



Supply Base Report:

Nature's Earth Pellet Energy Main (Initial) Audit

Sustainable Biomass Program
sbp-cert.org





Completed in accordance with the Supply Base Report Template Version 2.0

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

Document history

| | |
|-------------|--------------------------|
| Version 1.0 | Published 26 March 2015 |
| Version 2.0 | Published 10 August 2023 |

© Copyright Sustainable Biomass Program Limited 2023

Table of contents

1 Overview

2 Description of the Biomass Producer and the Supply Base

- 2.1 Description of the company
- 2.2 Detailed description of the Supply Base
- 2.3 Feedstock information

3 Supply Base Risk Assessments and Risk Management Measures

- 3.1 Summary of the Supply Base Evaluation
- 3.2 Conflicts with applicable national and sub-national legislation
- 3.3 Risk Management Measures

4 Stakeholder engagement

- 4.1 General description
- 4.2 Response to stakeholder comments

5 Report updates and approval

Annex 1: Detailed findings for Supply Base Evaluation indicators

Annex 2: RED II Supply Base Evaluation

Annex 3: SBP Processing residues and/or Post-consumer feedstock requirements

1 Overview

| | |
|--|--|
| Producer name: | Nature's Earth Pellet Energy |
| Producer address: | 125-21st Ave SW, 35481 Reform, United States |
| SBP Certificate Code: | |
| Geographic position: | 33.379841, -88.016406 |
| Primary contact: | Gary Boyd, +1 901 581 4360, gary.boyd@greener-options.com |
| Company website: | www.naturesearth.com |
| Date report finalised: | |
| SBR reporting period from: | 01 Nov 2022 |
| SBR reporting period to: | 31 Oct 2023 |
| Name of the Certification Body: | SCS Global Services |
| Certification Body Approval date: | |
| SBP Standard(s) used: | SBP Standard 1: Feedstock Compliance v2.0, SBP Standard 2: Feedstock Verification v2.0, SBP Standard 4: Chain of Custody v2.0, SBP Standard 5: Collection and Communication of Data v2.0, Instruction Document 5E: Collection and Communication of Energy and Carbon Data v2.0 |
| Feedstock origin (countries) | United States |
| Weblink to Standard(s) used: | https://sbp-cert.org/documents/standards-documents/standards |



2 Description of the Biomass Producer and the Supply Base

2.1 Description of the company

Nature's Earth Pellet Energy is a pellet mill located in Reform, AL. The company's corporate office is located in West Palm Beach, FL. This facility purchases tertiary feedstock in the form of softwood (pine) shavings through its twenty (20) feedstock suppliers. The supply base for the pellet mill and its suppliers includes one hundred sixty three (163) counties encompassing 27.03 million hectares in Alabama (62), Florida (4), Georgia (6), Kentucky (3), Mississippi (61) & Tennessee (27 counties) within the United States.

Products included in the scope of SBP Certification: *Pellets*

Number of employees: *50*

Annual maximum production capacity (metric tonnes): *115000*

Number of direct feedstock suppliers: *19*

Approximate number of feedstock sub-suppliers: *156*

The BP purchases tertiary feedstock in the form of softwood (pine) shavings through its twenty (20) feedstock suppliers. Four of the twenty suppliers are re-manufacturers of lumber and purchase lumber from six sawmills located in AL and MS. The remaining suppliers are sawmills and purchases logs from approximately hundred fifty (150) producers/loggers. The supply base for the pellet mill and its suppliers includes one hundred sixty three (163) counties encompassing 27.03 million hectares in Alabama (62), Florida (4), Georgia (6), Kentucky (3), Mississippi (61) & Tennessee (27 counties) within the United States.

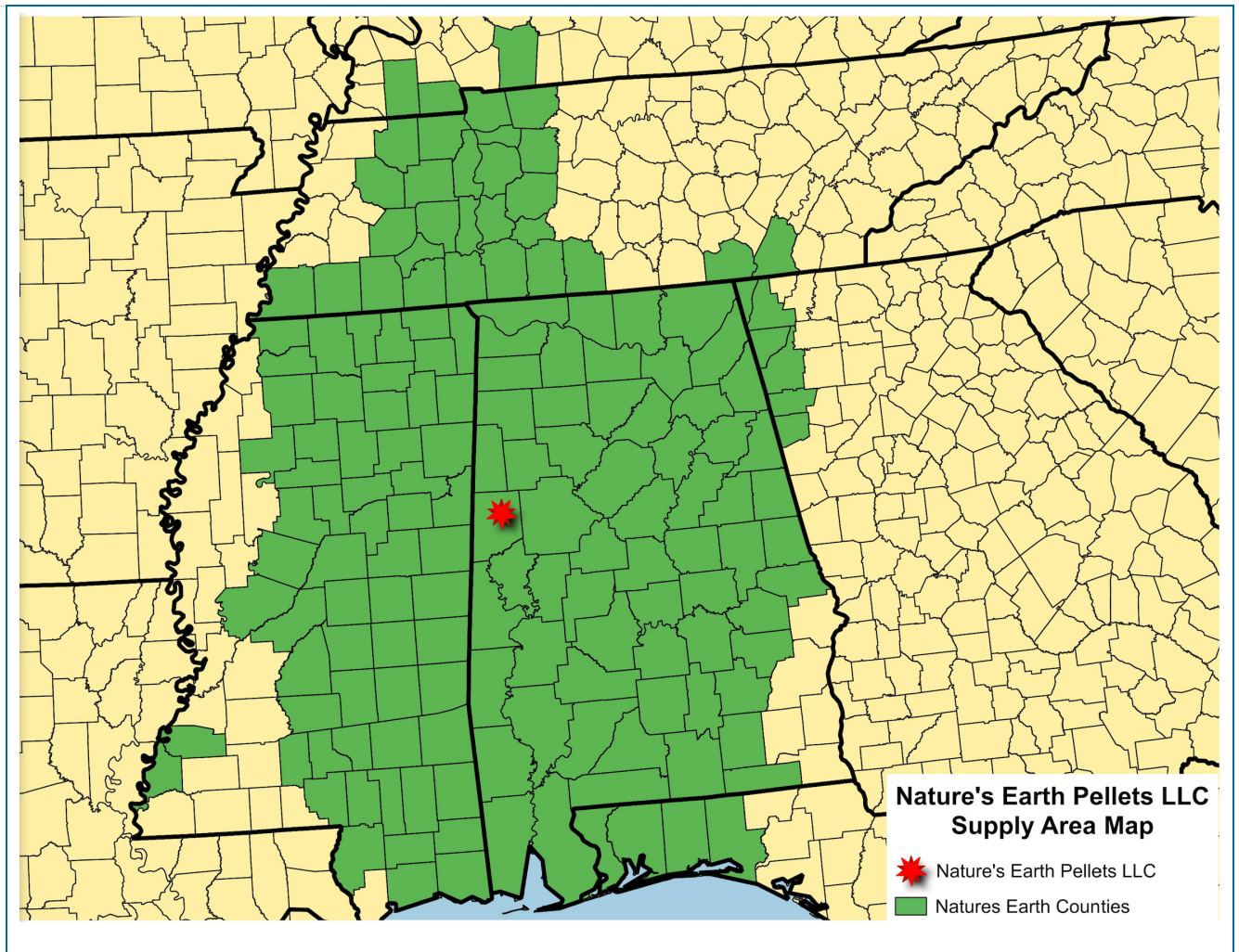
2.2 Detailed description of the Supply Base

Guidance: Tables below have been generated automatically for each sourcing country based on the selection of 'Feedstock origin (countries)' in section 1 above.

Annex 1 is generated by the system if the SBP SBE is used without Regional Risk Assessment(s) (RRAs). In case RRA(s) is used, further details shall be given only in section 3 below.

Annex 2 is generated if RED II SBE is in the scope for each country separately.

| | |
|---|---|
| Country | United States |
| Area/Region | Southeast Region |
| Exclusions | None |
| Feedstock types | Procession residues |
| Feedstock Product Groups | Processing residues feedstock (4A) |
| Feedstock inputs | SBP Compliant feedstock |
| Is the forest managed to supply energy and non-energy markets? | No |
| For the forests in the Supply Base, is there an intention to retain, restock or encourage natural regeneration within 5 years of felling? | Yes - Majority |
| Risk assessment(s) | Yes – Biomass Producer's own risk assessment used (SBE) |
| Provide a concise summary of why a SBE was determined to be required or not required here: | |
| The BP conducted its own SBE because no Regional Risk Assessment (RRA) exists in the southeastern United States. The BP completed this SBE because they want to certify all feedstock as SBP-compliant. | |
| Feedstock types included in SBE: | Procession residues |
| Includes RED II SBE: | Yes |
| Size of Supply Base area (million ha): | 27.0300 |
| Map(s) of the Supply Base area: | |



2.3 Feedstock information

a. Total volume of Feedstock: 1-200,000 tonnes

b. Volume of primary feedstock: 0

c. List of all the species in primary feedstock, including scientific name:

| | |
|-----------------|----------------|
| Pinus taeda | Loblolly pine |
| Pinus elliotii | Slash pine |
| Pinus palustris | Longleaf pine |
| Pinus echinata | Shortleaf pine |
| Pinus serotina | Pond pine |

d. Was the feedstock used in the biomass removed from a forest as part of a pest/disease control measure or a salvage operation? N/A

Explanation:

e. Hardwood (i.e. broadleaf trees): specify proportion of feedstock from (%): 0.00

f. Softwood (i.e. coniferous trees): specify proportion of feedstock from (%): 0.00

g. Proportion of feedstock composed of or derived from saw logs by weight (%): 0.00

h. Indicate how you determine the proportion of saw log:

i. Roundwood from fellings from forests with > 40 yr rotation times - Average % volume of fellings delivered to BP (%): 0.00

j. Select forest type(s) where the primary feedstock was sourced from:

k. Select the main harvesting system(s) used for the sourced primary feedstock:

l. Volume of primary feedstock from primary forest:

m. Volume of processing residues feedstock: 1-200,000 tonnes

Physical form of the feedstock: Other (specify)

n. Share of SBP-recognised system claim for processing residues:

2 % FSC

10 % SFI

10 % PEFC

o. Volume of post-consumer feedstock: 0

Physical form of the feedstock: Other (specify)

p. Estimated amount of REDII-compliant sustainable feedstock that could be collected annually by the BP: 200000 tonnes

q. What is the estimated amount of REDII-compliant sustainable feedstock that could be harvested annually in a Supply Base (estimated): 66581060 tonnes

Explanation: Volume based on USDA TPO Report (2022) for BP's defined supply area.

3 Supply Base Risk Assessments and Risk Management Measures

Guidance: Biomass Producers shall demonstrate that any specified risks of sourcing feedstock not in compliance with SBP Standard 1 have been adequately reduced to low risk, following Standard 2 requirements. Following section applies to Biomass Producer's implementing SBP Supply Base Evaluation (SBP RRA or company own risk assessment). RED II Supply Base Evaluation details are reported in Annex 2.

☐ **Not Applicable – Supply Base Evaluation not implemented**

3.1 Summary of the Supply Base Evaluation

Nature's Earth Pellets LLC (NEP) conducted a supply base evaluation to confirm adherence to all indicators of Principles 1,2,3 & 4 of SBP Standard 1: Feedstock Compliance (Version 2). NEP has implemented policies and procedures appropriate to the size and scale of its operations and no indicators were excluded. The supply base evaluation includes all procession residues feedstock that are sourced from the 163 counties identified in Alabama, Florida, Georgia, Kentucky, Mississippi & Tennessee.

The evaluation assessed each of the indicators within SBP Standard 1: Feedstock Compliance (Version 2) to determine adherence with each indicator. The assessment reviewed applicable laws and regulations and forestry best management practices, analyzed 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. This evaluation and analysis were 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.

In summary, the results of the supply base evaluation is low risk to all indicators SBP Standard 1: Feedstock Compliance except for indicators 2.1.2, 2.1.3, 2.2.1, and 2.2.2, 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.

Analysis using USDA Forest Service Forest Inventory & Analysis (FIA) data clearly shows the supply area's forests are growing more fiber than is being harvested. Carbon stocks are stable and increasing. This data along with economic impact studies indicate NEP is a key part of the area's economy providing employment opportunities at the manufacturing site as well as throughout the supply area.

3.2 Conflicts with applicable national and sub-national legislation

None

3.3 Risk Management Measures

Guidance: Please provide more details about specified risk indicators in each supply country and describe mitigation measures taken to address all specified risks associated with indicators.

| | |
|--|---|
| Country: United States | |
| Area/sub-scope: Southeast USA | |
| Risk Assessment used: | |
| | <input type="checkbox"/> British Columbia, Canada <input type="checkbox"/> Denmark <input type="checkbox"/> Estonia <input type="checkbox"/> Latvia <input type="checkbox"/> Lithuania <input type="checkbox"/> Quebec, Canada <input checked="" type="checkbox"/> Biomass Producer's own risk assessment |
| Indicator with specified risk: | |
| Description of the specific risk: | |
| <p>Nature's Earth Energy Pellets, LLC (NEP) has completed an assessment of risk to identified High Conservation Value Areas (HCVs) within its supply area. This risk assessment is primarily based on the NATIONAL RISK ASSESSMENT FOR THE CONTERMINOUS UNITED STATES OF AMERICA (FSC-NRA-USA V1-0) and other conservation assessments from organizations, including but not limited to, World Resources Institute, IUCN Centre for Plant Diversity, Critical Ecosystem Partnership Fund and World Wildlife Fund. The US NRA has declared the level of risk based primarily on requirements for sourcing FSC® Controlled Wood (FSC-STD-40-005v3.1).</p> <p>The NATIONAL RISK ASSESSMENT FOR THE CONTERMINOUS UNITED STATES OF AMERICA (FSC-NRA-USA V1-0) has identified the following HCVs that are located within NEP's supply area.</p> <ul style="list-style-type: none"> • HCV1: Species Diversity <ul style="list-style-type: none"> ◦ Dusky Gopher Frog • HCV3: Rare Ecosystems <ul style="list-style-type: none"> ◦ Late Successional Bottomland Hardwoods ◦ Native Longleaf Pine Systems <p>Within the NEP district of origin there are other HCVs associated from the high conservation value assessment frameworks identified below that occur near or within the NEP supply area.</p> <ul style="list-style-type: none"> • Alliance for Zero Extinction (AZE) – There are five AZE sites identified with the NEP defined supply area. • IUCN Centre for Plant Diversity (CPD) – There are no CPD sites identified within the NEP defined supply area. • GreenPeace Intact Forest - There are no Greenpeace Intact Forest sites identified within the NEP defined supply area. | |

- World Wildlife Fund (WWF), Global 200 Ecoregion - 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.

Most of the counties located in the NEP defined supply area are 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)

The Southeastern conifer forests (NA0529) is the second terrestrial ecoregion that makes up the global ecoregion # 75. The northern half of the NEP wood basin overlaps this ecoregion. The ecoregion extends from the Savannah River in Georgia across the coastal plain to the eastern parishes of Louisiana and south into Florida in the vicinity of Lake Okeechobee.

This ecoregion is equated with the longleaf pine ecosystem that once spanned a significant portion of the coastal plain. It was dominated by a longleaf pine overstory and an exceptionally diverse array of plants in the understory and especially in the herbaceous layer. The entire ecology of this region was driven by fire which maintained a longleaf pine dominance in the overstory. Many species of birds, reptiles, and amphibians adapted to this environment as well. The red-cockaded woodpecker, gopher tortoise, indigo snake, and flatwoods salamander are some of the more threatened, regulated, and managed of those taxa.

