shellbark Hickory		Quercus marilandica	Blackjack Oak	
Carya ovata	Shagbark Hickory		Quercus michauxii	Swamp Chestnut Oak	
Carya tomentosa	Mockernut Hickory		Quercus nigra	Water Oak	
Carya laevigata	Sugarberry		Quercus phellos	Willow Oak	
Carya occidentalis	Hackberry		Quercus shumardii	Shumard Oak	
Diospyros virginiana	Persimmon		Quercus stellate	Post Oak	
Fagus grandifloia	American Beech		Quercus texana	Nuttall Oak	
Fraxinus americana	White Ash		Quercus velutina	Black Oak	
Fraxinus pennsylvanica	Green Ash		Robinia pseudoacacia	Black Locust	
Gleditsia aquatica	Waterlocust		Salix nigra	Black Willow	
Gleditsia triancanthos	Honeylocust		Ulmus alata	Winged Elm	
Juglans nigra	Black Walnut	1	Ulmus americana	American Elm	
Liquidambar styraciflua	Sweetgum				

- j. Volume of primary feedstock from primary forest 0 tonnes
- k. List percentage of primary feedstock from primary forest (j), by the following categories.
  - Primary feedstock from primary forest certified to an SBP-approved Forest Management Scheme 0%
  - Primary feedstock from primary forest not certified to an SBP-approved Forest Management Scheme 0%
- Volume of secondary feedstock: specify origin and type the volume may be shown as a % of the figure in (f) and percentages may be shown in a banding between XX% to YY% if a compelling justification is provided\*.

Pine chips	40%-59%	Hdwd chips	0%-19%
Pine sawdust	0%-19%	Hdwd sawdust	0%-19%
Pine shavings	0%-19%	Hdwd shavings	0%-19%

w. Volume of tertiary feedstock: specify origin and composition - the volume may be shown as a % of the figure in (f) and percentages may be shown in a banding between XX% to YY% if a compelling justification is provided\*.



Bands for (f) and (g) are:

- 1. 0 200,000 tonnes or  $m^3$
- 2. 200,000 400,000 tonnes or m<sup>3</sup>
- 3. 400,000 600,000 tonnes or m<sup>3</sup>
- 4. 600,000 800,000 tonnes or m<sup>3</sup>
- 5. 800,000 1,000,000 tonnes or  $m^3$
- 6. >1,000, 000 tonnes or m<sup>3</sup>

Bands for (h), (l) and (m) are:

- 1. 0%-19%
- 2. 20%-39%
- 3. 40%-59%
- 4. 60%-79%
- 5. 80%-100%

NB: Percentage values to be calculated as rounded-up integers.

Sustainable Biomass Program



# 3 Requirement for a Supply Base Evaluation

SBE completed	SBE not completed
X	

SBE was completed so that all material can be SBP compliant in accordance with SBP Standard 4, 5.2.2.



# 4 Supply Base Evaluation

### 4.1 Scope

The scope of the supply base evaluation is to determine the level of risk as compared to the indicators of SBP Framework Standard 1: Feedstock Compliance Standard. The scope of the evaluation covered the supply area for the pellet mill including all existing sources of primary, secondary and tertiary feedstocks, as well as the feedstocks' point of origination. The evaluation is consistent with MREQ's due diligence processes and risk assessment for FSC Controlled Wood.

### 4.2 Justification

The evaluation assessed each of the indicators within SBP Framework Standard 1: Feedstock Compliance to determine the level of risk associated with each indicator. This assessment reviewed applicable laws and regulations and forestry best management practices, analysed high conservation areas within the supply base for their rareness and level of protection and assessed the economic impact of the company's presence in the supply base. Forestland ownership in the supply area is mainly private. The forest industry is well established with logger training and forestry best management practices required by all large wood consuming mills.

This review and analysis was completed using stated laws and regulations, published forestry best management practices, recognized research and data from the USDA Forest Service and conservation organizations such as the World Wildlife Fund, NatureServe, state forestry and wildlife agencies and other noted experts.

### 4.3 Results of Risk Assessment

Each indicator was assessed against MREQ's FSC controlled wood and chain of custody programs. The FSC US Controlled Wood National Risk Assessment (US NRA) was used as a baseline to determine if areas of high conservation value, biodiversity and conversion exist in MREQ's supply base area. Based on this assessment, MREQ has determined a rating of "low risk" for each indicator with the exception of indicators 2.1.2, 2.1.3, 2.2.3, 2.2.4 and 2.4.1.

### 4.4 Results of Supplier Verification Programme

Not applicable; the results of the risk assessment indicate there are no indicators determined to be "unspecified risk".

### 4.5 Conclusion

Based on the results of the supply base evaluation there is low risk to all indicators SBP Framework Standard 1: Feedstock Compliance except for indicators 2.1.2, 2.1.3, 2.2.3, 2.2.4 and 2.4.1, which are determined to be "specified risk" and will require mitigation measures to lower this identified risk.

This conclusion is based on the strong legal and regulatory system found within the supply base. Federal, state and local laws regulations are in place to address a wide range of indicators including, but not limited to, illegal harvesting, water quality, rare and endangered species, worker health and safety, labour rights and



air quality. In addition to these laws and regulations, voluntary state forestry best management practices (BMPs) are in place to provide guidance to forest landowners and contractors on how to sustainably manage forests. The company has made these voluntary guidelines mandatory through contract language requiring the use of all BMPs.



# 5 Supply Base Evaluation Process

The Supply Base Evaluation was completed in partnership with Greener Options Inc., a sustainability consulting company specializing in sustainable forest certification and Biological Integrity LLC, a consulting company specializing in conservation and biodiversity assessments.

Gary Boyd, Greener Options Inc. is a Society of American Foresters (SAF) Certified Forester, a Georgia Registered Forester and an ISO 14001 Environmental Management Lead Auditor. He is also a lead auditor and conducts audits to the FSC, SFI and Programme for the Endorsement of Forest Certification (PEFC) chain of custody, controlled wood, fiber sourcing and forest management standards. He had more than 35 years of experience in the forestry profession. Mark Hughes Ph.D., Biological Integrity LLC, is an accomplished wildlife biologist who has published more than 10 scientific articles, books and monographs. He has developed more than thirty (35) risk assessments for forest products companies addressing sustainable forestry certification schemes such as the FSC and PEFC.

The supply base was determined based on primary & secondary feedstock suppliers to ensure the complete geography of the supply area. USDA Forest Service Forest Inventory and Analysis (FIA) data based on this established supply base was used to verify forest growth and harvest levels, forest ownership and overall forest composition (species, age, stand structure). Ecosystem and biodiversity data from WWF, GreenPeace, World Resources Institute (WRI), Conservation International (CI), NatureServe and the various state natural heritage programs from within the supply base was also reviewed to determine potential high conversation value (HCV) areas and the level of protection for these HCVs.

Forest management regimes for the supply base were determined from information gathered from local forestry professionals and contractors within the region. Regional economic and forest health information was gathered from state forestry agencies and forestry associations.

MREQ's suppliers are visited at least annually to confirm their supply base and the species they purchase for their operations.



# 6 Stakeholder Consultation

Twenty-six (26) local and regional stakeholders were identified for consultation. These stakeholders represent interests from local contractors and businesses, local governments, state forestry and wildlife agencies, conservation organizations such as the Nature Conservancy, state forestry associations, local forest landowner associations, US Forest Service and US Fish & Wildlife Service.

Letters were sent to the identified stakeholders between 10 May 2019 and 16 May 2019 notifying them the intent of MREQ to become SBP certified and asking for input on their thoughts on MREQ's business practices and their impact on sustainable forestry in their area. Feedback was requested during a 45-day review process via letter or email. All feedback will be reviewed and responses will be provided.

### 6.1 Response to stakeholder comments

No responses were received.



# 7 Overview of Initial Assessment of Risk

The initial results of the supply base evaluation has determined there is low risk to all indicators SBP Framework Standard 1: Feedstock Compliance except for indicators 2.1.2, 2.1.3, 2.2.3, 2.2.4 and 2.4.1, which are determined to be "specified risk". The assessment used evidence in conjunction with MRE's FSC Controlled Wood due diligence and risk assessment. It also assessed compliance with the European Union Timber Regulation and the UK Department of Energy and Climate Change's Timber Standard for Heat and Electricity. The low risk ratings were supported by the fact that the United States and the relevant states have well established systems of laws and regulations that satisfy all applicable SBP indicators.

	Initial Risk Rating				
Indicator	Specified	Low	Unspecified		
1.1.1		Х			
1.1.2		Х			
1.1.3		Х			
1.2.1		Х			
1.3.1		Х			
1.4.1		Х			
1.5.1		Х			
1.6.1		Х			
2.1.1		Х			
2.1.2	Х				
2.1.3	Х				
2.2.1		Х			
2.2.2		Х			
2.2.3	Х				
2.2.4	Х				
2.2.5		Х			
2.2.6		Х			
2.2.7		Х			
2.2.8		Х			
2.2.9		Х			

Table 1. Overview of results from the risk assessment of all Indicators (prior to SVP)

	Initial Risk Rating				
Indicator	Specified	Low	Unspecified		
2.3.1		Х			
2.3.2		Х			
2.3.3		Х			
2.4.1	Х				
2.4.2		Х			
2.4.3		Х			
2.5.1		Х			
2.5.2		Х			
2.6.1		Х			
2.7.1		Х			
2.7.2		Х			
2.7.3		Х			
2.7.4		Х			
2.7.5		Х			
2.8.1		Х			
2.9.1		Х			
2.9.2		Х			
2.10.1		Х			



# 8 Supplier Verification Programme

### 8.1 Description of the Supplier Verification Programme

Not applicable; all indicators of the initial risk assessment were determined to be low or specified risk and no unspecified risk was identified. No Supplier Verification Programme is required.

### 8.2 Site visits

Not Applicable.

### 8.3 Conclusions from the Supplier Verification Programme

Not Applicable.



# 9 Mitigation Measures

### 9.1 Mitigation measures

Describe any mitigation measures taken to address specified risks associated with Indicators.

#### Central Appalachians CBA

 MREQ has contracted with Greener Options, Inc. to assist in the development and implementation of MREQ's certification programs. Greener Options, Inc. working with Biological Integrity, LLC attended the three FSC US Controlled Wood Regional meeting held in 2018. Gary Boyd attended the Appalachian Region meeting on July 19, 2018 in Asheville, NC. Boyd actively participated in the discussion of mitigating measures for the HCVs during this meeting.

Gary Boyd, Greener Options, Inc. and Mark Hughes, PhD, Biological Integrity, LLC have reviewed the FSC US Controlled Wood Regional Meeting final report findings with MREQ specifically on recommended mitigation measures for the Central Appalachian CBA.

- 2. MREQ will work with suppliers who source wood fiber from this area to educate the suppliers, their loggers and landowners on the conservation values of aquatic biodiversity, threats from poorly implemented forest management activities, and opportunities for conservation through management practices that reduce or eliminate these threats, including but not limited to forest management activities on steep slopes, and practices that will prevent siltation. This education and outreach measure will be documented using MREQ-DOC-012 Secondary Supplier Audit Checklists.
- 3. MREQ will engage with and/or provide monetary or in-kind resources to conservation partnerships, organizations or similar entities that are supporting or promoting programs/projects to develop new or augment existing programs within the specified risk area and the MREQ's supply area that will: a) result in increased and improved implementation of BMPs with a focus on aquatic biodiversity conservation; and/or b) result in increased access to incentive programs for landowners who restore, maintain or enhance forests in a way that will conserve aquatic biodiversity.

#### Cheoah Bald Salamander

 MREQ has contracted with Greener Options, Inc. to assist in the development and implementation of MREQ's certification programs. Greener Options, Inc. working with Biological Integrity, LLC attended the three FSC US Controlled Wood Regional meeting held in 2018. Gary Boyd, Greener Options, Inc. attended the Appalachian Region meeting on July 19, 2018 in Ashville, NC. Boyd actively participated in the discussion of mitigating measures for the HCVs during this meeting.

Gary Boyd, Greener Options, Inc., and Mark Hughes, Biological Integrity, LLC have reviewed the FSC US Controlled Wood Regional Meeting final report findings with MREQ specifically on recommended mitigation measures for the CBS.

2. MREQ will work with suppliers who source wood fiber from this area to educate the suppliers, their loggers and landowners on conservation values of CBS, potential threats from forest management



activities and opportunities for conservation through management that maintains, enhances, or restores CBS populations and reduces or eliminates potential threats.

#### Dusky Gopher Frog

 MREQ has contracted with Greener Options, Inc. to assist in the development and implementation of MREQ's certification programs. Greener Options, Inc. working with Biological Integrity, LLC attended the three FSC US Controlled Wood Regional meeting held in 2018. Mark Hughes, PhD, owner of Biological Integrity, LLC attended the Southeast Region meeting on July 31, 2018 in Atlanta, GA. Hughes actively participated in the discussion of mitigating measures for the HCVs during this meeting.

Gary Boyd, Greener Options, Inc., and Mark Hughes, Biological Integrity, LLC have reviewed the FSC US Controlled Wood Regional Meeting final report findings with MREQ specifically on recommended mitigation measures for the DGF.

- MREQ will work with suppliers who source wood fiber from this area to educate the suppliers, their loggers and landowners on conservation values of DGF, potential threats from forest management activities and opportunities for conservation through management that maintains, enhances, or restores DGF populations and reduces or eliminates potential threats.
- 3. MREQ is developing and implementing a procurement policy for those suppliers who source wood fiber directly from the forest in this area that reflects the above stated education & outreach mitigation measure and clearly states the requirement that the landowner/forester/logger at the source forest will not supply materials from forests where DGFs are threatened as a result of the forest management activities that produced the forest materials. This policy will include a description of the forest type in which DGF populations occur, potential threats to DGF from forest management activities and the kinds of activities that would maintain or enhance DGF populations in the specified risk area.

#### Florida Panhandle CBA

 MREQ has contracted with Greener Options, Inc. to assist in the development and implementation of MREQ's certification programs. Greener Options, Inc. working with Biological Integrity, LLC attended the three FSC US Controlled Wood Regional meeting held in 2018. Mark Hughes, PhD, owner of Biological Integrity, LLC attended the Southeast Region meeting on July 31, 2018 in Atlanta, GA. Hughes actively participated in the discussion of mitigating measures for the HCVs during this meeting.

Gary Boyd, Greener Options, Inc., and Mark Hughes, Biological Integrity, LLC have reviewed the FSC US Controlled Wood Regional Meeting final report findings with MREQ specifically on recommended mitigation measures for the Southern Appalachian CBA.

2. MREQ will work with suppliers who source wood fiber from this area to educate the suppliers, their loggers and landowners on the conservation values of aquatic biodiversity and Native Longleaf Pine Systems, threats from poorly implemented forest management activities, and opportunities for conservation through management practices that reduce or eliminate these threats, including but not limited to forest management activities on steep slopes, and practices that will prevent siltation. This education and outreach measure will be documented using MREQ-DOC-012 Secondary Supplier Audit Checklists.



#### Patch-nosed Salamander

 MREQ has contracted with Greener Options, Inc. to assist in the development and implementation of MREQ's certification programs. Greener Options, Inc. working with Biological Integrity, LLC attended the three FSC US Controlled Wood Regional meeting held in 2018. Gary Boyd, Greener Options, Inc. attended the Appalachian Region meeting on July 19, 2018 in Ashville, NC. Boyd actively participated in the discussion of mitigating measures for the HCVs during this meeting.

Gary Boyd, Greener Options, Inc., and Mark Hughes, Biological Integrity, LLC have reviewed the FSC US Controlled Wood Regional Meeting final report findings with MREQ specifically on recommended mitigation measures for the PNS.

 MREQ will work with suppliers who source wood fiber from this area to educate the suppliers, their loggers and landowners on conservation values of PNS, potential threats from forest management activities and opportunities for conservation through management that maintains, enhances, or restores PNS populations and reduces or eliminates potential threats.

#### Southern Appalachian CBA

 MREQ has contracted with Greener Options, Inc. to assist in the development and implementation of MREQ's certification programs. Greener Options, Inc. working with Biological Integrity, LLC attended the three FSC US Controlled Wood Regional meeting held in 2018. Mark Hughes, PhD, owner of Biological Integrity, LLC attended the Southeast Region meeting on July 31, 2018 in Atlanta, GA. Hughes actively participated in the discussion of mitigating measures for the HCVs during this meeting.

Gary Boyd, Greener Options, Inc., and Mark Hughes, Biological Integrity, LLC have reviewed the FSC US Controlled Wood Regional Meeting final report findings with MREQ specifically on recommended mitigation measures for the Southern Appalachian CBA.

- 2. MREQ will work with suppliers who source wood fiber from this area to educate the suppliers, their loggers and landowners on the conservation values of aquatic biodiversity, threats from poorly implemented forest management activities, and opportunities for conservation through management practices that reduce or eliminate these threats, including but not limited to forest management activities on steep slopes, and practices that will prevent siltation. This education and outreach measure will be documented using MREQ-DOC-012 Secondary Supplier Audit Checklists.
- 3. MREQ will engage with and/or provide monetary or in-kind resources to conservation partnerships, organizations or similar entities that are supporting or promoting programs/projects to develop new or augment existing programs within the specified risk area and the MREQ's supply area that will: a) result in increased and improved implementation of BMPs with a focus on aquatic biodiversity conservation; and/or b) result in increased access to incentive programs for landowners who restore, maintain or enhance forests in a way that will conserve aquatic biodiversity.

#### Late Successional Bottomland Hardwoods

 MREQ has contracted with Greener Options, Inc. to assist in the development and implementation of MREQ's certification programs. Greener Options, Inc. working with Biological Integrity, LLC attended the three FSC US Controlled Wood Regional meeting held in 2018. Gary Boyd attended the Appalachian



Region meeting on July 19, 2018 in Asheville, NC. Boyd actively participated in the discussion of mitigating measures for the HCVs during this meeting.

Gary Boyd, Greener Options, Inc. and Mark Hughes, PhD, Biological Integrity, LLC have reviewed the FSC US Controlled Wood Regional Meeting final report findings with MREQ specifically on recommended mitigation measures for Late Successional Bottomland Hardwoods (LSBH).

- 2. MREQ will work with suppliers who source wood fiber from these forest types to educate the suppliers, their loggers and landowners and communicate the social benefits & values of LSBH, threats from forest management activities & related loss of values, and opportunities for conservation through management that restores or maintains LSBH and reduces or eliminates these threats. This education and outreach measure will be documented using MREQ-DOC-012 Secondary Supplier Audit Checklists.
- Engage with and/or provide monetary or in-kind resources to conservation organizations or similar entities that are facilitating active, on-the-ground implementation of management activities to restore or maintain existing examples of LSBH, with a goal of long-term conservation of this forest type within the specified risk area and MREQ's supply area.

#### Mesophytic Cove Sites

 MREQ has contracted with Greener Options, Inc. to assist in the development and implementation of MREQ's certification programs. Greener Options, Inc. working with Biological Integrity, LLC attended the three FSC US Controlled Wood Regional meeting held in 2018. Gary Boyd attended the Appalachian Region meeting on July 19, 2018 in Asheville, NC. Boyd actively participated in the discussion of mitigating measures for the HCVs during this meeting.

Gary Boyd, Greener Options, Inc. and Mark Hughes, PhD, Biological Integrity, LLC have reviewed the FSC US Controlled Wood Regional Meeting final report findings with MREQ specifically on recommended mitigation measures for the Southern Appalachian CBA.

2. MREQ will work with suppliers who source wood fiber from these forest types to educate the suppliers, their loggers and landowners and communicate the social benefits and values of Mesophytic Cove Sites, how to identify them in the field, threats from incompatible forest management activities, and opportunities for conservation through management that enhances these sites and reduces or eliminates these threats. This education and outreach measure will be documented using MREQ-DOC-012 Secondary Supplier Audit Checklists.

#### Natural Longleaf Pine Systems

 MREQ has contracted with Greener Options, Inc. to assist in the development and implementation of MREQ's certification programs. Greener Options, Inc. working with Biological Integrity, LLC attended the three FSC US Controlled Wood Regional meeting held in 2018. Gary Boyd attended the Appalachian Region meeting on July 19, 2018 in Asheville, NC. Boyd actively participated in the discussion of mitigating measures for the HCVs during this meeting.

Gary Boyd, Greener Options, Inc. and Mark Hughes, PhD, Biological Integrity, LLC have reviewed the FSC US Controlled Wood Regional Meeting final report findings with MREQ specifically on recommended mitigation measures for the NLPS.



- 2. MREQ will work with suppliers who source wood fiber from these areas to communicate and educate suppliers, their loggers and landowners on the social benefits and values of NLPS, threats from forest management and related loss of values, and opportunities for conservation through management that restores or maintains NLPS and reduces or eliminates these threats. Communications should recognize the importance of the forest understory and fire to NLPS. This education and outreach measure will be documented using MREQ-DOC-012 Secondary Supplier Audit Checklists.
- 3. MREQ will engage with and/or provide monetary or in-kind resources to conservation organizations such as the Longleaf Alliance that are facilitating active, on-the-ground implementation of management activities to restore or maintain existing examples of NLPS, with a goal of long-term conservation of this system within the specified risk area and the MREQ's supply area.

#### Forestland Conversion

- 1. The Company is developing and implementing binding written agreements with its applicable feedstock suppliers that:
  - 1) mitigate the risk that material supplied originates from forest areas converted into plantation or non-forest use; or
  - 2) assure that if some conversion has occurred, that material supplied originates from limited and legal sources of conversion (e.g., conversion that results in conservation benefits, publicly approved changes in zoning in urban areas, etc.) and does not come from sources where the conversion threatens High Conservation Values.
- 2. The Company has committed to improving the education and awareness of this ecoregion through the representation of company at FSC Controlled Wood Regional Meetings held in 2018. Information from these regional meetings on forestland conversion was reviewed by company personnel.
- 3. The Company reviews this educational information with its suppliers who source wood fiber from these counties to educate the suppliers, their loggers and landowners on the social benefits of keeping forests as forests, and the value enhancing alternatives to conversion and opportunities for the maintenance of forests. This education and outreach measure will be documented using MREQ-DOC-012 Secondary Supplier Audit Checklists.
- 4. The Company will also maintain membership in the Mississippi Forestry Association to keep abreast of forestry issues within the Company's supply area. Below are some sources of information used to educate suppliers and their loggers, and landowners of forest conservation.

### 9.2 Monitoring and outcomes

Mitigation as been implemented. Monitoring will occur during annual supplier audits and documented using MREQ-DOC-012 Secondary Supplier Audit Checklists. The plans to measure effectiveness for these mitigation measures are below:

Central Appalachians CBA

- Consultant will have an annual review with the company on the high conservation value areas to review any updates or changes on the specified risk areas. Any new data or information related to threats or improvement actions through partnerships will be reviewed. Annual review will be documented on MREQ-DOC-002 Training Record.
- 2. The Company will meet with suppliers annually to verify the supplier has educated their suppliers, loggers & landowners on the conservation values of the specified risk. This annual audit will be documented using MREQ-DOC-012 Secondary Supplier Audit Checklist. Supplier maps, education

Sustainable Biomass Program



materials and other pertinent information will be provided to the supplier to be passed on to theie suppliers, loggers and landowners.

 Company annually reviews the results of partnerships developed and implemented with conservation organizations addressing FSC Controlled Wood specified risk areas and other areas of high conservation value identified within the company's MREQ-DOC-005 FSC Controlled Wood Risk Assessment as mitigation measures.

#### Cheoah Bald Salamander

- 1. Consultant will have an annual review with the company on the high conservation value areas to review any updates or changes on the specified risk areas. Any new data or information related to threats or improvement actions through partnerships will be reviewed. Annual review will be documented on MREQ-DOC-002 Training Record.
- The Company will meet with suppliers annually to verify the supplier has educated their suppliers, loggers & landowners on the conservation values of the specified risk. This annual audit will be documented using MREQ-DOC-012 Secondary Supplier Audit Checklist. Supplier maps, education materials and other pertinent information will be provided to the supplier to be passed on to theie suppliers, loggers and landowners.

#### Dusky Gopher Frog

- 1. Consultant will have an annual review with the company on the high conservation value areas to review any updates or changes on the specified risk areas. Any new data or information related to threats or improvement actions through partnerships will be reviewed. Annual review will be documented on MREQ-DOC-002 Training Record.
- The Company will meet with suppliers annually to verify the supplier has educated their suppliers, loggers & landowners on the conservation values of the specified risk. This annual audit will be documented using MREQ-DOC-012 Secondary Supplier Audit Checklist. Supplier maps, education materials and other pertinent information will be provided to the supplier to be passed on to theie suppliers, loggers and landowners.
- 3. The Company will annually review Fiber Supply Agreements to ensure agreements contain applicable requirements.

#### Florida Panhandle CBA

- Consultant will have an annual review with the company on the high conservation value areas to review any updates or changes on the specified risk areas. Any new data or information related to threats or improvement actions through partnerships will be reviewed. Annual review will be documented on MREQ-DOC-002 Training Record.
- The Company will meet with suppliers annually to verify the supplier has educated their suppliers, loggers & landowners on the conservation values of the specified risk. This annual audit will be documented using MREQ-DOC-012 Secondary Supplier Audit Checklist. Supplier maps, education materials and other pertinent information will be provided to the supplier to be passed on to theie suppliers, loggers and landowners.

#### Patch-nosed Salamander

- Consultant will have an annual review with the company on the high conservation value areas to review any updates or changes on the specified risk areas. Any new data or information related to threats or improvement actions through partnerships will be reviewed. Annual review will be documented on MREQ-DOC-002 Training Record.
- The Company will meet with suppliers annually to verify the supplier has educated their suppliers, loggers & landowners on the conservation values of the specified risk. This annual audit will be documented using MREQ-DOC-012 Secondary Supplier Audit Checklist. Supplier maps, education



materials and other pertinent information will be provided to the supplier to be passed on to theie suppliers, loggers and landowners.

#### Southern Appalachian CBA

- Consultant will have an annual review with the company on the high conservation value areas to review any updates or changes on the specified risk areas. Any new data or information related to threats or improvement actions through partnerships will be reviewed. Annual review will be documented on MREQ-DOC-002 Training Record.
- The Company will meet with suppliers annually to verify the supplier has educated their suppliers, loggers & landowners on the conservation values of the specified risk. This annual audit will be documented using MREQ-DOC-012 Secondary Supplier Audit Checklist. Supplier maps, education materials and other pertinent information will be provided to the supplier to be passed on to theie suppliers, loggers and landowners.
- Company annually reviews the results of partnerships developed and implemented with conservation organizations addressing FSC Controlled Wood specified risk areas and other areas of high conservation value identified within the company's MREQ-DOC-005 FSC Controlled Wood Risk Assessment as mitigation measures.

#### Late Successional Bottomland Hardwoods

- 1. Consultant will have an annual review with the company on the high conservation value areas to review any updates or changes on the specified risk areas. Any new data or information related to threats or improvement actions through partnerships will be reviewed. Annual review will be documented on MREQ-DOC-002 Training Record.
- The Company will meet with suppliers annually to verify the supplier has educated their suppliers, loggers & landowners on the conservation values of the specified risk. This annual audit will be documented using MREQ-DOC-012 Secondary Supplier Audit Checklist. Supplier maps, education materials and other pertinent information will be provided to the supplier to be passed on to theie suppliers, loggers and landowners.
- Company annually reviews the results of partnerships developed and implemented with conservation organizations addressing FSC Controlled Wood specified risk areas and other areas of high conservation value identified within the company's MREQ-DOC-005 FSC Controlled Wood Risk Assessment as mitigation measures.