Fire was eventually suppressed in this ecosystem as it was in many of the other regions in the southeast. Due to commercial and private development, conversion to agriculture and the planting of loblolly pine in the area, the longleaf pine flatwoods have been reduced to less than 1% of its original size. However, there are several places where the natural habitat is being maintained and fire is still allowed into the systems. Most of the conservation sites that remain can be found on national forests, military bases, and state parks. Thanks to organizations like the Longleaf Alliance, private landowners are being given federal incentives to plant longleaf on their property and maintain those stands for many decades to come. As a result of education and conservation planning, there has been an increase in longleaf plantations over the past decade with an increase in newly planted acres every year within the ecoregion.

- Protected Areas – The USGS Protected Areas database of the United States (PAD-US) is America's official national inventory of U.S. terrestrial and marine protected areas that are dedicated to the preservation of biological diversity and to other natural, recreation and cultural uses, managed for these purposes through legal or other effective means. This database inventories protected areas that include fee lands to conservation easements on federal, state, local and private lands. More than 10% of the NEP supply area is considered protected.

Mitigation measure:

Dusky Gopher Frog (DGF) / Alliance for Zero Extinction

1. The only known viable populations of DGF are on the USDA Forest Service DeSoto National Forest. These DGF populations are well protected and mitigated if timber sales occur within this national forest.
2. NEP personnel with fiber procurement responsibilities are trained on High Conservation Value (HCV) areas including the description of the habitat/ecosystem, description & life cycle of the endangered species, identified threats and recommended mitigation measures. Training will be based on educational materials developed from FSC, NatureServe, state Natural Heritage programs and the US Fish & Wildlife Service.
3. NEP will work with suppliers who source wood fiber from this supply 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. The educational materials previously described will be provided. This education and outreach measure will be documented using NEP-DOC-009 Secondary Supplier Audit Checklists.

Late Successional Bottomland Hardwoods (LSBH)

1. NEP only purchases southern pine (*Pinus taeda*, *Pinus elliottii*, *Pinus palustris*, *Pinus serotina*, *Pinus echinata*). These species are not commercially found in this HCV area.
2. NEP personnel with fiber procurement responsibilities are trained on High Conservation Value (HCV) areas including the description of the habitat/ecosystem, description & life cycle of the endangered species, identified threats and recommended mitigation measures. Training will be based on educational materials developed from FSC, state Natural Heritage programs and the Forest Guild.
3. NEP 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. The educational materials previously described will be provided. This education and outreach measure will be documented using NEP-DOC-009 Secondary Supplier Audit Checklists.

Natural Longleaf Pine Systems (NLPS)

1. NEP personnel with fiber procurement responsibilities are trained on High Conservation Value (HCV) areas including the description of the habitat/ecosystem, description & life cycle of the endangered species, identified threats and recommended mitigation measures. Training will be based on educational materials developed from FSC, state Natural Heritage programs and the Longleaf Alliance.
2. NEP 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. The educational materials previously described will be provided. This education and outreach measure will be documented using NEP-DOC-009 Secondary Supplier Audit Checklists.

Alliance for Zero Extinction / Key Biodiversity Areas

The other four Alliance for Zero Extinction (AZE) sites identified within NEP's defined supply area include:

- Sand Creek & associated hydrobasin located in Oktibbeha County, MS triggered by *Hobbseus orconectoides* (Oktibbeha Riverlet Crayfish).
 - Cypress Creek & associated hydrobasin located in west TN triggered by *Fallicambarus horton* (Hatchie Burrowing Crayfish).
 - Lacon Exit Cave & associated hydrobasin located in north AL triggered by *Cambarus laconensis* (Lacon Exit Cave Crayfish).
 - The Wheeler National Wildlife Refuge located in north AL triggered by the bird *Euphagus carolinus* (Rusty Blackbird) and the invertebrate *Cambarus veitchorum* (White Spring Cave Crayfish). These four AZE sites are aquatic ecosystems that support these stated endangered species.
1. These four AZE sites are aquatic ecosystems that support these stated endangered species. NEP only purchases southern pine shavings (*Pinus taeda*, *Pinus elliottii*, *Pinus palustris*, *Pinus serotina*, *Pinus echinata*) that are not commercially found in these ecosystems.
 2. NEP personnel with fiber procurement responsibilities are trained on High Conservation Value (HCV) areas including the description of the habitat/ecosystem, description & life cycle of the endangered species, identified threats and recommended mitigation measures. Training will be based on educational materials developed from AZE, NatureServe, state Natural Heritage programs, & the US Fish & Wildlife Service.
 3. NEP will work with suppliers who source wood fiber from these ecosystems to educate the suppliers, their loggers and landowners and communicate the social benefits & values of these endangered species, threats from forest management activities & related loss of values, and opportunities for conservation through management that restores or maintains these endangered species and reduces or eliminates these threats. The educational materials previously described will be provided. This education and outreach measure will be documented using NEP-DOC-009 Secondary Supplier Audit Checklists.

WWF Global 200 Ecoregion - Southeastern Coniferous & Broadleaf Forests

1. The World Wide Fund for Nature (WWF) has declared more than 99% of the ecoregions Southeastern mixed forests (NA0413) & Southeastern conifer forests (NA0529) having been converted. The remaining examples of this ecoregion are known to occur on protected lands.
2. NEP personnel with fiber procurement responsibilities are trained on High Conservation Value (HCV) areas including the description of the habitat/ecosystem, description & life cycle of the endangered species, identified threats and recommended mitigation measures. Training will be based on educational materials developed from WWF.
3. NEP will work with suppliers who source wood fiber from this ecoregion to educate the suppliers, their loggers and landowners and communicate the social benefits & values of this ecoregion, threats from forest management activities & related loss of values, and opportunities for conservation through management that restores or maintains this ecoregion and reduces or eliminates these threats. The educational materials previously described will be provided. This education and outreach measure will be documented using NEP-DOC-009 Secondary Supplier Audit Checklists.

Monitoring and outcomes:

Monitoring of residual supplier compliance will be completed through secondary supplier audits. These audits will be conducted biennially for all residual suppliers on site at their manufacturing location or by telephone. No tract Audits will assess supplier compliance to contract requirements, confirmation of supply area, status of sustainable forestry certification, status of trained logger usage, BMP compliance, environmental regulatory status and knowledge of high conservation value issues and locations along with status of education awareness for sub-suppliers and landowners. Results of supplier audits will be recorded on NEP-DOC-009 Secondary Supplier Audit Checklists.

Outcomes are currently not applicable.

Country: United States

Area/sub-scope: Southeast USA

Risk Assessment used:

- ☐ British Columbia, Canada
- ☐ Denmark
- ☐ Estonia
- ☐ Latvia
- ☐ Lithuania
- ☐ Quebec, Canada
- ☒ Biomass Producer's own risk assessment

Indicator with specified risk:

Description of the specific risk:

Nature's Earth Energy Pellets, LLC (NEP) has completed an assessment of risk to identified High Conservation Value Areas (HCVs) within its supply area. This risk assessment is primarily based on the NATIONAL RISK ASSESSMENT FOR THE CONTERMINOUS UNITED STATES OF AMERICA (FSC-NRA-USA V1-0) and other conservation assessments from organizations, including but not limited to, World Resources Institute, IUCN Centre for Plant Diversity, Critical Ecosystem Partnership Fund and World Wildlife Fund. The US NRA has declared the level of risk based primarily on requirements for sourcing FSC® Controlled Wood (FSC-STD-40-005v3.1).

The NATIONAL RISK ASSESSMENT FOR THE CONTERMINOUS UNITED STATES OF AMERICA (FSC-NRA-USA V1-0) has identified the following HCVs that are located within NEP's supply area.

- HCV1: Species Diversity
 - Dusky Gopher Frog
- HCV3: Rare Ecosystems
 - Late Successional Bottomland Hardwoods
 - Native Longleaf Pine Systems

Within the NEP district of origin there are other HCVs associated from the high conservation value assessment frameworks identified below that occur near or within the NEP supply area.

- Alliance for Zero Extinction (AZE) – There are five AZE sites identified with the NEP defined supply area that contain an animal on the IUCN Red List. These five sites include:
 1. The AZE site located on the DeSoto National Forest in MS is triggered by *Lithobates sevosus* (Dusky Gopher Frog). This is the only known viable population confined to this site.
 2. The site located in the Sand Creek watershed in Oktibbeha County, MS is triggered by *Hobbseus orconectoides* (Oktibbeha Riverlet Crayfish).
 3. The site located in the Cypress Creek watershed in TN is triggered by *Fallicambarus hortonii* (Hatchie Burrowing Crayfish).
 4. The site located in the Lacon Exit Cave area in AL is triggered by *Cambarus laconensis* (Lacon Exit Cave Crayfish).
 5. The Wheeler National Wildlife Refuge located in Morgan County, AL is triggered by the bird *Euphagus carolinus* (Rusty Blackbird) and the invertebrate *Cambarus veitchorum* (White Spring Cave Crayfish).
- IUCN Centre for Plant Diversity (CPD) – There are no CPD sites identified within the NEP defined supply area.
- GreenPeace Intact Forest - There are no Greenpeace Intact Forest sites identified within the NEP defined supply area.
- World Wildlife Fund (WWF), Global 200 Ecoregion - 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.

Most of the counties located in the NEP defined supply area are 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)

The Southeastern conifer forests (NA0529) is the second terrestrial ecoregion that makes up the global ecoregion # 75. The northern half of the NEP wood basin overlaps this ecoregion. The ecoregion extends from the Savannah River in Georgia across the coastal plain to the eastern parishes of Louisiana and south into Florida in the vicinity of Lake Okeechobee.

This ecoregion is equated with the longleaf pine ecosystem that once spanned a significant portion of the coastal plain. It was dominated by a longleaf pine overstory and an exceptionally diverse array of plants in the understory and especially in the herbaceous layer. The entire ecology of this region was driven by fire which maintained a longleaf pine dominance in the overstory. Many species of birds, reptiles, and

amphibians adapted to this environment as well. The red-cockaded woodpecker, gopher tortoise, indigo snake, and flatwoods salamander are some of the more threatened, regulated, and managed of those taxa.

Fire was eventually suppressed in this ecosystem as it was in many of the other regions in the southeast. Due to commercial and private development, conversion to agriculture and the planting of loblolly pine in the area, the longleaf pine flatwoods have been reduced to less than 1% of its original size. However, there are several places where the natural habitat is being maintained and fire is still allowed into the systems. Most of the conservation sites that remain can be found on national forests, military bases, and state parks. Thanks to organizations like the Longleaf Alliance, private landowners are being given federal incentives to plant longleaf on their property and maintain those stands for many decades to come. As a result of education and conservation planning, there has been an increase in longleaf plantations over the past decade with an increase in newly planted acres every year within the ecoregion.

- **Protected Areas** – The USGS Protected Areas database of the United States (PAD-US) is America's official national inventory of U.S. terrestrial and marine protected areas that are dedicated to the preservation of biological diversity and to other natural, recreation and cultural uses, managed for these purposes through legal or other effective means. This database inventories protected areas that include fee lands to conservation easements on federal, state, local and private lands. More than 10% of the NEP supply area is considered protected.

Mitigation measure:

Dusky Gopher Frog (DGF) / Alliance for Zero Extinction

1. The only known viable populations of DGF are on the USDA Forest Service DeSoto National Forest. These DGF populations are well protected and mitigated if timber sales occur within this national forest.
2. NEP personnel with fiber procurement responsibilities are trained on High Conservation Value (HCV) areas including the description of the habitat/ecosystem, description & life cycle of the endangered species, identified threats and recommended mitigation measures. Training will be based on educational materials developed from FSC, NatureServe, state Natural Heritage programs and the US Fish & Wildlife Service.
3. NEP will work with suppliers who source wood fiber from this supply 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. The educational materials previously described will be provided. This education and outreach measure will be documented using NEP-DOC-009 Secondary Supplier Audit Checklists.

Late Successional Bottomland Hardwoods (LSBH)

1. NEP only purchases southern pine (*Pinus taeda*, *Pinus elliottii*, *Pinus palustris*, *Pinus serotina*, *Pinus echinata*). These species are not commercially found in this HCV area.
2. NEP personnel with fiber procurement responsibilities are trained on High Conservation Value (HCV) areas including the description of the habitat/ecosystem, description & life cycle of the endangered species, identified threats and recommended mitigation measures. Training will be

based on educational materials developed from FSC, state Natural Heritage programs and the Forest Guild.

3. NEP 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. The educational materials previously described will be provided. This education and outreach measure will be documented using NEP-DOC-009 Secondary Supplier Audit Checklists.

Natural Longleaf Pine Systems (NLPS)

1. NEP personnel with fiber procurement responsibilities are trained on High Conservation Value (HCV) areas including the description of the habitat/ecosystem, description & life cycle of the endangered species, identified threats and recommended mitigation measures. Training will be based on educational materials developed from FSC, state Natural Heritage programs and the Longleaf Alliance.
2. NEP 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. The educational materials previously described will be provided. This education and outreach measure will be documented using NEP-DOC-009 Secondary Supplier Audit Checklists.

Alliance for Zero Extinction / Key Biodiversity Areas

The other four Alliance for Zero Extinction (AZE) sites identified within NEP's defined supply area include:

- Sand Creek & associated hydrobasin located in Oktibbeha County, MS triggered by *Hobbseus orconectoides* (Oktibbeha Riverlet Crayfish).
 - Cypress Creek & associated hydrobasin located in west TN triggered by *Fallicambarus hortonii* (Hatchie Burrowing Crayfish).
 - Lacon Exit Cave & associated hydrobasin located in north AL triggered by *Cambarus laconensis* (Lacon Exit Cave Crayfish).
 - The Wheeler National Wildlife Refuge located in north AL triggered by the bird *Euphagus carolinus* (Rusty Blackbird) and the invertebrate *Cambarus veitchorum* (White Spring Cave Crayfish).
1. These four AZE sites are aquatic ecosystems that support these stated endangered species. NEP only purchases southern pine (*Pinus taeda*, *Pinus elliottii*, *Pinus palustris*, *Pinus serotina*, *Pinus echinata*) that are not commercially found in these ecosystems.
 2. NEP personnel with fiber procurement responsibilities are trained on High Conservation Value (HCV) areas including the description of the habitat/ecosystem, description & life cycle of the endangered species, identified threats and recommended mitigation measures. Training will be based on educational materials developed from AZE, NatureServe, state Natural Heritage programs, & the US Fish & Wildlife Service.
 3. NEP will work with suppliers who source wood fiber from these ecosystems to educate the suppliers, their loggers and landowners and communicate the social benefits & values of these endangered species, threats from forest management activities & related loss of values, and opportunities for conservation through management that restores or maintains these endangered

species and reduces or eliminates these threats. The educational materials previously described will be provided. This education and outreach measure will be documented using NEP-DOC-009 Secondary Supplier Audit Checklists.

WWF Global 200 Ecoregion - Southeastern Coniferous & Broadleaf Forests

1. The World Wide Fund for Nature (WWF) has declared more than 99% of the ecoregions Southeastern mixed forests (NA0413) & Southeastern conifer forests (NA0529) having been converted. The remaining examples of this ecoregion are known to occur on protected lands.
2. NEP personnel with fiber procurement responsibilities are trained on High Conservation Value (HCV) areas including the description of the habitat/ecosystem, description & life cycle of the endangered species, identified threats and recommended mitigation measures. Training will be based on educational materials developed from WWF.
3. NEP will work with suppliers who source wood fiber from this ecoregion to educate the suppliers, their loggers and landowners and communicate the social benefits & values of this ecoregion, threats from forest management activities & related loss of values, and opportunities for conservation through management that restores or maintains this ecoregion and reduces or eliminates these threats. The educational materials previously described will be provided. This education and outreach measure will be documented using NEP-DOC-009 Secondary Supplier Audit Checklists.