#### Mesophytic Cove Sites

- 1. Consultant will have an annual review with the company on the high conservation value areas to review any updates or changes on the specified risk areas. Any new data or information related to threats or improvement actions through partnerships will be reviewed. Annual review will be documented on MREQ-DOC-002 Training Record.
- The Company will meet with suppliers annually to verify the supplier has educated their suppliers, loggers & landowners on the conservation values of the specified risk. This annual audit will be documented using MREQ-DOC-012 Secondary Supplier Audit Checklist. Supplier maps, education materials and other pertinent information will be provided to the supplier to be passed on to theie suppliers, loggers and landowners.

#### Natural Longleaf Pine Systems

- Consultant will have an annual review with the company on the high conservation value areas to review any updates or changes on the specified risk areas. Any new data or information related to threats or improvement actions through partnerships will be reviewed. Annual review will be documented on MREQ-DOC-002 Training Record.
- 2. The Company will meet with suppliers annually to verify the supplier has educated their suppliers, loggers & landowners on the conservation values of the specified risk. This annual audit will be



documented using MREQ-DOC-012 Secondary Supplier Audit Checklist. Supplier maps, education materials and other pertinent information will be provided to the supplier to be passed on to theie suppliers, loggers and landowners.

Company annually reviews the results of partnerships developed and implemented with conservation organizations addressing FSC Controlled Wood specified risk areas and other areas of high conservation value identified within the company's MREQ-DOC-005 FSC Controlled Wood Risk Assessment as mitigation measures.

#### Forestland Conversion

- 1. The Company will annually review Fiber Supply Agreements to ensure agreements contain applicable requirements.
- Consultant will have an annual review with the company on forestland conversion to review any updates or changes on forestland conversion. Any new data or information related to threats or improvement actions through partnerships will be reviewed. Annual review will be documented on MREQ-DOC-002 Training Record.
- 3. The Company will meet with suppliers annually to verify the supplier has educated their suppliers, loggers & landowners on forestland conversion. This annual audit will be documented using MREQ-DOC-012 Secondary Supplier Audit Checklist. Supplier maps, education materials and other pertinent information will be provided to the supplier to be passed on to their suppliers, loggers and landowners.
- 4. MREQ will also maintain membership in the Mississippi Forestry Association to keep abreast of forestry issues within MREQ's supply area.



# 10 Detailed Findings for Indicators

Detailed findings for each Indicator are given in Annex 1.



# 11 Review of Report

### 11.1 Peer review

No peer review of this report was completed.

### 11.2 Public or additional reviews

No additional external review of this report has been completed by other stakeholders.



# 12 Approval of Report

Approval of Supply Base Report by senior management					
Report Prepared by:	Gary Boyd	Owner Greener Options Inc.	7/20/2019		
~ <b>j</b> .	Name	Title	Date		
The undersig and do here managemen	The undersigned persons confirm that I/we are members of the organisation's senior management and do hereby affirm that the contents of this evaluation report were duly acknowledged by senior management as being accurate prior to approval and finalisation of the report.				
Report approved by:	Terry Dunlap	Plant Manager	7/22/2019		
	Name	Title	Date		
Report approved by:					
	Name	Title	Date		



# 13 Updates

### 13.1 Significant changes in the Supply Base

Not applicable; This is the certification audit report.

### 13.2 Effectiveness of previous mitigation measures

Not applicable; This is the certification audit report.

### 13.3 New risk ratings and mitigation measures

Not applicable; This is the certification audit report.

# 13.4 Actual figures for feedstock over the previous 12 months

Not applicable; This is the certification audit report.

### 13.5 Projected figures for feedstock over the next 12 months

Not applicable; This is the certification audit report.



# 14 Annex 1:Detailed Findings for Supply Base Evaluation Indicators

	Indicator			
1.1.1	The Biomass Producer's Supply Base is defined and mapped.			
Finding	The Company's Supply Base is defined and mapped as part of the company's MREQ- DOC-005 FSC Controlled Wood Risk Assessment. The map (Figure 1) and list of states and counties (Table 1) are defined by present & potential primary & secondary feedstock suppliers and sub-suppliers of the facility. Supply areas for each feedstock supplier and sub-supplier were determined by input obtained from the supplier and/or sub-supplier where either specific states & counties were identified as their supply area or they provided a maximum haul distance from which they define their supply area. States/counties that intersected the stated radius were considered a part of their supply area. All supplier and sub-supplier supply area information was merged into the Company's overall supply area.			
Means of Verification	Origin of primary & secondary feedstocks are determined initially on the MRE Supply Area Declaration. Once an supplier is active, the suppliers are verified during the Company's secondary supplier audits that are conducted annually for each supplier and documented on MREQ-DOC-012 Secondary Supplier Audit Checklist.			
Evidence Reviewed	<ul> <li>MRE Supply Area Declaration</li> <li>MREQ-DOC-005 FSC Controlled Wood Value Risk Assessment</li> <li>MREQ-DOC-012 Secondary Supplier Audit Checklist</li> </ul>			
Risk Rating	X Low Risk			
Comment or Mitigation Measure				

	Indicator
1.1.2	Feedstock can be traced back to the defined Supply Base.
Finding	Primary feedstock comes from two (2) suppliers providing in-woods chips. Secondary feedstock comes from approximately thirteen (13) pine & hardwood sawmills supplying chips, sawdust or shavings. Tertiary feedstock comes from one supplier sourcing their material from four (4) sub-suppliers. Feedstock can be tracked by scale tickets upon receipt from suppliers. Communications with suppliers and sub-suppliers confirm feedstock originates from within the Company supply base and is recorded using MREQ-DOC-012 Secondary Supplier Audit Checklist. Traceability to the county of origin is required in Company policies and procedures.



Means of Verification	Company procedure suppliers	es, records in feedstock inventory sy	stem an	d communications with
Evidence Reviewed	<ul> <li>Scale Tickets</li> <li>MREQ-POL-001 Sustainability Policy</li> <li>MREQ-PROC-001 Chain of Custody Procedures</li> <li>MREQ-PROC-002 Due Diligence Procedures</li> <li>MREQ-PROC-003 SBP Procedures</li> <li>MREQ-DOC-012 Secondary Supplier Audit Checklist</li> </ul>			
Risk Rating	X Low Risk	□ Specified Risk		Unspecified Risk at RA
Comment or Mitigation Measure				

	Indicator		
1.1.3	The feedstock input profile is described and categorised by the mix of inputs.		
Finding	The Company purchases primary & secondary feedstocks that are described in MREQ- DOC-004 Chain of Custody Product Group List as a part of its FSC Chain of Custody system. Receiving records record the type of feedstock and the species group purchased from suppliers. The Company's inventory system tracks all feedstock purchases. Receiving records are maintained for a five-year period to meet FSC Chain of Custody standard requirements.		
Means of Verification	Verify wood purchases in feedstock inventory system.		
Evidence Reviewed	<ul> <li>Feedstock receiving records</li> <li>Scale Tickets</li> <li>MREQ-DOC-004 Chain of Custody Product Group List</li> <li>MREQ-PROC-001 Chain of Custody Procedures</li> <li>MREQ-PROC-002 Due Diligence Procedures</li> <li>MREQ-PROC-003 SBP Procedures</li> </ul>		
Risk Rating	X Low Risk		
Comment or Mitigation Measure			



	Indicator
1.2.1	The Biomass Producer has implemented appropriate control systems and procedures to ensure that legality of ownership and land use can be demonstrated for the Supply Base.
Finding	The Company has approved and implemented MREQ-POL-001 Sustainability Policy that provides guidance to demonstrate the Company is committed to adhering to all applicable Federal, State and local laws and regulations. This policy also requires the avoidance of sourcing wood fiber from illegally harvested wood. Fiber Purchase Agreements executed with suppliers contain language requirements of meeting applicable laws and regulations and not knowingly purchasing illegally harvested wood. MREQ-PROC-001 Chain of Custody Procedures and MREQ-PROC-002 Due Diligence Procedures provide guidance on the purchase of feedstock to ensure it is legally sourced. The Company has implemented the FSC US Controlled Wood National Risk Assessment (US NRA) which has determined Controlled Wood Category 1: Illegally harvested wood to be "inversite".
	risk assessment through the listing of various applicable laws showcasing the rule of law and public agency governance.
Means of Verification	Fiber Purchase Agreements, Federal & State laws
Evidence Reviewed	<ul> <li>Fiber Purchase Agreements</li> <li>MREQ-POL-001 Sustainability Policy</li> <li>MREQ-PROC-001 Chain of Custody Procedures</li> <li>MREQ-PROC-002 Due Diligence Procedures</li> <li>MREQ-DOC-005 FSC Controlled Wood Areas Risk Assessment</li> <li>FSC US Controlled Wood National Risk Assessment (US NRA)</li> </ul>
Risk Rating	X Low Risk
Comment or Mitigation Measure	

	Indicator
1.3.1	The BP has implemented appropriate control systems and procedures to ensure that feedstock is legally harvested and supplied and is in compliance with EUTR legality requirements.
Finding	The Company has approved and implemented MREQ-POL-001 Sustainability Policy that provides guidance to demonstrate the Company is committed to adhering to all applicable Federal, State and local laws and regulations. This policy also requires the avoidance of sourcing wood fiber from illegally harvested wood.
	Fiber Purchase Agreements executed with suppliers contain language requirements of meeting applicable laws and regulations and not knowingly purchasing illegally harvested wood. MREQ-PROC-001 Chain of Custody Procedures and MREQ-PROC-002 Due Diligence Procedures provide guidance on the purchase of feedstock to ensure it is legally sourced and in compliance with EUTR legality requirements.
	The Company has implemented the FSC US Controlled Wood National Risk Assessment (US NRA) which has determined Controlled Wood Category 1: Illegally harvested wood to be "low risk". MREQ-DOC-005 FSC Controlled Wood Risk Assessment supports this low



	risk assessment through the listing of various applicable laws showcasing the rule of law and public agency governance.		
Means of Verification	Fiber Purchase Agreements, Federal & State laws		
Evidence Reviewed	<ul> <li>Fiber Purchase Ag</li> <li>MREQ-POL-001 S</li> <li>MREQ-PROC-001</li> <li>MREQ-PROC-002</li> <li>MREQ-DOC-005 F</li> <li>FSC US Controlled</li> </ul>	reements ustainability Policy Chain of Custody Procedures Due Diligence Procedures SC Controlled Wood Areas Risk d Wood National Risk Assessmen	Assessment t (US NRA)
Risk Rating	X Low Risk	□ Specified Risk	□ Unspecified Risk at RA
Comment or Mitigation Measure			

	Indicator	
1.4.1	The Biomass Producer has implemented appropriate control systems and procedures to verify that payments for harvest rights and timber, including duties, relevant royalties and taxes related to timber harvesting, are complete and up to date.	
	MREQ-POL-001 Sustainability Policy states the Company will abide by all laws and regulations, including those laws associated with taxes and harvesting rights. The Company works with its suppliers to ensure severance taxes are paid for harvest rights and timber related to timber harvesting.	
Finding	The Company has implemented the FSC US Controlled Wood National Risk Assessment (US NRA) which has determined Controlled Wood Category 1: Illegally harvested wood to be "low risk". Indicators 1.5 Payment of royalties and harvesting fees, 1.6 Value added taxes and other sales taxes and 1.7 Income and profit taxes are all determined to be "low risk".	
	Furthermore, Transparency International has identified no issues with corruption bribery or other illegal activities with the US having a Corruptions Perceptions Index score of 71 in 2018. AHEC Legality Study determined the Company's supply area is a low risk for illegal activity. The World Bank ranked the US in the top 90th percentile in the Rule of Law category (91.83/100 in 2017).	
Means of Verification	Tax payment records, Fiber Purchase Agreements	
Evidence Reviewed	<ul> <li>Fiber Purchase Agreements</li> <li>FSC US Controlled Wood National Risk Assessment (US NRA)</li> <li>MREQ-POL-001 Sustainability Policy</li> </ul>	
Risk Rating	X Low Risk	
Comment or Mitigation Measure		



	Indicator		
1.5.1	The Biomass Producer has implemented appropriate control systems and procedures to verify that feedstock is supplied in compliance with the requirements of CITES.		
Finding	The Company has implemented appropriate control systems and procedures to verify that feedstock is supplied in compliance with the requirements of CITES. Based on review of the CITES list it is determined that there are no species used in Company operations that are included in the CITES list.		
Means of Verification	List of species used by Company located in MREQ-DOC-004 Chain of Custody Product Group List and CITES list located in MREQ-DOC-005 High Conservation Value Areas Risk Assessment		
Evidence Reviewed	<ul> <li>MREQ-DOC-004 Chain of Custody Product Group List</li> <li>MREQ-DOC-005 FSC Controlled Wood Risk Assessment</li> </ul>		
Risk Rating	X Low Risk		
Comment or Mitigation Measure			

	Indicator		
1.6.1	The Biomass Producer has implemented appropriate control systems and procedures to ensure that feedstock is not sourced from areas where there are violations of traditional or civil rights.		
	MREQ-POL-001 Sustainability Policy states the Company will abide by all laws and regulations, including those laws associated with traditional and civil rights.		
Finding	Harvesting in the supply basin presents a low risk of violation of traditional, civil and collective rights based on the following factors: (1) There is no UN Security Council ban on timber exports from the country concerned; (2) The country or district is not designated a source of conflict timber (e.g. USAID Type 1 conflict timber); (3) There are recognized and equitable processes in place to resolve conflicts of substantial magnitude pertaining to traditional rights including use rights, cultural interests or traditional cultural identity in the district concerned; and (4) There is no evidence of violation of the ILO Convention 16S on Indigenous and Tribal Peoples taking place in the forest areas in the district concerned.		
	The Company has implemented the FSC US Controlled Wood National Risk Assessment (US NRA) which has determined Controlled Wood Category 2: Wood harvested in violation of traditional and human rights to be "low risk".		
Means of Verification	MREQ-POL-001 Sustainability Policy, FSC US Controlled Wood National Risk Assessment (US NRA)		
Evidence Reviewed	<ul> <li>MREQ-POL-001 Sustainability Policy</li> <li>MREQ-DOC-005 FSC Controlled Wood Risk Assessment</li> <li>FSC US Controlled Wood National Risk Assessment (US NRA)</li> </ul>		
Risk Rating	X Low Risk		
Comment or Mitigation Measure			



	Indicator		
2.1.1	The Biomass Producer has implemented appropriate control systems and procedures for verifying that forests and other areas with high conservation values are identified and mapped.		
Finding	<ul> <li>mapped.</li> <li>The Company's MREQ-DOC-005 FSC Controlled Wood Risk Assessment identified and mapped the presence or absence of the following high conservation value areas within its supply base. The FSC US Controlled Wood National Risk Assessment (US NRA) was the basis for the identification and mapping of areas with high conservation value (HCV). The US NRA consulted with and applied recommendations from over 200 conservation groups and databases including, but not limited to, Protected Areas Database of the United States (PAD-US), International Union for the Conservation of Nature (IUCN), The Nature Conservancy, NatureServe, &amp; USFS Inventoried Roadless Areas to map these HCVs. In addition to the US NRA, the company used World Wildlife Fund (WWF) eco-regions and Critical Ecosystem Partnership Fund biodiversity hotspots to identify and map HCV areas.</li> <li>The Company determined its feedstock supply area based on the secondary feedstock the facility is receiving. The company has expanded its identification and mapping of high conservation value areas (HCVs) by mapping HCV by supplier and sub-supplier. These supplier &amp; sub-supplier HCV maps collectively define the overall supply area for the company. These more detailed supplier maps utilize the conservation measures from the FSC Controlled Wood US National Risk Assessment (US NRA) where HCVs of "specified risk" have been identified. These supplier maps are used in conjunction with MREQ-DOC-012 Secondary Supplier Audit Checklist to annually review each supplier's supply area, areas of "specified risk" that are identified in their supply areas and mitigation measures being implemented to reduce "specified risk" to "low risk". MREQ-DOC-005 FSC Controlled Wood Risk Assessment identifies and maps HCVs with "specified risk" designations.</li> </ul>		
Means of Verification	Maps included in MREQ-DOC-005 FSC Controlled Wood Risk Assessment and MREQ- DOC-012 Secondary Supplier Audit Checklist		
Evidence Reviewed	<ul> <li>MREQ-DOC-005 FSC Controlled Wood Risk Assessment</li> <li>MREQ-DOC-012 Secondary Supplier Audit Checklist</li> <li>FSC US Controlled Wood National Risk Assessment (US NRA) https://us.fsc.org/en-us/certification/controlled-wood/fsc-us-controlled-wood-national- risk-assessment-us-nra</li> <li>Protected Areas Database of the United States (PAD-US) https://www.usgs.gov/core-science-systems/science-analytics-and- synthesis/gap/science/protected-areas</li> <li>International Union for the Conservation of Nature (IUCN) https://www.iucn.org/</li> <li>The Nature Conservancy https://www.nature.org/en-us/</li> <li>NatureServe http://explorer.natureserve.org/</li> <li>World Wildlife Fund (WWF) https://www.worldwildlife.org/biome-categories/terrestrial-ecoregions</li> <li>Critical Ecosystem Partnership Fund</li> <li>https://www.cepf.net/our-work/biodiversity-hotspots/north-american-coastal-plain</li> </ul>		



Risk Rating	X Low Risk	□ Specified Risk	Unspecified Risk at RA
Comment or			
Mitigation			
Measure			

	Indicator		
2.1.2	The Biomass Producer has implemented appropriate control systems and procedures to identify and address potential threats to forests and other areas with high conservation values from forest management activities.		
Finding	<ul> <li>MREQ has implemented the US NRA for its supply area. MREQ has determined the following categories of controlled wood as "low risk":</li> <li>Category 1: Illegally harvested wood;</li> <li>Category 2: Wood harvested in violation of traditional and human rights;</li> <li>Category 5: Wood from forests in which genetically modified trees are planted.</li> <li>MREQ has determined there may be areas within its supply area that are considered "specified risk" to the following categories of controlled wood:</li> <li>Category 3: Wood from forests where high conservation values are threatened by management activities;</li> <li>HCV1 - Central Appalachian Critical Biodiversity Area (CBA);</li> <li>HCV1 - Dusky Gopher Frog;</li> <li>HCV1 - Florida Panhandle Critical Biodiversity Area (CBA);</li> <li>HCV1 - Patch-nosed Salamander;</li> <li>HCV1 - Southern Appalachian CBA;</li> <li>HCV3 - Late Successional Bottomland Hardwoods;</li> <li>HCV3 - Nesophytic Cove Sites;</li> <li>HCV3 - Mesophytic Cove Sites;</li> <li>HCV3 - Nesophytic Cove Sites;</li> <li>HCV3 - Natural Longleaf Pine Systems</li> </ul> MREQ has mapped these "specified risk" areas by supplier/sub-supplier and will implement, as needed, adequate control measures to either avoid or to mitigate specified risk related to origin and/or risk related to mixing with non-eligible inputs in the supply chain. Central Appalachian CBA is located within 44 counties in 4 states (AL-4, GA-7, NC-5, TN-28) in the northeastern portion of the MREQ supply area. One sub-supplier provides wood fiber indirectly to MREQ that sources from counties within this CBA resulting in a low level of mitigation required (FSC US Controlled Wood Regional Meeting Report APPALACHIAN REGION: Asheville, NC – July 19, 2018; page 10). This CBA corresponds with the higher elevation portions of WWF's 'Appalachian Mixed Mesophytic Forest' area, one of their Global 200 biodiversity areas. The broadleaf forests and aquatic habitats drive the region's biodiversity. The forest are signifi		



<u>Mixed Mesophytic Forests</u> - The priority threats to the forests as a whole include: climate change, pollution from mining, new highways and utility rights-of-way, ORV recreation and overpopulation of deer.

<u>Aquatic Habitats</u> - Hydrologic alteration partially due to forestry practices and conversion from hardwood forests to non-native planted pine, reduced water quality partially due to loss of near-stream forested habitat and sedimentation associated with forestry practices and lack of Best Management Practice (BMP) implementation, and severe erosion of river banks.

#### Cheoah Bald Salamander

The Cheoah Bald Salamander (CBS) is located within 2 counties in NC in the MREQ supply area. One sub-supplier provides wood fiber indirectly to MREQ that sources from counties within this CBA which is considered to be "specified risk" within this CBA resulting in a low level of mitigation required (FSC US Controlled Wood Regional Meeting Report APPALACHIAN REGION: Asheville, NC – July 19, 2018; page 10).

The Cheoah Bald Salamander's range is not yet well defined but is believed to be limited a portion of the Appalachian Mountains at the very western extent of North Carolina within the elevational range of 975-1,524 meters, associated with the Cheoah Bald. The salamander's primary habitat is the mesic forests and the species may be common in areas with suitable habitat. It appears that much of the species' range may occur within the Nantahala National Forests and it is identified as a Federal Species of Concern.

Identified threats to these salamanders are clearcut harvests because they depend on forest & woodland habitats.

#### Dusky Gopher Frog

The Dusky Gopher Frog (DGF) is located within 4 counties in MS in the MREQ supply area. A few suppliers provide wood fiber to MREQ source from counties within this CBA which is considered to be "specified risk" within this CBA resulting in a low level of mitigation required (FSC US Controlled Wood Regional Meeting Report SOUTHEAST & MISSISSIPPI ALLUVIAL VALLEY REGIONS: Atlanta, GA – July 31, 2018; page 11).

The DGF historically occurred on the Coastal Plain from eastern Louisiana to the Mobile River delta in AL. Now, it is only known from one site in Harrison County and a couple of sites in Jackson County, MS. It is federally endangered wherever found. The species occurs in upland areas of sandy soils that were historically forested with longleaf pine and in temporary wetland breeding sites within the forested landscape. Most of its life cycle is spent in or near underground areas of refuge that historically were gopher tortoise burrows.

Identified Threats include population isolation, urbanization, disease, and a lack of suitable habitat. Habitat degradation is a significant factor, driven by multiple sources including, changes in forest type from longleaf pine to other forest types, forest degradation caused by grazing and the disruption of the natural fire regime.

#### Florida Panhandle CBA

The Florida Panhandle CBA is located within 3 counties in FL in the MREQ supply area. A few suppliers provide wood fiber to MREQ source from counties within this CBA which is considered to be "specified risk" within this CBA resulting in a low level of mitigation required (FSC US Controlled Wood Regional Meeting Report SOUTHEAST & MISSISSIPPI ALLUVIAL VALLEY REGIONS: Atlanta, GA – July 31, 2018; page 11).

This CBA is considered an HCV because it contains a high overall species richness, diversity, or uniqueness within a defined area compared to other sites within the same biogeographic area. The Florida Panhandle is reported to be one of the 5 richest biodiversity hotspots in North America. Of particular importance is the richness of frogs, snakes, turtles, and mussels. This concentration of biodiversity is driven by the river systems (particularly the Apalachicola River), longleaf pine savanna habitat and unique steephead ravines.

Identified Threats:


<u>Apalachicola Bay/River System</u> - Threats to this aquatic system are varied and include persistent drought resulting in reduced flow level, loss of floodplain and wetland habitat due to reduced flow levels, point and non-point source pollution, unrestrained growth and development. The Apalachicola River and Bay Surface Water Improvement & Management Plan identifies implementation of silvicultural Best Management Practices (BMPs) as a significant component of one of its priority projects.

<u>Longleaf Pine Savanna</u> - Biodiversity values can be adversely affected by forest management activities via conversion of longleaf to other pine types, and the use management techniques, including herbicide application that have the potential to inhibit native understory communities.

#### Patch-nosed Salamander

The Patch-nosed Salamander (PNS) is located within 2 counties in GA in the MREQ supply area. One sub-supplier provides wood fiber indirectly to MREQ that sources from counties within this CBA which is considered to be "specified risk" within this CBA resulting in a low level of mitigation required (FSC US Controlled Wood Regional Meeting Report APPALACHIAN REGION: Asheville, NC – July 19, 2018; page 10).

The PNS is the smallest known salamander in North America – typically around 5 cm in length, half of which is the tail. The known range of the Patch-nosed salamander includes a limited number of small, first order stream located at the foot of the Blue Ridge escarpment in Stephens and Habersham counties (near Lake Tugaloo) of Georgia, within the Chattahoochee National Forest. Identified individuals of this species have all been found in leaf litter or under rocks in the above water streambeds or banks of first-order streams. It is not yet known whether adjacent hardwood forests also provide habitat. This species is not listed at either the federal or state level.

Little is known about this species and specific threats have not yet been documented. The species depends on riparian habitat, so any factor that would disrupt water flow, canopy cover, or the leaf-littler layer would likely impact the species.

### Southern Appalachian CBA

The Southern Appalachian CBA is located within 20 counties in AL in the MREQ supply area. A few suppliers provide wood fiber to MREQ source from counties within this CBA which is considered to be "specified risk" within this CBA resulting in a low level of mitigation required (FSC US Controlled Wood Regional Meeting Report SOUTHEAST & MISSISSIPPI ALLUVIAL VALLEY REGIONS: Atlanta, GA – July 31, 2018; page 11).

Biodiversity values in the southern Appalachians include aquatic habitats, glades, and montane longleaf pine. Alabama is recognized as having the greatest number of freshwater species of mollusks and fish in the United States, and many of these species have very restricted distributions and specialized habitat requirements that make them highly vulnerable to extinction. The Cahaba River watershed is the center of the biodiversity hotspot, but the biodiversity area includes other smaller watercourses as well. Aquatic habitats driving this concentration of biodiversity include lakes, rivers, streams, bogs, swamps, ephemeral pools, fens, seeps, swamp forests and wet meadows. Other drivers of biodiversity include glades and montane longleaf pine. Bibb County Glades (i.e. rock outcrops), exposed limestone glades, and sandstone glades in Central Alabama have high density of rare plants. These are open habitats that are dominated by upland herbaceous plant species. There is typically an absence of a tree canopy on glades, resulting in large amounts of sunlight and heat on the surface. Montane longleaf pine habitats occur in steep rolling topography historically maintained by fire, mostly outside of or on the edge of the Coastal Plain. Biodiversity values are driven in part by the understory plant community.

Identified Threats:

<u>Aquatic Habitats</u> - Numerous sources of information identify threats from forest management activities, particularly non-point source pollution in aquatic habitats, and disturbance to riparian zones.



<u>Glades</u> - Threats include grazing, non-native species, quarrying, root-digging, plant and animal collecting, removal of large rocks for landscaping, urban development, plowing for fire breaks, use as logging decks (resulting in soil/vegetation disturbance and soil erosion), conversion to other land uses, and ORV damage.

<u>Montane Longleaf Pine</u> - Biodiversity values can be adversely affected by forest management activities via conversion of longleaf to other pine types, and the use of management techniques, including herbicide application that have the potential to inhibit native understory communities.

## Late Successional Bottomland Hardwoods

Late Successional Bottomland Hardwoods (LSBH) are located within 50 counties in 4 states (AL-11, FL-4, LA-a2, MS-23) in the southern portion of the MREQ supply area. Two (2) suppliers providing hardwood wood fiber to MREQ source from counties considered to be "specified risk" within this CBA resulting in a low level of mitigation required (FSC US Controlled Wood Regional Meeting Report SOUTHEAST & MISSISSIPPI ALLUVIAL VALLEY REGIONS: Atlanta, GA – July 31, 2018; page 11).