Monitoring and outcomes:

Monitoring of residual supplier compliance will be completed through secondary supplier audits. These audits will be conducted biennially for all residual suppliers on site at their manufacturing location or by telephone. No tract Audits will assess supplier compliance to contract requirements, confirmation of supply area, status of sustainable forestry certification, status of trained logger usage, BMP compliance, environmental regulatory status and knowledge of high conservation value issues and locations along with status of education awareness for sub-suppliers and landowners. Results of supplier audits will be recorded on NEP-DOC-009 Secondary Supplier Audit Checklists.

Outcomes are currently not applicable.

Country: United States

Area/sub-scope: Southeast USA

Risk Assessment used:

- ☐ British Columbia, Canada
- ☐ Denmark
- ☐ Estonia
- ☐ Latvia
- ☐ Lithuania
- ☐ Quebec, Canada
- ☒ Biomass Producer's own risk assessment

Indicator with specified risk:

Description of the specific risk:

Nature's Earth Energy Pellets, LLC (NEP) has completed an assessment of land conversion since January 2008 related to:

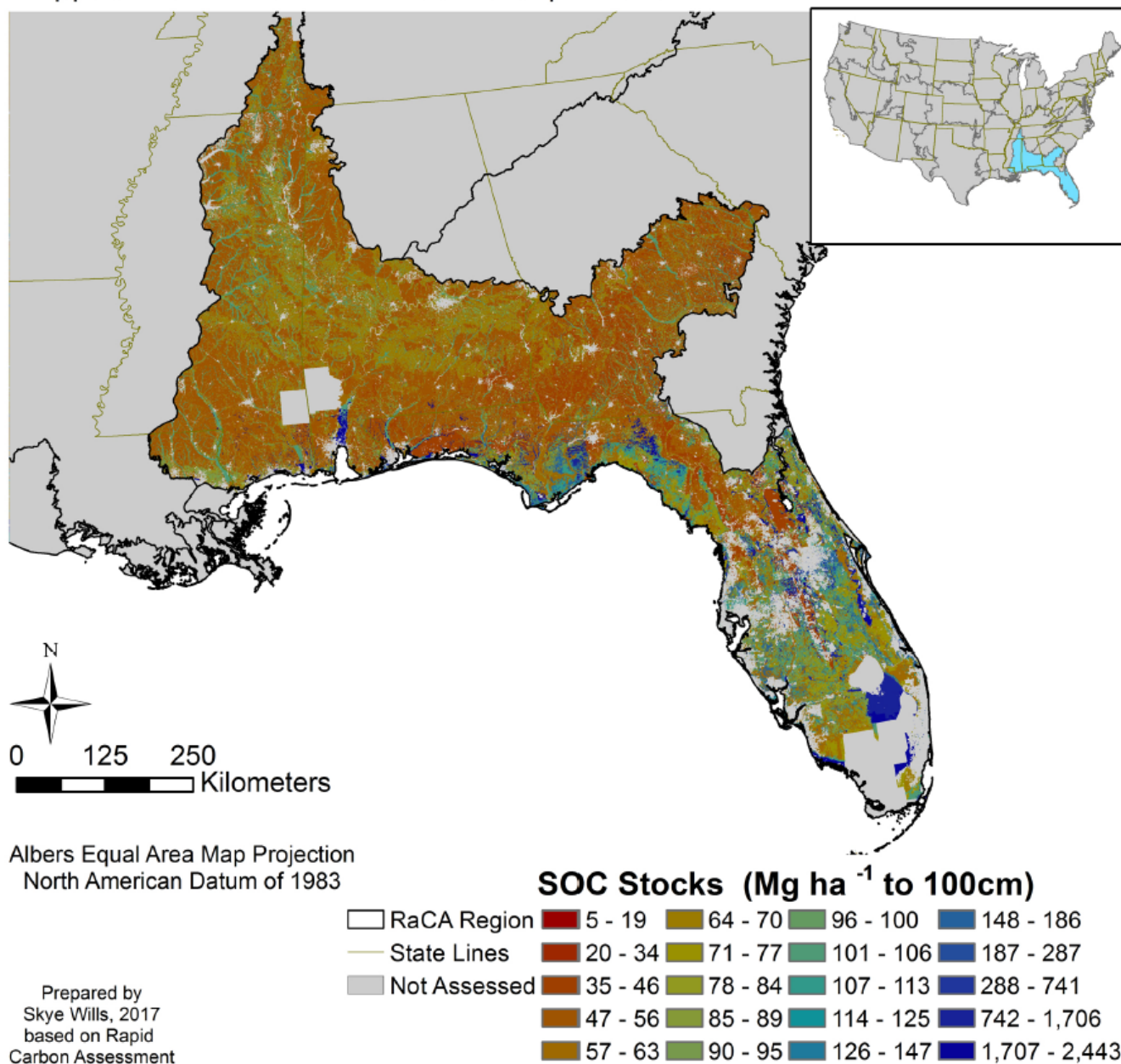
- a. Forests;
- b. Wetlands;
- c. Peatlands;
- d. Highly biodiverse grasslands.

This assessment for forests used FSC's NATIONAL RISK ASSESSMENT FOR THE CONTERMINOUS UNITED STATES OF AMERICA (FSC-NRA-USA V1-0) and USDA Forest Service Forest Inventory and Analysis (FIA) data. The FSC NRA identified 2 counties within the NEP's supply area as areas where there is a risk greater than "low" receiving forest materials from forest conversions. These counties are Mobile County, AL and Santa Rosa County, FL. USDA Forest Service FIA data for NEP's supply area covering the most current inventory year (2022) compared to 2008 data showed forestland area to be stable having slightly decreased by 0.4% in 14 years (0.03% annually).

This assessment for wetlands used USDA Forest Service Forest Inventory and Analysis (FIA) data. USDA Forest Service FIA data for NEP's supply area covering the most current inventory year (2022) compared to 2008 data showed wetland physiographic classes to be stable accounting for 24% of all forestland in 2008 and 2022.

This assessment for peatlands used USDA Natural Resources Conservation Service (NRCS) Rapid Carbon Assessment (RaCA) mapping. High carbon stock peatlands are not present within the NEP supply area.

RaCA Region 15 Mapped with Soil and Land Use Group Means



Grassland ecosystems do not exist within the NEP supply area.

Mitigation measure:

NEP personnel with fiber procurement responsibilities are trained on conversion and potential loss of forests, wetlands, peatlands & highly biodiverse grasslands including identified threats and recommended mitigation measures. Training will be based on educational materials developed from USDA Forest Service and NRCS.

NEP will work with suppliers who source wood fiber from the FSC identified 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 NEP-DOC-009 Secondary Supplier Audit Checklists.

Monitoring and outcomes:

Monitoring of residual supplier compliance will be completed through secondary supplier audits. These audits will be conducted biennially for all residual suppliers on site at their manufacturing location or by telephone. These audits will assess supplier compliance to contract requirements, confirmation of supply area, status of sustainable forestry certification, status of trained logger usage, BMP compliance, environmental regulatory status and knowledge of forestland, wetland, peatland & highly biodiverse grassland conversion issues and locations along with status of education awareness for sub-suppliers and landowners. Results of supplier audits will be recorded on NEP-DOC-009 Secondary Supplier Audit Checklists.

Outcomes are currently not applicable.

Country: United States

Area/sub-scope: Southeast USA

Risk Assessment used:

- ☐ British Columbia, Canada
- ☐ Denmark
- ☐ Estonia
- ☐ Latvia
- ☐ Lithuania
- ☐ Quebec, Canada
- ☒ Biomass Producer's own risk assessment

Indicator with specified risk:

Description of the specific risk:

Ecosystems, their health, vitality, functions, and services are maintained and enhanced through many voluntary and regulatory programs within the NEP supply area. Federal and state laws and regulations are in place to protect the waters of the United States as well as wildlife biodiversity. All laws and regulations are administered through federal and state environmental agencies. These same agencies have incentive programs to enhance forest health and ecosystems for improved wildlife habitat. Forestland within NEP's supply area is owned by the private sector (90%) followed by federal ownership (6.5%) and state ownership (3.5%). These government incentive programs provide financial incentives to support the conservation, health, and vitality of forestlands.

NEP has completed an assessment of risk to identified High Conservation Value Areas (HCVs) within its supply area. This risk assessment is primarily based on the NATIONAL RISK ASSESSMENT FOR THE CONTERMINOUS UNITED STATES OF AMERICA (FSC-NRA-USA V1-0) and other conservation assessments from organizations, including but not limited to, World Resources Institute, IUCN Centre for Plant Diversity, Critical Ecosystem Partnership Fund and World Wildlife Fund. The US NRA has declared the level of risk based primarily on requirements for sourcing FSC® Controlled Wood (FSC-STD-40-005v3.1).

The NATIONAL RISK ASSESSMENT FOR THE CONTERMINOUS UNITED STATES OF AMERICA (FSC-NRA-USA V1-0) has identified HCV areas previously stated in indicator 2.1.2 that are located within NEP's

supply area. Protecting these HCV areas through their identification and educational awareness ensures these ecosystems are maintained and enhanced.

Water and water quality is a primary function that forestlands provide. Federal laws, such as the Clean Water Act, provide regulatory guidance to ensure water quality is not negatively impacted. States within NEP's supply areas have developed voluntary forestry Best Management Practices (BMPs) for water quality. State forestry agencies are responsible for monitoring and managing water quality issues within their states. These state forestry agencies monitor BMP compliance by conducting BMP compliance checks randomly or upon request. Historically BMP compliance has improved since its inception and states currently have high compliance rates.

| State | Report Year | % Compliance | State | Report Year | % Compliance |
|-------|-------------|--------------|-------|-------------|--------------|
| AL | 2019 | 98.2% | KY | 2013 | 74% |
| FL | 2019 | 99% | MS | 2019 | 95% |
| GA | 2023 | 96.8% | TN | 2019 | 95.6% |

State forestry and wildlife agencies also manage long term Forest Action Plans & Wildlife Action Plans that identify and prioritize efforts to maintain and enhance forest and wildlife health and productivity. These action plans are readily available and provide assistance and incentives to private forest landowners.

Sustainable forestry certification, such as Forest Stewardship Council (FSC) and the Sustainable Forestry Initiative (SFI) provide opportunities to encourage forest landowners to manage the health and vitality of their forests. Almost half of NEP's residual feedstock suppliers are FSC &/or SFI certified (12 of 25 residual suppliers & sub-suppliers).

Mitigation measure:

NEP personnel with fiber procurement responsibilities are trained on conversion and potential loss of forests, wetlands, peatlands & highly biodiverse grasslands including identified threats and recommended mitigation measures. Training will be based on educational materials developed from USDA Forest Service and NRCS.

NEP will work with suppliers who source wood fiber from the FSC identified 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 NEP-DOC-009 Secondary Supplier Audit Checklists.

Monitoring and outcomes:

Monitoring of residual supplier compliance will be completed through secondary supplier audits. These audits will be conducted biennially for all residual suppliers on site at their manufacturing location or by telephone. These audits will assess supplier compliance to contract requirements, confirmation of supply area, status of sustainable forestry certification, status of trained logger usage, BMP compliance, environmental regulatory status and knowledge of forestland, wetland, peatland & highly biodiverse grassland conversion issues and locations along with status of education awareness for sub-suppliers and landowners. Results of supplier audits will be recorded on NEP-DOC-009 Secondary Supplier Audit Checklists.

Outcomes are currently not applicable.

4 Stakeholder engagement

4.1 General description

Biomass Producer's stakeholder engagement start date: 24 Jan 2024

Biomass Producer's stakeholder engagement end date: 21 Feb 2024

Total number of stakeholders contacted: 49

Give a general description of the process of Stakeholders Engagement, including stakeholders contacted, method of communication and a summary of the comments received:

Forty-nine (49) local and regional stakeholders were identified for initial 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. Two recognized indigenous peoples group, the Mississippi Band of Choctaw Indians & the Poarch Band of Creeks were included in this list.

A letter was sent to the identified stakeholders notifying them the intent of Nature's Earth Pellets, LLC to become SBP certified in January 2024 and asking for input on their thoughts on NEP's business practices and their impact on sustainable forestry in their area. Feedback is requested during the certification process via letter and/or email. All feedback will be reviewed and responses provided upon request. A summary of the feedback will be added, as received, below in Section 4.2.

4.2 Response to stakeholder comments

5 Report updates and approval

This document is: New Supply Base Report (Assessments/reassessments)

Summary of changes: N/A

| | |
|--------------------------------|-------------|
| Name | Gary Boyd |
| Title | Consultant |
| Date of report approval | 21 Jan 2024 |

Annex 1: Detailed findings for Supply Base Evaluation indicators

| United States Southeast Region | Indicator |
|-----------------------------------|--|
| 1.1.1 | Operations related to feedstock sourcing and biomass production shall comply with all existing applicable laws and regulations. |
| Supply Base Verifiers | <ul style="list-style-type: none"> Federal & state laws Purchase Agreements / Contracts National Risk Assessment for the Conterminous United States of America (FSC-NRA-USA V1-0) International Governance Indicators for regulatory quality & rule of law NEP-DOC-005 SBP Supply Base Risk Assessment NEP-POL-001 Sustainability Policy NEP- PROC-002 Due Diligence Procedures |
| Risk Rating justification | <p>There are appropriate control systems and procedures to ensure compliance with all existing applicable laws and regulations within the NEP Supply Base. A list of federal and state laws are included in NEP-DOC-005 SBP Supply Base Risk Assessment. Evidence indicates that major violations are prosecuted, and legal liability is enforced. NEP-POL-001 Sustainability Policy provides corporate commitment and guidance that requires that all applicable laws and regulations to be followed.</p> <p>Globally, the World Bank is its latest Global Governance Index (2022) awarded the US a percentile rank of 91.04 for Regulatory Quality and 88.68 for Rule of Law. This objective evidence demonstrates Low Risk for threat to legality.</p> <p>Further, compliance with all existing applicable laws and regulations is enforced through Company procedures (NEP-PROC-002 Due Diligence Procedures) and contractual agreements by suppliers.</p> |
| Risk Rating | Low Risk |

| United States Southeast Region | Indicator |
|-----------------------------------|--|
| 1.1.2 | Legal ownership of land and resource use rights shall be respected. |
| Supply Base Verifiers | <ul style="list-style-type: none"> Federal & state laws Purchase Agreements / Contracts National Risk Assessment for the Conterminous United States of America (FSC-NRA-USA V1-0) International Governance Indicators for regulatory quality NEP-DOC-005 SBP Supply Base Risk Assessment NEP-POL-001 Sustainability Policy |

| | |
|----------------------------------|---|
| | <ul style="list-style-type: none"> • NEP- PROC-002 Due Diligence Procedures |
| Risk Rating justification | <p>There are appropriate control systems and procedures to ensure that legality of ownership and land use can be demonstrated for the NEP Supply Base. Illegal harvesting in the supply base is prohibited by state laws. A list of federal and state laws addressing the legality of ownership are included in NEP-DOC-005 SBP Supply Base Risk Assessment. 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). Commonly used terms for violations in US are timber theft, tree poaching and unlawful logging. Thefts do occur, however the share of illegal felling in hardwoods is much smaller than 1% according to a study conducted by American Hardwood Export Council. It is logical to conclude that similarly illegal logging is not a major problem for softwoods in US. NEP-POL-001 Sustainability Policy provides corporate commitment and guidance that requires that all applicable laws and regulations to be followed.</p> <p>Globally, the World Bank is its latest Global Governance Index (2022) awarded the US a percentile rank of 91.04 for Regulatory Quality and 88.68 for Rule of Law. This objective evidence demonstrates Low Risk for threat to legality.</p> <p>NEP referenced FSC's NATIONAL RISK ASSESSMENT FOR THE CONTERMINOUS UNITED STATES OF AMERICA (FSC-NRA-USA V1-0) as part of its risk assessment referenced as NEP-DOC-005 Due Diligence Risk Assessment. The FSC national assessment has determined Controlled Wood Category 1: Illegally harvested wood to be "low risk".</p> <p>Further, legality of ownership and land use is enforced through Company procedures (NEP-PROC-002 Due Diligence Procedures) and contractual agreements by suppliers.</p> |
| Risk Rating | Low Risk |

| United States Southeast Region | Indicator |
|-----------------------------------|---|
| 1.1.3 | Feedstock shall be legally harvested, supplied and produced, including in compliance with CITES, EUTR and other applicable legal trade requirements. |
| Supply Base Verifiers | <ul style="list-style-type: none"> • Federal & state laws • Purchase Agreements / Contracts • National Risk Assessment for the Conterminous United States of America (FSC-NRA-USA V1-0) • International Governance Indicators for regulatory quality • CITES • NEP-DOC-005 SBP Supply Base Risk Assessment • NEP-POL-001 Sustainability Policy |

| | |
|----------------------------------|---|
| | <ul style="list-style-type: none"> • NEP- PROC-002 Due Diligence Procedures |
| Risk Rating justification | <p>There are appropriate control systems and procedures to ensure feedstock shall be legally harvested, supplied and produced, including in compliance with CITES, EUTR and other applicable legal trade requirements for the NEP Supply Base. Illegal harvesting in the supply base is prohibited by state laws. A list of federal and state laws addressing the legality of ownership are included in NEP-DOC-005 SBP Supply Base Risk Assessment. 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). Commonly used terms for violations in US are timber theft, tree poaching and unlawful logging. Thefts do occur, however the share of illegal felling in hardwoods is much smaller than 1% according to a study conducted by American Hardwood Export Council. It is logical to conclude that similarly illegal logging is not a major problem for softwoods in US. NEP-POL-001 Sustainability Policy provides corporate commitment and guidance that requires that all applicable laws and regulations to be followed.</p> <p>Globally, the World Bank is its latest Global Governance Index (2022) awarded the US a percentile rank of 91.04 for Regulatory Quality and 88.68 for Rule of Law. This objective evidence demonstrates Low Risk for threat to legality.</p> <p>NEP referenced FSC's NATIONAL RISK ASSESSMENT FOR THE CONTERMINOUS UNITED STATES OF AMERICA (FSC-NRA-USA V1-0) as part of its risk assessment referenced as NEP-DOC-005 SBP Supply Base Risk Assessment. The FSC national assessment has determined Controlled Wood Category 1: Illegally harvested wood to be "low risk".</p> <p>Based on review of the CITES list located in NEP-DOC-005 SBP Supply Base Risk Assessment it is determined that there are no species used in NEP's operations that are included in the CITES list.</p> <p>Further, compliance with CITES, EUTR and other applicable legal trade requirements is enforced through Company procedures (NEP-PROC-002 Due Diligence Procedures) and contractual agreements by suppliers.</p> |
| Risk Rating | Low Risk |

| United States Southeast Region | Indicator |
|-----------------------------------|--|
| 1.1.4 | Payments for harvest rights and feedstock, including duties, relevant royalties and taxes related to timber harvesting shall be complete and up-to-date. |
| Supply Base Verifiers | <ul style="list-style-type: none"> • Purchase Agreements / Contracts • Quarterly tax reporting |

| | |
|----------------------------------|---|
| | <ul style="list-style-type: none"> National Risk Assessment for the Conterminous United States of America (FSC-NRA-USA V1-0) NEP-DOC-005 SBP Supply Base Risk Assessment NEP-PROC-001 Chain of Custody Procedures |
| Risk Rating justification | <p>NEP 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. Ad valorem taxes are collected in all states within the NEP supply area. Severance taxes are collected in AL, GA, KY, and MS at the county level. Purchase Agreements/Contracts state buyers of timber are solely responsible for all sales taxes, severance taxes or other taxes arising out of or in connection with the sale of wood fiber and indemnifies the buyer from all such taxes.</p> <p>In addition, Purchase Agreements/Contracts require the supplier to ensure they know where feedstocks originate and ensure wood is legally sourced. NEP-PROC-001 Chain of Custody Procedures documents the workflow to ensure feedstock are legally and sustainably sourced.</p> <p>NEP-DOC-005 SBP Supply Base Risk Assessment is reviewed annually to ensure NEP is aware of changes in the origin of feedstocks. The analysis includes a review of the existence of appropriate laws to ensure the payment of relevant fees and taxes. NEP-DOC-005 SBP Supply Base Risk Assessment also contains the work done to determine if illegal logging and timber theft are a risk in the supply area. This document uses many if the same sources as the FSC US CWNRA. Both conclude illegal logging is a low risk in NEP's supply area.</p> <p>Lastly, NEP-POL-01 Sustainability Policy requires suppliers to comply with all applicable federal, state, and local laws and regulations.</p> |
| Risk Rating | Low Risk |

| United States Southeast Region | Indicator |
|-----------------------------------|--|
| 1.1.5 | There shall be adequate protection of the Supply Base from unauthorised and illegal activities, such as illegal logging, mining, and encroachment. |
| Supply Base Verifiers | <ul style="list-style-type: none"> State laws NEP-POL-001 Sustainability Policy NEP-DOC-008 SBP Supply Base Risk Assessment National Risk Assessment for the Conterminous United States of America (FSC-NRA-USA V1-0) Purchase Agreements / Contracts |

| | |
|----------------------------------|---|
| Risk Rating justification | <p>There are appropriate control systems and procedures to ensure adequate protection of the Supply Base from unauthorised and illegal activities, such as illegal logging, mining, and encroachment. Illegal harvesting in the supply base is prohibited by state laws. A list of federal and state laws addressing the legality of ownership are included in NEP-DOC-005 Due Diligence Risk Assessment. 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). Commonly used terms for violations in US are timber theft, tree poaching and unlawful logging. Thefts do occur, however the share of illegal felling in hardwoods is much smaller than 1% according to a study conducted by American Hardwood Export Council. It is logical to conclude that similarly illegal logging is not a major problem for softwoods in US. NEP-POL-001 Sustainability Policy provides corporate commitment and guidance that requires that all applicable laws and regulations to be followed.</p> <p>Globally, the World Bank is its latest Global Governance Index (2022) awarded the US a percentile rank of 91.04 for Regulatory Quality and 88.68 for Rule of Law. This objective evidence demonstrates Low Risk for threat to legality.</p> <p>NEP referenced FSC's NATIONAL RISK ASSESSMENT FOR THE CONTERMINOUS UNITED STATES OF AMERICA (FSC-NRA-USA V1-0) as part of its risk assessment referenced as NEP-DOC-005 Due Diligence Risk Assessment. The FSC national assessment has determined Controlled Wood Category 1: Illegally harvested wood to be "low risk".</p> <p>Further, adequate protection of the Supply Base from unauthorised and illegal activities, such as illegal logging, mining, and encroachment is enforced through contractual agreements by suppliers.</p> |
| Risk Rating | Low Risk |

| United States Southeast Region | Indicator |
|---|---|
| 2.1.1 | Key species, habitats, ecosystems, and areas of high conservation value (HCV) pertaining to biodiversity in the Supply Base shall be identified. |
| Supply Base Verifiers | <ul style="list-style-type: none"> • National Risk Assessment for the Conterminous United States of America (FSC-NRA-USA V1-0) • World Wildlife Fund (WWF) eco-regions • Critical Ecosystem Partnership Fund biodiversity hotspots • IUCN Centres for Plant Diversity • Alliance for Zero Extinction • GreenPeace Intact Forests • NEP-DOC-005 SBP Supply Base Risk Assessment • NEP-DOC-009 Secondary Supplier Audit Checklist |

| | |
|----------------------------------|---|
| Risk Rating justification | <p>NEP-DOC-005 SBP Supply Base Risk Assessment identified and mapped the presence or absence of the following high conservation value areas within NEP's supply base. The National Risk Assessment for the Conterminous United States of America (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, & USFS Inventoried Roadless Areas to map these HCVs.</p> <p>In addition to the US NRA, the NEP used World Wildlife Fund (WWF) eco-regions, Critical Ecosystem Partnership Fund biodiversity hotspots, IUCN Centres for Plant Diversity, Alliance for Zero Extinction and GreenPeace Intact Forests to identify and map HCV areas.</p> <p>NEP determined its supply area based on the origin of processed residue feedstock received. NEP has 25 residual suppliers and sub-suppliers. The supply area has been identified and mapped of high conservation value areas (HCVs). These more detailed HCV maps utilize the conservation measures from the US NRA where HCVs of "specified risk" have been identified in addition to other HCV designations mentioned above.</p> <p>The HCV maps are used in conjunction with the NEP's 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". NEP-DOC-005 SBP Supply Base Risk Assessment identifies and maps HCVs with "specified risk" designations.</p> |
| Risk Rating | Low Risk |

| United States Southeast Region | Indicator |
|-----------------------------------|---|
| 2.1.2 | Threats to and impacts on the identified key species, habitats, ecosystems, and areas of high conservation value (HCV) pertaining to biodiversity in the Supply Base shall be identified and evaluated. |
| Supply Base Verifiers | <ul style="list-style-type: none"> • National Risk Assessment for the Conterminous United States of America (FSC-NRA-USA V1-0) • World Wildlife Fund (WWF) eco-regions • Critical Ecosystem Partnership Fund biodiversity hotspots • IUCN Centres for Plant Diversity • Alliance for Zero Extinction • GreenPeace Intact Forests • NEP-DOC-005 SBP Supply Base Risk Assessment • NEP-DOC-009 Secondary Supplier Audit Checklist |

| | |
|---|--|
| <p>Risk Rating justification</p> | <p>Nature's Earth Energy Pellets, LLC (NEP) has completed an assessment of risk to identified High Conservation Value Areas (HCVs) within its supply area. This risk assessment is primarily based on the NATIONAL RISK ASSESSMENT FOR THE CONTERMINOUS UNITED STATES OF AMERICA (FSC-NRA-USA V1-0) and other conservation assessments from organizations, including but not limited to, World Resources Institute, IUCN Centre for Plant Diversity, Critical Ecosystem Partnership Fund and World Wildlife Fund. The US NRA has declared the level of risk based primarily on requirements for sourcing FSC® Controlled Wood (FSC-STD-40-005v3.1).</p> <p>The NATIONAL RISK ASSESSMENT FOR THE CONTERMINOUS UNITED STATES OF AMERICA (FSC-NRA-USA V1-0) has identified the following HCVs that are located within NEP's supply area.</p> <ul style="list-style-type: none"> • HCV1: Species Diversity <ul style="list-style-type: none"> ○ Dusky Gopher Frog • HCV3: Rare Ecosystems <ul style="list-style-type: none"> ○ Late Successional Bottomland Hardwoods ○ Native Longleaf Pine Systems <p>Within the NEP district of origin there are other HCVs associated from the high conservation value assessment frameworks identified below that occur near or within the NEP supply area.</p> <ul style="list-style-type: none"> • Alliance for Zero Extinction (AZE) – There are five AZE sites identified with the NEP defined supply area that contain an animal on the IUCN Red List. These five sites include: <ul style="list-style-type: none"> ○ The AZE site located on the DeSoto National Forest in MS is triggered by <i>Lithobates sevosus</i> (Dusky Gopher Frog). This is the only known viable population confined to this site. ○ The site located in the Sand Creek watershed in Oktibbeha County, MS is triggered by <i>Hobbseus orconectoides</i> (Oktibbeha Riverlet Crayfish). ○ The site located in the Cypress Creek watershed in TN is triggered by <i>Fallicambarus horton</i> (Hatchie Burrowing Crayfish). ○ The site located in the Lacon Exit Cave area in AL is triggered by <i>Cambarus laconensis</i> (Lacon Exit Cave Crayfish). ○ The Wheeler National Wildlife Refuge located in Morgan County, AL is triggered by the bird <i>Euphagus carolinus</i> (Rusty Blackbird) and the invertebrate <i>Cambarus veitchorum</i> (White Spring Cave Crayfish). • IUCN Centre for Plant Diversity (CPD) – There are no CPD sites identified within the NEP defined supply area. • GreenPeace Intact Forest - There are no Greenpeace Intact Forest sites identified within the NEP defined supply area. |
|---|--|

- World Wildlife Fund (WWF), Global 200 Ecoregion - 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.

Most of the counties located in the NEP defined supply area are 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)

The Southeastern conifer forests (NA0529) is the second terrestrial ecoregion that makes up the global ecoregion # 75. The northern half of the NEP wood basin overlaps this ecoregion. The ecoregion extends from the Savannah River in Georgia across the coastal plain to the eastern parishes of Louisiana and south into Florida in the vicinity of Lake Okeechobee.

This ecoregion is equated with the longleaf pine ecosystem that once spanned a significant portion of the coastal plain. It was dominated by a longleaf pine overstory and an exceptionally diverse array of plants in the understory and especially in the herbaceous layer. The entire ecology of this region was driven by fire which maintained a longleaf pine dominance in the overstory. Many species of birds, reptiles, and amphibians adapted to this environment as well. The red-cockaded woodpecker, gopher tortoise, indigo snake, and flatwoods salamander are some of the more threatened, regulated, and managed of those taxa.

Fire was eventually suppressed in this ecosystem as it was in many of the other regions in the southeast. Due to commercial and private development, conversion to agriculture and the planting of loblolly pine in the area, the longleaf pine flatwoods have been reduced to less than 1% of its original size. However, there are several places where the natural habitat is being maintained and fire is still allowed into the systems. Most of the conservation sites that remain can be found on national forests, military bases, and state parks. Thanks to organizations like the Longleaf Alliance, private landowners are being given federal incentives to plant longleaf on their property and maintain those stands for many decades to come. As a result of education and conservation planning, there has been an increase in longleaf plantations

| | |
|--------------------|---|
| | <p>over the past decade with an increase in newly planted acres every year within the ecoregion.</p> <ul style="list-style-type: none"> Protected Areas – The USGS Protected Areas database of the United States (PAD-US) is America’s official national inventory of U.S. terrestrial and marine protected areas that are dedicated to the preservation of biological diversity and to other natural, recreation and cultural uses, managed for these purposes through legal or other effective means. This database inventories protected areas that include fee lands to conservation easements on federal, state, local and private lands. More than 10% of the NEP supply area is considered protected. |
| Risk Rating | Specified Risk |

| United States Southeast Region | Indicator |
|-----------------------------------|---|
| 2.1.3 | Key species, habitats, ecosystems, and areas of high conservation value (HCV) pertaining to biodiversity in the Supply Base shall be maintained or enhanced. |
| Supply Base Verifiers | <ul style="list-style-type: none"> National Risk Assessment for the Conterminous United States of America (FSC-NRA-USA V1-0) World Wildlife Fund (WWF) eco-regions Critical Ecosystem Partnership Fund biodiversity hotspots IUCN Centres for Plant Diversity Alliance for Zero Extinction GreenPeace Intact Forests NEP-DOC-005 SBP Supply Base Risk Assessment NEP-DOC-009 Secondary Supplier Audit Checklist |
| Risk Rating justification | <p>Nature’s Earth Energy Pellets, LLC (NEP) has completed an assessment of risk to identified High Conservation Value Areas (HCVs) within its supply area. This risk assessment is primarily based on the NATIONAL RISK ASSESSMENT FOR THE CONTERMINOUS UNITED STATES OF AMERICA (FSC-NRA-USA V1-0) and other conservation assessments from organizations, including but not limited to, World Resources Institute, IUCN Centre for Plant Diversity, Critical Ecosystem Partnership Fund and World Wildlife Fund. The US NRA has declared the level of risk based primarily on requirements for sourcing FSC® Controlled Wood (FSC-STD-40-005v3.1).</p> <p>The NATIONAL RISK ASSESSMENT FOR THE CONTERMINOUS UNITED STATES OF AMERICA (FSC-NRA-USA V1-0) has identified the following HCVs that are located within NEP’s supply area.</p> <ul style="list-style-type: none"> HCV1: Species Diversity <ul style="list-style-type: none"> Dusky Gopher Frog HCV3: Rare Ecosystems |

- Late Successional Bottomland Hardwoods
- Native Longleaf Pine Systems

Within the NEP district of origin there are other HCVs associated from the high conservation value assessment frameworks identified below that occur near or within the NEP supply area.