Much of the original bottomland hardwood in the US was cleared for agriculture, particularly in the Mississippi valley, and much of the remainder was mismanaged leaving very few intact examples. Bottomland Hardwoods are periodically inundated, floodplain forests, where the entire ecosystem is driven by hydrology. Late successional stands are not defined by the species, as much as by the structural composition (e.g., more stratification) and existence of large wood debris, including standing hollow trees – these changes occur at about 80 years in most Bottomland Hardwood types and perhaps a little later in cypress swamps.

Identified threats include development, hydrologic changes (droughts, water withdraws, ditching), incompatible forest management, pollution, fragmentation, invasive species and economic drivers that alter forest management goals.

### Mesophytic Cove Sites

Mesophytic Cove Sites is located within 35 counties in 4 states (AL-1; GA-10; NC-5; TN-19) in the northeastern portion of the MREQ supply area. One sub-supplier provides wood fiber indirectly to MREQ that sources from counties within this CBA resulting in a low level of mitigation required (FSC US Controlled Wood Regional Meeting Report SOUTHEAST & MISSISSIPPI ALLUVIAL VALLEY REGIONS: Atlanta, GA – July 31, 2018; page 11).

Mesophytic cove sites are highly diverse, closed-canopy hardwood forest occurring on sheltered sites at low- to moderate-elevation (1,000-3,600 ft), and sometimes higher. They tend to occur in large patches on concave slopes that accumulate nutrients and moisture. They are characterized by high species diversity and a complex forest structure. The ground level flora in particular has high species richness, often with abundant spring ephemerals. Rich cove forests have very fertile soils with a diverse herb layer containing few shrubs. Acidic cove forests are less fertile than rich coves, but otherwise similar.

Identified Threats to this forest type are invasive species and conversion to other uses. Threats also include incompatible forest management that results in alterations to the structure and composition of the forest or conversion to other forest types (white pine), climate change, chronic deer herbivory, harvesting of herbs and pollution.

### Natural Longleaf Pine Systems

Native Longleaf Pine Systems (NLPS) are located in 27 counties in 3 states (AL-14, FL-4, MS-9) throughout the MREQ supply area. Most of the suppliers providing wood fiber to MREQ source from counties that have been identified as containing native longleaf systems resulting in a low level of mitigation required (FSC US Controlled Wood Regional Meeting Report SOUTHEAST & MISSISSIPPI ALLUVIAL VALLEY REGIONS: Atlanta, GA – July 31, 2018; page 11).

NLPS were once one of the most widespread forest types in the US but were reduced to less than 5% of their original range, becoming one of the rarest forest systems in the world. This historical reduction was driven by suppression of fire and conversion to other



forest types. These forest systems are associated with high animal and plant diversity, including many rare, threatened and endangered species such as the Red-cockaded Woodpecker, Bachman's Sparrow, Gopher Tortoise, Eastern Indigo Snake, and Flatwoods Salamander. "Native" in this instance refers to existing longleaf pine that is on a site that has historically been maintained as longleaf pine. Longleaf pine stands that have been restored in areas that have not been historically maintained in longleaf pine do not apply under this definition. "Native" does not imply a particular regeneration method; these stands may be either planted or naturally regenerated. Identified threats include altered stand structure (due to lack of fire), conversion to other forest types, conversion to other land uses, habitat disturbance (including management techniques that inhibit native understory communities which may include herbicide application), and fragmentation. World Resources Institute (WRI) / Global Forest Watch Frontier Forests There are no WRI Frontier Forests in the lower 48 states which means that there are no WRI frontier forests in the GBLLC wood basin. World Wildlife Fund (WWF), Global 200 Ecoregions 1. Appalachian & Mixed Mesophytic Forests (# 69 in the WWF Global 200) The Appalachian and Mixed Mesophytic Forests is Number 69 of the Global 200 is ranked vulnerable. Although this risk assessment address only those Global 200 ranked critical/endangered, it is important to look at the two sub-ecoregions that make up Number 69. One of the subecoregions, the Appalachian Mixed Mesophytic Forests (NA0402), is ranked critical/endangered and is therefore significant at the national level. The other subecoregion, Appalachian-Blue Ridge Forests (NA0403), intersects the District. However, since it is ranked vulnerable, it does not require evaluation. 2. Southeastern Coniferous & Broadleaf Forests (# 75 in the WWF Global 200) The WWF's Global 200 Ecoregions build a framework for describing the most important areas of biodiversity on the planet. The Global 200 encompass almost 50% of life on earth. These 200 areas are places that conservation groups target and discuss with forest products companies about the loss of global, forest biodiversity. The southern third of the MREC supply area is in the Southeastern Coniferous & Broadleaf Forests which has a conservation status of endangered/critical. It is significant at a global scale, but this global ecoregion (#75) is subdivided into two smaller endangered/critical terrestrial ecoregions. These scaled-down subdivisions have significance at the national level. The Southeastern mixed forests (NA0413) The Southeastern conifer forests (NA0529) This is a highly degraded ecoregion with more than 99% of the original habitat having been converted to other uses. Settlers within the ecoregion logged and then cleared the land for agriculture. The ecoregion overlaps and is synonymous with the Piedmont physiographic province along the Atlantic Slope and the rest falls into the Coastal Plain on the Gulf Coast. WWF reports that there is little habitat left to conserve in this critical/endangered ecoregion. There are multiple examples of protected areas within this ecoregion. IUCN Centre for Plant Diversity (CPD) The Centres of Plant Diversity (CPD) is a program established by the International Union for the Conservation of Nature (IUCN) and the World Wildlife Fund (WWF). The CPD identifies global areas with high concentrations of plant diversity or centers of plant endemism.



CPD NA23, contains endemic plants associated with granite outcrops within the Piedmont of Alabama, Georgia, and South Carolina. Granite outcrops are indicators for one of the IUCN Centre of Plant Diversity sites. There are about 10,800 acres of exposed granite in Georgia which is about 90% of all the exposed granite in the Southeast. GIS data is available that shows the location of granite bedrock which identifies possible locations of granite outcrops. Weathering of soils over granite bedrock exposes the bedrock at the surface. Once exposed, the granite bedrock is called a granite outcrop, granite outcrops are another name for exposed granite bedrock. A high percentage (33%) of plants associated with these rock outcrops are endemics. A handful of rare species are known to occupy high quality granite outcrops and their occurrences indicate the locations of granite outcrops. They are pool sprite (*Minuartia uniflora*), black-spored quillwort (*Isoetes melanospora*), mat-forming quillwort (*Isoetes tegetiformans*), and harperella (*Ptilimnium nodosum*). Counties with granite deposits are at the eastern extremity of the MREQ supply area.

CPD NA25 sites contain endemic plants associated with ultramafic rock outcrops that give rise to serpentine soils within the Piedmont of Alabama, Georgia, and South Carolina. Serpentine flora are restricted to soils derived from serpentine rock outcrops found in association with utramafic rock. NA25 is restricted to the Piedmont physiographic province. Serpentine soils, associated with ultramafic bedrock, formed along a linear boundary between ancient continents. There are two of these zones in North America, one on the west coast and another on the east coast. The eastern zone extends from Alabama north into Quebec. Serpentine soils have relatively higher levels of heavy metals (cadmium and nickel) and lower levels of calcium than other soils. Therefore, are toxic to most plants. Clays in serpentine soils have a high affinity for water, more so than other clays, making less water available to plants. Plants found in this CPD are specialists. They are adapted to the harsh conditions created by these soils and cannot survive outside of this habitat, making them obligate endemics to serpentine soils. As already stated, most plants cannot live in this environment. The outcrops where the plants are found are not mapped, but outcrops of ultramafic rock preclude serpentine soils and associated plant species that define this CPD.

### High Priority Aquatic Watersheds

The status and distribution of about 1,050 species of fishes, mussels, and crayfishes inhabiting 290 watersheds (HUC 8) were studied at both the regional and state level by aquatic biology experts and authors of the *Southeastern Freshwater Biodiversity Conservation Strategy*. Based on the results of their studies, researchers evaluated and ranked each of the watersheds.

The 290 watersheds in the southeast region were ranked at the regional level. Number 1 was given to the watershed with the highest priority and 290 was assigned to the lowest priority watershed. All of the top ten priority watersheds are located within the MREQ supply area.

## North American Coastal Plain

The North American Coastal Plain, considered a biodiversity hot spot by the Critical Ecosystem Partnership Fund intersects more about half of the MREQ supply area. This biodiversity hotspot reaches from northern Mexico along the Gulf Coastal and Atlantic Coastal Plains north to southern Maine. Despite the 1,816 endemic plant species and the 1.13 million square kilometers of area, the hotspot has a low level of geographic variety and an unusually low level of elevation change when compared to the other hotspots, leading the scientific community to assume it would be less biodiverse. After European settlers colonized the Northern American Coastal Plain, they converted more than 85 percent of the savannas and woodlands to non-native plant species, artificially reducing the land's endemism rate and giving rise to misconceptions about the true levels of biodiversity.

The North American Coastal Plain has a high number of plant species, with an endemism rate of almost 30 percent. There are more than 270 species of birds native to the North



	American Coastal Plain, 2.2 percent of which are endemic, including the red-cockaded woodpecker ( <i>Leuconotopicus borealis</i> ), which relies on the longleaf pine tree for its habitat. The North American Coastal Plain contains 306 species of native mammals, 114 of which are endemic to the area.
	Protected Areas
	The Protected Areas Database of the United States (PAD-US) is the official inventory of public parks and other protected open space. The spatial data in PAD-US represents public lands held in trust by thousands of national, state and regional/local governments, as well as non-profit conservation organizations. PAs account for 7.75% of the area with the supply areas and are protected from uncontrolled forest management.
Means of Verification	<ul> <li>Company reviews the FSC US Controlled Wood National Risk Assessment (US NRA) and MQEC-DOC-005 FSC Controlled Wood Risk Assessment at least annually to verify status of US NRA or to address any changes identified since the previous year. This review is a part of the company's annual Due Diligence System review.</li> <li>MQEC-DOC-012 Secondary Supplier Audit Checklists – Suppliers are audited by company at least annually to verify:         <ul> <li>The supplier and its sub-suppliers are aware of the mitigation measures implemented for FSC Controlled Wood specified risk areas and other areas of high conservation value identified within the company's MQEC-DOC-005 FSC Controlled Wood Risk Assessment.</li> </ul> </li> <li>Company annually reviews the results of partnerships developed and implemented with conservation organizations addressing FSC Controlled Wood specified risk areas and other areas and other areas of high conservation value identified within the company's MQEC-DOC-005 FSC DOC-005 FSC Controlled Wood Risk Assessment.</li> </ul>
Evidence Reviewed	<ul> <li>MREQ-DOC-005 FSC Controlled Wood Risk Assessment</li> <li>MREQ-DOC-012 Secondary Supplier Audit Checklist</li> <li>FSC US Controlled Wood National Risk Assessment (US NRA)</li> <li>https://us.fsc.org/en-us/certification/controlled-wood/fsc-us-controlled-wood-national- risk-assessment-us-nra</li> <li>International Union for the Conservation of Nature (IUCN)</li> <li>https://www.iucn.org/</li> <li>World Resources Institute / Global Forest Watch</li> <li>https://www.wri.org/our-work/project/global-forest-watch</li> <li>World Wildlife Fund (WWF)</li> <li>https://www.worldwildlife.org/biome-categories/terrestrial-ecoregions</li> </ul>
Risk Rating	□ Low Risk X Specified Risk □ Unspecified Risk at RA
Comment or Mitigation Measure	<ul> <li><u>Central Appalachians CBA</u></li> <li>MREQ has contracted with Greener Options, Inc. to assist in the development and implementation of MREQ's certification programs. Greener Options, Inc. working with Biological Integrity, LLC attended the three FSC US Controlled Wood Regional meeting held in 2018. Gary Boyd attended the Appalachian Region meeting on July 19, 2018 in Asheville, NC. Boyd actively participated in the discussion of mitigating measures for the HCVs during this meeting.</li> <li>Gary Boyd, Greener Options, Inc. and Mark Hughes, PhD, Biological Integrity, LLC have reviewed the FSC US Controlled Wood Regional Meeting final report findings with MREQ specifically on recommended mitigation measures for the Central Appalachian CBA.</li> <li><u>Plan to Measure Effectiveness:</u> Consultant will have an annual review with the company on the high conservation value areas to review any updates or changes on the specified risk areas. Any new data or information related to threats or</li> </ul>



improvement actions through partnerships will be reviewed. Annual review will be documented on MREQ-DOC-002 Training Record.

2. MREQ will work with suppliers who source wood fiber from this area to educate the suppliers, their loggers and landowners on the conservation values of aquatic biodiversity, threats from poorly implemented forest management activities, and opportunities for conservation through management practices that reduce or eliminate these threats, including but not limited to forest management activities on steep slopes, and practices that will prevent siltation. This education and outreach measure will be documented using MREQ-DOC-012 Secondary Supplier Audit Checklists.

<u>Plan to Measure Effectiveness</u>: The Company will meet with suppliers annually to verify they have educated their suppliers, loggers & landowners on the conservation values of the specified risk. This annual audit will be documented using MREQ-DOC-012 Secondary Supplier Audit Checklist. Supplier maps, education materials and other pertinent information will be provided to the supplier to be passed on to their suppliers, loggers and landowners.

3. MREQ will engage with and/or provide monetary or in-kind resources to conservation partnerships, organizations or similar entities that are supporting or promoting programs/projects to develop new or augment existing programs within the specified risk area and the MREQ's supply area that will: a) result in increased and improved implementation of BMPs with a focus on aquatic biodiversity conservation; and/or b) result in increased access to incentive programs for landowners who restore, maintain or enhance forests in a way that will conserve aquatic biodiversity.

<u>Plan to Measure Effectiveness</u>: Company annually reviews the results of partnerships developed and implemented with conservation organizations addressing FSC Controlled Wood specified risk areas and other areas of high conservation value identified within the company's MREQ-DOC-005 FSC Controlled Wood Risk Assessment as mitigation measures.

### Cheoah Bald Salamander

 MREQ has contracted with Greener Options, Inc. to assist in the development and implementation of MREQ's certification programs. Greener Options, Inc. working with Biological Integrity, LLC attended the three FSC US Controlled Wood Regional meeting held in 2018. Gary Boyd, Greener Options, Inc. attended the Appalachian Region meeting on July 19, 2018 in Ashville, NC. Boyd actively participated in the discussion of mitigating measures for the HCVs during this meeting.

Gary Boyd, Greener Options, Inc., and Mark Hughes, Biological Integrity, LLC have reviewed the FSC US Controlled Wood Regional Meeting final report findings with MREQ specifically on recommended mitigation measures for the CBS.

<u>Plan to Measure Effectiveness:</u> Consultant will have an annual review with the company on the high conservation value areas to review any updates or changes on the specified risk areas. Any new data or information related to threats or improvement actions through partnerships will be reviewed. Annual review will be documented on MREQ-DOC-002 Training Record.

 MREQ will work with suppliers who source wood fiber from this area to educate the suppliers, their loggers and landowners on conservation values of CBS, potential threats from forest management activities and opportunities for conservation through management that maintains, enhances, or restores CBS populations and reduces or eliminates potential threats.

<u>Plan to Measure Effectiveness:</u> The Company will meet with suppliers annually to verify they have educated their suppliers, loggers & landowners on the conservation values of the specified risk. This annual audit will be documented using MREQ-DOC-012 Secondary Supplier Audit Checklist. Supplier maps, education materials and other pertinent information will be provided to the supplier to be passed on to theie suppliers, loggers and landowners.



Dusky Gopher Frog
<ol> <li>MREQ has contracted with Greener Options, Inc. to assist in the development and implementation of MREQ's certification programs. Greener Options, Inc. working with Biological Integrity, LLC attended the three FSC US Controlled Wood Regional meeting held in 2018. Mark Hughes, PhD, owner of Biological Integrity, LLC attended the Southeast Region meeting on July 31, 2018 in Atlanta, GA. Hughes actively participated in the discussion of mitigating measures for the HCVs during this meeting.</li> </ol>
Gary Boyd, Greener Options, Inc., and Mark Hughes, Biological Integrity, LLC have reviewed the FSC US Controlled Wood Regional Meeting final report findings with MREC specifically on recommended mitigation measures for the DGF.
<u>Plan to Measure Effectiveness:</u> Consultant will have an annual review with the company on the high conservation value areas to review any updates or changes on the specified risk areas. Any new data or information related to threats or improvement actions through partnerships will be reviewed. Annual review will be documented on MREQ-DOC-002 Training Record.
2. MREQ will work with suppliers who source wood fiber from this area to educate the suppliers, their loggers and landowners on conservation values of DGF, potential threats from forest management activities and opportunities for conservation through management that maintains, enhances, or restores DGF populations and reduces or eliminates potential threats.
<u>Plan to Measure Effectiveness</u> : The Company will meet with suppliers annually to verify they have educated their suppliers, loggers & landowners on the conservation values of the specified risk. This annual audit will be documented using MREQ-DOC-012 Secondary Supplier Audit Checklist. Supplier maps, education materials and other pertinent information will be provided to the supplier to be passed on to theie suppliers, loggers and landowners.
3. MREQ is developing and implementing a procurement policy for those suppliers who source wood fiber directly from the forest in this area that reflects the above stated education & outreach mitigation measure and clearly states the requirement that the landowner/forester/logger at the source forest will not supply materials from forests where DGFs are threatened as a result of the forest management activities that produced the forest materials. This policy will include a description of the forest type in which DGF populations occur, potential threats to DGF from forest management activities and the kinds of activities that would maintain or enhance DGF populations in the specified risk area.
<u>Plan to Measure Effectiveness:</u> The Company will annually review Fiber Supply Agreements to ensure agreements contain applicable requirements.
Florida Panhandle CBA
1. MREQ has contracted with Greener Options, Inc. to assist in the development and implementation of MREQ's certification programs. Greener Options, Inc. working with Biological Integrity, LLC attended the three FSC US Controlled Wood Regional meeting held in 2018. Mark Hughes, PhD, owner of Biological Integrity, LLC attended the Southeast Region meeting on July 31, 2018 in Atlanta, GA. Hughes actively participated in the discussion of mitigating measures for the HCVs during this meeting.
Gary Boyd, Greener Options, Inc., and Mark Hughes, Biological Integrity, LLC have reviewed the FSC US Controlled Wood Regional Meeting final report findings with MREC specifically on recommended mitigation measures for the Southern Appalachian CBA.
<u>Plan to Measure Effectiveness:</u> Consultant will have an annual review with the company on the high conservation value areas to review any updates or changes on the specified risk areas. Any new data or information related to threats or



improvement actions through partnerships will be reviewed. Annual review will be documented on MREQ-DOC-002 Training Record.

2. MREQ will work with suppliers who source wood fiber from this area to educate the suppliers, their loggers and landowners on the conservation values of aquatic biodiversity and Native Longleaf Pine Systems, threats from poorly implemented forest management activities, and opportunities for conservation through management practices that reduce or eliminate these threats, including but not limited to forest management activities on steep slopes, and practices that will prevent siltation. This education and outreach measure will be documented using MREQ-DOC-012 Secondary Supplier Audit Checklists.

<u>Plan to Measure Effectiveness</u>: The Company will meet with suppliers annually to verify they have educated their suppliers, loggers & landowners on the conservation values of the specified risk. This annual audit will be documented using MREQ-DOC-012 Secondary Supplier Audit Checklist. Supplier maps, education materials and other pertinent information will be provided to the supplier to be passed on to theie suppliers, loggers and landowners.

## Patch-nosed Salamander

 MREQ has contracted with Greener Options, Inc. to assist in the development and implementation of MREQ's certification programs. Greener Options, Inc. working with Biological Integrity, LLC attended the three FSC US Controlled Wood Regional meeting held in 2018. Gary Boyd, Greener Options, Inc. attended the Appalachian Region meeting on July 19, 2018 in Ashville, NC. Boyd actively participated in the discussion of mitigating measures for the HCVs during this meeting.

Gary Boyd, Greener Options, Inc., and Mark Hughes, Biological Integrity, LLC have reviewed the FSC US Controlled Wood Regional Meeting final report findings with MREQ specifically on recommended mitigation measures for the PNS.

<u>Plan to Measure Effectiveness:</u> Consultant will have an annual review with the company on the high conservation value areas to review any updates or changes on the specified risk areas. Any new data or information related to threats or improvement actions through partnerships will be reviewed. Annual review will be documented on MREQ-DOC-002 Training Record.

 MREQ will work with suppliers who source wood fiber from this area to educate the suppliers, their loggers and landowners on conservation values of PNS, potential threats from forest management activities and opportunities for conservation through management that maintains, enhances, or restores PNS populations and reduces or eliminates potential threats.

<u>Plan to Measure Effectiveness</u>: The Company will meet with suppliers annually to verify they have educated their suppliers, loggers & landowners on the conservation values of the specified risk. This annual audit will be documented using MREQ-DOC-012 Secondary Supplier Audit Checklist. Supplier maps, education materials and other pertinent information will be provided to the supplier to be passed on to theie suppliers, loggers and landowners.

## Southern Appalachian CBA

 MREQ has contracted with Greener Options, Inc. to assist in the development and implementation of MREQ's certification programs. Greener Options, Inc. working with Biological Integrity, LLC attended the three FSC US Controlled Wood Regional meeting held in 2018. Mark Hughes, PhD, owner of Biological Integrity, LLC attended the Southeast Region meeting on July 31, 2018 in Atlanta, GA. Hughes actively participated in the discussion of mitigating measures for the HCVs during this meeting.

Gary Boyd, Greener Options, Inc., and Mark Hughes, Biological Integrity, LLC have reviewed the FSC US Controlled Wood Regional Meeting final report findings with MREC specifically on recommended mitigation measures for the Southern Appalachian CBA.







<u>Plan to Measure Effectiveness:</u> The Company will meet with suppliers annually to verify they have educated their suppliers, loggers & landowners on the conservation values of the specified risk. This annual audit will be documented using MREQ-DOC-012 Secondary Supplier Audit Checklist. Supplier maps, education materials and other pertinent information will be provided to the supplier to be passed on to theie suppliers, loggers and landowners.
3. Engage with and/or provide monetary or in-kind resources to conservation organizations or similar entities that are facilitating active, on-the-ground implementation of management activities to restore or maintain existing examples of LSBH, with a goal of long-term conservation of this forest type within the specified risk area and MREQ's supply area.
<u>Plan to Measure Effectiveness</u> : Company annually reviews the results of partnerships developed and implemented with conservation organizations addressing FSC Controlled Wood specified risk areas and other areas of high conservation value identified within the company's MREQ-DOC-005 FSC Controlled Wood Risk Assessment as mitigation measures.
Mesophytic Cove Sites
<ol> <li>MREQ has contracted with Greener Options, Inc. to assist in the development and implementation of MREQ's certification programs. Greener Options, Inc. working with Biological Integrity, LLC attended the three FSC US Controlled Wood Regional meeting held in 2018. Gary Boyd attended the Appalachian Region meeting on July 19, 2018 in Asheville, NC. Boyd actively participated in the discussion of mitigating measures for the HCVs during this meeting.</li> </ol>
Gary Boyd, Greener Options, Inc. and Mark Hughes, PhD, Biological Integrity, LLC have reviewed the FSC US Controlled Wood Regional Meeting final report findings with MREQ specifically on recommended mitigation measures for the Southern Appalachian CBA.
<u>Plan to Measure Effectiveness:</u> Consultant will have an annual review with the company on the high conservation value areas to review any updates or changes on the specified risk areas. Any new data or information related to threats or improvement actions through partnerships will be reviewed. Annual review will be documented on MREQ-DOC-002 Training Record.
2. MREQ will work with suppliers who source wood fiber from these forest types to educate the suppliers, their loggers and landowners and communicate the social benefits and values of Mesophytic Cove Sites, how to identify them in the field, threats from incompatible forest management activities, and opportunities for conservation through management that enhances these sites and reduces or eliminates these threats. This education and outreach measure will be documented using MREC- DOC-012 Secondary Supplier Audit Checklists.
<u>Plan to Measure Effectiveness</u> : The Company will meet with suppliers annually to verify they have educated their suppliers, loggers & landowners on the conservation values of the specified risk. This annual audit will be documented using MREQ-DOC-012 Secondary Supplier Audit Checklist. Supplier maps, education materials and other pertinent information will be provided to the supplier to be passed on to theie suppliers, loggers and landowners.
Natural Longleaf Pine Systems
<ol> <li>MREQ has contracted with Greener Options, Inc. to assist in the development and implementation of MREQ's certification programs. Greener Options, Inc. working with Biological Integrity, LLC attended the three FSC US Controlled Wood Regional meeting held in 2018. Gary Boyd attended the Appalachian Region meeting on July 19, 2018 in Asheville, NC. Boyd actively participated in the discussion of mitigating measures for the HCVs during this meeting.</li> </ol>



Gary Boyd, Greener Options, Inc. and Mark Hughes, PhD, Biological Integrity, LLC have reviewed the FSC US Controlled Wood Regional Meeting final report findings with MREC specifically on recommended mitigation measures for the NLPS. <u>Plan to Measure Effectiveness:</u> Consultant will have an annual review with the company on the high conservation value areas to review any updates or changes on the specified risk areas. Any new data or information related to threats or improvement actions through partnerships will be reviewed. Annual review will be documented on MREQ-DOC-002 Training Record.
2. MREQ will work with suppliers who source wood fiber from these areas to communicate and educate suppliers, their loggers and landowners on the social benefits and values of NLPS, threats from forest management and related loss of values, and opportunities for conservation through management that restores or maintains NLPS and reduces or eliminates these threats. Communications should recognize the importance of the forest understory and fire to NLPS. This education and outreach measure will be documented using MREQ-DOC-012 Secondary Supplier Audit Checklists.
<u>Plan to Measure Effectiveness</u> : The Company will meet with suppliers annually to verify they have educated their suppliers, loggers & landowners on the conservation values of the specified risk. This annual audit will be documented using MREQ-DOC-012 Secondary Supplier Audit Checklist. Supplier maps, education materials and other pertinent information will be provided to the supplier to be passed on to theie suppliers, loggers and landowners.
3. MREQ will engage with and/or provide monetary or in-kind resources to conservation organizations such as the Longleaf Alliance that are facilitating active, on-the-ground implementation of management activities to restore or maintain existing examples of NLPS, with a goal of long-term conservation of this system within the specified risk area and the MREQ's supply area.
<u>Plan to Measure Effectiveness:</u> Company annually reviews the results of partnerships developed and implemented with conservation organizations addressing FSC Controlled Wood specified risk areas and other areas of high conservation value identified within the company's MREQ-DOC-005 FSC Controlled Wood Risk Assessment as mitigation measures.



	Indicator
2.1.3	The Biomass Producer has implemented appropriate control systems and procedures for verifying that feedstock is not sourced from forests converted to production plantation forest or non-forest lands after January 2008.
Finding	<ul> <li>FSC US Controlled Wood National Risk Assessment (US NRA)</li> <li><u>Category 4: Forestland Conversion</u></li> <li>The US NRA has identified the forested portions of 53 counties across the FSC US</li> <li>Southeast and Pacific Coast Regions as areas where there is a risk greater than "low" receiving forest materials from forest conversions. Companies that wish to use non-certified materials from the identified areas are required to either avoid sourcing from specific sites where forest conversion is occurring, or to implement mitigation actions that reduce the risk of sourcing from these sites. There are only two counties identified in Alabama (1) &amp; Florida (1) that are located within the company's supply area – MREQ-DOC-005 FSC Controlled Wood Risk Assessment that represent a higher than "low" risk for conversion.</li> <li>The Company is developing &amp; implementing Fiber Purchase Agreements with its applicable feedstock suppliers that: <ul> <li>i. mitigate the risk that material supplied originates from forest areas converted into plantation or non-forest use; or</li> <li>ii. assure that if some conversion has occurred, that material supplied originates from limited and legal sources of conversion (e.g., conversion that results in conservation benefits, publicly approved changes in zoning in urban areas, etc.) and does not come from sources where the conversion threatens High Conservation Values.</li> </ul> </li> <li>Production plantation forests are defined as forests of exotic species that have been planted or seeded by human intervention and that are under intensive stand management are forest areas are defined as forests of exotic species that have been planted or seeded by human intervention and that are under intensive stand</li> </ul>
Means of	or eucalyptus plantations). Feedstock purchase contracts, MREQ-DOC-012 Secondary Supplier Audit Checklists
Evidence Reviewed	<ul> <li>Fiber Purchase Agreements</li> <li>FSC US Controlled Wood National Risk Assessment (US NRA)</li> <li>MREQ-DOC-005 FSC Controlled Wood Risk Assessment</li> <li>MREQ-DOC-012 Secondary Supplier Audit Checklists</li> </ul>
Risk Rating	□ Low Risk X Specified Risk □ Unspecified Risk at RA
Comment or Mitigation Measure	<ul> <li><u>FSC US Controlled Wood National Risk Assessment (US NRA)</u></li> <li><u>Category 4: Forestland Conversion</u></li> <li>Mitigation Measures:</li> <li>1. The Company is developing and implementing binding written agreements with its applicable feedstock suppliers that: <ul> <li>a. mitigate the risk that material supplied originates from forest areas converted into plantation or non-forest use; or</li> <li>b. assure that if some conversion has occurred, that material supplied originates from limited and legal sources of conversion (e.g., conversion that results in conservation benefits, publicly approved changes in zoning in urban areas, etc.) and does not come from sources where the conversion threatens High Conservation Values.</li> </ul> </li> </ul>



	Plan to Measure Effectiveness: The Company will annually review Fiber Supply Agreements to ensure agreements contain applicable requirements.
2.	The Company has committed to improving the education and awareness of this ecoregion through the representation of company at FSC Controlled Wood Regional Meetings held in 2018. Information from these regional meetings on forestland conversion was reviewed by company personnel.
	<u>Plan to Measure Effectiveness:</u> Consultant will have an annual review with the company on forestland conversion to review any updates or changes on forestland conversion. Any new data or information related to threats or improvement actions through partnerships will be reviewed. Annual review will be documented on MREQ-DOC-002 Training Record.
3.	The Company reviews this educational information with its suppliers who source wood fiber from these counties to educate the suppliers, their loggers and landowners on the social benefits of keeping forests as forests, and the value enhancing alternatives to conversion and opportunities for the maintenance of forests. This education and outreach measure will be documented using MREQ-DOC-012 Secondary Supplier Audit Checklists.
	<u>Plan to Measure Effectiveness</u> : The Company will meet with the sole supplier annually to verify the supplier has educated their suppliers, loggers & landowners on forestland conversion. This annual audit will be documented using MREQ-DOC-012 Secondary Supplier Audit Checklist. Supplier maps, education materials and other pertinent information will be provided to the supplier to be passed on to their suppliers, loggers and landowners.
4.	The Company will also maintain membership in the Mississippi Forestry Association to keep abreast of forestry issues within the Company's supply area. Below are some sources of information used to educate suppliers and their loggers, and landowners of forest conservation.

	Indicator
2.2.1	The Biomass Producer has implemented appropriate control systems and procedures to verify that feedstock is sourced from forests where there is appropriate assessment of impacts, and planning, implementation and monitoring to minimise them.
	The Company requires compliance with Best Management Practices (BMP) for the feedstock purchased through its Fiber Purchase Agreements with its suppliers.
Finding	The Company verifies the sourcing of feedstock with its suppliers & sub-suppliers through its secondary supplier annual audit program. This verification reviews each supplier's & sub-supplier's supply area, areas of "specified risk" for areas with high conservation value (HCV) that are identified in their supply areas and mitigation measures being implemented to reduce "specified risk" to "low risk". The Company has developed and is using specific supplier maps detailing the supplier's & sub-supplier's supply area and HCV areas. Annual supplier audits also verify supplier's certification status, BMP compliance, logger training and overall environmental compliance. Annual audits are documented using MREQ-DOC-012 Secondary Supplier Audit Checklists.
	The company requires its suppliers, sub-suppliers and loggers to maintain SFI State Implementation Committee (SIC) logger training. This training educates loggers on BMPs, threatened & endangered species and biodiversity. The Company has access to SIC logger training databases to verify logger training.
	State forestry agencies conduct BMP compliance checks randomly or upon request by stakeholders. State BMP compliance reports are available for review by the Company.



Means of Verification	<ul> <li>Fiber Purchase Agreements – Signed agreements verify suppliers comply with state BMPs &amp; all loggers are maintaining their SIC logger training requirement</li> <li>MREQ-DOC-012 Secondary Supplier Audit Checklists – Company's sole supplier is audited by company at least once a year to verify:         <ul> <li>Certification status of supplier</li> <li>Logger Training status &amp; % trained of sub-suppliers</li> <li>BMP compliance and/or regulatory violations of supplier &amp; sub-suppliers</li> </ul> </li> <li>Company reviews the most current and available state BMP compliance reports annually</li> </ul>
Evidence Reviewed	<ul> <li>Fiber Purchase Agreements</li> <li>MREQ-POL-001 Sustainability Policy</li> <li>MREQ-DOC-012 Secondary Supplier Audit Checklists</li> <li>Alabama Professional Logging Manager http://loridaforest.org/programs/master-logger/master-logger-search-tool/</li> <li>Georgia Master Timber Harvester http://loganth.org/</li> <li>Louisiana Master Logger</li> <li>http://loganth.org/</li> <li>Louisiana Master Logger Program</li> <li>Mississippi Professional Logging Manager http://loggered.msstate.edu/</li> <li>North Carolina ProLogger Program</li> <li>Mississippi Professional Logging Manager</li> <li>http://www.laforestry.org/prologgers/prologger-lists/</li> <li>Tennessee Master Logger</li> <li>http://www.tnforestry.org/prologgers/prologger-lists/</li> <li>Tennessee Master Logger</li> <li>http://www.forestry.alabama.gov/Pages/Management/BMP_Practices.aspx</li> <li>Florida Silviculture Best Management Practices 2017 Implementation Survey Report http://www.frestry.alabama.gov/Pages/Management/BMP_Practices.aspx</li> <li>Florida Silviculture Best Management Practices Implementation and Compliance Survey</li> <li>Results of Georgia's 2017 Silvicultural Best Management Practices Implementation and Compliance Survey</li> <li>http://www.dfc.state.ga.us/forest-management/water- quality/bmps/BMP%20Survey%202017%20Results%20Report%20Final%20Corrected% 20by%20Scott%20Jan112018%20410pm.pdf</li> <li>Louisiana 2015 BMP Survey Results</li> <li>http://www.idaf.state.la.us/wp-content/uploads/2016/01/2015-BMP-Results.pdf</li> <li>2016 BMP Implementation Survey: Mississippi's BMP Implementation Monitoring Program</li> <li>https://www.idaf.state.la.us/wp-content/uploads/2016/01/2015-BMP-Results.pdf</li> <li>2016 BMP Implementation Survey: Mississippi's BMP Implementation Monitoring Program</li> <li>https://www.idaf.state.la.us/wp-content/uploads/2016/01/2015-BMP-Results.pdf</li> <li>2016 BMP Implementation Survey: Mississippi's BMP Implementation Monitoring Program</li> <li>https://www.idaf.state.la.us/wp-content/uploads/2016/01/2015-BMP</li></ul>
Risk Rating	X Low Risk
Comment	
or Mitigation Measure	



	Indicator
2.2.2	The Biomass Producer has implemented appropriate control systems and procedures for verifying that feedstock is sourced from forests where management maintains or improves soil quality (CPET S5b).
Finding	State forestry Best Management Practices (BMP) set forth guidelines for maintaining and/or improving soil quality. MREQ-POL-001 Sustainability Policy states the Company requires BMP compliance with the harvesting of all wood fiber it receives. Fiber Purchase Agreements require BMP compliance. The Company verifies BMP compliance as part of its annual supplier audits. BMP compliance is documented using MREQ-DOC-012 Secondary Supplier Audit Checklists.
	The company requires their suppliers, sub-suppliers and loggers to maintain SFI State Implementation Committee (SIC) logger training. This training educates loggers on BMPs, threatened & endangered species and biodiversity. The Company has access to SIC logger training databases to verify logger training.
	State forestry agencies conduct BMP compliance checks randomly or upon request by stakeholders. State BMP compliance reports are available for review by the Company.
	Soil maps covering the supply basin are available as a resource to suppliers to assist in planning fiber harvest in a way that does not harm soil quality.
Means of Verification	<ul> <li>Fiber Purchase Agreements – Signed agreements verify suppliers comply with state BMPs &amp; all loggers are maintaining their SIC logger training requirement</li> <li>MREQ-DOC-012 Secondary Supplier Audit Checklists – Company's sole supplier is audited by company at least once a year to verify:         <ul> <li>Certification status of supplier</li> <li>Logger Training status &amp; % trained of sub-suppliers</li> <li>BMP compliance and/or regulatory violations of supplier &amp; sub-suppliers</li> </ul> </li> <li>Company reviews the most current and available state BMP compliance reports annually</li> </ul>
Evidence Reviewed	<ul> <li>Fiber Purchase Agreements</li> <li>MREQ-POL-001 Sustainability Policy</li> <li>MREQ-DOC-012 Secondary Supplier Audit Checklists</li> <li>Alabama Professional Logging Manager https://www.alaforestry.org/page/PLMGeneral</li> <li>Florida Master Logger http://floridaforest.org/programs/master-logger/master-logger-search-tool/</li> <li>Georgia Master Timber Harvester http://gamth.org/</li> <li>Louisiana Master Logger https://www.laforestry.com/training-program</li> <li>Mississippi Professional Logging Manager http://loggered.msstate.edu/</li> <li>North Carolina ProLogger Program https://www.ncforestry.org/prologgers/prologger-lists/</li> <li>Tennessee Master Logger http://www.taforestry.com/files/1131/masterloggerdb.cfm</li> <li>Alabama Annual BMP Reports http://www.froestry.alabama.gov/Pages/Management/BMP_Practices.aspx</li> <li>Florida Silviculture Best Management Practices 2017 Implementation Survey Report https://www.freshfromflorida.com/content/download/78966/2320474/SPMP_2017_Imple mentationSurveyReport.pdf</li> <li>Results of Georgia's 2017 Silvicultural Best Management Practices Implementation and Compliance Survey</li> </ul>



	<ul> <li><u>http://www.gfc.state.ga.us/forest-management/water-guality/bmps/BMP%20Survey%202017%20Results%20Report%20Final%20Corrected%20by%20Scott%20Jan112018%20410pm.pdf</u></li> <li>Louisiana 2015 BMP Survey Results <u>http://www.ldaf.state.la.us/wp-content/uploads/2016/01/2015-BMP-Results.pdf</u></li> <li>2016 BMP Implementation Survey: Mississippi's BMP Implementation Monitoring Program <u>https://www.mfc.ms.gov/sites/default/files/2016_BMP_%20Implementation_Survey_V3.pdf</u></li> <li>An Assessment of Forestry Best Management Practices in North Carolina 2012-2016 <u>https://www.ncforestservice.gov/water_quality/pdf/BMP_Assessment_Report_2012-2016.pdf</u></li> <li>Implementstion of Forestry Best Management Practices in Tennessee (2017) <u>https://www.tn.gov/content/dam/tn/agriculture/documents/forestry/AgForBMPimpl2017.pd</u></li> </ul>
	https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx
Risk Rating	X Low Risk
Comment or Mitigation Measure	

	Indicator
2.2.3	The Biomass Producer has implemented appropriate control systems and procedures to ensure that key ecosystems and habitats are conserved or set aside in their natural state (CPET S8b).
Finding	<ul> <li>MREQ has implemented the US NRA for its supply area. MREQ has determined the following categories of controlled wood as "low risk": <ul> <li>Category 1: Illegally harvested wood;</li> <li>Category 2: Wood harvested in violation of traditional and human rights;</li> <li>Category 5: Wood from forests in which genetically modified trees are planted.</li> </ul> </li> <li>MREQ has determined there may be areas within its supply area that are considered "specified risk" to the following categories of controlled wood: <ul> <li>Category 3: Wood from forests where high conservation values are threatened by management activities;</li> <li>HCV1 - Central Appalachian Critical Biodiversity Area (CBA);</li> <li>HCV1 - Cheoah Bald Salamander;</li> <li>HCV1 - Florida Panhandle Critical Biodiversity Area (CBA);</li> <li>HCV1 - Patch-nosed Salamander;</li> <li>HCV1 - Southern Appalachian CBA;</li> <li>HCV3 - Late Successional Bottomland Hardwoods;</li> <li>HCV3 - Mesophytic Cove Sites;</li> <li>HCV3 - Natural Longleaf Pine Systems</li> </ul> </li> </ul>
	implement, as needed, adequate control measures to either avoid or to mitigate specified



risk related to origin and/or risk related to mixing with non-eligible inputs in the supply chain.

## Central Appalachians CBA

The Central Appalachian CBA is located within 44 counties in 4 states (AL-4, GA-7, NC-5, TN-28) in the northeastern portion of the MREQ supply area. One sub-supplier provides wood fiber indirectly to MREQ that sources from counties within this CBA which is considered to be "specified risk" within this CBA resulting in a low level of mitigation required (FSC US Controlled Wood Regional Meeting Report APPALACHIAN REGION: Asheville, NC – July 19, 2018; page 10).

This CBA corresponds with the higher elevation portions of WWF's 'Appalachian Mixed Mesophytic Forest' area, one of their Global 200 biodiversity areas. The broadleaf forests and aquatic habitats drive the region's biodiversity. The forests are significant in the diversity of different forest types that occur and within them the large number of different tree species that occur, along with incredibly diverse understories and associated wildlife species. The geologic history, change in elevation, and diverse topography and climate have resulted in a very large number of microhabitats within the region – each with a unique biodiversity.

## Identified Threats:

<u>Mixed Mesophytic Forests</u> - The priority threats to the forests as a whole include: climate change, pollution from mining, new highways and utility rights-of-way, ORV recreation and overpopulation of deer.

<u>Aquatic Habitats</u> - Hydrologic alteration partially due to forestry practices and conversion from hardwood forests to non-native planted pine, reduced water quality partially due to loss of near-stream forested habitat and sedimentation associated with forestry practices and lack of Best Management Practice (BMP) implementation, and severe erosion of river banks.

## Cheoah Bald Salamander

The Cheoah Bald Salamander (CBS) is located within 2 counties in NC in the MREQ supply area. One sub-supplier provides wood fiber indirectly to MREQ that sources from counties within this CBA which is considered to be "specified risk" within this CBA resulting in a low level of mitigation required (FSC US Controlled Wood Regional Meeting Report APPALACHIAN REGION: Asheville, NC – July 19, 2018; page 10).

The Cheoah Bald Salamander's range is not yet well defined but is believed to be limited a portion of the Appalachian Mountains at the very western extent of North Carolina within the elevational range of 975-1,524 meters, associated with the Cheoah Bald. The salamander's primary habitat is the mesic forests and the species may be common in areas with suitable habitat. It appears that much of the species' range may occur within the Nantahala National Forests and it is identified as a Federal Species of Concern.

Identified threats to these salamanders are clearcut harvests because they depend on forest & woodland habitats.

### Dusky Gopher Frog

The Dusky Gopher Frog (DGF) is located within 4 counties in MS in the MREQ supply area. A few suppliers provide wood fiber to MREQ source from counties within this CBA which is considered to be "specified risk" within this CBA resulting in a low level of mitigation required (FSC US Controlled Wood Regional Meeting Report SOUTHEAST & MISSISSIPPI ALLUVIAL VALLEY REGIONS: Atlanta, GA – July 31, 2018; page 11).

The DGF historically occurred on the Coastal Plain from eastern Louisiana to the Mobile River delta in AL. Now, it is only known from one site in Harrison County and a couple of sites in Jackson County, MS. It is federally endangered wherever found. The species occurs in upland areas of sandy soils that were historically forested with longleaf pine and in temporary wetland breeding sites within the forested landscape. Most of its life cycle is spent in or near underground areas of refuge that historically were gopher tortoise burrows.



Identified Threats include population isolation, urbanization, disease, and a lack of suitable habitat. Habitat degradation is a significant factor, driven by multiple sources including, changes in forest type from longleaf pine to other forest types, forest degradation caused by grazing and the disruption of the natural fire regime.

## Florida Panhandle CBA

The Florida Panhandle CBA is located within 3 counties in FL in the MREQ supply area. A few suppliers provide wood fiber to MREQ source from counties within this CBA which is considered to be "specified risk" within this CBA resulting in a low level of mitigation required (FSC US Controlled Wood Regional Meeting Report SOUTHEAST & MISSISSIPPI ALLUVIAL VALLEY REGIONS: Atlanta, GA – July 31, 2018; page 11).

This CBA is considered an HCV because it contains a high overall species richness, diversity, or uniqueness within a defined area compared to other sites within the same biogeographic area. The Florida Panhandle is reported to be one of the 5 richest biodiversity hotspots in North America. Of particular importance is the richness of frogs, snakes, turtles, and mussels. This concentration of biodiversity is driven by the river systems (particularly the Apalachicola River), longleaf pine savanna habitat and unique steephead ravines.

### Identified Threats:

<u>Apalachicola Bay/River System</u> - Threats to this aquatic system are varied and include persistent drought resulting in reduced flow level, loss of floodplain and wetland habitat due to reduced flow levels, point and non-point source pollution, unrestrained growth and development. The Apalachicola River and Bay Surface Water Improvement & Management Plan identifies implementation of silvicultural Best Management Practices (BMPs) as a significant component of one of its priority projects.

<u>Longleaf Pine Savanna</u> - Biodiversity values can be adversely affected by forest management activities via conversion of longleaf to other pine types, and the use management techniques, including herbicide application that have the potential to inhibit native understory communities.

### Patch-nosed Salamander

The Patch-nosed Salamander (PNS) is located within 2 counties in GA in the MREQ supply area. One sub-supplier provides wood fiber indirectly to MREQ that sources from counties within this CBA which is considered to be "specified risk" within this CBA resulting in a low level of mitigation required (FSC US Controlled Wood Regional Meeting Report APPALACHIAN REGION: Asheville, NC – July 19, 2018; page 10).

The PNS is the smallest known salamander in North America – typically around 5 cm in length, half of which is the tail. The known range of the Patch-nosed salamander includes a limited number of small, first order stream located at the foot of the Blue Ridge escarpment in Stephens and Habersham counties (near Lake Tugaloo) of Georgia, within the Chattahoochee National Forest. Identified individuals of this species have all been found in leaf litter or under rocks in the above water streambeds or banks of first-order streams. It is not yet known whether adjacent hardwood forests also provide habitat. This species is not listed at either the federal or state level.

Little is known about this species and specific threats have not yet been documented. The species depends on riparian habitat, so any factor that would disrupt water flow, canopy cover, or the leaf-littler layer would likely impact the species.

## Southern Appalachian CBA

The Southern Appalachian CBA is located within 20 counties in AL in the MREQ supply area. A few suppliers provide wood fiber to MREQ source from counties within this CBA which is considered to be "specified risk" within this CBA resulting in a low level of mitigation required (FSC US Controlled Wood Regional Meeting Report SOUTHEAST & MISSISSIPPI ALLUVIAL VALLEY REGIONS: Atlanta, GA – July 31, 2018; page 11).

Biodiversity values in the southern Appalachians include aquatic habitats, glades, and montane longleaf pine. Alabama is recognized as having the greatest number of



freshwater species of mollusks and fish in the United States, and many of these species have very restricted distributions and specialized habitat requirements that make them highly vulnerable to extinction. The Cahaba River watershed is the center of the biodiversity hotspot, but the biodiversity area includes other smaller watercourses as well. Aquatic habitats driving this concentration of biodiversity include lakes, rivers, streams, bogs, swamps, ephemeral pools, fens, seeps, swamp forests and wet meadows. Other drivers of biodiversity include glades and montane longleaf pine. Bibb County Glades (i.e. rock outcrops), exposed limestone glades, and sandstone glades in Central Alabama have high density of rare plants. These are open habitats that are dominated by upland herbaceous plant species. There is typically an absence of a tree canopy on glades, resulting in large amounts of sunlight and heat on the surface. Montane longleaf pine habitats occur in steep rolling topography historically maintained by fire, mostly outside of or on the edge of the Coastal Plain. Biodiversity values are driven in part by the understory plant community.

Identified Threats:

<u>Aquatic Habitats</u> - Numerous sources of information identify threats from forest management activities, particularly non-point source pollution in aquatic habitats, and disturbance to riparian zones.

<u>Glades</u> - Threats include grazing, non-native species, quarrying, root-digging, plant and animal collecting, removal of large rocks for landscaping, urban development, plowing for fire breaks, use as logging decks (resulting in soil/vegetation disturbance and soil erosion), conversion to other land uses, and ORV damage.

<u>Montane Longleaf Pine</u> - Biodiversity values can be adversely affected by forest management activities via conversion of longleaf to other pine types, and the use of management techniques, including herbicide application that have the potential to inhibit native understory communities.

### Late Successional Bottomland Hardwoods

Late Successional Bottomland Hardwoods (LSBH) are located within 50 counties in 4 states (AL-11, FL-4, LA-a2, MS-23) in the southern portion of the MREQ supply area. Two (2) suppliers providing hardwood wood fiber to MREQ source from counties considered to be "specified risk" within this CBA resulting in a low level of mitigation required (FSC US Controlled Wood Regional Meeting Report SOUTHEAST & MISSISSIPPI ALLUVIAL VALLEY REGIONS: Atlanta, GA – July 31, 2018; page 11).

Much of the original bottomland hardwood in the US was cleared for agriculture, particularly in the Mississippi valley, and much of the remainder was mismanaged leaving very few intact examples. Bottomland Hardwoods are periodically inundated, floodplain forests, where the entire ecosystem is driven by hydrology. Late successional stands are not defined by the species, as much as by the structural composition (e.g., more stratification) and existence of large wood debris, including standing hollow trees – these changes occur at about 80 years in most Bottomland Hardwood types and perhaps a little later in cypress swamps.

Identified threats include development, hydrologic changes (droughts, water withdraws, ditching), incompatible forest management, pollution, fragmentation, invasive species and economic drivers that alter forest management goals.

### Mesophytic Cove Sites

Mesophytic Cove Sites is located within 35 counties in 4 states (AL-1; GA-10; NC-5; TN-19) in the northeastern portion of the MREQ supply area. One sub-supplier provides wood fiber indirectly to MREQ that sources from counties within this CBA resulting in a low level of mitigation required (FSC US Controlled Wood Regional Meeting Report SOUTHEAST & MISSISSIPPI ALLUVIAL VALLEY REGIONS: Atlanta, GA – July 31, 2018; page 11).

Mesophytic cove sites are highly diverse, closed-canopy hardwood forest occurring on sheltered sites at low- to moderate-elevation (1,000-3,600 ft), and sometimes higher. They tend to occur in large patches on concave slopes that accumulate nutrients and moisture. They are characterized by high species diversity and a complex forest structure. The



ground level flora in particular has high species richness, often with abundant spring ephemerals. Rich cove forests have very fertile soils with a diverse herb layer containing few shrubs. Acidic cove forests are less fertile than rich coves, but otherwise similar.

Identified Threats to this forest type are invasive species and conversion to other uses. Threats also include incompatible forest management that results in alterations to the structure and composition of the forest or conversion to other forest types (white pine), climate change, chronic deer herbivory, harvesting of herbs and pollution.

### Natural Longleaf Pine Systems

Native Longleaf Pine Systems (NLPS) are located in 27 counties in 3 states (AL-14, FL-4, MS-9) throughout the MREQ supply area. Most of the suppliers providing wood fiber to MREQ source from counties that have been identified as containing native longleaf systems resulting in a low level of mitigation required (FSC US Controlled Wood Regional Meeting Report SOUTHEAST & MISSISSIPPI ALLUVIAL VALLEY REGIONS: Atlanta, GA – July 31, 2018; page 11).

NLPS were once one of the most widespread forest types in the US but were reduced to less than 5% of their original range, becoming one of the rarest forest systems in the world. This historical reduction was driven by suppression of fire and conversion to other forest types. These forest systems are associated with high animal and plant diversity, including many rare, threatened and endangered species such as the Red-cockaded Woodpecker, Bachman's Sparrow, Gopher Tortoise, Eastern Indigo Snake, and Flatwoods Salamander.

"Native" in this instance refers to existing longleaf pine that is on a site that has historically been maintained as longleaf pine. Longleaf pine stands that have been restored in areas that have not been historically maintained in longleaf pine do not apply under this definition. "Native" does not imply a particular regeneration method; these stands may be either planted or naturally regenerated.

Identified threats include altered stand structure (due to lack of fire), conversion to other forest types, conversion to other land uses, habitat disturbance (including management techniques that inhibit native understory communities which may include herbicide application), and fragmentation.

World Resources Institute (WRI) / Global Forest Watch Frontier Forests

There are no WRI Frontier Forests in the lower 48 states which means that there are no WRI frontier forests in the GBLLC wood basin.

World Wildlife Fund (WWF), Global 200 Ecoregions

3. Appalachian & Mixed Mesophytic Forests (# 69 in the WWF Global 200)

The Appalachian and Mixed Mesophytic Forests is Number 69 of the Global 200 is ranked vulnerable. Although this risk assessment address only those Global 200 ranked critical/endangered, it is important to look at the two sub-ecoregions that make up Number 69. One of the subecoregions, the Appalachian Mixed Mesophytic Forests (NA0402), is ranked critical/endangered and is therefore significant at the national level. The other sub-ecoregion, Appalachian-Blue Ridge Forests (NA0403), intersects the District. However, since it is ranked vulnerable, it does not require evaluation.

4. Southeastern Coniferous & Broadleaf Forests (# 75 in the WWF Global 200)

The WWF's Global 200 Ecoregions build a framework for describing the most important areas of biodiversity on the planet. The Global 200 encompass almost 50% of life on earth. These 200 areas are places that conservation groups target and discuss with forest products companies about the loss of global, forest biodiversity.

The southern third of the MREC supply area is in the Southeastern Coniferous & Broadleaf Forests which has a conservation status of endangered/critical. It is significant at a global scale, but this *global* ecoregion (#75) is subdivided into two smaller



endangered/critical terrestrial ecoregions. These scaled-down subdivisions have significance at the national level.

- The Southeastern mixed forests (NA0413)
- The Southeastern conifer forests (NA0529)

This is a highly degraded ecoregion with more than 99% of the original habitat having been converted to other uses. Settlers within the ecoregion logged and then cleared the land for agriculture. The ecoregion overlaps and is synonymous with the Piedmont physiographic province along the Atlantic Slope and the rest falls into the Coastal Plain on the Gulf Coast. WWF reports that there is little habitat left to conserve in this critical/endangered ecoregion. There are multiple examples of protected areas within this ecoregion.