- Alliance for Zero Extinction (AZE) – There are five AZE sites identified with the NEP defined supply area that contain an animal on the IUCN Red List. These five sites include:
 - The AZE site located on the DeSoto National Forest in MS is triggered by *Lithobates sevosus* (Dusky Gopher Frog). This is the only known viable population confined to this site.
 - The site located in the Sand Creek watershed in Oktibbeha County, MS is triggered by *Hobbseus orconectoides* (Oktibbeha Riverlet Crayfish).
 - The site located in the Cypress Creek watershed in TN is triggered by *Fallicambarus hortonii* (Hatchie Burrowing Crayfish).
 - The site located in the Lacon Exit Cave area in AL is triggered by *Cambarus laconensis* (Lacon Exit Cave Crayfish).
 - The Wheeler National Wildlife Refuge located in Morgan County, AL is triggered by the bird *Euphagus carolinus* (Rusty Blackbird) and the invertebrate *Cambarus veitchorum* (White Spring Cave Crayfish)
- IUCN Centre for Plant Diversity (CPD) – There are no CPD sites identified within the NEP defined supply area.
- GreenPeace Intact Forest - There are no Greenpeace Intact Forest sites identified within the NEP defined supply area.
- World Wildlife Fund (WWF), Global 200 Ecoregion - 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.

Most of the counties located in the NEP defined supply area are 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)

| | |
|--------------------|---|
| | <ul style="list-style-type: none"> • The Southeastern conifer forests (NA0529) <p>The Southeastern conifer forests (NA0529) is the second terrestrial ecoregion that makes up the global ecoregion # 75. The northern half of the NEP wood basin overlaps this ecoregion. The ecoregion extends from the Savannah River in Georgia across the coastal plain to the eastern parishes of Louisiana and south into Florida in the vicinity of Lake Okeechobee.</p> <p>This ecoregion is equated with the longleaf pine ecosystem that once spanned a significant portion of the coastal plain. It was dominated by a longleaf pine overstory and an exceptionally diverse array of plants in the understory and especially in the herbaceous layer. The entire ecology of this region was driven by fire which maintained a longleaf pine dominance in the overstory. Many species of birds, reptiles, and amphibians adapted to this environment as well. The red-cockaded woodpecker, gopher tortoise, indigo snake, and flatwoods salamander are some of the more threatened, regulated, and managed of those taxa.</p> <p>Fire was eventually suppressed in this ecosystem as it was in many of the other regions in the southeast. Due to commercial and private development, conversion to agriculture and the planting of loblolly pine in the area, the longleaf pine flatwoods have been reduced to less than 1% of its original size. However, there are several places where the natural habitat is being maintained and fire is still allowed into the systems. Most of the conservation sites that remain can be found on national forests, military bases, and state parks. Thanks to organizations like the Longleaf Alliance, private landowners are being given federal incentives to plant longleaf on their property and maintain those stands for many decades to come. As a result of education and conservation planning, there has been an increase in longleaf plantations over the past decade with an increase in newly planted acres every year within the ecoregion.</p> <ul style="list-style-type: none"> • Protected Areas – The USGS Protected Areas database of the United States (PAD-US) is America’s official national inventory of U.S. terrestrial and marine protected areas that are dedicated to the preservation of biological diversity and to other natural, recreation and cultural uses, managed for these purposes through legal or other effective means. This database inventories protected areas that include fee lands to conservation easements on federal, state, local and private lands. More than 10% of the NEP supply area is considered protected. |
| Risk Rating | Specified Risk |

| | |
|----------------------------------|---|
| 2.2.1 | Feedstock shall not be sourced from land that had one of the following statuses in January 2008 and no longer has that status due to land conversion: a. Forests b. Wetlands c. Peatlands d. Highly biodiverse grasslands. |
| Supply Base Verifiers | <ul style="list-style-type: none"> • National Risk Assessment for the Conterminous United States of America (FSC-NRA-USA V1-0) • USDA Forest Service Forest Inventory and Analysis (FIA) data • USDA Natural Resources Conservation Service (NRCS) Rapid Carbon Assessment (RaCA) mapping • NEP-DOC-005 SBP Supply Base Risk Assessment • NEP-DOC-009 Secondary Supplier Audit Checklist |
| Risk Rating justification | <p>Nature's Earth Energy Pellets, LLC (NEP) has completed an assessment of land conversion since January 2008 related to:</p> <p>a. Forests; b. Wetlands; c. Peatlands; d. Highly biodiverse grasslands.</p> <p>This assessment for forests used FSC's NATIONAL RISK ASSESSMENT FOR THE CONTERMINOUS UNITED STATES OF AMERICA (FSC-NRA-USA V1-0) and USDA Forest Service Forest Inventory and Analysis (FIA) data. The FSC NRA identified 2 counties within the NEP's supply area as areas where there is a risk greater than "low" receiving forest materials from forest conversions. These counties are Mobile County, AL and Santa Rosa County, FL. USDA Forest Service FIA data for NEP's supply area covering the most current inventory year (2022) compared to 2008 data showed forestland area to be stable having slightly decreased by 0.4% in 14 years (0.03% annually).</p> <p>This assessment for wetlands used USDA Forest Service Forest Inventory and Analysis (FIA) data. USDA Forest Service FIA data for NEP's supply area covering the most current inventory year (2022) compared to 2008 data showed wetland physiographic classes to be stable accounting for 24% of all forestland in 2008 and 2022.</p> <p>This assessment for peatlands used USDA Natural Resources Conservation Service (NRCS) Rapid Carbon Assessment (RaCA) mapping. High carbon stock peatlands are not present within the NEP supply area.</p> <p>Grassland ecosystems do not exist within the NEP supply area.</p> |
| Risk Rating | Specified Risk |

| United States Southeast Region | Indicator |
|-----------------------------------|--|
| 2.2.2 | Ecosystems, their health, vitality, functions and services in the Supply Base shall be maintained or enhanced. |

| | |
|----------------------------------|--|
| Supply Base Verifiers | <ul style="list-style-type: none"> • Federal & State laws • National Risk Assessment for the Conterminous United States of America (FSC-NRA-USA V1-0) • USDA Forest Service Forest Inventory and Analysis (FIA) data • AL, FL, GA, KY, MS, TN Forest Action Plans • AL, FL, GA, KY, MS, TN Wildlife Action Plans • AL, FL, GA, KY, MS, TN BMP Compliance Reports • AL, FL, GA, KY, MS, TN Forestry Agency Websites • AL, FL, GA, KY, MS, TN Forestry Association Websites • Forest Stewardship Council (FSC) Certificate Holder Database • Sustainable Forestry Initiative (SFI) Certificate Holder Database • NEP-DOC-005 SBP Supply Base Risk Assessment • NEP-DOC-009 Secondary Supplier Audit Checklist |
| Risk Rating justification | <p>Ecosystems, their health, vitality, functions, and services are maintained and enhanced through many voluntary and regulatory programs within the NEP supply area. Federal and state laws and regulations are in place to protect the waters of the United States as well as wildlife biodiversity. All laws and regulations are administered through federal and state environmental agencies. These same agencies have incentive programs to enhance forest health and ecosystems for improved wildlife habitat. Forestland within NEP's supply area is owned by the private sector (90%) followed by federal ownership (6.5%) and state ownership (3.5%). These government incentive programs provide financial incentives to support the conservation, health, and vitality of forestlands.</p> <p>NEP has completed an assessment of risk to identified High Conservation Value Areas (HCVs) within its supply area. This risk assessment is primarily based on the NATIONAL RISK ASSESSMENT FOR THE CONTERMINOUS UNITED STATES OF AMERICA (FSC-NRA-USA V1-0) and other conservation assessments from organizations, including but not limited to, World Resources Institute, IUCN Centre for Plant Diversity, Critical Ecosystem Partnership Fund and World Wildlife Fund. The US NRA has declared the level of risk based primarily on requirements for sourcing FSC® Controlled Wood (FSC-STD-40-005v3.1).</p> <p>The NATIONAL RISK ASSESSMENT FOR THE CONTERMINOUS UNITED STATES OF AMERICA (FSC-NRA-USA V1-0) has identified HCV areas previously stated in indicator 2.1.2 that are located within NEP's supply area. Protecting these HCV areas through their identification and educational awareness ensures these ecosystems are maintained and enhanced.</p> <p>Water and water quality is a primary function that forestlands provide. Federal laws, such as the Clean Water Act, provide regulatory guidance to ensure water quality is not negatively impacted. States within NEP's supply areas have developed voluntary forestry Best Management Practices (BMPs) for water quality. State forestry agencies are responsible for monitoring and managing water quality issues within their states. These</p> |

| | <p>state forestry agencies monitor BMP compliance by conducting BMP compliance checks randomly or upon request. Historically BMP compliance has improved since its inception and states currently have high compliance rates.</p> <table><thead><tr><th>State</th><th>Report Year</th><th>% Compliance</th><th>State</th><th>Report Year</th><th>% Compliance</th></tr></thead><tbody><tr><td>AL</td><td>2019</td><td>98.2%</td><td>KY</td><td>2013</td><td>74%</td></tr><tr><td>FL</td><td>2019</td><td>99%</td><td>MS</td><td>2019</td><td>95%</td></tr><tr><td>GA</td><td>2023</td><td>96.8%</td><td>TN</td><td>2019</td><td>95.6%</td></tr></tbody></table> <p>State forestry and wildlife agencies also manage long term Forest Action Plans & Wildlife Action Plans that identify and prioritize efforts to maintain and enhance forest and wildlife health and productivity. These action plans are readily available and provide assistance and incentives to private forest landowners.</p> <p>Sustainable forestry certification, such as Forest Stewardship Council (FSC) and the Sustainable Forestry Initiative (SFI) provide opportunities to encourage forest landowners to manage the health and vitality of their forests. Almost half of NEP’s residual feedstock suppliers are FSC &/or SFI certified (12 of 25 residual suppliers).</p> | State | Report Year | % Compliance | State | Report Year | % Compliance | AL | 2019 | 98.2% | KY | 2013 | 74% | FL | 2019 | 99% | MS | 2019 | 95% | GA | 2023 | 96.8% | TN | 2019 | 95.6% |
|-------------|---|--------------|-------------|--------------|--------------|-------------|--------------|----|------|-------|----|------|-----|----|------|-----|----|------|-----|----|------|-------|----|------|-------|
| State | Report Year | % Compliance | State | Report Year | % Compliance | | | | | | | | | | | | | | | | | | | | |
| AL | 2019 | 98.2% | KY | 2013 | 74% | | | | | | | | | | | | | | | | | | | | |
| FL | 2019 | 99% | MS | 2019 | 95% | | | | | | | | | | | | | | | | | | | | |
| GA | 2023 | 96.8% | TN | 2019 | 95.6% | | | | | | | | | | | | | | | | | | | | |
| Risk Rating | Specified Risk | | | | | | | | | | | | | | | | | | | | | | | | |

| United States Southeast Region | Indicator |
|-----------------------------------|---|
| 2.2.3 | Soil quality in the Supply Base shall be maintained or enhanced |
| Supply Base Verifiers | <ul style="list-style-type: none"> • Purchase Agreements/Contracts • USDA Natural Resources Conservation Service (NRCS) Website • USDA Natural Resources Conservation Service (NRCS) Web Soil Survey Website • AL, FL, GA, KY, MS, TN BMP Compliance Reports • AL, FL, GA, KY, MS, TN Forestry Agency Websites • AL, FL, GA, KY, MS, TN Trained Logger Database Websites • Forest Stewardship Council (FSC) Certificate Holder Database • Sustainable Forestry Initiative (SFI) Certificate Holder Database • NEP-DOC-009 Secondary Supplier Audit Checklist |
| Risk Rating justification | Soil quality is maintained and enhanced through many voluntary and regulatory programs within the NEP supply area. States within NEP's supply areas have developed voluntary forestry Best Management Practices (BMPs) for water quality that include recommendations for protecting soil |

| | | | | | | | | | | | | | | | | | | | |
|-------------|---|-------|------|-------|-------|------|-----|----|------|-----|----|------|-----|----|------|-------|----|------|-------|
| | <p>quality. State forestry agencies are responsible for monitoring and managing water quality and soil disturbance issues within their states. These state forestry agencies monitor BMP compliance by conducting BMP compliance checks randomly or upon request. Historically BMP compliance has improved since its inception and states currently have high compliance rates.</p> <p>State Report Year % Compliance State Report Year % Compliance</p> <table><tr><td>AL</td><td>2019</td><td>98.2%</td><td>KY</td><td>2013</td><td>74%</td></tr><tr><td>FL</td><td>2019</td><td>99%</td><td>MS</td><td>2019</td><td>95%</td></tr><tr><td>GA</td><td>2023</td><td>96.8%</td><td>TN</td><td>2019</td><td>95.6%</td></tr></table> <p>The USDA Natural Resources Conservation Service (NRCS) provides assistance to forest landowners through technology transfer and incentive programs to conserve and improve soil. Forestland within NEP's supply area is owned by the private sector (90%) followed by federal ownership (6.5%) and state ownership (3.5%). These government incentive programs provide financial incentives to support the conservation of soils.</p> <p>Sustainable forestry certification, such as Sustainable Forestry Initiative (SFI), include requirements to maintain or enhance soil quality. SFI requires the use of forestry BMPs as well the use of trained loggers. Almost half of NEP's residual feedstock suppliers are FSC &/or SFI certified (12 of 25 residual suppliers).</p> <p>To ensure these standards are met, NEP Purchase Agreements / Contracts require all feedstock suppliers to harvest fiber in compliance with state BMPs and to maintain SFI State Implementation Committee (SIC) logger training requirements to control the impact on the forests.</p> <p>Lastly, soil maps covering the NEP supply basin are available as a resource to suppliers to assist in planning fiber harvest in a way that does not harm soil quality.</p> | AL | 2019 | 98.2% | KY | 2013 | 74% | FL | 2019 | 99% | MS | 2019 | 95% | GA | 2023 | 96.8% | TN | 2019 | 95.6% |
| AL | 2019 | 98.2% | KY | 2013 | 74% | | | | | | | | | | | | | | |
| FL | 2019 | 99% | MS | 2019 | 95% | | | | | | | | | | | | | | |
| GA | 2023 | 96.8% | TN | 2019 | 95.6% | | | | | | | | | | | | | | |
| Risk Rating | Low Risk | | | | | | | | | | | | | | | | | | |

| United States Southeast Region | Indicator |
|-----------------------------------|---|
| 2.2.4 | Where the removal of harvest forest residues and/or stumps occurs, this shall not lead to irreversible negative impacts to the ecosystem. |
| Supply Base Verifiers | <ul style="list-style-type: none"> Purchase Agreements / Contracts AL, FL, GA, KY, MS, TN Forestry BMP Manuals AL, FL, GA, KY, MS, TN BMP Compliance Reports |