## IUCN Centre for Plant Diversity (CPD)

The Centres of Plant Diversity (CPD) is a program established by the International Union for the Conservation of Nature (IUCN) and the World Wildlife Fund (WWF). The CPD identifies global areas with high concentrations of plant diversity or centers of plant endemism.

CPD NA23, contains endemic plants associated with granite outcrops within the Piedmont of Alabama, Georgia, and South Carolina. Granite outcrops are indicators for one of the IUCN Centre of Plant Diversity sites. There are about 10,800 acres of exposed granite in Georgia which is about 90% of all the exposed granite in the Southeast. GIS data is available that shows the location of granite bedrock which identifies possible locations of granite outcrops. Weathering of soils over granite bedrock exposes the bedrock at the surface. Once exposed, the granite bedrock is called a granite outcrop, granite outcrops are another name for exposed granite bedrock. A high percentage (33%) of plants associated with these rock outcrops are endemics. A handful of rare species are known to occupy high quality granite outcrops and their occurrences indicate the locations of granite outcrops. They are pool sprite (*Minuartia uniflora*), black-spored quillwort (*Isoetes melanospora*), mat-forming quillwort (*Isoetes tegetiformans*), and harperella (*Ptilimnium nodosum*). Counties with granite deposits are at the eastern extremity of the MREQ supply area.

CPD NA25 sites contain endemic plants associated with ultramafic rock outcrops that give rise to serpentine soils within the Piedmont of Alabama, Georgia, and South Carolina. Serpentine flora are restricted to soils derived from serpentine rock outcrops found in association with utramafic rock. NA25 is restricted to the Piedmont physiographic province. Serpentine soils, associated with ultramafic bedrock, formed along a linear boundary between ancient continents. There are two of these zones in North America, one on the west coast and another on the east coast. The eastern zone extends from Alabama north into Quebec. Serpentine soils have relatively higher levels of heavy metals (cadmium and nickel) and lower levels of calcium than other soils. Therefore, are toxic to most plants. Clays in serpentine soils have a high affinity for water, more so than other clays, making less water available to plants. Plants found in this CPD are specialists. They are adapted to the harsh conditions created by these soils and cannot survive outside of this habitat, making them obligate endemics to serpentine soils. As already stated, most plants cannot live in this environment. The outcrops where the plants are found are not mapped, but outcrops of ultramafic rock preclude serpentine soils and associated plant species that define this CPD.

### High Priority Aquatic Watersheds

The status and distribution of about 1,050 species of fishes, mussels, and crayfishes inhabiting 290 watersheds (HUC 8) were studied at both the regional and state level by aquatic biology experts and authors of the *Southeastern Freshwater Biodiversity Conservation Strategy*. Based on the results of their studies, researchers evaluated and ranked each of the watersheds.



	The 290 watersheds in the southeast region were ranked at the regional level. Number 1 was given to the watershed with the highest priority and 290 was assigned to the lowest priority watershed. All of the top ten priority watersheds are located within the MREQ supply area.
	North American Coastal Plain
	The North American Coastal Plain, considered a biodiversity hot spot by the Critical Ecosystem Partnership Fund intersects more about half of the MREQ supply area. This biodiversity hotspot reaches from northern Mexico along the Gulf Coastal and Atlantic Coastal Plains north to southern Maine. Despite the 1,816 endemic plant species and the 1.13 million square kilometers of area, the hotspot has a low level of geographic variety and an unusually low level of elevation change when compared to the other hotspots, leading the scientific community to assume it would be less biodiverse. After European settlers colonized the Northern American Coastal Plain, they converted more than 85 percent of the savannas and woodlands to non-native plant species, artificially reducing the land's endemism rate and giving rise to misconceptions about the true levels of biodiversity.
	The North American Coastal Plain has a high number of plant species, with an endemism rate of almost 30 percent. There are more than 270 species of birds native to the North American Coastal Plain, 2.2 percent of which are endemic, including the red-cockaded woodpecker ( <i>Leuconotopicus borealis</i> ), which relies on the longleaf pine tree for its habitat. The North American Coastal Plain contains 306 species of native mammals, 114 of which are endemic to the area.
	Protected Areas
	The Protected Areas Database of the United States (PAD-US) is the official inventory of public parks and other protected open space. The spatial data in PAD-US represents public lands held in trust by thousands of national, state and regional/local governments, as well as non-profit conservation organizations. PAs account for 7.75% of the area with the supply areas and are protected from uncontrolled forest management.
Means of Verification	<ul> <li>Company reviews the FSC US Controlled Wood National Risk Assessment (US NRA) and MREQ-DOC-005 FSC Controlled Wood Risk Assessment at least annually to verify status of US NRA or to address any changes identified since the previous year. This review is a part of the company's annual Due Diligence System review.</li> <li>MREQ-DOC-012 Secondary Supplier Audit Checklists – Suppliers are audited by company at least annually to verify:         <ul> <li>The supplier and its sub-suppliers are aware of the mitigation measures implemented for FSC Controlled Wood specified risk areas and other areas of high conservation value identified within the company's MREQ-DOC-005 FSC Controlled Wood Risk Assessment.</li> </ul> </li> <li>Company annually reviews the results of partnerships developed and implemented with conservation organizations addressing FSC Controlled Wood specified risk areas and other areas of high conservation value identified within the company's MREQ-DOC-005 FSC Controlled Wood Risk Assessment as mitigation measures.</li> </ul>
Evidence Reviewed	<ul> <li>MREQ-DOC-005 FSC Controlled Wood Risk Assessment</li> <li>MREQ-DOC-012 Secondary Supplier Audit Checklist</li> <li>FSC US Controlled Wood National Risk Assessment (US NRA)</li> <li><u>https://us.fsc.org/en-us/certification/controlled-wood/fsc-us-controlled-wood-national-risk-assessment-us-nra</u></li> <li>International Union for the Conservation of Nature (IUCN)</li> <li><u>https://www.iucn.org/</u></li> <li>World Resources Institute / Global Forest Watch</li> <li><u>https://www.wri.org/our-work/project/global-forest-watch</u></li> <li>World Wildlife Fund (WWF)</li> </ul>



	https://www.worldwildlife.org/biome-categories/terrestrial-ecoregions					
Risk Rating		Low Risk	х	Specified Risk		Unspecified Risk at RA
Comment or Mitigation Measure	<u>Ce</u> 1.	ntral Appalachians CBA MREQ has contracted implementation of MR Biological Integrity, LL meeting held in 2018. 19, 2018 in Asheville, measures for the HCV Gary Boyd, Greener C	A EQ's C att Gar NC. 's du	Greener Options, Inc. certification programs. ended the three FSC U y Boyd attended the Ap Boyd actively participa ring this meeting.	to assist ir Greener IS Controll opalachian ted in the o	n the development and Options, Inc. working with ed Wood Regional Region meeting on July discussion of mitigating
		have reviewed the FS with MREQ specifical Appalachian CBA. <u>Plan to Measure Effect</u> company on the high the specified risk area improvement actions t documented on MREC	tiven conse s. A prou	S Controlled Wood Regi recommended mitigation recommended mitigation	ve an annu review any tion related reviewed.	ing final report findings es for the Central ual review with the y updates or changes on d to threats or Annual review will be
	2.	MREQ will work with s suppliers, their loggers biodiversity, threats fro opportunities for conse these threats, includin slopes, and practices will be documented us Plan to Measure Effect	suppl s and om po ervat g but that v sing N	iers who source wood f I landowners on the cor oorly implemented fores ion through manageme t not limited to forest ma will prevent siltation. Th MREQ-DOC-012 Secon uess: The Company will	iber from t nservation st manage nt practice anagemen is educatio idary Supp meet with	his area to educate the values of aquatic ment activities, and es that reduce or eliminate t activities on steep on and outreach measure olier Audit Checklists.
		verify they have educa values of the specified 012 Secondary Suppli other pertinent informa suppliers, loggers and	ated f I risk er Au ation Iand	their suppliers, loggers This annual audit will udit Checklist. Supplier will be provided to the lowners.	& landowr be docum maps, ed supplier to	ers on the conservation ented using MREQ-DOC- ucation materials and be passed on to their
	3.	MREQ will engage wit partnerships, organiza programs/projects to or risk area and the MRE implementation of BM result in increased acc or enhance forests in	h and level Q's Ps w cess a way	d/or provide monetary of s or similar entities that op new or augment exis supply area that will: a) ith a focus on aquatic b to incentive programs for y that will conserve aqu	or in-kind r are suppo sting progr result in ir iodiversity or landowr atic biodiv	esources to conservation rting or promoting rams within the specified ncreased and improved conservation; and/or b) ners who restore, maintain ersity.
		Plan to Measure Effect developed and implem Controlled Wood spect identified within the co Assessment as mitiga	tiven nente ified mpa tion r	<u>ess:</u> Company annuall ed with conservation org risk areas and other ar- ny's MREQ-DOC-005 F measures.	ly reviews ganizations eas of high SC Contro	the results of partnerships addressing FSC conservation value olled Wood Risk
	<u>Ch</u> 1.	eoah Bald Salamander MREQ has contracted implementation of MR Biological Integrity, LL meeting held in 2018. Region meeting on Ju discussion of mitigatin	l with EQ's C att Gar Iy 19 g me	Greener Options, Inc. certification programs. ended the three FSC U y Boyd, Greener Optior , 2018 in Ashville, NC. easures for the HCVs du	to assist ir Greener IS Controll ns, Inc. atte Boyd activ uring this r	n the development and Options, Inc. working with ed Wood Regional ended the Appalachian vely participated in the neeting.







activities and the kinds of activities that would maintain or enhance DGF populations in the specified risk area. Plan to Measure Effectiveness: The Company will annually review Fiber Supply Agreements to ensure agreements contain applicable requirements. Florida Panhandle CBA 1. MREQ has contracted with Greener Options, Inc. to assist in the development and implementation of MREQ's certification programs. Greener Options, Inc. working with Biological Integrity, LLC attended the three FSC US Controlled Wood Regional meeting held in 2018. Mark Hughes, PhD, owner of Biological Integrity, LLC attended the Southeast Region meeting on July 31, 2018 in Atlanta, GA. Hughes actively participated in the discussion of mitigating measures for the HCVs during this meetina. Gary Boyd, Greener Options, Inc., and Mark Hughes, Biological Integrity, LLC have reviewed the FSC US Controlled Wood Regional Meeting final report findings with MREC specifically on recommended mitigation measures for the Southern Appalachian CBA. Plan to Measure Effectiveness: Consultant will have an annual review with the company on the high conservation value areas to review any updates or changes on the specified risk areas. Any new data or information related to threats or improvement actions through partnerships will be reviewed. Annual review will be documented on MREQ-DOC-002 Training Record. 2. MREQ will work with suppliers who source wood fiber from this area to educate the suppliers, their loggers and landowners on the conservation values of aquatic biodiversity and Native Longleaf Pine Systems, threats from poorly implemented forest management activities, and opportunities for conservation through management practices that reduce or eliminate these threats, including but not limited to forest management activities on steep slopes, and practices that will prevent siltation. This education and outreach measure will be documented using MREQ-DOC-012 Secondary Supplier Audit Checklists. Plan to Measure Effectiveness: The Company will meet with suppliers annually to verify they have educated their suppliers, loggers & landowners on the conservation values of the specified risk. This annual audit will be documented using MREQ-DOC-012 Secondary Supplier Audit Checklist. Supplier maps, education materials and other pertinent information will be provided to the supplier to be passed on to theie suppliers, loggers and landowners. Patch-nosed Salamander 1. MREQ has contracted with Greener Options, Inc. to assist in the development and implementation of MREQ's certification programs. Greener Options, Inc. working with Biological Integrity, LLC attended the three FSC US Controlled Wood Regional meeting held in 2018. Gary Boyd, Greener Options, Inc. attended the Appalachian Region meeting on July 19, 2018 in Ashville, NC. Boyd actively participated in the discussion of mitigating measures for the HCVs during this meeting. Gary Boyd, Greener Options, Inc., and Mark Hughes, Biological Integrity, LLC have reviewed the FSC US Controlled Wood Regional Meeting final report findings with MREQ specifically on recommended mitigation measures for the PNS. Plan to Measure Effectiveness: Consultant will have an annual review with the company on the high conservation value areas to review any updates or changes on the specified risk areas. Any new data or information related to threats or improvement actions through partnerships will be reviewed. Annual review will be documented on MREQ-DOC-002 Training Record. 2. MREQ will work with suppliers who source wood fiber from this area to educate the suppliers, their loggers and landowners on conservation values of PNS, potential threats from forest management activities and opportunities for conservation through



management that maintains, enhances, or restores PNS populations and reduces or eliminates potential threats.
Plan to Measure Effectiveness: The Company will meet with suppliers annually to verify they have educated their suppliers, loggers & landowners on the conservation values of the specified risk. This annual audit will be documented using MREQ-DOC-012 Secondary Supplier Audit Checklist. Supplier maps, education materials and other pertinent information will be provided to the supplier to be passed on to theie suppliers, loggers and landowners.
Southern Appalachian CBA
<ol> <li>MREQ has contracted with Greener Options, Inc. to assist in the development and implementation of MREQ's certification programs. Greener Options, Inc. working with Biological Integrity, LLC attended the three FSC US Controlled Wood Regional meeting held in 2018. Mark Hughes, PhD, owner of Biological Integrity, LLC attended the Southeast Region meeting on July 31, 2018 in Atlanta, GA. Hughes actively participated in the discussion of mitigating measures for the HCVs during this meeting.</li> </ol>
Gary Boyd, Greener Options, Inc., and Mark Hughes, Biological Integrity, LLC have reviewed the FSC US Controlled Wood Regional Meeting final report findings with MREC specifically on recommended mitigation measures for the Southern Appalachian CBA.
<u>Plan to Measure Effectiveness:</u> Consultant will have an annual review with the company on the high conservation value areas to review any updates or changes on the specified risk areas. Any new data or information related to threats or improvement actions through partnerships will be reviewed. Annual review will be documented on MREQ-DOC-002 Training Record.
2. MREQ will work with suppliers who source wood fiber from this area to educate the suppliers, their loggers and landowners on the conservation values of aquatic biodiversity, threats from poorly implemented forest management activities, and opportunities for conservation through management practices that reduce or eliminate these threats, including but not limited to forest management activities on steep slopes, and practices that will prevent siltation. This education and outreach measure will be documented using MREQ-DOC-012 Secondary Supplier Audit Checklists.
<u>Plan to Measure Effectiveness:</u> The Company will meet with suppliers annually to verify they have educated their suppliers, loggers & landowners on the conservation values of the specified risk. This annual audit will be documented using MREQ-DOC-012 Secondary Supplier Audit Checklist. Supplier maps, education materials and other pertinent information will be provided to the supplier to be passed on to theie suppliers, loggers and landowners.
3. MREQ will engage with and/or provide monetary or in-kind resources to conservation partnerships, organizations or similar entities that are supporting or promoting programs/projects to develop new or augment existing programs within the specified risk area and the MREQ's supply area that will: a) result in increased and improved implementation of BMPs with a focus on aquatic biodiversity conservation; and/or b) result in increased access to incentive programs for landowners who restore, maintain or enhance forests in a way that will conserve aquatic biodiversity.
<u>Plan to Measure Effectiveness:</u> Company annually reviews the results of partnerships developed and implemented with conservation organizations addressing FSC Controlled Wood specified risk areas and other areas of high conservation value identified within the company's MREQ-DOC-005 FSC Controlled Wood Risk Assessment as mitigation measures.
Late Successional Bottomland Hardwoods
1. MREQ has contracted with Greener Options, Inc. to assist in the development and implementation of MREQ's certification programs. Greener Options. Inc. working with



Biological Integrity, LLC attended the three FSC US Controlled Wood Regional meeting held in 2018. Gary Boyd attended the Appalachian Region meeting on July 19, 2018 in Asheville, NC. Boyd actively participated in the discussion of mitigating measures for the HCVs during this meeting.
Gary Boyd, Greener Options, Inc. and Mark Hughes, PhD, Biological Integrity, LLC have reviewed the FSC US Controlled Wood Regional Meeting final report findings with MREC specifically on recommended mitigation measures for Late Successional Bottomland Hardwoods (LSBH).
<u>Plan to Measure Effectiveness</u> : Consultant will have an annual review with the company on the high conservation value areas to review any updates or changes on the specified risk areas. Any new data or information related to threats or improvement actions through partnerships will be reviewed. Annual review will be documented on MREQ-DOC-002 Training Record.
<ol> <li>MREQ will work with suppliers who source wood fiber from these forest types to educate the suppliers, their loggers and landowners and communicate the social benefits &amp; values of LSBH, threats from forest management activities &amp; related loss of values, and opportunities for conservation through management that restores or maintains LSBH and reduces or eliminates these threats. This education and outreach measure will be documented using MREQ-DOC-012 Secondary Supplier Audit Checklists.</li> </ol>
<u>Plan to Measure Effectiveness</u> : The Company will meet with suppliers annually to verify they have educated their suppliers, loggers & landowners on the conservation values of the specified risk. This annual audit will be documented using MREQ-DOC-012 Secondary Supplier Audit Checklist. Supplier maps, education materials and other pertinent information will be provided to the supplier to be passed on to theie suppliers, loggers and landowners.
3. Engage with and/or provide monetary or in-kind resources to conservation organizations or similar entities that are facilitating active, on-the-ground implementation of management activities to restore or maintain existing examples of LSBH, with a goal of long-term conservation of this forest type within the specified risk area and MREQ's supply area.
<u>Plan to Measure Effectiveness</u> : Company annually reviews the results of partnerships developed and implemented with conservation organizations addressing FSC Controlled Wood specified risk areas and other areas of high conservation value identified within the company's MREQ-DOC-005 FSC Controlled Wood Risk Assessment as mitigation measures.
Mesophytic Cove Sites
<ol> <li>MREQ has contracted with Greener Options, Inc. to assist in the development and implementation of MREQ's certification programs. Greener Options, Inc. working with Biological Integrity, LLC attended the three FSC US Controlled Wood Regional meeting held in 2018. Gary Boyd attended the Appalachian Region meeting on July 19, 2018 in Asheville, NC. Boyd actively participated in the discussion of mitigating measures for the HCVs during this meeting.</li> </ol>
Gary Boyd, Greener Options, Inc. and Mark Hughes, PhD, Biological Integrity, LLC have reviewed the FSC US Controlled Wood Regional Meeting final report findings with MREQ specifically on recommended mitigation measures for the Southern Appalachian CBA.
<u>Plan to Measure Effectiveness:</u> Consultant will have an annual review with the company on the high conservation value areas to review any updates or changes on the specified risk areas. Any new data or information related to threats or improvement actions through partnerships will be reviewed. Annual review will be documented on MREQ-DOC-002 Training Record.
2. MREQ will work with suppliers who source wood fiber from these forest types to educate the suppliers, their loggers and landowners and communicate the social



	benefits and values of Mesophytic Cove Sites, how to identify them in the field, threats from incompatible forest management activities, and opportunities for conservation through management that enhances these sites and reduces or eliminates these threats. This education and outreach measure will be documented using MREC- DOC-012 Secondary Supplier Audit Checklists. <u>Plan to Measure Effectiveness:</u> The Company will meet with suppliers annually to verify they have educated their suppliers, loggers & landowners on the conservation values of the specified risk. This annual audit will be documented using MREQ-DOC- 012 Secondary Supplier Audit Checklist. Supplier maps, education materials and other pertinent information will be provided to the supplier to be passed on to theie suppliers, loggers and landowners.
Na	tural Longleaf Pine Systems
1.	MREQ has contracted with Greener Options, Inc. to assist in the development and implementation of MREQ's certification programs. Greener Options, Inc. working with Biological Integrity, LLC attended the three FSC US Controlled Wood Regional meeting held in 2018. Gary Boyd attended the Appalachian Region meeting on July 19, 2018 in Asheville, NC. Boyd actively participated in the discussion of mitigating measures for the HCVs during this meeting.
	Gary Boyd, Greener Options, Inc. and Mark Hughes, PhD, Biological Integrity, LLC have reviewed the FSC US Controlled Wood Regional Meeting final report findings with MREC specifically on recommended mitigation measures for the NLPS.
	<u>Plan to Measure Effectiveness:</u> Consultant will have an annual review with the company on the high conservation value areas to review any updates or changes on the specified risk areas. Any new data or information related to threats or improvement actions through partnerships will be reviewed. Annual review will be documented on MREQ-DOC-002 Training Record.
2.	MREQ will work with suppliers who source wood fiber from these areas to communicate and educate suppliers, their loggers and landowners on the social benefits and values of NLPS, threats from forest management and related loss of values, and opportunities for conservation through management that restores or maintains NLPS and reduces or eliminates these threats. Communications should recognize the importance of the forest understory and fire to NLPS. This education and outreach measure will be documented using MREQ-DOC-012 Secondary Supplier Audit Checklists.
	<u>Plan to Measure Effectiveness:</u> The Company will meet with suppliers annually to verify they have educated their suppliers, loggers & landowners on the conservation values of the specified risk. This annual audit will be documented using MREQ-DOC-012 Secondary Supplier Audit Checklist. Supplier maps, education materials and other pertinent information will be provided to the supplier to be passed on to theie suppliers, loggers and landowners.
3.	MREQ will engage with and/or provide monetary or in-kind resources to conservation organizations such as the Longleaf Alliance that are facilitating active, on-the-ground implementation of management activities to restore or maintain existing examples of NLPS, with a goal of long-term conservation of this system within the specified risk area and the MREQ's supply area. <u>Plan to Measure Effectiveness:</u> Company annually reviews the results of partnerships developed and implemented with conservation organizations addressing FSC
	Controlled Wood specified risk areas and other areas of high conservation value identified within the company's MREQ-DOC-005 FSC Controlled Wood Risk Assessment as mitigation measures.



	Indicator
2.2.4	The Biomass Producer has implemented appropriate control systems and procedures to ensure that biodiversity is protected (CPET S5b).
Finding	The Protected Areas Database of the United States (PAD-US) is the official inventory of public parks and other protected open space. The spatial data in PAD-US represents public lands held in trust by thousands of national, state and regional/local governments, as well as non-profit conservation organizations. Protected Areas account for 7.75% of the area with the supply areas and are protected from uncontrolled forest management.
Means of Verification	<ul> <li>Company reviews the FSC US Controlled Wood National Risk Assessment (US NRA) and MREQ-DOC-005 FSC Controlled Wood Risk Assessment at least annually to verify status of US NRA or to address any changes identified since the previous year. This review is a part of the company's annual Due Diligence System review.</li> <li>MREQ-DOC-012 Secondary Supplier Audit Checklists – Company's sole supplier is audited by company at least annually to verify:         <ul> <li>The supplier and its sub-suppliers are aware of the mitigation measures implemented for FSC Controlled Wood specified risk areas and other areas of high conservation value identified within the company's MREQ-DOC-005 FSC Controlled Wood Risk Assessment.</li> </ul> </li> </ul>
Evidence Reviewed	<ul> <li>MREQ-DOC-005 FSC Controlled Wood Risk Assessment</li> <li>MREQ-DOC-012 Secondary Supplier Audit Checklists</li> <li>FSC US Controlled Wood National Risk Assessment (US NRA) <u>https://us.fsc.org/en-us/certification/controlled-wood/fsc-us-controlled-wood-national-risk-assessment-us-nra</u></li> <li>Protected Areas Database of the United States (PAD-US)</li> <li><u>https://www.usgs.gov/core-science-systems/science-analytics-and-synthesis/gap/science/protected-areas</u></li> </ul>
Risk Rating	□ Low Risk X Specified Risk □ Unspecified Risk at RA
Comment or Mitigation Measure	MREQ will work with suppliers who source wood fiber from this area to educate the suppliers, their loggers and landowners on the conservation values of protected areas, and opportunities for conservation easements. This education and outreach measure will be documented using MREQ-DOC-012 Secondary Supplier Audit Checklists. <u>Plan to Measure Effectiveness</u> : The Company will meet with the sole supplier annually to verify the supplier has educated their suppliers, loggers & landowners on the conservation values of protected areas, and opportunities for conservation easements. This annual audit will be documented using MREQ-DOC-012 Secondary Supplier Audit Checklist. Supplier maps, education materials and other pertinent information will be provided to the supplier to be passed on to theie suppliers, loggers and landowners.



The Biomass Producer has implemented appropriate control systems and procedures for verifying that the process of residue removal minimises harm to ecosystems.
The Company has appropriate control systems and procedures to ensure residue removals are minimized in harming the ecosystem. State forestry Best Management Practices (BMP) address wood and residue utilization. MREQ-POL-001 Sustainability Policy states the Company requires BMP compliance with the harvesting of all wood fiber it receives. Fiber Purchase Agreements require BMP compliance. The Company verifies BMP compliance as part of its annual supplier audits. BMP compliance is documented using MREQ-DOC-012 Secondary Supplier Audit Checklists.
The company also requires suppliers, their sub-suppliers and loggers to maintain SFI State Implementation Committee (SIC) logger training. This training educates loggers on BMPs, threatened & endangered species and biodiversity. The Company has access to SIC logger training databases to verify logger training.
State forestry agencies conduct BMP compliance checks randomly or upon request by stakeholders. State BMP compliance reports are available for review by the Company.
The Company is in the process of distributing "Forest Biomass Retention and Harvesting Guidelines for the Southeast" from the Forest Guild to be used as a tool to ensure biomass removal minimizes the harm to ecosystems. MREQ-DOC-012 Secondary Supplier Audit Checklists will document forest biomass retention literature distribution.
Fiber Purchase Agreements, MREQ-DOC-012 Secondary Supplier Audit Checklists
<ul> <li>Fiber Purchase Agreements</li> <li>MREQ-POL-001 Sustainability Policy</li> <li>MREQ-DOC-012 Secondary Supplier Audit Checklists</li> <li>Alabama Professional Logging Manager https://www.alaforestry.org/page/PLMGeneral</li> <li>Florida Master Logger</li> <li>http://floridaforest.org/programs/master-logger/master-logger-search-tool/</li> <li>Georgia Master Timber Harvester</li> <li>http://gamth.org/</li> <li>Louisiana Master Logger</li> <li>http://loggered.msstate.edu/</li> <li>North Carolina ProLogger Program</li> <li>http://www.laforestry.com/fries/1131/masterloggerdb.cfm</li> <li>Alabama Annual BMP Reports</li> <li>http://www.tnforestry.com/files/1131/masterloggerdb.cfm</li> <li>Alabama Annual BMP Reports</li> <li>http://www.forestry.alabama.gov/Pages/Management/BMP_Practices.aspx</li> <li>Florida Silviculture Best Management Practices 2017 Implementation Survey Report</li> <li>http://www.freshfromflorida.com/content/download/78966/2320474/SPMP_2017_Imple</li> <li>mentationSurveyReport.pdf</li> <li>Results of Georgia's 2017 Silvicultural Best Management Practices Implementation and Compliance Survey</li> <li>http://www.fc.state.ga.us/forest-management/water-guality/bmps/BMP%20Survey%202017%20Results%20Report%20Final%20Corrected% 20by%20Scott%20Jan112018%20410pm.pdf</li> <li>Louisiana 2015 BMP Survey Results</li> </ul>



	<ul> <li>2016 BMP Implementation Survey: Mississippi's BMP Implementation Monitoring Program</li> </ul>
	https://www.mfc.ms.gov/sites/default/files/2016_BMP_%20Implementation_Survey_V3.p
	<ul> <li>An Assessment of Forestry Best Management Practices in North Carolina 2012-2016 <u>https://www.ncforestservice.gov/water_quality/pdf/BMP_Assessment_Report_2012-2016.pdf</u></li> </ul>
	<ul> <li>Implementation of Forestry Best Management Practices in Tennessee (2017) <u>https://www.tn.gov/content/dam/tn/agriculture/documents/forestry/AgForBMPimpl2017.pd</u></li> </ul>
	<ul> <li>Forest Biomass Retention and Harvesting Guidelines for the Southeast</li> </ul>
	https://foreststewardsguild.org/publications/research/2012/FG_Biomass_Guidelines_SE. pdf#
Risk Rating	X Low Risk
Comment	
Or Mitigation	
Measure	

	Indicator
2.2.6	The Biomass Producer has implemented appropriate control systems and procedures to verify that negative impacts on ground water, surface water and water downstream from forest management are minimised (CPET S5b).
Finding	State forestry Best Management Practices (BMP) set forth guidelines for maintaining and/or improving soil quality. MREQ-POL-001 Sustainability Policy states the Company requires BMP compliance with the harvesting of all wood fiber it receives. Fiber Purchase Agreements require BMP compliance. The Company verifies BMP compliance as part of its annual supplier audits. BMP compliance is documented using MREQ-DOC-012 Secondary Supplier Audit Checklists.
	The company also requires suppliers, their sub-suppliers and loggers to maintain SFI State Implementation Committee (SIC) logger training. This training educates loggers on BMPs, threatened & endangered species and biodiversity. The Company has access to SIC logger training databases to verify logger training.
	State forestry agencies conduct BMP compliance checks randomly or upon request by stakeholders. State BMP compliance reports are available for review by the Company.
Means of Verification	Fiber Purchase Agreements, MREQ-DOC-012 Secondary Supplier Audit Checklists
Evidence Reviewed	<ul> <li>Fiber Purchase Agreements</li> <li>MREQ-POL-001 Sustainability Policy</li> <li>MREQ-DOC-012 Secondary Supplier Audit Checklists</li> <li>Alabama Professional Logging Manager <u>https://www.alaforestry.org/page/PLMGeneral</u></li> <li>Florida Master Logger <u>http://floridaforest.org/programs/master-logger/master-logger-search-tool/</u></li> <li>Georgia Master Timber Harvester <u>http://gamth.org/</u></li> <li>Louisiana Master Logger <u>http://www.laforestry.com/training-program</u></li> </ul>



	Mississippi Professional Logging Manager
	nttp://loggered.msstate.edu/
	North Carolina ProLogger Program
	https://www.ncforestry.org/prologgers/prologger-lists/
	Tennessee Master Logger
	http://www.tnforestry.com/files/1131/masterloggerdb.cfm
	Alabama Annual BMP Reports
	http://www.forestry.alabama.gov/Pages/Management/BMP_Practices.aspx
	<ul> <li>Florida Silviculture Best Management Practices 2017 Implementation Survey Report</li> </ul>
	https://www.freshfromflorida.com/content/download/78966/2320474/SPMP 2017 Imple
	mentationSurveyReport.pdf
	<ul> <li>Results of Georgia's 2017 Silvicultural Best Management Practices Implementation and</li> </ul>
	Compliance Survey
	http://www.gfc.state.ga.us/forest-management/water-
	guality/bmps/BMP%20Survey%202017%20Results%20Report%20Final%20Corrected%
	20by%20Scott%20Jan112018%20410pm.pdf
	<ul> <li>Louisiana 2015 BMP Survey Results</li> </ul>
	http://www.ldaf.state.la.us/wp-content/uploads/2016/01/2015-BMP-Results.pdf
	<ul> <li>2016 BMP Implementation Survey: Mississippi's BMP Implementation Monitoring</li> </ul>
	Program
	https://www.mfc.ms.gov/sites/default/files/2016_BMP_%20Implementation_Survey_V3.p
	<u>df</u>
	<ul> <li>An Assessment of Forestry Best Management Practices in North Carolina 2012-2016</li> </ul>
	https://www.ncforestservice.gov/water_quality/pdf/BMP_Assessment_Report_2012-
	<u>2016.pdf</u>
	<ul> <li>Implementation of Forestry Best Management Practices in Tennessee (2017)</li> </ul>
	https://www.tn.gov/content/dam/tn/agriculture/documents/forestry/AgForBMPimpl2017.pd
	f
Risk Rating	X Low Risk
Comment	
or	
Mitigation	
Measure	

	Indicator
2.2.7	The Biomass Producer has implemented appropriate control systems and procedures for verifying that air quality is not adversely affected by forest management activities.
Finding	While the Company receives primary & secondary feedstock and does not conduct forest management activities (prescribed burning) that directly impacts air quality, state laws and regulations require people wanting to burn piles and/or forest residues to request a burning permit. All permits are managed by the state forestry agency. In addition, states issue burn permits based on state smoke management guidelines. State forestry agency State Forest Plans and Annual Reports state forest activities such as prescribed burning have mixed impacts on the forests. While smoke from prescribed burning
	can lower air quality temporarily, the lack of burning has a direct negative impact of longleaf pine ecosystems.
Means of Verificatio n	Employee interviews, state Smoke Management guidelines, state prescribed burning laws, state Forest Action Plans



Evidence Reviewed	<ul> <li>Alabama Burn Law http://www.forestry.alabama.gov/Pages/Informational/Legal/Burn_Law.aspx</li> <li>Forida Burning Laws</li> <li>https://www.freshfromflorida.com/content/download/4743/30229/know_the_law.pdf</li> <li>Louisiana Open Burning Law https://deq.louisiana.gov/assets/docs/About_LDEQ/enviroschool/BurningPresentation_201 9_Update.pdf</li> <li>Mississippi Open Burning Law https://www.mdeq.ms.gov/wp-content/uploads/2018/11/Air-Regs-Chapter-1-Air-Emission- Regulations-Amended-May-24-2018.pdf</li> <li>Mississippi Forestry Commission Voluntary Smoke Management Guidelines https://www.mfc.ms.gov/sites/default/files/Voluntary_Smoke_Management_Guidelines_20 12_2.pdf</li> <li>Alabama Forest Action Plan http://www.forestry.alabama.gov/Pages/Management/Forest_Action_Plan.aspx</li> <li>Florida Forest Action Plan</li> <li>https://www.freshfromflorida.com/content/download/81380/2380181/Florida_Forest_Reso urce_Strategy_6-18-10.pdf</li> <li>Louisiana Forest Action Plan http://www.laf.state.la.us/wp-content/uploads/2014/10/Louisiana-Statewide-Forest- Resource-Assessment-and-Strategy.pdf</li> <li>Mississippi Forest Action Plan</li> <li>Mississippi Forest Action Plan</li> <li>Mississippi Forest Action Plan</li> <li>http://www.laf.state.la.us/wp-content/uploads/2014/10/Louisiana-Statewide-Forest- Resource-Assessment-and-Strategy.pdf</li> </ul>
	https://www.mfc.ms.gov/forest-action-plan
Risk Rating	X Low Risk   Specified Risk  Unspecified Risk at RA
Comment	
Mitigation Measure	

	Indicator
2.2.8	The Biomass Producer has implemented appropriate control systems and procedures for verifying that there is controlled and appropriate use of chemicals, and that Integrated Pest Management (IPM) is implemented wherever possible in forest management activities (CPET S5c).
Finding	The Company receives primary & secondary feedstock and does not conduct forest management activities which use forest chemicals or is directly involved with Integrated Pest Management (IPM).
	MREQ-POL-001 Sustainability Policy states the Company will abide by all laws and regulations, including those laws associated with the environment. Fiber Purchase Agreements require suppliers to abide all applicable laws and regulations.
	Within the US, chemical use on forestlands is regulated under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA). The US Environmental Protection Agency (EPA) has responsibility for implementing and enforcing FIFRA. All chemicals use in forest management activities must be EPA registered and applicators must follow guidelines prescribed for each chemical's application.
	The Company is a member of the Mississippi Forestry Association. This participation allows the Company to stay abreast of environmental legislation and provides opportunities to engage forest landowners in best forestry management practices.



Means of Verification	Employee interviews, Fiber Purchase Agreements			
Evidence Reviewed	Fiber Purchase Agre MREC-POL-001 Sus	ements tainability Policy		
Risk Rating	X Low Risk	□ Specified Risk		Unspecified Risk at RA
Comment or Mitigation Measure				

	Indicator	
2.2.9	The Biomass Producer has implemented appropriate control systems and procedures for verifying that methods of waste disposal minimise negative impacts on forest ecosystems (CPET S5d).	
Finding	State and Federal laws, such as the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), are in place to protect from oil spills and hazardous substance releases. Access to these laws is available to Company personnel as referenced in the Appendix within MREQ-DOC-005 FSC Controlled Wood Risk Assessment.	
	MREQ-POL-001 Sustainability Policy states the Company will abide by all laws and regulations, including those laws associated with the environment. Fiber Purchase Agreements require suppliers to abide all applicable laws and regulations and requires compliance to state forestry Best Management Practices (BMP).	
	MREQ-DOC-012 Secondary Supplier Audit Checklist documents supplier BMP compliance and/or regulatory violations.	
Means of Verification	Fiber Purchase Agreements, MREQ-DOC-012 Secondary Supplier Audit Checklists	
Evidence Reviewed	<ul> <li>Fiber Purchase Agreements</li> <li>MREQ-POL-001 Sustainability Policy</li> <li>MREQ-DOC-005 FSC Controlled Wood Risk Assessment</li> <li>MREQ-DOC-012 Secondary Supplier Audit Checklists</li> </ul>	
Risk Rating	X Low Risk	
Comment or Mitigation Measure		



	Indicator		
2.3.1	Analysis shows that feedstock harvesting does not exceed the long-term production capacity of the forest, avoids significant negative impacts on forest productivity and ensures long-term economic viability. Harvest levels are justified by inventory and growth data.		
Finding	Harvest levels for the supply base in AL, FL, GA, LA, MS, NC & TN do not exceed growth according to USDA Forest Service forest inventory data. Forest Service annual growth & removals data for the most current year (AL-2018; FL,LA-2016; GA, MS, NC-2017; TN-2015) show a positive average rate of growth to removals of 2.37 for all wood. This annual growth to removals rate is 2.83 for pine & 1.81 for hardwood. USDA Forest Service State of Forest Reports for the four states show growth to removals ratios of 1.77 (AL), 2.55 (FL), 3.66 (LA) & 2.70 (MS) for all wood.		
Means of Verification	USDA Forest Service FIA data		
Evidence Reviewed	<ul> <li>Forests of Alabama, 2018 <u>https://www.srs.fs.usda.gov/pubs/ru/ru_srs180.pdf</u></li> <li>Forests of Florida, 2016 <u>https://www.srs.fs.usda.gov/pubs/ru/ru_srs182.pdf</u></li> <li>Forests of Georgia, 2017 <u>https://www.srs.fs.usda.gov/pubs/ru/ru_srs183.pdf</u></li> <li>Forests of Louisiana, 2016 <u>https://www.srs.fs.usda.gov/pubs/ru/ru_srs185.pdf</u></li> <li>Forests of Mississippi, 2017 <u>https://www.fs.usda.gov/treesearch/pubs/58128</u></li> <li>Forests of North Carolina, 2017 <u>https://www.srs.fs.usda.gov/pubs/ru/ru_srs187.pdf</u></li> <li>Forest of Tennessee, 2015 <u>https://www.srs.fs.usda.gov/pubs/ru/ru_srs189.pdf</u></li> </ul>		
Risk Rating	X Low Risk		
Comment or Mitigation Measure			

	Indicator
2.3.2	Adequate training is provided for all personnel, including employees and contractors (CPET S6d).
Finding	Company personnel have been trained on SBP standards. This training is recorded on MREQ-DOC-002 Training Record.
	The company requires their suppliers, sub-suppliers and loggers to maintain SFI State Implementation Committee (SIC) logger training. This training educates loggers on BMPs, threatened & endangered species and biodiversity. The Company has access to SIC logger training databases to verify logger training. The Company verifies logger training as part of its annual supplier audits. Looger training is documented using MREQ- DOC-012 Secondary Supplier Audit Checklists.



Means of Verification	<ul> <li>Training records</li> <li>MREQ-DOC-012 Secondary Supplier Audit Checklist – Suppliers are audited by company at least once a year to verify:         <ul> <li>Certification status of supplier</li> <li>Logger Training status &amp; % trained of sub-suppliers</li> </ul> </li> </ul>
Evidence Reviewed	<ul> <li>MREQ-DOC-002 Training Record</li> <li>MREQ-DOC-012 Secondary Supplier Audit Checklist</li> <li>Alabama Professional Logging Manager https://www.alaforestry.org/page/PLMGeneral</li> <li>Florida Master Logger http://floridaforest.org/programs/master-logger/master-logger-search-tool/</li> <li>Georgia Master Timber Harvester http://gamth.org/</li> <li>Louisiana Master Logger https://www.laforestry.com/training-program</li> <li>Mississippi Professional Logging Manager http://loggered.msstate.edu/</li> <li>North Carolina ProLogger Program https://www.ncforestry.org/prologgers/prologger-lists/</li> <li>Tennessee Master Logger http://www.tnforestry.com/files/1131/masterloggerdb.cfm</li> </ul>
Risk Rating	X Low Risk
Comment or Mitigation Measure	

	Indicator		
2.3.3	Analysis shows that feedstock harvesting and biomass production positively contribute to the local economy, including employment.		
Finding	In addition to the 27 jobs associated with the pellet mill, the Company has created another market for wood residuals. This additional market adds to a forest products industry that is a leading industry and employer in AL, LA and MS.		
	According to recent economic studies, forestry is a \$18.5 billion industry in AL (2016) & \$12.79 billion industry in MS (2014). Forestry and its related jobs accounted for 65,400 jobs in AL & over 40,000 jobs in MS.		
Means of Verification	Economic studies, Employee interviews		
Evidence Reviewed	<ul> <li>Economic Contributions of Alabama Agriculture and Forestry         <u>http://www.decision-innovation.com/webres/File/docs/AL-</u> </li> <li><u>AECS/170619_FINAL%20Alabama%20Ag%20%26%20Forestry%20Economic%20Contribution%20Study.pdf</u></li> <li>Forestry in Mississippi: The Contribution of the Industry to the Mississippi Economy: An Input-Output Analysis (Based on 2014 Data)         <u>https://www.forestryimpacts.net/reports/mississippi/foinms2017.pdf</u> </li> </ul>		
Risk Rating	X Low Risk		


Comment	
or	
Mitigation	
Measure	
Measure	

	Indicator
2.4.1	The Biomass Producer has implemented appropriate control systems and procedures for verifying that the health, vitality and other services provided by forest ecosystems are maintained or improved (CPET S7a).
Finding	<ul> <li>MREQ has implemented the US NRA for its supply area. MREQ has determined the following categories of controlled wood as "low risk":</li> <li>Category 1: Illegally harvested wood;</li> <li>Category 2: Wood harvested in violation of traditional and human rights;</li> <li>Category 5: Wood from forests in which genetically modified trees are planted.</li> <li>MREQ has determined there may be areas within its supply area that are considered "specified risk" to the following categories of controlled wood:</li> <li>Category 3: Wood from forests where high conservation values are threatened by management activities;</li> <li>HCV1 - Central Appalachian Critical Biodiversity Area (CBA);</li> <li>HCV1 - Cheoah Bald Salamander;</li> <li>HCV1 - Florida Panhandle Critical Biodiversity Area (CBA);</li> <li>HCV1 - Florida Panhandle Critical Biodiversity Area (CBA);</li> <li>HCV1 - Patch-nosed Salamander;</li> <li>HCV3 - Late Successional Bottomland Hardwoods;</li> <li>HCV3 - Natural Longleaf Pine Systems</li> </ul> MREQ has mapped these "specified risk" areas by supplier/sub-supplier and will implement, as needed, adequate control measures to either avoid or to mitigate specified risk related to origin and/or risk related to mixing with non-eligible inputs in the supply chain. Central Appalachian CBA is located within 44 counties in 4 states (AL-4, GA-7, NC-5, TN-28) in the northeastern portion of the MREQ supply area. One sub-supplier provides wood fiber indirectly to MREQ that sources from counties within this CBA which is considered to be "specified risk" within this CBA resulting in a low level of mitigation required (FSC US Controlled Wood Regional Meeting Report APPALACHIAN REGION: Asheville, NC – July 19, 2018; page 10). This CBA corresponds with the higher elevation portions of WWF's 'Appalachian Mixed Mesophytic Forest' area, one of their Global 200 biodiversity areas. The broadleaf forests an aquatic habitats drive the region's biodiversity areas. The broadleaf forests an aquatic habitats dr



<u>Mixed Mesophytic Forests</u> - The priority threats to the forests as a whole include: climate change, pollution from mining, new highways and utility rights-of-way, ORV recreation and overpopulation of deer.

<u>Aquatic Habitats</u> - Hydrologic alteration partially due to forestry practices and conversion from hardwood forests to non-native planted pine, reduced water quality partially due to loss of near-stream forested habitat and sedimentation associated with forestry practices and lack of Best Management Practice (BMP) implementation, and severe erosion of river banks.

### Cheoah Bald Salamander

The Cheoah Bald Salamander (CBS) is located within 2 counties in NC in the MREQ supply area. One sub-supplier provides wood fiber indirectly to MREQ that sources from counties within this CBA which is considered to be "specified risk" within this CBA resulting in a low level of mitigation required (FSC US Controlled Wood Regional Meeting Report APPALACHIAN REGION: Asheville, NC – July 19, 2018; page 10).

The Cheoah Bald Salamander's range is not yet well defined but is believed to be limited a portion of the Appalachian Mountains at the very western extent of North Carolina within the elevational range of 975-1,524 meters, associated with the Cheoah Bald. The salamander's primary habitat is the mesic forests and the species may be common in areas with suitable habitat. It appears that much of the species' range may occur within the Nantahala National Forests and it is identified as a Federal Species of Concern.

Identified threats to these salamanders are clearcut harvests because they depend on forest & woodland habitats.

#### Dusky Gopher Frog

The Dusky Gopher Frog (DGF) is located within 4 counties in MS in the MREQ supply area. A few suppliers provide wood fiber to MREQ source from counties within this CBA which is considered to be "specified risk" within this CBA resulting in a low level of mitigation required (FSC US Controlled Wood Regional Meeting Report SOUTHEAST & MISSISSIPPI ALLUVIAL VALLEY REGIONS: Atlanta, GA – July 31, 2018; page 11).

The DGF historically occurred on the Coastal Plain from eastern Louisiana to the Mobile River delta in AL. Now, it is only known from one site in Harrison County and a couple of sites in Jackson County, MS. It is federally endangered wherever found. The species occurs in upland areas of sandy soils that were historically forested with longleaf pine and in temporary wetland breeding sites within the forested landscape. Most of its life cycle is spent in or near underground areas of refuge that historically were gopher tortoise burrows.

Identified Threats include population isolation, urbanization, disease, and a lack of suitable habitat. Habitat degradation is a significant factor, driven by multiple sources including, changes in forest type from longleaf pine to other forest types, forest degradation caused by grazing and the disruption of the natural fire regime.

#### Florida Panhandle CBA

The Florida Panhandle CBA is located within 3 counties in FL in the MREQ supply area. A few suppliers provide wood fiber to MREQ source from counties within this CBA which is considered to be "specified risk" within this CBA resulting in a low level of mitigation required (FSC US Controlled Wood Regional Meeting Report SOUTHEAST & MISSISSIPPI ALLUVIAL VALLEY REGIONS: Atlanta, GA – July 31, 2018; page 11).

This CBA is considered an HCV because it contains a high overall species richness, diversity, or uniqueness within a defined area compared to other sites within the same biogeographic area. The Florida Panhandle is reported to be one of the 5 richest biodiversity hotspots in North America. Of particular importance is the richness of frogs, snakes, turtles, and mussels. This concentration of biodiversity is driven by the river systems (particularly the Apalachicola River), longleaf pine savanna habitat and unique steephead ravines.

Identified Threats:



<u>Apalachicola Bay/River System</u> - Threats to this aquatic system are varied and include persistent drought resulting in reduced flow level, loss of floodplain and wetland habitat due to reduced flow levels, point and non-point source pollution, unrestrained growth and development. The Apalachicola River and Bay Surface Water Improvement & Management Plan identifies implementation of silvicultural Best Management Practices (BMPs) as a significant component of one of its priority projects.

<u>Longleaf Pine Savanna</u> - Biodiversity values can be adversely affected by forest management activities via conversion of longleaf to other pine types, and the use management techniques, including herbicide application that have the potential to inhibit native understory communities.

#### Patch-nosed Salamander

The Patch-nosed Salamander (PNS) is located within 2 counties in GA in the MREQ supply area. One sub-supplier provides wood fiber indirectly to MREQ that sources from counties within this CBA which is considered to be "specified risk" within this CBA resulting in a low level of mitigation required (FSC US Controlled Wood Regional Meeting Report APPALACHIAN REGION: Asheville, NC – July 19, 2018; page 10).

The PNS is the smallest known salamander in North America – typically around 5 cm in length, half of which is the tail. The known range of the Patch-nosed salamander includes a limited number of small, first order stream located at the foot of the Blue Ridge escarpment in Stephens and Habersham counties (near Lake Tugaloo) of Georgia, within the Chattahoochee National Forest. Identified individuals of this species have all been found in leaf litter or under rocks in the above water streambeds or banks of first-order streams. It is not yet known whether adjacent hardwood forests also provide habitat. This species is not listed at either the federal or state level.

Little is known about this species and specific threats have not yet been documented. The species depends on riparian habitat, so any factor that would disrupt water flow, canopy cover, or the leaf-littler layer would likely impact the species.

#### Southern Appalachian CBA

The Southern Appalachian CBA is located within 20 counties in AL in the MREQ supply area. A few suppliers provide wood fiber to MREQ source from counties within this CBA which is considered to be "specified risk" within this CBA resulting in a low level of mitigation required (FSC US Controlled Wood Regional Meeting Report SOUTHEAST & MISSISSIPPI ALLUVIAL VALLEY REGIONS: Atlanta, GA – July 31, 2018; page 11).

Biodiversity values in the southern Appalachians include aquatic habitats, glades, and montane longleaf pine. Alabama is recognized as having the greatest number of freshwater species of mollusks and fish in the United States, and many of these species have very restricted distributions and specialized habitat requirements that make them highly vulnerable to extinction. The Cahaba River watershed is the center of the biodiversity hotspot, but the biodiversity area includes other smaller watercourses as well. Aquatic habitats driving this concentration of biodiversity include lakes, rivers, streams, bogs, swamps, ephemeral pools, fens, seeps, swamp forests and wet meadows. Other drivers of biodiversity include glades and montane longleaf pine. Bibb County Glades (i.e. rock outcrops), exposed limestone glades, and sandstone glades in Central Alabama have high density of rare plants. These are open habitats that are dominated by upland herbaceous plant species. There is typically an absence of a tree canopy on glades, resulting in large amounts of sunlight and heat on the surface. Montane longleaf pine habitats occur in steep rolling topography historically maintained by fire, mostly outside of or on the edge of the Coastal Plain. Biodiversity values are driven in part by the understory plant community.

Identified Threats:

<u>Aquatic Habitats</u> - Numerous sources of information identify threats from forest management activities, particularly non-point source pollution in aquatic habitats, and disturbance to riparian zones.



<u>Glades</u> - Threats include grazing, non-native species, quarrying, root-digging, plant and animal collecting, removal of large rocks for landscaping, urban development, plowing for fire breaks, use as logging decks (resulting in soil/vegetation disturbance and soil erosion), conversion to other land uses, and ORV damage.

<u>Montane Longleaf Pine</u> - Biodiversity values can be adversely affected by forest management activities via conversion of longleaf to other pine types, and the use of management techniques, including herbicide application that have the potential to inhibit native understory communities.

### Late Successional Bottomland Hardwoods

Late Successional Bottomland Hardwoods (LSBH) are located within 50 counties in 4 states (AL-11, FL-4, LA-a2, MS-23) in the southern portion of the MREQ supply area. Two (2) suppliers providing hardwood wood fiber to MREQ source from counties considered to be "specified risk" within this CBA resulting in a low level of mitigation required (FSC US Controlled Wood Regional Meeting Report SOUTHEAST & MISSISSIPPI ALLUVIAL VALLEY REGIONS: Atlanta, GA – July 31, 2018; page 11).

Much of the original bottomland hardwood in the US was cleared for agriculture, particularly in the Mississippi valley, and much of the remainder was mismanaged leaving very few intact examples. Bottomland Hardwoods are periodically inundated, floodplain forests, where the entire ecosystem is driven by hydrology. Late successional stands are not defined by the species, as much as by the structural composition (e.g., more stratification) and existence of large wood debris, including standing hollow trees – these changes occur at about 80 years in most Bottomland Hardwood types and perhaps a little later in cypress swamps.

Identified threats include development, hydrologic changes (droughts, water withdraws, ditching), incompatible forest management, pollution, fragmentation, invasive species and economic drivers that alter forest management goals.

#### Mesophytic Cove Sites

Mesophytic Cove Sites is located within 35 counties in 4 states (AL-1; GA-10; NC-5; TN-19) in the northeastern portion of the MREQ supply area. One sub-supplier provides wood fiber indirectly to MREQ that sources from counties within this CBA resulting in a low level of mitigation required (FSC US Controlled Wood Regional Meeting Report SOUTHEAST & MISSISSIPPI ALLUVIAL VALLEY REGIONS: Atlanta, GA – July 31, 2018; page 11).

Mesophytic cove sites are highly diverse, closed-canopy hardwood forest occurring on sheltered sites at low- to moderate-elevation (1,000-3,600 ft), and sometimes higher. They tend to occur in large patches on concave slopes that accumulate nutrients and moisture. They are characterized by high species diversity and a complex forest structure. The ground level flora in particular has high species richness, often with abundant spring ephemerals. Rich cove forests have very fertile soils with a diverse herb layer containing few shrubs. Acidic cove forests are less fertile than rich coves, but otherwise similar.

Identified Threats to this forest type are invasive species and conversion to other uses. Threats also include incompatible forest management that results in alterations to the structure and composition of the forest or conversion to other forest types (white pine), climate change, chronic deer herbivory, harvesting of herbs and pollution.

#### Natural Longleaf Pine Systems

Native Longleaf Pine Systems (NLPS) are located in 27 counties in 3 states (AL-14, FL-4, MS-9) throughout the MREQ supply area. Most of the suppliers providing wood fiber to MREQ source from counties that have been identified as containing native longleaf systems resulting in a low level of mitigation required (FSC US Controlled Wood Regional Meeting Report SOUTHEAST & MISSISSIPPI ALLUVIAL VALLEY REGIONS: Atlanta, GA – July 31, 2018; page 11).