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------------------|---|--------------|-------------|--------------|--------------|-------------|--------------|----|------|-------|----|------|-----|----|------|-----|----|------|-----|----|------|-------|----|------|-------|
| | <ul style="list-style-type: none">• AL, FL, GA, KY, MS, TN Forestry Agency Websites• AL, FL, GA, KY, MS, TN Trained Logger Database Websites• Sustainable Forestry Initiative (SFI) Certificate Holder Database• Forest Guild’s “Forest Biomass Retention and Harvesting Guidelines for the Southeast”• NEP-DOC-009 Secondary Supplier Audit Checklist | | | | | | | | | | | | | | | | | | | | | | | | |
| Risk Rating justification | <p>The prevention of the removal of harvest forest residues and/or stumps is maintained and enhanced through many voluntary and regulatory programs within the NEP supply area. States within NEP’s supply areas have developed voluntary forestry Best Management Practices (BMPs) for water quality that include recommendations for scattering tops, limbs and other logging debris across harvest areas in skid trails and on temporary landings to minimize soil erosion. State forestry agencies are responsible for monitoring and managing water quality and soil erosion issues within their states. These state forestry agencies monitor BMP compliance by conducting BMP compliance checks randomly or upon request. Historically BMP compliance has improved since its inception and states currently have high compliance rates.</p> <table><tr><td>State</td><td>Report Year</td><td>% Compliance</td><td>State</td><td>Report Year</td><td>% Compliance</td></tr><tr><td>AL</td><td>2019</td><td>98.2%</td><td>KY</td><td>2013</td><td>74%</td></tr><tr><td>FL</td><td>2019</td><td>99%</td><td>MS</td><td>2019</td><td>95%</td></tr><tr><td>GA</td><td>2023</td><td>96.8%</td><td>TN</td><td>2019</td><td>95.6%</td></tr></table> <p>Sustainable forestry certification, such as Sustainable Forestry Initiative (SFI), include requirements to protect from soil erosion. SFI requires the use of forestry BMPs as well the use of trained loggers. Almost half of NEP’s residual feedstock suppliers are FSC &/or SFI certified (12 of 25 residual suppliers).</p> <p>To ensure these standards are met, NEP Purchase Agreements / Contracts require all feedstock suppliers to harvest fiber in compliance with state BMPs and to maintain SFI State Implementation Committee (SIC) logger training requirements to control the impact on the forests.</p> <p>Stumps are not traditionally removed after harvest. Stumps are left to rot and decay naturally. Given the favorable weather conditions within the NEP supply area, stumps break down and decay quickly (1-2 years) allowing their nutrients to be recycled on site.</p> <p>NEP has also distributed “Forest Biomass Retention and Harvesting Guidelines for the Southeast” from the Forest Guild to its suppliers as a tool to ensure biomass removal minimizes the harm to ecosystems.</p> | State | Report Year | % Compliance | State | Report Year | % Compliance | AL | 2019 | 98.2% | KY | 2013 | 74% | FL | 2019 | 99% | MS | 2019 | 95% | GA | 2023 | 96.8% | TN | 2019 | 95.6% |
| State | Report Year | % Compliance | State | Report Year | % Compliance | | | | | | | | | | | | | | | | | | | | |
| AL | 2019 | 98.2% | KY | 2013 | 74% | | | | | | | | | | | | | | | | | | | | |
| FL | 2019 | 99% | MS | 2019 | 95% | | | | | | | | | | | | | | | | | | | | |
| GA | 2023 | 96.8% | TN | 2019 | 95.6% | | | | | | | | | | | | | | | | | | | | |
| Risk Rating | Low Risk | | | | | | | | | | | | | | | | | | | | | | | | |

| United States Southeast Region | Indicator | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------------------------|---|--------------|-------------|--------------|--------------|-------------|--------------|----|------|-------|----|------|-----|----|------|-----|----|------|-----|----|------|-------|----|------|-------|
| 2.2.5 | Quality and quantity of ground water, surface water and water downstream shall be maintained or enhanced. | | | | | | | | | | | | | | | | | | | | | | | | |
| Supply Base Verifiers | <ul style="list-style-type: none">• Purchase Agreements / Contracts• Federal & state laws• AL, FL, GA, KY, MS, TN Forestry BMP Manuals• AL, FL, GA, KY, MS, TN BMP Compliance Reports• AL, FL, GA, KY, MS, TN Forestry Agency Websites• AL, FL, GA, KY, MS, TN Trained Logger Database Websites• Sustainable Forestry Initiative (SFI) Certificate Holder Database• EP-DOC-011 Secondary Supplier Audit Checklist | | | | | | | | | | | | | | | | | | | | | | | | |
| Risk Rating justification | <p>State and Federal laws, such as the Clean Water Act, are in place to protect the waters of the United States. Access to these laws is available to NEP personnel. State forestry agencies, working with state environmental protection agencies are charged with the enforcement of these state and federal laws. In addition, state forestry best management practices (BMPs) have been developed to provide guidance in water quality protection. These state forestry agencies monitor BMP compliance by conducting BMP compliance checks randomly or upon request. Historically BMP compliance has improved since its inception and states currently have high compliance rates.</p> <table><tr><td>State</td><td>Report Year</td><td>% Compliance</td><td>State</td><td>Report Year</td><td>% Compliance</td></tr><tr><td>AL</td><td>2019</td><td>98.2%</td><td>KY</td><td>2013</td><td>74%</td></tr><tr><td>FL</td><td>2019</td><td>99%</td><td>MS</td><td>2019</td><td>95%</td></tr><tr><td>GA</td><td>2023</td><td>96.8%</td><td>TN</td><td>2019</td><td>95.6%</td></tr></table> <p>Sustainable forestry certification, such as Sustainable Forestry Initiative (SFI), include requirements to protect from soil erosion. SFI requires the use of forestry BMPs as well the use of trained loggers. Almost half of NEP's residual feedstock suppliers are FSC &/or SFI certified (12 of 25 residual suppliers).</p> <p>To ensure these standards are met, NEP Purchase Agreements / Contracts require all feedstock suppliers to harvest fiber in compliance with state BMPs and to maintain SFI State Implementation Committee (SIC) logger training requirements to control the impact on the forests.</p> | State | Report Year | % Compliance | State | Report Year | % Compliance | AL | 2019 | 98.2% | KY | 2013 | 74% | FL | 2019 | 99% | MS | 2019 | 95% | GA | 2023 | 96.8% | TN | 2019 | 95.6% |
| State | Report Year | % Compliance | State | Report Year | % Compliance | | | | | | | | | | | | | | | | | | | | |
| AL | 2019 | 98.2% | KY | 2013 | 74% | | | | | | | | | | | | | | | | | | | | |
| FL | 2019 | 99% | MS | 2019 | 95% | | | | | | | | | | | | | | | | | | | | |
| GA | 2023 | 96.8% | TN | 2019 | 95.6% | | | | | | | | | | | | | | | | | | | | |
| Risk Rating | Low Risk | | | | | | | | | | | | | | | | | | | | | | | | |

| United States Southeast Region | Indicator |
|-----------------------------------|--|
| 2.2.6 | Air emissions shall comply with national legislation or in the absence of national legislation with industry best practice. |
| Supply Base Verifiers | <ul style="list-style-type: none"> Federal & state laws NEP Permits AL, FL, GA, KY, MS, TN Forestry Agency Websites AL, FL, GA, KY, MS, TN Forestry Agency Burning Permit Application Websites AL, FL, GA, KY, MS, TN Forest Action Plans |
| Risk Rating justification | <p>State and Federal laws, such as the Clean Air Act, are in place to protect the air emissions in the United States. Access to these laws is available to NEP personnel. Every state within NEP's supply base has environmental regulatory agencies that are responsible for enforcement of air quality regulations. NEP maintains any and all required environmental permits for air emissions at its facility.</p> <p>The only potential adverse impact to air quality from forest management activities is prescribed burning. Permits or authorizations for prescribed burning are required in AL, FL, GA, KY, MS, & TN. NEP does not conduct forest management activities that directly impacts air quality.</p> <p>State Forest Action Plans 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 and other fire tolerant species within EP's supply basin.</p> |
| Risk Rating | Low Risk |

| United States Southeast Region | Indicator |
|-----------------------------------|---|
| 2.2.7 | Pesticides shall only be used as part of an Integrated Pest Management (IPM) plan in compliance with national legislation, chemical safety data sheets and industry best practice. Banned pesticides shall not be used. |
| Supply Base Verifiers | <ul style="list-style-type: none"> Federal & state laws EPA Websites AL, FL, GA, KY, MS, TN Forestry BMP Manuals AL, FL, GA, KY, MS, TN Forestry Agency Websites |
| Risk Rating justification | NEP does not conduct forest management activities which use forest chemicals. Historically, chemical use in forest management within NEP's supply area is minimal. The only times chemicals are used are the time of stand establishment (site preparation, fertilization, herbaceous weed control) and intermittent stand management (release after thinning, fertilization, |

| | |
|--------------------|---|
| | <p>control of invasive species). The maximum number of applications does not exceed 3-4 applications over a 40-year rotation. Most stands receive no chemicals throughout the life cycle. When chemicals are applied, applications are minimal or below labelled rates.</p> <p>The use of chemicals is regulated by the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA). FIFRA is a federal regulation that governs the registration, distribution, sale, and use of pesticides in the United States. States have regulations that further support FIFRA and provide requirements for the use of licensed applicators to comply with federal EPA regulations.</p> <p>In addition, state forestry best management practices (BMPs) have been developed to provide guidance in water quality protection and addresses the application of chemicals to avoid water quality impacts.</p> |
| Risk Rating | Low Risk |

| United States Southeast Region | Indicator |
|-----------------------------------|---|
| 2.2.8 | Waste shall be disposed of in an environmentally appropriate manner. |
| Supply Base Verifiers | <ul style="list-style-type: none"> Federal & state laws Purchase Agreements/Contracts EPA Websites State Environmental Agency Websites AL, FL, GA, KY, MS, TN Forestry BMP Manuals AL, FL, GA, KY, MS, TN Forestry Agency Websites |
| Risk Rating justification | <p>NEP does not conduct forest management activities which requires proper waste disposal. State and Federal laws, such as the CERCLA, are in place to protect from oil spills and hazardous substance releases. Access to these laws is available to NEP personnel & suppliers.</p> <p>NEP Purchase Agreements/Contracts have clauses requiring adherence to federal, state and local laws and state BMPs.</p> |
| Risk Rating | Low Risk |

| United States Southeast Region | Indicator |
|-----------------------------------|---|
| 2.2.9 | Harvesting levels shall be justified as to how they can be sustained with reference to inventory and growth data for the Supply Base. |

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------------------|---|-------------|------------|------------|-----------|-------------|------------|---------------|--------------|--------|-------------|------------|------------|-----------|-------------|------------|---------------|----------|-------------|-----------|-----------|--------|-------------|------------|-------------|-----------|------------|-----------|-----------|------------|------------|------------|-------------|------------|-------------|------------|--------------|-----------|-------------|------------|-------------|--------------|------|------|------|------|------|------|------|
| Supply Base Verifiers | <ul style="list-style-type: none">USDA Forest Service Forest Inventory and Analysis (FIA) data | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Risk Rating justification | Harvest levels for NEP's supply base do not exceed growth according to USDA Forest Service forest inventory data. Forest Service removals, growth and mortality records for the most year (AL-2022, FL-2019, GA-2021, KY-2019, MS-2021, TN-2019) show a positive average rate of growth to removals (and mortality) at 2.03 for all wood. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | <table><tr><td></td><td>AL</td><td>FL</td><td>GA</td><td>KY</td><td>MS</td><td>TN</td><td>Total</td></tr><tr><td>Growth</td><td>390,114,415</td><td>27,592,537</td><td>18,975,102</td><td>6,906,111</td><td>515,845,244</td><td>76,688,057</td><td>1,036,121,466</td></tr><tr><td>Removals</td><td>157,355,692</td><td>7,252,193</td><td>7,753,882</td><td>27,547</td><td>181,879,966</td><td>29,828,503</td><td>384,097,783</td></tr><tr><td>Mortality</td><td>56,490,384</td><td>4,357,673</td><td>3,233,924</td><td>957,481</td><td>64,080,075</td><td>12,747,196</td><td>141,866,706</td></tr><tr><td>Net Change</td><td>176,268,339</td><td>15,982,671</td><td>7,987,296</td><td>5,921,083</td><td>269,885,203</td><td>34,112,385</td><td>510,156,977</td></tr><tr><td>Growth Ratio</td><td>2.21</td><td>1.73</td><td>2.38</td><td>1.17</td><td>1.91</td><td>2.25</td><td>2.03</td></tr></table> | | AL | FL | GA | KY | MS | TN | Total | Growth | 390,114,415 | 27,592,537 | 18,975,102 | 6,906,111 | 515,845,244 | 76,688,057 | 1,036,121,466 | Removals | 157,355,692 | 7,252,193 | 7,753,882 | 27,547 | 181,879,966 | 29,828,503 | 384,097,783 | Mortality | 56,490,384 | 4,357,673 | 3,233,924 | 957,481 | 64,080,075 | 12,747,196 | 141,866,706 | Net Change | 176,268,339 | 15,982,671 | 7,987,296 | 5,921,083 | 269,885,203 | 34,112,385 | 510,156,977 | Growth Ratio | 2.21 | 1.73 | 2.38 | 1.17 | 1.91 | 2.25 | 2.03 |
| | | AL | FL | GA | KY | MS | TN | Total | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Growth | 390,114,415 | 27,592,537 | 18,975,102 | 6,906,111 | 515,845,244 | 76,688,057 | 1,036,121,466 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Removals | 157,355,692 | 7,252,193 | 7,753,882 | 27,547 | 181,879,966 | 29,828,503 | 384,097,783 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Mortality | 56,490,384 | 4,357,673 | 3,233,924 | 957,481 | 64,080,075 | 12,747,196 | 141,866,706 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Net Change | 176,268,339 | 15,982,671 | 7,987,296 | 5,921,083 | 269,885,203 | 34,112,385 | 510,156,977 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Growth Ratio | 2.21 | 1.73 | 2.38 | 1.17 | 1.91 | 2.25 | 2.03 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | State-wide FIA data shows the growth-to-removals (and mortality) ratios below: | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | <table><tr><td></td><td>AL</td><td>FL</td><td>GA</td><td>KY</td><td>MS</td><td>TN</td></tr><tr><td>Gross Growth</td><td>2,794</td><td>1,139</td><td>2,486</td><td>925</td><td>2,737</td><td>1,154</td></tr><tr><td>Mortality</td><td>411</td><td>293</td><td>443</td><td>281</td><td>387</td><td>305</td></tr><tr><td>Removals</td><td>1,260</td><td>589</td><td>1,377</td><td>285</td><td>987</td><td>369</td></tr><tr><td>Net Change</td><td>1,123</td><td>257</td><td>666</td><td>359</td><td>1,363</td><td>479</td></tr><tr><td>Growth Ratio</td><td>2.49</td><td>4.43</td><td>3.73</td><td>2.58</td><td>2.01</td><td>2.41</td></tr></table> | | AL | FL | GA | KY | MS | TN | Gross Growth | 2,794 | 1,139 | 2,486 | 925 | 2,737 | 1,154 | Mortality | 411 | 293 | 443 | 281 | 387 | 305 | Removals | 1,260 | 589 | 1,377 | 285 | 987 | 369 | Net Change | 1,123 | 257 | 666 | 359 | 1,363 | 479 | Growth Ratio | 2.49 | 4.43 | 3.73 | 2.58 | 2.01 | 2.41 | | | | | | |
| | AL | FL | GA | KY | MS | TN | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Gross Growth | 2,794 | 1,139 | 2,486 | 925 | 2,737 | 1,154 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mortality | 411 | 293 | 443 | 281 | 387 | 305 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Removals | 1,260 | 589 | 1,377 | 285 | 987 | 369 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Net Change | 1,123 | 257 | 666 | 359 | 1,363 | 479 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Growth Ratio | 2.49 | 4.43 | 3.73 | 2.58 | 2.01 | 2.41 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| *Volumes are million cubic feet. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| </ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| United States Southeast Region | Indicator |
|--------------------------------|---|
| 2.2.10 | Harvested areas shall be regenerated |
| Supply Base Verifiers | <ul style="list-style-type: none"> USDA Forest Service Forest Inventory and Analysis (FIA) data FAO (United Nations) Global Forest Resources Assessment Website |