NLPS were once one of the most widespread forest types in the US but were reduced to less than 5% of their original range, becoming one of the rarest forest systems in the world. This historical reduction was driven by suppression of fire and conversion to other



forest types. These forest systems are associated with high animal and plant diversity, including many rare, threatened and endangered species such as the Red-cockaded Woodpecker, Bachman's Sparrow, Gopher Tortoise, Eastern Indigo Snake, and Flatwoods Salamander. "Native" in this instance refers to existing longleaf pine that is on a site that has historically been maintained as longleaf pine. Longleaf pine stands that have been restored in areas that have not been historically maintained in longleaf pine do not apply under this definition. "Native" does not imply a particular regeneration method; these stands may be either planted or naturally regenerated. Identified threats include altered stand structure (due to lack of fire), conversion to other forest types, conversion to other land uses, habitat disturbance (including management techniques that inhibit native understory communities which may include herbicide application), and fragmentation. World Resources Institute (WRI) / Global Forest Watch Frontier Forests There are no WRI Frontier Forests in the lower 48 states which means that there are no WRI frontier forests in the GBLLC wood basin. World Wildlife Fund (WWF), Global 200 Ecoregions 5. Appalachian & Mixed Mesophytic Forests (# 69 in the WWF Global 200) The Appalachian and Mixed Mesophytic Forests is Number 69 of the Global 200 is ranked vulnerable. Although this risk assessment address only those Global 200 ranked critical/endangered, it is important to look at the two sub-ecoregions that make up Number 69. One of the subecoregions, the Appalachian Mixed Mesophytic Forests (NA0402), is ranked critical/endangered and is therefore significant at the national level. The other subecoregion, Appalachian-Blue Ridge Forests (NA0403), intersects the District. However, since it is ranked vulnerable, it does not require evaluation. 6. Southeastern Coniferous & Broadleaf Forests (# 75 in the WWF Global 200) The WWF's Global 200 Ecoregions build a framework for describing the most important areas of biodiversity on the planet. The Global 200 encompass almost 50% of life on earth. These 200 areas are places that conservation groups target and discuss with forest products companies about the loss of global, forest biodiversity. The southern third of the MREC supply area is in the Southeastern Coniferous & Broadleaf Forests which has a conservation status of endangered/critical. It is significant at a global scale, but this global ecoregion (#75) is subdivided into two smaller endangered/critical terrestrial ecoregions. These scaled-down subdivisions have significance at the national level. The Southeastern mixed forests (NA0413) The Southeastern conifer forests (NA0529) This is a highly degraded ecoregion with more than 99% of the original habitat having been converted to other uses. Settlers within the ecoregion logged and then cleared the land for agriculture. The ecoregion overlaps and is synonymous with the Piedmont physiographic province along the Atlantic Slope and the rest falls into the Coastal Plain on the Gulf Coast. WWF reports that there is little habitat left to conserve in this critical/endangered ecoregion. There are multiple examples of protected areas within this ecoregion. IUCN Centre for Plant Diversity (CPD) The Centres of Plant Diversity (CPD) is a program established by the International Union for the Conservation of Nature (IUCN) and the World Wildlife Fund (WWF). The CPD identifies global areas with high concentrations of plant diversity or centers of plant endemism.



CPD NA23, contains endemic plants associated with granite outcrops within the Piedmont of Alabama, Georgia, and South Carolina. Granite outcrops are indicators for one of the IUCN Centre of Plant Diversity sites. There are about 10,800 acres of exposed granite in Georgia which is about 90% of all the exposed granite in the Southeast. GIS data is available that shows the location of granite bedrock which identifies possible locations of granite outcrops. Weathering of soils over granite bedrock exposes the bedrock at the surface. Once exposed, the granite bedrock is called a granite outcrop, granite outcrops are another name for exposed granite bedrock. A high percentage (33%) of plants associated with these rock outcrops are endemics. A handful of rare species are known to occupy high quality granite outcrops and their occurrences indicate the locations of granite outcrops. They are pool sprite (*Minuartia uniflora*), black-spored quillwort (*Isoetes melanospora*), mat-forming quillwort (*Isoetes tegetiformans*), and harperella (*Ptilimnium nodosum*). Counties with granite deposits are at the eastern extremity of the MREQ supply area.

CPD NA25 sites contain endemic plants associated with ultramafic rock outcrops that give rise to serpentine soils within the Piedmont of Alabama, Georgia, and South Carolina. Serpentine flora are restricted to soils derived from serpentine rock outcrops found in association with utramafic rock. NA25 is restricted to the Piedmont physiographic province. Serpentine soils, associated with ultramafic bedrock, formed along a linear boundary between ancient continents. There are two of these zones in North America, one on the west coast and another on the east coast. The eastern zone extends from Alabama north into Quebec. Serpentine soils have relatively higher levels of heavy metals (cadmium and nickel) and lower levels of calcium than other soils. Therefore, are toxic to most plants. Clays in serpentine soils have a high affinity for water, more so than other clays, making less water available to plants. Plants found in this CPD are specialists. They are adapted to the harsh conditions created by these soils and cannot survive outside of this habitat, making them obligate endemics to serpentine soils. As already stated, most plants cannot live in this environment. The outcrops where the plants are found are not mapped, but outcrops of ultramafic rock preclude serpentine soils and associated plant species that define this CPD.

#### High Priority Aquatic Watersheds

The status and distribution of about 1,050 species of fishes, mussels, and crayfishes inhabiting 290 watersheds (HUC 8) were studied at both the regional and state level by aquatic biology experts and authors of the *Southeastern Freshwater Biodiversity Conservation Strategy*. Based on the results of their studies, researchers evaluated and ranked each of the watersheds.

The 290 watersheds in the southeast region were ranked at the regional level. Number 1 was given to the watershed with the highest priority and 290 was assigned to the lowest priority watershed. All of the top ten priority watersheds are located within the MREQ supply area.

### North American Coastal Plain

The North American Coastal Plain, considered a biodiversity hot spot by the Critical Ecosystem Partnership Fund intersects more about half of the MREQ supply area. This biodiversity hotspot reaches from northern Mexico along the Gulf Coastal and Atlantic Coastal Plains north to southern Maine. Despite the 1,816 endemic plant species and the 1.13 million square kilometers of area, the hotspot has a low level of geographic variety and an unusually low level of elevation change when compared to the other hotspots, leading the scientific community to assume it would be less biodiverse. After European settlers colonized the Northern American Coastal Plain, they converted more than 85 percent of the savannas and woodlands to non-native plant species, artificially reducing the land's endemism rate and giving rise to misconceptions about the true levels of biodiversity.

The North American Coastal Plain has a high number of plant species, with an endemism rate of almost 30 percent. There are more than 270 species of birds native to the North



	American Coastal Plain, 2.2 percent of which are endemic, including the red-cockaded woodpecker ( <i>Leuconotopicus borealis</i> ), which relies on the longleaf pine tree for its habitat. The North American Coastal Plain contains 306 species of native mammals, 114 of which are endemic to the area.
	Protected Areas
	The Protected Areas Database of the United States (PAD-US) is the official inventory of public parks and other protected open space. The spatial data in PAD-US represents public lands held in trust by thousands of national, state and regional/local governments, as well as non-profit conservation organizations. PAs account for 7.75% of the area with the supply areas and are protected from uncontrolled forest management.
Means of Verification	<ul> <li>Company reviews the FSC US Controlled Wood National Risk Assessment (US NRA) and MQEC-DOC-005 FSC Controlled Wood Risk Assessment at least annually to verify status of US NRA or to address any changes identified since the previous year. This review is a part of the company's annual Due Diligence System review.</li> <li>MQEC-DOC-012 Secondary Supplier Audit Checklists – Suppliers are audited by company at least annually to verify:         <ul> <li>The supplier and its sub-suppliers are aware of the mitigation measures implemented for FSC Controlled Wood specified risk areas and other areas of high conservation value identified within the company's MQEC-DOC-005 FSC Controlled Wood Risk Assessment.</li> </ul> </li> <li>Company annually reviews the results of partnerships developed and implemented with conservation organizations addressing FSC Controlled Wood specified risk areas and other areas and other areas of high conservation value identified within the company's MQEC-DOC-005 FSC Controlled Wood Risk Assessment.</li> <li>Company annually reviews the results of partnerships developed and implemented with conservation organizations addressing FSC Controlled Wood specified risk areas and other areas of high conservation value identified within the company's MQEC-DOC-005 FSC Controlled Wood Risk Assessment as mitigation measures.</li> </ul>
Evidence Reviewed	<ul> <li>MREQ-DOC-005 FSC Controlled Wood Risk Assessment</li> <li>MREQ-DOC-012 Secondary Supplier Audit Checklist</li> <li>FSC US Controlled Wood National Risk Assessment (US NRA)</li> <li><u>https://us.fsc.org/en-us/certification/controlled-wood/fsc-us-controlled-wood-national-risk-assessment-us-nra</u></li> <li>International Union for the Conservation of Nature (IUCN)</li> <li><u>https://www.iucn.org/</u></li> <li>World Resources Institute / Global Forest Watch</li> <li><u>https://www.wri.org/our-work/project/global-forest-watch</u></li> <li>World Wildlife Fund (WWF)</li> <li><u>https://www.worldwildlife.org/biome-categories/terrestrial-ecoregions</u></li> </ul>
Risk Rating	□ Low Risk X Specified Risk □ Unspecified Risk at RA
Comment or Mitigation Measure	<ul> <li><u>Central Appalachians CBA</u></li> <li>MREQ has contracted with Greener Options, Inc. to assist in the development and implementation of MREQ's certification programs. Greener Options, Inc. working with Biological Integrity, LLC attended the three FSC US Controlled Wood Regional meeting held in 2018. Gary Boyd attended the Appalachian Region meeting on July 19, 2018 in Asheville, NC. Boyd actively participated in the discussion of mitigating measures for the HCVs during this meeting.</li> <li>Gary Boyd, Greener Options, Inc. and Mark Hughes, PhD, Biological Integrity, LLC have reviewed the FSC US Controlled Wood Regional Meeting final report findings with MREQ specifically on recommended mitigation measures for the Central Appalachian CBA.</li> <li>Plan to Measure Effectiveness: Consultant will have an annual review with the company on the high conservation value areas to review any updates or changes on the specified risk areas. Any new data or information related to threats or</li> </ul>



improvement actions through partnerships will be reviewed. Annual review will be documented on MREQ-DOC-002 Training Record.

5. MREQ will work with suppliers who source wood fiber from this area to educate the suppliers, their loggers and landowners on the conservation values of aquatic biodiversity, threats from poorly implemented forest management activities, and opportunities for conservation through management practices that reduce or eliminate these threats, including but not limited to forest management activities on steep slopes, and practices that will prevent siltation. This education and outreach measure will be documented using MREQ-DOC-012 Secondary Supplier Audit Checklists.

<u>Plan to Measure Effectiveness</u>: The Company will meet with suppliers annually to verify they have educated their suppliers, loggers & landowners on the conservation values of the specified risk. This annual audit will be documented using MREQ-DOC-012 Secondary Supplier Audit Checklist. Supplier maps, education materials and other pertinent information will be provided to the supplier to be passed on to their suppliers, loggers and landowners.

6. MREQ will engage with and/or provide monetary or in-kind resources to conservation partnerships, organizations or similar entities that are supporting or promoting programs/projects to develop new or augment existing programs within the specified risk area and the MREQ's supply area that will: a) result in increased and improved implementation of BMPs with a focus on aquatic biodiversity conservation; and/or b) result in increased access to incentive programs for landowners who restore, maintain or enhance forests in a way that will conserve aquatic biodiversity.

<u>Plan to Measure Effectiveness</u>: Company annually reviews the results of partnerships developed and implemented with conservation organizations addressing FSC Controlled Wood specified risk areas and other areas of high conservation value identified within the company's MREQ-DOC-005 FSC Controlled Wood Risk Assessment as mitigation measures.

#### Cheoah Bald Salamander

3. MREQ has contracted with Greener Options, Inc. to assist in the development and implementation of MREQ's certification programs. Greener Options, Inc. working with Biological Integrity, LLC attended the three FSC US Controlled Wood Regional meeting held in 2018. Gary Boyd, Greener Options, Inc. attended the Appalachian Region meeting on July 19, 2018 in Ashville, NC. Boyd actively participated in the discussion of mitigating measures for the HCVs during this meeting.

Gary Boyd, Greener Options, Inc., and Mark Hughes, Biological Integrity, LLC have reviewed the FSC US Controlled Wood Regional Meeting final report findings with MREQ specifically on recommended mitigation measures for the CBS.

<u>Plan to Measure Effectiveness:</u> Consultant will have an annual review with the company on the high conservation value areas to review any updates or changes on the specified risk areas. Any new data or information related to threats or improvement actions through partnerships will be reviewed. Annual review will be documented on MREQ-DOC-002 Training Record.

4. MREQ will work with suppliers who source wood fiber from this area to educate the suppliers, their loggers and landowners on conservation values of CBS, potential threats from forest management activities and opportunities for conservation through management that maintains, enhances, or restores CBS populations and reduces or eliminates potential threats.

<u>Plan to Measure Effectiveness:</u> The Company will meet with suppliers annually to verify they have educated their suppliers, loggers & landowners on the conservation values of the specified risk. This annual audit will be documented using MREQ-DOC-012 Secondary Supplier Audit Checklist. Supplier maps, education materials and other pertinent information will be provided to the supplier to be passed on to theie suppliers, loggers and landowners.



Dusky Gopher Frog
4. MREQ has contracted with Greener Options, Inc. to assist in the development and implementation of MREQ's certification programs. Greener Options, Inc. working with Biological Integrity, LLC attended the three FSC US Controlled Wood Regional meeting held in 2018. Mark Hughes, PhD, owner of Biological Integrity, LLC attended the Southeast Region meeting on July 31, 2018 in Atlanta, GA. Hughes actively participated in the discussion of mitigating measures for the HCVs during this meeting.
Gary Boyd, Greener Options, Inc., and Mark Hughes, Biological Integrity, LLC have reviewed the FSC US Controlled Wood Regional Meeting final report findings with MREC specifically on recommended mitigation measures for the DGF.
<u>Plan to Measure Effectiveness</u> : Consultant will have an annual review with the company on the high conservation value areas to review any updates or changes on the specified risk areas. Any new data or information related to threats or improvement actions through partnerships will be reviewed. Annual review will be documented on MREQ-DOC-002 Training Record.
5. MREQ will work with suppliers who source wood fiber from this area to educate the suppliers, their loggers and landowners on conservation values of DGF, potential threats from forest management activities and opportunities for conservation through management that maintains, enhances, or restores DGF populations and reduces or eliminates potential threats.
<u>Plan to Measure Effectiveness:</u> The Company will meet with suppliers annually to verify they have educated their suppliers, loggers & landowners on the conservation values of the specified risk. This annual audit will be documented using MREQ-DOC-012 Secondary Supplier Audit Checklist. Supplier maps, education materials and other pertinent information will be provided to the supplier to be passed on to theie suppliers, loggers and landowners.
6. MREQ is developing and implementing a procurement policy for those suppliers who source wood fiber directly from the forest in this area that reflects the above stated education & outreach mitigation measure and clearly states the requirement that the landowner/forester/logger at the source forest will not supply materials from forests where DGFs are threatened as a result of the forest management activities that produced the forest materials. This policy will include a description of the forest type in which DGF populations occur, potential threats to DGF from forest management activities and the kinds of activities that would maintain or enhance DGF populations in the specified risk area.
<u>Plan to Measure Effectiveness:</u> The Company will annually review Fiber Supply Agreements to ensure agreements contain applicable requirements.
Florida Panhandle CBA
3. MREQ has contracted with Greener Options, Inc. to assist in the development and implementation of MREQ's certification programs. Greener Options, Inc. working with Biological Integrity, LLC attended the three FSC US Controlled Wood Regional meeting held in 2018. Mark Hughes, PhD, owner of Biological Integrity, LLC attended the Southeast Region meeting on July 31, 2018 in Atlanta, GA. Hughes actively participated in the discussion of mitigating measures for the HCVs during this meeting.
Gary Boyd, Greener Options, Inc., and Mark Hughes, Biological Integrity, LLC have reviewed the FSC US Controlled Wood Regional Meeting final report findings with MREC specifically on recommended mitigation measures for the Southern Appalachian CBA.
<u>Plan to Measure Effectiveness:</u> Consultant will have an annual review with the company on the high conservation value areas to review any updates or changes on the specified risk areas. Any new data or information related to threats or



improvement actions through partnerships will be reviewed. Annual review will be documented on MREQ-DOC-002 Training Record.

4. MREQ will work with suppliers who source wood fiber from this area to educate the suppliers, their loggers and landowners on the conservation values of aquatic biodiversity and Native Longleaf Pine Systems, threats from poorly implemented forest management activities, and opportunities for conservation through management practices that reduce or eliminate these threats, including but not limited to forest management activities on steep slopes, and practices that will prevent siltation. This education and outreach measure will be documented using MREQ-DOC-012 Secondary Supplier Audit Checklists.

<u>Plan to Measure Effectiveness</u>: The Company will meet with suppliers annually to verify they have educated their suppliers, loggers & landowners on the conservation values of the specified risk. This annual audit will be documented using MREQ-DOC-012 Secondary Supplier Audit Checklist. Supplier maps, education materials and other pertinent information will be provided to the supplier to be passed on to theie suppliers, loggers and landowners.

#### Patch-nosed Salamander

3. MREQ has contracted with Greener Options, Inc. to assist in the development and implementation of MREQ's certification programs. Greener Options, Inc. working with Biological Integrity, LLC attended the three FSC US Controlled Wood Regional meeting held in 2018. Gary Boyd, Greener Options, Inc. attended the Appalachian Region meeting on July 19, 2018 in Ashville, NC. Boyd actively participated in the discussion of mitigating measures for the HCVs during this meeting.

Gary Boyd, Greener Options, Inc., and Mark Hughes, Biological Integrity, LLC have reviewed the FSC US Controlled Wood Regional Meeting final report findings with MREQ specifically on recommended mitigation measures for the PNS.

<u>Plan to Measure Effectiveness:</u> Consultant will have an annual review with the company on the high conservation value areas to review any updates or changes on the specified risk areas. Any new data or information related to threats or improvement actions through partnerships will be reviewed. Annual review will be documented on MREQ-DOC-002 Training Record.

4. MREQ will work with suppliers who source wood fiber from this area to educate the suppliers, their loggers and landowners on conservation values of PNS, potential threats from forest management activities and opportunities for conservation through management that maintains, enhances, or restores PNS populations and reduces or eliminates potential threats.

<u>Plan to Measure Effectiveness</u>: The Company will meet with suppliers annually to verify they have educated their suppliers, loggers & landowners on the conservation values of the specified risk. This annual audit will be documented using MREQ-DOC-012 Secondary Supplier Audit Checklist. Supplier maps, education materials and other pertinent information will be provided to the supplier to be passed on to theie suppliers, loggers and landowners.

### Southern Appalachian CBA

4. MREQ has contracted with Greener Options, Inc. to assist in the development and implementation of MREQ's certification programs. Greener Options, Inc. working with Biological Integrity, LLC attended the three FSC US Controlled Wood Regional meeting held in 2018. Mark Hughes, PhD, owner of Biological Integrity, LLC attended the Southeast Region meeting on July 31, 2018 in Atlanta, GA. Hughes actively participated in the discussion of mitigating measures for the HCVs during this meeting.

Gary Boyd, Greener Options, Inc., and Mark Hughes, Biological Integrity, LLC have reviewed the FSC US Controlled Wood Regional Meeting final report findings with MREC specifically on recommended mitigation measures for the Southern Appalachian CBA.







<u>Plan to Measure Effectiveness</u> : The Company will meet with suppliers annually to verify they have educated their suppliers, loggers & landowners on the conservation values of the specified risk. This annual audit will be documented using MREQ-DOC-012 Secondary Supplier Audit Checklist. Supplier maps, education materials and other pertinent information will be provided to the supplier to be passed on to theie suppliers, loggers and landowners.
6. Engage with and/or provide monetary or in-kind resources to conservation organizations or similar entities that are facilitating active, on-the-ground implementation of management activities to restore or maintain existing examples of LSBH, with a goal of long-term conservation of this forest type within the specified risk area and MREQ's supply area.
<u>Plan to Measure Effectiveness:</u> Company annually reviews the results of partnerships developed and implemented with conservation organizations addressing FSC Controlled Wood specified risk areas and other areas of high conservation value identified within the company's MREQ-DOC-005 FSC Controlled Wood Risk Assessment as mitigation measures.
Mesophytic Cove Sites
<ol> <li>MREQ has contracted with Greener Options, Inc. to assist in the development and implementation of MREQ's certification programs. Greener Options, Inc. working with Biological Integrity, LLC attended the three FSC US Controlled Wood Regional meeting held in 2018. Gary Boyd attended the Appalachian Region meeting on July 19, 2018 in Asheville, NC. Boyd actively participated in the discussion of mitigating measures for the HCVs during this meeting.</li> </ol>
Gary Boyd, Greener Options, Inc. and Mark Hughes, PhD, Biological Integrity, LLC have reviewed the FSC US Controlled Wood Regional Meeting final report findings with MREQ specifically on recommended mitigation measures for the Southern Appalachian CBA.
<u>Plan to Measure Effectiveness:</u> Consultant will have an annual review with the company on the high conservation value areas to review any updates or changes on the specified risk areas. Any new data or information related to threats or improvement actions through partnerships will be reviewed. Annual review will be documented on MREQ-DOC-002 Training Record.
4. MREQ will work with suppliers who source wood fiber from these forest types to educate the suppliers, their loggers and landowners and communicate the social benefits and values of Mesophytic Cove Sites, how to identify them in the field, threats from incompatible forest management activities, and opportunities for conservation through management that enhances these sites and reduces or eliminates these threats. This education and outreach measure will be documented using MREC-DOC-012 Secondary Supplier Audit Checklists.
<u>Plan to Measure Effectiveness</u> : The Company will meet with suppliers annually to verify they have educated their suppliers, loggers & landowners on the conservation values of the specified risk. This annual audit will be documented using MREQ-DOC-012 Secondary Supplier Audit Checklist. Supplier maps, education materials and other pertinent information will be provided to the supplier to be passed on to theie suppliers, loggers and landowners.
Natural Longleaf Pine Systems
<ol> <li>MREQ has contracted with Greener Options, Inc. to assist in the development and implementation of MREQ's certification programs. Greener Options, Inc. working with Biological Integrity, LLC attended the three FSC US Controlled Wood Regional meeting held in 2018. Gary Boyd attended the Appalachian Region meeting on July 19, 2018 in Asheville, NC. Boyd actively participated in the discussion of mitigating measures for the HCVs during this meeting.</li> </ol>



	Gary Boyd, Greener Options, Inc. and Mark Hughes, PhD, Biological Integrity, LLC have reviewed the FSC US Controlled Wood Regional Meeting final report findings with MREC specifically on recommended mitigation measures for the NLPS.
	<u>Plan to Measure Effectiveness:</u> Consultant will have an annual review with the company on the high conservation value areas to review any updates or changes on the specified risk areas. Any new data or information related to threats or improvement actions through partnerships will be reviewed. Annual review will be documented on MREQ-DOC-002 Training Record.
5.	MREQ will work with suppliers who source wood fiber from these areas to communicate and educate suppliers, their loggers and landowners on the social benefits and values of NLPS, threats from forest management and related loss of values, and opportunities for conservation through management that restores or maintains NLPS and reduces or eliminates these threats. Communications should recognize the importance of the forest understory and fire to NLPS. This education and outreach measure will be documented using MREQ-DOC-012 Secondary Supplier Audit Checklists.
	<u>Plan to Measure Effectiveness:</u> The Company will meet with suppliers annually to verify they have educated their suppliers, loggers & landowners on the conservation values of the specified risk. This annual audit will be documented using MREQ-DOC-012 Secondary Supplier Audit Checklist. Supplier maps, education materials and other pertinent information will be provided to the supplier to be passed on to theie suppliers, loggers and landowners.
6.	MREQ will engage with and/or provide monetary or in-kind resources to conservation organizations such as the Longleaf Alliance that are facilitating active, on-the-ground implementation of management activities to restore or maintain existing examples of NLPS, with a goal of long-term conservation of this system within the specified risk area and the MREQ's supply area.
1.	<u>Plan to Measure Effectiveness:</u> Company annually reviews the results of partnerships developed and implemented with conservation organizations addressing FSC Controlled Wood specified risk areas and other areas of high conservation value identified within the company's MREQ-DOC-005 FSC Controlled Wood Risk Assessment as mitigation measures.



	Indicator
2.4.2	The Biomass Producer has implemented appropriate control systems and procedures for verifying that natural processes, such as fires, pests and diseases are managed appropriately (CPET S7b).
Finding	The Company receives primary & secondary feedstock and does not conduct forest management activities that manage fires, pests and diseases. The Company promotes certification from certified secondary suppliers and sub-suppliers where possible. Five of the fourteen suppliers are SFI Fiber Sourcing certified. The company through its participation in the Mississippi Forestry Association will stay abreast of forest health issues. The Company will also work with state forestry agencies, as needed, to address issues of forest health. The AL Forestry Commission in its 2018 Annual Report stated there were 1,038 wildfires burning 11,309 acres for the fiscal year. As part of hazard mitigation, total prescribed fire in AL involved 12,601 burns on 944,176 acres. A total of 299 southern pine beetle spots were detected that infested 8,013 pines. More than half of these infestations were located on National Forests in the state. The GA Forestry Commission in its 2016 Annual Report stated there were 2,415 wildfires burning 9,970 acres for the fiscal year. GFC stated 2016 was lowest acreage burned since 1957. GFC foresters incorporated insect, disease, or invasive species advise into 361 management cases involving 9,012 acres for the year. The MS Forestry Commission in its 2018 Annual Report stated there were 796 wildfires that burned 11,204 acres for the fiscal year. Prescribed burning was completed on 25,546 acres. The Exotic Invasive Species Plan addressed the detection, identification, information, control, and abatement of six species of concern that impact the forest resources of MS. A total of 86 landowners were inspected for invasive species with 831 infested spots treated accounting for 253 acres. The TN Forestry Commission in its 2018 Annual Report stated they responded to 583 wildfires that burned 5,837 acres, compared to 74,816 acres in FY 2017. They detected no major southern pine beetle (SPB) activity despite increasing populations reported in some areas of the southeast U.S. pine belt.
Means of Verification	Employee interviews, MS Forestry Association membership
Evidence Reviewed	<ul> <li>AL Forestry Commission Annual Report, 2018 <u>http://www.forestry.alabama.gov/Pages/Other/Forms/Annual_Report_20_18.pdf</u></li> <li>GA Forestry Commission Annual Report, 2016 <u>http://www.gfc.state.ga.us/resources/publications/2016%20Annual%20Report.pdf</u></li> <li>MS Forestry Commission Annual Report, 2018 <u>https://www.mfc.ms.gov/sites/default/files/MFC%202018%20Annual%20Report%20Web</u> <u>%20Compressed.pdf</u></li> <li>TN Forestry Commission Annual Report, 2018 <u>https://www.tn.gov/content/dam/tn/agriculture/documents/forestry/2018_TFC_report_web.pdf</u></li> </ul>
Risk Rating	X Low Risk
Comment or Mitigation Measure	



	Indicator
2.4.3	The Biomass Producer has implemented appropriate control systems and procedures for verifying that there is adequate protection of the forest from unauthorised activities, such as illegal logging, mining and encroachment (CPETS7c).
Finding	There are appropriate control systems and procedures to ensure that legality of ownership and land use can be demonstrated for the Company's supply area. Illegal harvesting is prohibited by state laws. In most states the timber buyers and/or harvesting companies have to be licensed in order to conduct their business. Evidence indicates that major violations are prosecuted and legal liability is enforced. There is no evidence suggesting that illegal logging is a wide scale problem in the United States (US). The Company has implemented the FSC US Controlled Wood National Risk Assessment (US NRA) which has determined Controlled Wood Category 1: Illegally harvested wood to be "low risk". MREQ-DOC-005 FSC Controlled Wood Risk Assessment supports this low risk assessment through the listing of various applicable laws showcasing the rule of law and public agency governance.
Means of Verification	Fiber Purchase Agreements, State laws, MREQ-DOC-005 FSC Controlled Wood Risk Assessment
Evidence Reviewed	<ul> <li>Fiber Purchase Agreements</li> <li>FSC US Controlled Wood National Risk Assessment (US NRA)</li> <li>MREJ-DOC-005 FSC Controlled Wood Risk Assessment</li> <li>State laws addressing illegal logging and wood theft are as follows: <u>Alabama Laws</u></li> <li>ALA. CODE 1975 § 9-13-62 awards double damages for a trespass that is committed <i>knowingly and intentionally.</i>"</li> <li>Article 3 - Regulations as to Cutting, Removal, Purchase, etc., of Forest Products § 9-13-60 Unauthorized cutting, removal, transportation, etc., of timber or other forest products</li> <li>§ 9-13-61 Charges in affidavits, information or indictments under article; proof of title, etc.</li> <li>§ 9-13-62 Liability</li> <li>§ 9-13-63 Record of purchases, etc., of manufactured or semi-manufactured forest products; provision of false information to purchasers, etc.; failure to maintain record, etc.</li> <li>§ 9-13-64 Powers of State Forestry Commission employees as to enforcement of article, etc.</li> <li>§ 9-13-65 Disposition of fines</li> <li>Article 9 - Timber Theft Equipment Condemnation</li> <li>§ 9-13-221 Seizure of vehicle and equipment upon arrest for certain criminal violations; delivery to district forester</li> <li>§ 9-13-223 Report of seizure to district attorney</li> <li>§ 9-13-224 Notice to creditors; institution of condemnation proceedings; legal title to equipment</li> <li>§ 9-13-225 Forfeiture of equipment upon judgment; costs of proceedings; State Forester to keep records</li> <li>§ 9-13-226 Use of proceeds from sale of equipment; award and distribution determined by State Forester</li> <li>§ 9-13-227 Provisions cumulative</li> <li>Logging Notice Act - Act 12-0257</li> </ul>



Chapter 536 Timber and Lumber
§ 536.13 Stamp or brand for logs.
Any person engaged in this state in the business of getting out, buying, selling, or
S 526 14 Pronde to be recorded by clerk of circuit court
§ 556.14 Brands to be recorded by clerk of circuit court. A person may execute a written deeleration that also ar he has adopted a brand.
A person may execute a written declaration that she of he has adopted a brand,
S 526 15 May provent use by others
Any person who has had her or his brand recorded in any county, may prevent other
nersons from using the same in said county by
§ 536 16 Prima facie evidence of ownershin
Any log found in any county branded with a brand recorded in said county by any
person shall be deemed prima facie to be the
§ 536.17 Where two or more brands the same.
In case there shall be recorded in the same county two or more brands the same, or
substantially the same, the brand first recorded shall
§ 536.18 Defacing the mark or brand of lumber and timber.
If any person shall fraudulently alter, change or deface the duly recorded mark, brand,
or stamp of any lumber, logs or timber, or shall fraudulently
§ 536.19 Unlawful use of recorded log brand or stamp.
Any person who shall unlawfully use any recorded log brand or stamp of another shall
be guilty of a misdemeanor of the second degree, punishable
Georgia Laws
House Bill - HB 790 (A BILL TO BE ENTITLED AN ACT) Signed by Governor: April 29.
2014 Effective Date: July 1, 2014
Provides additional enforcement authority to Georgia Forestry Commission investigators
In cases involving the unauthorized cutting or cutting and carrying away of timber from the
property of another damages shall be awarded in accordance with GA. CODE ANN. § 51-
12-50.
Amends GA. CODE ANN. § 51-12-50 whereas damages shall be: (1) Treble the fair
market value of the trees cut as they stood; (2) Treble the diminished fair market value of
any trees incidentally harmed; (3) Costs of reasonable reforestation activities related to
the plaintiff's injury; and (4) Attorney fees and expenses of litigation. When defendant is a
willful trespasser, plaintiff may receive punitive damages.
Amends GA. CODE ANN. § 12-6-23 relating to wood load ticket required for wood
removal, so as to require purchasers to provide the proper tickets to sellers of timber
within 20 days
GA Codes Title 12 Forest Resources and other Plant Life
Article 1 – Forestry Resources
GA_CODE § 12-6-23 - Wood load ticket required for wood removal: form: exceptions
CA CODE § 12.6.24 Notice of timber her resting operations
bttp://etatutes.laws.com/georgia/title_12/ebanter_6/article_1/part_1attethach_IOTa7rl6_dayf
http://statules.iaws.com/georgia/itile=rz/chapter-o/article=r/part-ra#sthash.j91CZri0.dpul
Louisiana Laws
A. Thett of timber is the misappropriation or taking of timber belonging to another, or
proceeds derived from the sale of such timber, either taken without the consent of the
owner, or by means of fraudulent conduct, practices, or representations, with the intent to
deprive the owner permanently of the timber or proceeds derived therefrom.
B.(1) Whoever commits the crime of theft of timber when the misappropriation or taking
amounts to a value of twenty-five thousand dollars or more shall be fined not more than
ten thousand dollars and imprisoned at hard labor for not more than ten years. (2) When
the misappropriation or taking amounts to a value of less than twenty-five thousand
dollars, the offender shall be imprisoned, with or without hard labor, for not more than five
years, fined not more than five thousand dollars, or both.



C. The enforcement division of the office of forestry within the Department of Agriculture and Forestry shall have primary responsibility for collection, preparation, and central registry of information relating to theft of timber and shall assist all law enforcement agencies in investigations of violations of the provisions of this Section. RS 3:4278.1. Trees, cutting without consent; co-owners and co-heirs; penalty A.(1) It shall be unlawful for any person to cut, fell, destroy, remove, or to divert for sale or use, any trees, or to authorize or direct his agent or employee to cut, fell, destroy, remove, or to divert for sale or use, any trees, growing or lying on the land of another, without the consent of, or in accordance with the direction of, the owner or legal possessor, or in accordance with specific terms of a legal contract or agreement. (2) It shall be unlawful for any co-owner or co-heir to cut, fell, destroy, remove, or to divert for sale or use, any trees, or to authorize or direct his agent or employee to cut, fell, destroy, remove, or to divert for sale or use, any trees, growing or lying on co-owned land, without the consent of, or in accordance with the direction of, the other co-owners or co-heirs, or in accordance with specific terms of a legal contract or agreement. The provisions of this Paragraph shall not apply to the sale of an undivided timber interest pursuant to R.S. 3:4278.2. B. Whoever willfully and intentionally violates the provisions of Subsection A of this Section shall be liable to the owner, co-owner, co-heir, or legal possessor of the trees for civil damages in the amount of three times the fair market value of the trees cut, felled, destroyed, removed, or diverted, plus reasonable attorney fees and costs. C. Whoever violates the provisions of Subsection A of this Section in good faith shall be liable to the owner, co-owner, co-heir, or legal possessor of the trees for three times the fair market value of the trees cut, felled, destroyed, removed, or diverted, if circumstances prove that the violator should have been aware that his actions were without the consent or direction of the owner, co-owner, co-heir, or legal possessor of the trees. D. If a good faith violator of Subsection A of this Section fails to make payment under the requirements of this Section within thirty days after notification and demand by the owner, co-owner, co-heir, or legal possessor, the violator shall also be responsible for the reasonable attorney fees and costs of the owner, co-owner, co-heir, or legal possessor. E. The provisions of this Section shall not apply to the clearing and maintenance of rights of way or to utility service situations where a utility is acting in good faith to minimize the damage or harm occasioned by an act of God. The provisions of this Section shall not apply to land surveying by or under the direction of a registered professional land surveyor, duly registered under the laws of the state of Louisiana. F. Whoever violates the provisions of Subsection A as they relate to the cutting of standing cypress trees on water bottoms owned by the state of Louisiana shall, in addition to the penalties otherwise provided in this Section, be subject to a fine not to exceed five thousand dollars, imprisonment not to exceed six months, or both. G. Notwithstanding any other provision of law to the contrary, a civil action pursuant to provisions of this Section shall be subject to a liberative prescriptive period of five years. RS 3:4278.2. Sale of undivided timber interest; consent of co-owners; theft A. A co-owner or co-heir of land may execute an act of timber sale whereby he sells his undivided interest in the timber, and any condition imposing a time period within which to remove the timber shall commence from the date of its execution. B. A buyer who purchases the timber from a co-owner or co-heir of land may not remove the timber without the consent of the co-owners or co-heirs representing at least eighty percent of the ownership interest in the land, provided that he has made reasonable effort to contact the co-owners or co-heirs who have not consented and, if contacted, has offered to contract with them on substantially the same basis that he has contracted with the other co-owners or co-heirs. C. A co-owner or co-heir of the land who does not consent to the exercise of such rights has no liability for the cost of timber operations resulting from the sale of the timber, and shall receive from the buyer the same price which the buyer paid to the other co-owners



	or co-heirs. The consenting co-owners or co-heirs shall agree to indemnify and hold harmless the nonconsenting co-owners or co-heirs for any damage or injury claims which may result from such operations.
	D. If the nonconsenting co-owner or co-heir fails or refuses to claim his portion of the sale price of the timber, the buyer shall be obligated to hold such funds in escrow, for and on behalf of such nonconsenting co-owner or co-heir and any interest or other income earned by such funds in escrow shall inure to the benefit of the co-owner or co-heir for whom they are held.
	E. Failure to comply with the provisions of this Section shall constitute prima facie evidence of the intent to commit theft of the timber by such buyer.
	F. The sale of an undivided interest in timber that constitutes community property shall be governed by the provisions of Chapter 2 of Title VI of Book III of the Civil Code.
	G. Notwithstanding any other provision of law to the contrary, a civil action pursuant to provisions of this Section shall be subject to a liberative prescriptive period of five years. RS 56:1901-07 Endangered Species Act
	RS 56:1840 Louisiana Scenic Rivers Act
	<ul> <li><u>Mississippi Laws</u></li> <li>MISSISSIPPI CODE OF 1972</li> <li>§ 69-29-1. Mississippi Agricultural and Livestock Theft Bureau established</li> <li>§ 69-29-1. (h) To investigate, prevent, apprehend and arrest those persons anywhere in the state who are violating any of the laws administered by the Department of Agriculture and Commerce including, but not limited to, timber theft.</li> </ul>
	<ul> <li><u>North Carolina Laws</u></li> <li>N.C. GEN. STAT. § 1-539 "awards double damages for a timber trespass that occurs without the consent and permission of the bona fide owner or an act of arson if a defendant willfully and intentionally set on fire, or cause to be set on fire" timber on the land of another."</li> <li>N.C. GEN STAT. § 14-128 "considers anyone committing a willful timber trespass guilty of a Class 1 misdemeanor, provided the offender is not an officer, agent, or employee of the Department of Transportation who committed the act within a right-of-way or easement of the Department of Transportation."</li> <li>N.C. GEN. STAT. § 1-487 "requires that when a title to timberland is contested, either party is not to harvest timber until ownership is determined by court action."</li> </ul>
	<ul> <li><u>Tennessee Laws</u></li> <li>TCA 43-28-312 Cutting timber from property of another – Civil liability.</li> <li>(a) (1) Civil liability for the negligent cutting of timber from the property of another shall be in an amount double that of the current market value of the timber.</li> </ul>
Risk Rating	X Low Risk
Comment or Mitigation Measure	



	Indicator
2.5.1	The Biomass Producer has implemented appropriate control systems and procedures for verifying that legal, customary and traditional tenure and use rights of indigenous people and local communities related to the forest are identified, documented and respected (CPET S9).
	MREQ-POL-001 Sustainability Policy states the Company will abide by all laws and regulations, including those laws associated with traditional and civil rights.
Finding	Harvesting in the supply basin presents a low risk of violation of traditional, civil and collective rights based on the following factors: (1) There is no UN Security Council ban on timber exports from the country concerned; (2) The country or district is not designated a source of conflict timber (e.g. USAID Type 1 conflict timber); (3) There are recognized and equitable processes in place to resolve conflicts of substantial magnitude pertaining to traditional rights including use rights, cultural interests or traditional cultural identity in the district concerned; and (4) There is no evidence of violation of the ILO Convention 169 on Indigenous and Tribal Peoples taking place in the forest areas in the district concerned. The Company has implemented the FSC US Controlled Wood National Risk Assessment (US NRA) which has determined Controlled Wood Category 2: Wood harvested in violation of traditional and human rights to be "low risk".
Means of Verification	MREQ-POL-001 Sustainability Policy, FSC US Controlled Wood National Risk Assessment (US NRA), Stakeholder consultation correspondence
Evidence Reviewed	<ul> <li>Stakeholder consultation correspondence</li> <li>MREQ-POL-001 Sustainability Policy</li> <li>MREQ-DOC-005 FSC Controlled Wood Risk Assessment</li> <li>FSC US Controlled Wood National Risk Assessment (US NRA)</li> </ul>
Risk Rating	X Low Risk
Comment or Mitigation Measure	



	Indicator
2.5.2	The Biomass Producer has implemented appropriate control systems and procedures for verifying that production of feedstock does not endanger food, water supply or subsistence means of communities, where the use of this specific feedstock or water is essential for the fulfilment of basic needs.
Finding	State forestry Best Management Practices (BMP) set forth guidelines for maintaining and/or improving soil quality. MREQ-POL-001 Sustainability Policy states the Company requires BMP compliance with the harvesting of all wood fiber it receives. Fiber Purchase Agreements require BMP compliance. The Company verifies BMP compliance as part of its annual supplier audits. BMP compliance is documented using MREQ-DOC-012 Secondary Supplier Audit Checklists. The company requires their suppliers, sub-suppliers and loggers to maintain SFI State Implementation Committee (SIC) logger training. This training educates loggers on BMPs,
	threatened & endangered species and biodiversity. The Company has access to SIC logger training databases to verify logger training. State forestry agencies conduct BMP compliance checks randomly or upon request by stakeholders. State BMP compliance reports are available for review by the Company.
Means of Verification	<ul> <li>Fiber Purchase Agreements – Signed agreements verify suppliers comply with state BMPs &amp; all loggers are maintaining their SIC logger training requirement</li> <li>MREC-DOC-012 Secondary Supplier Audit Checklists – Suppliers are audited by company at least once a year to verify:         <ul> <li>Certification status of supplier</li> <li>Logger Training status &amp; % trained of sub-suppliers</li> <li>BMP compliance and/or regulatory violations of supplier &amp; sub-suppliers</li> </ul> </li> <li>Company reviews the most current and available state BMP compliance reports annually</li> </ul>
Evidence Reviewed	<ul> <li>Fiber Purchase Agreements</li> <li>MREQ-POL-001 Sustainability Policy</li> <li>MREQ-DOC-012 Secondary Supplier Audit Checklists</li> <li>Alabama Professional Logging Manager https://www.alaforestry.org/page/PLMGeneral</li> <li>Florida Master Logger</li> <li>http://floridaforest.org/programs/master-logger/master-logger-search-tool/</li> <li>Georgia Master Timber Harvester</li> <li>http://gamth.org/</li> <li>Louisiana Master Logger</li> <li>https://www.laforestry.com/training-program</li> <li>Mississipi Professional Logging Manager</li> <li>http://loggered.msstate.edu/</li> <li>North Carolina ProLogger Program</li> <li>https://www.ncforestry.org/prologgers/prologger-lists/</li> <li>Tennessee Master Logger</li> <li>http://www.inforestry.com/files/1131/masterloggerdb.cfm</li> <li>Alabama Annual BMP Reports</li> <li>http://www.forestry.alabama.gov/Pages/Management/BMP_Practices.aspx</li> <li>Florida Silviculture Best Management Practices 2017 Implementation Survey Report</li> <li>https://www.freshfromflorida.com/content/download/78966/2320474/SPMP_2017_Imple</li> <li>mentationSurveyReport.pdf</li> <li>Results of Georgia's 2017 Silvicultural Best Management Practices Implementation and Compliance Survey</li> <li>http://www.ffc.state.ga.us/forest-management/water- guality/bmps/BMP%20Survey%202017%20Results%20Report%20Final%20Corrected%</li> </ul>



	Louisiana 2015 BMI     bttp://www.ldof.etetr	P Survey Results	2015 PMD Populto adf	
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	https://www.mfc.ms	gov/sites/default/files/2016 BMP	%20Implementation Survey V3 p	
	df		<u> </u>	
	An Assessment of F	An Assessment of Forestry Best Management Practices in North Carolina 2012-2016		
	<u>nttps://www.nctores</u> 2016 pdf	https://www.nctorestservice.gov/water_quality/pdf/BMP_Assessment_Report_2012-		
	<ul> <li>Implementation of Forestry Best Management Practices in Tennessee (2017)</li> </ul>			
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	Indicator		
2.6.1	The Biomass Producer has implemented appropriate control systems and procedures for verifying that appropriate mechanisms are in place for resolving grievances and disputes, including those relating to tenure and use rights, to forest management practices and to work conditions.		
	The Company has complaint mechanisms in place MREQ-PROC-001 Chain of Custody Procedures and MREQ-PROC-002 Due Diligence Procedures. These procedures provide guidance on when and how the Company respond to grievances and complaints. The complaints procedures is as follows:		
	<ol> <li>Individual complaints regarding fiber sourcing may be filed with MREQ by mailing written complaints with specific reference to the Controlled Wood Standard variance to: Terry Dunlap Mohegan Renewable Energy - Quitman</li> </ol>		
	252 Hickory Street Quitman MS 39355		
Finding	<ol> <li>When complaints related to the MREQ Due Diligence System are received, the compliant is recorded in MREQ-DOC-007 FSC Controlled Wood Complaints Log. A detailed description of the complaint will be recorded in MREQ-DOC-006 FSC Controlled Wood Complaints Report.</li> </ol>		
	<ol> <li>Within two (2) weeks of receipt of the complaint, stakeholders will be notified of MREQ complaint procedures and complainants will be sent a response acknowledging receipt of complaint.</li> </ol>		
	4. MREQ will conduct a preliminary assessment to determine whether evidence provided in a complaint is or is not substantial, by assessing the evidence provided against the risk of using material from unacceptable sources. Following a preliminary MREQ assessment of evidence provided, complainants will be contacted for dialogue to resolve substantiated complaints before further action is taken.		
	<ol> <li>Substantiated complaints will be forward to the certifying body and FSC National Office within two (2) weeks of receipt of the complaint, outlining steps to be taken to resolve the complaint and precautionary approaches to sourcing while the complaint is pending.</li> </ol>		



Magner	<ol> <li>Field evidence, sourcing records, and supplier documentation will be reviewed within two months to verify complaints deemed to be substantial. Steps to include review of Tract Information sheets to confirm District of Origin for current deliveries and stepped up intensity of BMP audits to assess field compliance with Controlled Wood expectations.</li> <li>Corrective actions will be developed to correct the circumstances leading to substantiated and verified complaints.</li> <li>Corrective actions will be communicated and implemented with relevant suppliers. If corrective actions are not accepted or cannot be implemented, relevant materials and/or suppliers will be excluded from delivering to MREQ until corrective actions are implemented and confirmed.</li> <li>Verification of implementation of the corrective actions will be achieved through tract visits, supplier discussions and document review.</li> <li>MREQ will inform the complainant, the certification body, and the relevant FSC National Office of the results of the complaint and any actions taken towards its resolution, and for maintaining copies of relevant correspondence.</li> <li>All correspondence will be recorded and filed by the Management Representative.</li> </ol>
Means of Verification	Procedures
Evidence Reviewed	MREQ-PROC-001 Chain of Custody Procedures MREQ-PROC-002 Due Diligence Procedures
Risk Rating	X Low Risk
Comment or Mitigation Measure	

	Indicator		
2.7.1	The Biomass Producer has implemented appropriate control systems and procedures for verifying that Freedom of Association and the effective recognition of the right to collective bargaining are respected.		
Finding	The Company recognizes the right to collective bargaining and the Freedom of Association. The Company is FSC Chain of Custody certified and has signed the Self Declaration which demonstrates support of FSC Policy FSC-POL-01-004, Policy for the Association of Organizations with FSC.		
	Federal laws in the United States are codified in both the National Labor Relations Act of 1935 and OSHA protect workers' rights to collective bargaining. AL, FL, GA, LA, MS, NC & TN are "Right to Work" states.		
Means of Verification	Employee interviews, FSC Self Declaration, Federal Laws		
Evidence Reviewed	<ul> <li>FSC Self Declaration</li> <li>National Labor Relations Act <u>https://www.nlrb.gov/how-we-work/national-labor-relations-act</u> </li> <li>Occupational Safety and Health Administration (OSHA) <u>https://www.osha.gov/</u> </li> </ul>		
Risk Rating	X Low Risk    Specified Risk   Unspecified Risk at RA		



Comment or	
Mitigation	
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	Indicator		
2.7.2	The Biomass Producer has implemented appropriate control systems and procedures for verifying that feedstock is not supplied using any form of compulsory labour.		
Finding	The United States Federal Constitution 13 <sup>th</sup> Amendment provides "Neither slavery nor involuntary servitude, except as a punishment for crime whereof the party shall have been duly convicted, shall exist within the United States, or any place subject to their jurisdiction". Further, benefiting from compulsory labor in the United States is a federal crime punishable by up to 20 years in prison. The Company also has policies on workers rights, discrimination, etc.		
Means of Verification	Company employment policies, Employee interviews		
Evidence Reviewed	<ul> <li>Employment Posters</li> <li>Amendment XIII of the United States Constitution <u>https://www.archivesfoundation.org/documents/13th-amendment/</u></li> </ul>		
Risk Rating	X Low Risk		
Comment or Mitigation Measure			

	Indicator		
2.7.3	The Biomass Producer has implemented appropriate control systems and procedures to verify that feedstock is not supplied using child labour.		
Finding	State and Federal laws, such as the Equal Employment Opportunity and OSHA, are in place to prohibit child labor.		
Means of Verification	Review of Company employment policies, Employee interviews		
Evidence Reviewed	<ul> <li>Employee Handbook</li> <li>Employment Posters</li> <li>US Department of Labor <u>https://www.dol.gov/whd/childlabor.htm</u></li> <li>AL Department of Labor <u>https://labor.alabama.gov/uc/ChildLabor/child-labor.aspx</u></li> <li>Florida Child Labor Law <u>https://hr.fsu.edu/pdf/publications/compliance/childlaborlaw.pdf</u></li> <li>Louisiana Workforce Commission <u>http://www.laworks.net/ORS_minors.asp</u></li> <li>Mississippi Department of Employment Security</li> </ul>		



	<u>https://mdes.ms.g</u> issues/	gov/employers/unemployment-tax/	employer-resources/employment-
Risk Rating	X Low Risk	□ Specified Risk	Unspecified Risk at RA
Comment or Mitigation			
Measure			

	Indicator		
2.7.4	The Biomass Producer has implemented appropriate control systems and procedures for verifying that feedstock is not supplied using labour which is discriminated against in respect of employment and occupation.		
Finding	State and Federal laws, such as the Equal Employment Opportunity and OSHA, are in place to provide rights to workers.		
Means of Verification	Employee interviews, Company Employee Handbook, Federal laws		
Evidence Reviewed	<ul> <li>Employee Handbook</li> <li>Employee Posters</li> <li>U.S. Equal Employment Opportunity Commission <u>https://www.eeoc.gov/eeoc/</u></li> <li>Occupational Safety and Health Administration (OSHA) <u>https://www.osha.gov/</u></li> </ul>		
Risk Rating	X Low Risk		
Comment or Mitigation Measure			

	Indicator
2.7.5	The Biomass Producer has implemented appropriate control systems and procedures for verifying that feedstock is supplied using labour where the pay and employment conditions are fair and meet, or exceed, minimum requirements.
Finding	State and Federal laws, such as the Equal Employment Opportunity and OSHA, are in place to ensure pay and employment conditions are fair.
Means of Verification	Employee interviews, Company Employee Handbook, Federal laws
Evidence Reviewed	<ul> <li>Employee Handbook</li> <li>Employee Posters</li> <li>U.S. Equal Employment Opportunity Commission <u>https://www.eeoc.gov/eeoc/</u></li> <li>Occupational Safety and Health Administration (OSHA) <u>https://www.osha.gov/</u></li> </ul>



Risk Rating	X Low Risk	□ Specified Risk	Unspecified Risk at RA
Comment or Mitigation			
Measure			

	Indicator		
2.8.1	The Biomass Producer has implemented appropriate control systems and procedures for verifying that appropriate safeguards are put in place to protect the health and safety of forest workers (CPET S12).		
Finding	State and Federal laws, such as OSHA to ensure worker health and safety in the work place. The Company has policies on workers' health and safety. The Company has a health and safety program that is managed by dedicated personnel. This program includes the use of personal protective equipment and safety meetings.		
Means of Verification	Training records, Employee interviews		
Evidence Reviewed	<ul> <li>Training Records</li> <li>Employee Handbook</li> <li>Employee Posters</li> <li>Occupational Safety and Health Administration (OSHA) <u>https://www.osha.gov/</u></li> </ul>		
Risk Rating	X Low Risk		
Comment or Mitigation Measure			

	Indicator
2.9.1	Biomass is not sourced from areas that had high carbon stocks in January 2008 and no longer have those high carbon stocks.
Finding	USDA Forest Service FIA data on carbon storage for the Company's supply area was determined to be 1,231 billion short tons in 2008 (AL-2008; FL-2009; GA-2008; LA-2008; MS-2009; NC-2009; TN-2008). In 2015-18 (AL-2018; FL-2016; GA-2017; LA-2016; MS-2017; NC-2016; TN-2015) the supply area was determined to have 1,600 billion short tons of carbon stock. This accounts for 369.382 billion short tons of more carbon storage (11.62% annual increase) in 7-10 years.
Means of Verification	USDA Forest Service FIA data
Evidence Reviewed	Carbon Reports from USDA Forest Service Forest Inventory & Analysis website <u>https://www.fia.fs.fed.us/tools-data/</u>
Risk Rating	X Low Risk



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Mitigation	
Measure	

	Indicator
2.9.2	Analysis demonstrates that feedstock harvesting does not diminish the capability of the forest to act as an effective sink or store of carbon over the long term.
Finding	USDA Forest Service FIA data on carbon storage for the Company's supply area was determined to be 1,231 billion short tons in 2008 (AL-2008; FL-2009; GA-2008; LA-2008; MS-2009; NC-2009; TN-2008). In 2015-18 (AL-2018; FL-2016; GA-2017; LA-2016; MS-2017; NC-2016; TN-2015) the supply area was determined to have 1,600 billion short tons of carbon stock. This accounts for 369.382 billion short tons of more carbon storage (11.62% annual increase) in 7-10 years.
Means of Verification	USDA FOIESI SEIVICE FIA dala
Evidence Reviewed	Carbon Reports from USDA Forest Service Forest Inventory & Analysis website <u>https://www.fia.fs.fed.us/tools-data/</u>
Risk Rating	X Low Risk
Comment or Mitigation Measure	

	Indicator
2.10.1	Genetically modified trees are not used.
Finding	The Company has implemented the FSC US Controlled Wood National Risk Assessment (US NRA) which has determined Controlled Wood Category 5: Wood harvested in violation of traditional and human rights to be "low risk".
	There are no known operational plantings on GMO trees in the US.
Means of Verification	FSC US Controlled Wood National Risk Assessment (US NRA)
Evidence Reviewed	FSC US Controlled Wood National Risk Assessment (US NRA)
Risk Rating	X Low Risk
Comment or Mitigation Measure	