| Risk Rating justification | <p>NEP does not directly conduct forest management activities such as timber harvesting and regeneration. Encouraging natural or artificial forest regeneration are responsibilities of USDA Forest Service and state forestry agencies. USDA Forest Service provides funding to state forestry agencies whose primary responsibilities include forest management of public lands, oversight of fire prevention, oversight of pest & disease monitoring and management of all lands, and public outreach and education of forest management issues including forest regeneration.</p> <p>State forest action plans have been developed, and are updated every 10 years, to identify forest management priorities for the states. These priorities include forest regeneration. State forestry agencies have tree nurseries to grow and sell seedlings for regeneration. State forestry agency and NRCS cost sharing programs provide financial assistance to forest landowners to pay for regeneration costs.</p> <p>Successful regeneration can be tracked by the area classified to be in forests every year. The graph below shows that forests have remained stable for the last thirty-plus years.</p> <div data-bbox="331 869 1576 1276"> <table border="1"> <caption>US Forest Area Data (1000ha)</caption> <thead> <tr> <th>Year</th> <th>Forest Area (1000ha)</th> </tr> </thead> <tbody> <tr><td>1990</td><td>300,000</td></tr> <tr><td>1995</td><td>300,000</td></tr> <tr><td>2000</td><td>300,000</td></tr> <tr><td>2005</td><td>300,000</td></tr> <tr><td>2010</td><td>300,000</td></tr> <tr><td>2015</td><td>300,000</td></tr> <tr><td>2020</td><td>300,000</td></tr> </tbody> </table> </div> | Year | Forest Area (1000ha) | 1990 | 300,000 | 1995 | 300,000 | 2000 | 300,000 | 2005 | 300,000 | 2010 | 300,000 | 2015 | 300,000 | 2020 | 300,000 |
|----------------------------------|--|------|----------------------|------|---------|------|---------|------|---------|------|---------|------|---------|------|---------|------|---------|
| Year | Forest Area (1000ha) | | | | | | | | | | | | | | | | |
| 1990 | 300,000 | | | | | | | | | | | | | | | | |
| 1995 | 300,000 | | | | | | | | | | | | | | | | |
| 2000 | 300,000 | | | | | | | | | | | | | | | | |
| 2005 | 300,000 | | | | | | | | | | | | | | | | |
| 2010 | 300,000 | | | | | | | | | | | | | | | | |
| 2015 | 300,000 | | | | | | | | | | | | | | | | |
| 2020 | 300,000 | | | | | | | | | | | | | | | | |
| Risk Rating | Low Risk | | | | | | | | | | | | | | | | |

| United States Southeast Region | Indicator |
|-----------------------------------|--|
| 2.2.11 | The impacts of natural processes such as fires, pests and diseases shall be managed. |
| Supply Base Verifiers | <ul style="list-style-type: none"> AL, FL, GA, KY, MS, TN Forestry Agency Websites |
| Risk Rating justification | NEP does not directly conduct forest management activities that manage fires, pests and diseases. Managing fire, pest, and disease are a primary responsibility of USDA Forest Service and state forestry agencies. USDA Forest Service provides funding to state forestry agencies whose primary responsibilities include forest management of public lands, oversight of fire prevention, oversight of pest & disease monitoring and management of all lands, and public outreach and education of forest management issues including management of fire, pests, and diseases. |

| | |
|--------------------|---|
| | <p>State forest action plans have been developed, and are updated every 10 years, to identify forest management priorities for the states. These priorities include forest health. State forestry agencies develop annual reports communicating to the public the results of their efforts each year. These plans and reports are available to NEP personnel via state forestry agency websites.</p> <p>Fire occurrences in Alabama for 2020 were below average due to abundant rainfall and other climatic conditions. Commission employees suppressed 9,483 wildfires that burned 14,909 acres. The average fire size was 16 acres. The Mississippi Forestry Commission in 2021 reported 922 wildfires burning 19,251 acres for the year. During 2022, the Tennessee Division of Forestry suppressed 942 wildfires affecting 12,300 acres and safely implemented 146 beneficial prescribed fires across 8,220 acres statewide.</p> <p>The Alabama Forestry Commission continued monitoring for southern pine beetle (SPB) infestation spots for the state in 2021. Overall, the number of SPB infestation spots were lower compared to previous years. In June 2020, the non-native hemlock woolly adelgid was identified in the state of Alabama for the first time from hemlocks in Dekalb County. The Tennessee Forestry Commission completed surveys for the presence of laurel wilt disease, detecting the disease in four additional counties. This disease has spread to 20 counties in Tennessee since its first detection in 2019.</p> |
| Risk Rating | Low Risk |

| United States Southeast Region | Indicator |
|-----------------------------------|---|
| 2.2.12 | Genetically modified trees shall not be used. |
| Supply Base Verifiers | <ul style="list-style-type: none"> National Risk Assessment for the Conterminous United States of America (FSC-NRA-USA V1-0) NEP-DOC-005 SBP Supply Base Risk Assessment |
| Risk Rating justification | <p>NEP referenced FSC's NATIONAL RISK ASSESSMENT FOR THE CONTERMINOUS UNITED STATES OF AMERICA (FSC-NRA-USA V1-0) as part of its risk assessment. The national assessment has determined Controlled Wood Category 5: Wood from forests in which genetically modified trees are planted to be "low risk".</p> <p>NEP completed a SBP Supply Base Risk Assessment which assessed the level of risk GMO trees are available for operational use. The Risk Assessment states there are no operational GMO forests or stands in the United States.</p> |
| Risk Rating | Low Risk |

| United States Southeast Region | Indicator |
|-----------------------------------|--|
| 3.2.2 | Primary feedstock shall not be sourced from forest areas where site productivity is low and, according to local definitions or norms, the areas are classified as low-productive or difficult to regenerate. |
| Supply Base Verifiers | Not Applicable; NEP does not purchase primary feedstock. |
| Risk Rating justification | Not Applicable; NEP does not purchase primary feedstock. |
| Risk Rating | Low Risk |

| United States Southeast Region | Indicator |
|-----------------------------------|---|
| 3.2.3 | feedstock shall not be sourced from forest areas in the Supply Base which, according to local definitions or norms, are classified as having combined attributes of high carbon stocks and high conservation value (HCV). |
| Supply Base Verifiers | Not Applicable; NEP does not purchase primary feedstock. |
| Risk Rating justification | Not Applicable; NEP does not purchase primary feedstock. |
| Risk Rating | Low Risk |

| United States Southeast Region | Indicator |
|-----------------------------------|--|
| 3.1.1 | LULUCF emissions shall be accounted for through one of the following routes: Route A Feedstock may be sourced from a country of origin which is party to the Paris Agreement, and which has submitted a Nationally Determined Contribution to the United Nations Framework Convention on Climate Change (UNFCCC) covering carbon emissions and removals from agriculture, forestry and land use which ensure the changes in carbon stock associated with biomass harvest are counted towards the country's commitment to reduce or limit greenhouse gas emissions, or Route B Feedstock may be sourced from a country of origin which is party to the Paris Agreement and has national or sub-national laws in place (developed in accordance with Article 5 of the Paris Agreement and applicable in the area of harvest), to conserve and enhance carbon stocks and sinks, and provided there is evidence that reported LULUCF-sector emissions do not exceed removals, or Route C Feedstock may be sourced from a Supply Base where an assessment demonstrates that both the carbon stock is stable, and the forests' capacity to act as a carbon sink is stable or increasing over the long term. |
| Supply Base Verifiers | <ul style="list-style-type: none"> • United States State Department Announcement • United Nations Climate Change Website (https://unfccc.int/process-and-meetings/the-paris-agreement/nationally-determined-contributions-ndcs) |

| | |
|----------------------------------|--|
| Risk Rating justification | The United States rejoined the Paris Agreement and submitted its Nationally Determined Contribution on April 22, 2021. |
| Risk Rating | Low Risk |

| United States Southeast Region | Indicator |
|-----------------------------------|---|
| 3.2.1 | All feedstock sourcing shall be consistent with either of these two options: Option A. Feedstock may be sourced from Supply Bases where an assessment of the Supply Base shows that the forest carbon stocks are stable or increasing, or Option B. Feedstock may be sourced, if the assessment shows that the forest carbon stocks are declining in the Supply Base, provided that the decline is due to natural processes (fire, pests etc.), and sourcing of feedstock has the aim to recover feedstock that would otherwise be lost or to assist regeneration. |
| Supply Base Verifiers | <ul style="list-style-type: none"> USDA Forest Service Forest Inventory and Analysis (FIA) data |
| Risk Rating justification | <p>NEP is following Option A.</p> <p>Using USDA Forest Service FIA data on carbon storage for the EP's supply area was determined to be 113.16 million short tons for the most recent years in NC (2017) & SC (2016). This accounts for a 2.52% increase in the 8 years.</p> <p>Forest carbon stocks for NEP's supply base are stable and are increasing according to USDA Forest Service FIA forest inventory data. Forest Service measured total carbon for the most current year (AL-2022, FL-2019, GA-2021, KY-2019, MS-2021, TN-2019) to be 586.6 million tons compared to the 2013 inventory of 499.1 tons. This is a 14% increase over ten years or 1.4% annually.</p> |
| Risk Rating | Low Risk |

| United States Southeast Region | Indicator |
|-----------------------------------|---|
| 3.3.1 | Feedstock sourcing shall not compete with wood sourcing for long-lived wood products. |
| Supply Base Verifiers | <ul style="list-style-type: none"> Purchase Agreements/Contracts |
| Risk Rating justification | NEP only purchases residual feedstock. |
| Risk Rating | Low Risk |

| United States Southeast Region | Indicator |
|-----------------------------------|---|
| 4.1.1 | Freedom of association and the right to collective bargaining shall be respected in the workplace. |
| Supply Base Verifiers | <ul style="list-style-type: none"> Employee interviews Federal & state laws Stakeholder Consultation NEP-POL-001 Sustainability Policy |
| Risk Rating justification | <p>NEP recognizes the right to collective bargaining and the Freedom of Association. NEP has a publicly available sustainability policy that affirms its commitment to comply with labor, health & safety, and other social laws.</p> <p>Federal laws in the United States codified in both the National Labor Relations Act of 1935 and OSHA protect workers' rights to collective bargaining. AL, FL, GA, KY, MS & TN are Right to Work states. Further, compliance with social laws is enforced through contracts with suppliers.</p> <p>No negative feedback has been received by stakeholders.</p> |
| Risk Rating | Low Risk |

| United States Southeast Region | Indicator |
|-----------------------------------|---|
| 4.1.2 | Forced or compulsory labour shall not be used. |
| Supply Base Verifiers | <ul style="list-style-type: none"> Employee interviews Federal & state laws Stakeholder Consultation NEP-POL-001 Sustainability Policy |
| Risk Rating justification | <p>The United States Federal Constitution 13th 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". Benefiting from compulsory labor in the United States is a federal crime punishable by up to 20 years in prison.</p> <p>NEP has a publicly available sustainability policy that affirms its commitment to comply with labor, health & safety, and other social laws. Further, compliance with labor laws is enforced through contracts with suppliers.</p> <p>No negative feedback has been received by stakeholders.</p> |
| Risk Rating | Low Risk |

| United States Southeast Region | Indicator |
|-----------------------------------|---|
| 4.1.3 | Child labour shall not be used. |
| Supply Base Verifiers | <ul style="list-style-type: none"> Employee interviews Federal & state laws Employee Handbook Stakeholder Consultation NEP-POL-001 Sustainability Policy |
| Risk Rating justification | <p>State and Federal laws, such as the Equal Employment Opportunity and OSHA, are in place to prohibit child labour. NEP has a publicly available sustainability policy that affirms its commitment to comply with labor, health & safety, and other social laws. Further, compliance with labour laws is enforced through contracts with suppliers.</p> <p>No negative feedback has been received by stakeholders.</p> |
| Risk Rating | Low Risk |

| United States Southeast Region | Indicator |
|-----------------------------------|---|
| 4.1.4 | Workers shall not be discriminated in hiring, remuneration, access to training, promotion, termination or retirement. |
| Supply Base Verifiers | <ul style="list-style-type: none"> Employee interviews Federal & state laws Stakeholder Consultation NEP-POL-001 Sustainability Policy |
| Risk Rating justification | <p>State and Federal laws, such as the Equal Employment Opportunity and OSHA, are in place to provide rights to workers. NEP has a publicly available sustainability policy that affirms its commitment to comply with labor, health & safety, and other social laws. Further, compliance with labour laws is enforced through contracts with suppliers.</p> <p>No negative feedback has been received by stakeholders.</p> |
| Risk Rating | Low Risk |

| United States Southeast Region | Indicator |
|-----------------------------------|---|
| 4.1.5 | Wages paid to workers shall meet or exceed the legal minimum wage or where there is no statutory minimum wage industry norms shall be met or exceeded |
| Supply Base Verifiers | <ul style="list-style-type: none"> Employee interviews Employee payroll records |

| | |
|----------------------------------|--|
| | <ul style="list-style-type: none"> Federal & state laws Stakeholder Consultation NEP-POL-001 Sustainability Policy |
| Risk Rating justification | <p>State and Federal laws, such as the Fair Labor Standards Act, are in place to enforce minimum wages, overtime pay, record keeping and child labor requirements. NEP has a publicly available sustainability policy that affirms its commitment to comply with labour, health & safety, and other social laws. Further, compliance with labour laws is enforced through contracts with suppliers.</p> <p>No negative feedback has been received by stakeholders.</p> |
| Risk Rating | Low Risk |

| United States Southeast Region | Indicator |
|-----------------------------------|---|
| 4.1.6 | Working hours shall comply with legal requirements. |
| Supply Base Verifiers | <ul style="list-style-type: none"> Employee interviews Federal & state laws Stakeholder Consultation NEP-POL-001 Sustainability Policy |
| Risk Rating justification | <p>State and Federal laws, such as the Equal Employment Opportunity and OSHA, are in place to prohibit child labour. NEP has a publicly available sustainability policy that affirms its commitment to comply with labor, health & safety, and other social laws. Further, compliance with labour laws is enforced through contracts with suppliers.</p> <p>No negative feedback has been received by stakeholders.</p> |
| Risk Rating | Low Risk |

| United States Southeast Region | Indicator |
|-----------------------------------|---|
| 4.1.7 | Workers shall have access to health care provisions, sickness benefits, retirement benefits, invalidity benefits, death benefits, and workers' compensation |
| Supply Base Verifiers | <ul style="list-style-type: none"> Employee interviews Employee Handbook Company Website / Careers Page (https://naturesearth.com/careers/) Stakeholder Consultation NEP-POL-001 Sustainability Policy |

| | |
|----------------------------------|--|
| Risk Rating justification | NEP provides benefits to employees that include competitive salary, affordable health, dental & vision insurance, 401K matching, and paid time off & holidays. |
| Risk Rating | Low Risk |

| United States Southeast Region | Indicator |
|-----------------------------------|---|
| 4.1.8 | Training shall be provided for all workers to allow them to implement the conditions set out in all elements of the SBP Standards relevant to their responsibilities. |
| Supply Base Verifiers | <ul style="list-style-type: none"> Company training records |
| Risk Rating justification | NEP has implemented a training program for effected employees on SBP certification. These employees are trained initially on an overview of SBP certification, NEP's supply base evaluation results and the roles with the certification program. Additional training is required upon changes to the SBE, the standards, or employee responsibilities. |
| Risk Rating | Low Risk |

| United States Southeast Region | Indicator |
|-----------------------------------|--|
| 4.1.9 | Mechanisms shall be in place for resolving grievances and disputes in the workplace. |
| Supply Base Verifiers | <ul style="list-style-type: none"> Employee Interviews Employee Handbook Training Records NEP-POL-001 Sustainability Policy NEP-PROC-003 SBP Procedures |
| Risk Rating justification | <p>NEP has implemented a grievance and dispute resolution procedure within NEP-PROC-003 SBP Procedures. A training plan has been implemented to train NEP employees on the awareness of these procedures.</p> <p>A procedure to resolve complaints from stakeholders is included in NEP-PROC-002 Due Diligence Procedures. These procedures provide guidance on how complaints from interested parties are evaluated, analysed, and responded.</p> |
| Risk Rating | Low Risk |

| United States Southeast Region | Indicator |
|-----------------------------------|---|
| 4.1.10 | Safeguards shall be put in place to protect the health and safety of workers by developing, communicating and implementing policies and procedures. |
| Supply Base Verifiers | <ul style="list-style-type: none"> • Training records • Federal & State Laws • Employee interviews< • The World Bank Worldwide Governance Indicators Website https://www.worldbank.org/en/publication/worldwide-governance-indicators |
| Risk Rating justification | <p>State and Federal laws, such as OSHA to ensure worker health and safety in the work place.</p> <p>NEP has policies on workers' health and safety. NEP has a health and safety program that is managed by dedicated personnel. This program includes the use of personal protective equipment and safety meetings.</p> <p>NEP Purchase Agreements/Contracts contain requirements of adhering to laws and regulations including worker health and safety. NEP requires their suppliers, sub-suppliers and loggers to maintain SFI State Implementation Committee (SIC) logger training. This training educates loggers on safety.</p> <p>The United States has a robust legal system with established laws & regulations protecting tenure & use rights, forest management practices & work conditions. One such federal administration, OSHA, ensures workers have a safe work environment. OSHA has a complaint process where workers can submit complaints to have their workplace inspected.</p> <p>Globally, the United States is recognized as having high quality governance and regulatory quality. In 2022, the United States ranked 88.68 for Rule of Law and 91.04 for Regulatory Quality in the Worldwide Governance Indicators by the World Bank. NEP has implemented the National Risk Assessment for the Conterminous United States of America (FSC-NRA-USA V1-0) which has determined Controlled Wood Category 1: Illegally harvested wood & Category 2: Wood harvested in violation of traditional and human rights to be "low risk". NEP's SBP Supply Base Risk Assessment supports these low risk assessments through the listing of various applicable laws showcasing the rule of law and public agency governance.</p> |
| Risk Rating | Low Risk |

| United States Southeast Region | Indicator |
|-----------------------------------|---|
| 4.2.1 | Negative social and community impacts shall be identified and avoided. |
| Supply Base Verifiers | <ul style="list-style-type: none"> • Employee Interviews • Stakeholder Consultation • Company Website Press Releases |

| | |
|----------------------------------|--|
| Risk Rating justification | <p>NEP is recognized by the local community as being an important employer in the area. The company announced plans in 2022 to a \$10.8 million capital expansion to double the size of the facility. This announcement ensures additional jobs in the community.</p> <p>No negative feedback has been received by stakeholders.</p> |
| Risk Rating | Low Risk |

| United States Southeast Region | Indicator |
|-----------------------------------|--|
| 4.2.2 | Feedstock sourcing shall positively contribute to the local economy, including employment. |
| Supply Base Verifiers | <ul style="list-style-type: none"> Economic studies Employee interviews |
| Risk Rating justification | <p>In addition to the 50 jobs associated with the pellet mill, NEP has created another market for wood residuals. This additional market only adds to a forest products industry that is a leading industry and employer in AL and MS.</p> <p>According to recent economic studies, forestry directly contributed \$11.4 billion in industry output in Alabama (2020) and \$13.12 billion in Mississippi (2018). The forest sector employed 44,141 people in AL and 61,619 people in MS.</p> |
| Risk Rating | Low Risk |

| United States Southeast Region | Indicator |
|-----------------------------------|--|
| 4.2.3 | Food, water supply or high conservation values (HCV) that are essential for the fulfillment of basic needs of communities shall be maintained or enhanced |
| Supply Base Verifiers | <ul style="list-style-type: none"> Purchase Agreements/Contracts Stakeholder Consultation NEP-POL-001 Sustainability Policy |
| Risk Rating justification | <p>NEP does not conduct forest management activities which could negatively impact food, water, or HCV for the basic needs of communities. NEP has a sustainability policy to provide support and guidance on how employees and suppliers meet Best Management Practices (BMPs) in the harvest of fiber thus verifying the 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 fulfillment of basic needs. Purchase</p> |

| | |
|--------------------|--|
| | <p>Agreements/Contracts have clauses requiring adherence to state BMPs. Procedures are in place to monitor BMP compliance.</p> <p>NEP reaches out to local and regional stakeholders who may have specific needs from the forestlands within their community. Feedback from these stakeholder consultations will be addressed as needed. No negative feedback has been received by stakeholders.</p> |
| Risk Rating | Low Risk |

| United States Southeast Region | Indicator |
|-----------------------------------|--|
| 4.2.4 | Legal, customary, and traditional tenure and use rights of Indigenous Peoples and local communities related to the Supply Base shall be identified, documented, and respected. |
| Supply Base Verifiers | <ul style="list-style-type: none"> • Bureau of Indian Affairs Website • International, Federal & State Laws • NEP-DOC-005 SBP Supply Base Risk Assessment |
| Risk Rating justification | <p>There are appropriate control systems and procedures to verify that legal, customary, and traditional tenure and use rights of indigenous people and local communities related to the forest are identified, documented and respected for NEP's supply area.</p> <p>According to NEP-DOC-005 SBP Supply Base Risk Assessment there is low risk in 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. Below are the justifications for this low risk designation.</p> <ul style="list-style-type: none"> • There are no U.N. Security Council bans on timber exports from the United States; • USAID does not designate districts as source of conflict timber; • 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; • There is no evidence of violation of the ILO Convention 169 in the US. <p>Native Americans are protected by federal law rather than state law according to the Nonintercourse Act of 1790. The Indian Removal Act of 1830 was intended to promote the voluntary removal of Native Americans out of the US Territory peacefully through treaties and land sales. There are two recognized Native American tribe located within NEP's supply area. They are the Mississippi Band of Choctaw in MS and the Poarch Band of Creek in AL.</p> |
| Risk Rating | Low Risk |

| United States Southeast Region | Indicator |
|-----------------------------------|--|
| 4.2.5 | Mechanisms shall be in place for resolving grievances and disputes relating to tenure and use rights of the forest and other land management practices. |
| Supply Base Verifiers | <ul style="list-style-type: none"> • Employee interviews • Federal & State Laws • The World Bank Worldwide Governance Indicators Website https://www.worldbank.org/en/publication/worldwide-governance-indicators • NEP-PROC-002 Due Diligence Procedures • NEP-DOC-005 SBP Supply Area Risk Assessment |
| Risk Rating justification | <p>NEP has complaint mechanisms in place as part of NEP-PROC-002 Due Diligence Procedures. These procedures provide guidance on when and how NEP responds to grievances and complaints. No complaints or grievances have been received to date.</p> <p>The United States has a robust legal system with established laws & regulations protecting tenure and use rights, forest management practices and work conditions. One such federal administration, OSHA, ensures workers have a safe work environment. OSHA has a complaint process where workers can submit complaints to have their workplace inspected.</p> <p>Globally, the United States is recognized as having high quality governance and regulatory quality. In 2022, the United States ranked 88.68 for Rule of Law and 91.04 for Regulatory Quality in the Worldwide Governance Indicators by the World Bank.</p> <p>NEP has implemented the National Risk Assessment for the Conterminous United States of America (FSC-NRA-USA V1-0) which has determined Controlled Wood Category 1: Illegally harvested wood & Category 2: Wood harvested in violation of traditional and human rights to be “low risk”. NE-DOC-005 SBP Supply Area Risk Assessment supports these low risk assessments through the listing of various applicable laws showcasing the rule of law and public agency governance.</p> |
| Risk Rating | Low Risk |

| United States Southeast Region | Indicator |
|-----------------------------------|---|
| 4.2.6 | Where Indigenous Peoples’ rights are identified in the Supply Base, and Free Prior and Informed Consent (FPIC) has not been achieved for the proposed and planned activities, a consultation and, if required, accommodation process shall be put in place. |

| | |
|----------------------------------|---|
| Supply Base Verifiers | <ul style="list-style-type: none"> Bureau of Indian Affairs Website https://www.bia.gov/ International, Federal & State Laws NEP-DOC-005 SBP Supply Base Risk Assessment |
| Risk Rating justification | <p>There are appropriate control systems and procedures to verify that legal, customary, and traditional tenure and use rights of indigenous people and local communities related to the forest are identified, documented and respected for NEP's supply area.</p> <p>While the US recognizes "the significance of the Declaration's provisions on free, prior and informed consent" it qualifies those provisions as a "call for a process of meaningful consultation with tribal leaders." The federal government's emphasis on consultation rather than consent is an ongoing challenge for tribes seeking to ensure they have the necessary decision-making authority over projects that affect their lands, territories, and resources.</p> <p>According to NEP-DOC-005 SBP Supply Base Risk Assessment there is low risk in verifying that FPIC has not been achieved for the proposed and planned activities, a consultation and, if required, accommodation process shall be put in place. Below are the justifications for this low risk designation.</p> <ul style="list-style-type: none"> There are no U.N. Security Council bans on timber exports from the United States; USAID does not designate districts as source of conflict timber; 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; There is no evidence of violation of the ILO Convention 169 in the US. <p>Native Americans are protected by federal law rather than state law according to the Nonintercourse Act of 1790. The Indian Removal Act of 1830 was intended to promote the voluntary removal of Native Americans out of the US Territory peacefully through treaties and land sales. There are two recognized Native American tribe located within NEP's supply area. They are the Mississippi Band of Choctaw in MS and the Poarch Band of Creek in AL.</p> |
| Risk Rating | Low Risk |

| United States Southeast Region | Indicator |
|-----------------------------------|--|
| 4.2.7 | Designated cultural heritage sites shall be preserved. |
| Supply Base Verifiers | <ul style="list-style-type: none"> UNESCO World Heritage List Website |

| | |
|----------------------------------|--|
| Risk Rating justification | There are no UNESCO World Heritage sites located within NEP's supply area. |
| Risk Rating | Low Risk |

Annex 2: RED II Supply Base Evaluation

| Please add all countries where RED II Supply Base Evaluation is used | |
|---|--|
| Country | United States |
| Area | Southeast Region |
| Sustainable harvesting criteria 29(6) | |
| (i) The legality of harvesting operations | |
| Type of Risk Assessment used | <input type="checkbox"/> Level A – proof at national or sub-national level <input type="checkbox"/> Level B – management system at forest sourcing area level |
| Level A risk assessment description | N/A |
| Level B management system at the level of the forest sourcing area | N/A |
| (ii) Forest regeneration of harvested areas | |
| Type of Risk Assessment used | <input type="checkbox"/> Level A – proof at national or sub-national level <input type="checkbox"/> Level B – management system at forest sourcing area level |
| Level A risk assessment description | N/A |
| Level B management system at the level of the forest sourcing area | N/A |
| (iii) That areas designated by international or national law or by the relevant competent authority for nature protection purposes, including in wetlands and peatlands, are protected unless evidence is provided that the harvesting of that raw material does not interfere with those nature protection purposes | |
| Type of Risk Assessment used | <input type="checkbox"/> Level A – proof at national or sub-national level <input type="checkbox"/> Level B – management system at forest sourcing area level |
| Level A risk assessment description | N/A |
| Level B management system at the level of the forest sourcing area | N/A |
| (iv) That harvesting is carried out considering the maintenance of soil quality and biodiversity with the aim of minimising negative impacts | |
| Type of Risk Assessment used | <input type="checkbox"/> Level A – proof at national or sub-national level <input type="checkbox"/> Level B – management system at forest sourcing area level |
| Level A risk assessment description | N/A |
| Level B management system at the level of the forest sourcing area | N/A |

| (v) That harvesting maintains or improves the long-term production capacity of the forest. | |
|--|--|
| Type of Risk Assessment used | <input type="checkbox"/> Level A – proof at national or sub-national level <input type="checkbox"/> Level B – management system at forest sourcing area level |
| Level A risk assessment description | N/A |
| Level B management system at the level of the forest sourcing area | N/A |
| LULUCF criteria 29(7) | |
| Type of Risk Assessment used | <input type="checkbox"/> Level A – proof at national or sub-national level <input type="checkbox"/> Level B – management system at forest sourcing area level |
| Level A risk assessment description | N/A |
| Level B management system at the level of the forest sourcing area | N/A |

Annex 3: SBP Processing residues and/or Post-consumer feedstock requirements

☐ Not Applicable (Processing Residues and/or post-consumer feedstock not used)

Verification and monitoring of suppliers

Monitoring of residual supplier compliance will be completed through secondary supplier audits. These audits will be conducted biennially for all residual suppliers on site at their manufacturing location or by telephone. These audits will assess supplier compliance to contract requirements, confirmation of supply area, status of sustainable forestry certification, status of trained logger usage, BMP compliance, environmental regulatory status and knowledge of forestland, wetland, peatland & highly biodiverse grassland conversion issues and locations along with status of education awareness for sub-suppliers and landowners. Results of supplier audits will be recorded on NEP-DOC-009 Secondary Supplier Audit Checklists.

Feedstock inspection and classification upon receipt

Each load of processing residues is received at the NEP facility. The load is weighed for gross weight and then unloaded. During the unloading process the NEP employee visually inspects the load to ensure the stated feedstock type (pine shavings) is correct. A sample of each load is also collected for further laboratory testing. After the load is delivered the truck & trailer is weighed out to determine the net weight of the load for payment to the supplier.

Supplier audit for processing residues and post-consumer feedstock

Monitoring of residual supplier compliance will be completed through secondary supplier audits. These audits will be conducted biennially for all residual suppliers on site at their manufacturing location or by telephone. These audits will assess supplier compliance to contract requirements, confirmation of supply area, status of sustainable forestry certification, status of trained logger usage, BMP compliance, environmental regulatory status and knowledge of forestland, wetland, peatland & highly biodiverse grassland conversion issues and locations along with status of education awareness for sub-suppliers and landowners. Results of supplier audits will be recorded on NEP-DOC-009 Secondary Supplier Audit Checklists.