

CAR1336 Listing Attachment G**3.1. General Eligibility Requirements**

(a) In order to be eligible under this protocol, a forest offset project must:

(1) Meet the natural forest management criteria set forth in table 3.1

- Composition of native species;
- Distribution of age classes / sustainable management;
- Structural elements (standing and lying dead wood);

Part VI.B.1 – the project consists of at least 95% native species based on the sum of carbon in the standing live carbon pool. The assessment was conducted using preliminary estimates of basal area per acre for Improved Forest Management Projects.

Preliminary Estimates (all species in total project area):

Species ID	Common Name	Scientific Name	Native	BA (sqft/ac) %
832	Chestnut Oak	Quercus prinus L.	Yes	13.27%
132	Virginia Pine	Pinus virginiana Mill.	Yes	11.97%
131	Loblolly Pine	Pinus taeda L.	Yes	10.41%
802	White Oak	Quercus alba L.	Yes	8.41%
621	Yellow-Poplar	Liriodendron tulipifera L.	Yes	7.20%
611	Sweetgum	Liquidambar styraciflua L.	Yes	6.96%
403	Pignut Hickory	Carya glabra (Mill.) Sweet	Yes	4.96%
318	Sugar Maple	Acer saccharum Marsh.	Yes	4.51%
531	American Beech	Fagus grandifolia Ehrh.	Yes	3.91%
833	Northern Red Oak	Quercus rubra L.	Yes	3.80%
409	Mockernut Hickory	Carya alba (L.) Nutt.	Yes	3.05%
701	E. Hophornbeam	Ostrya virginiana (Mill.) K. Koch	Yes	2.70%
316	Red Maple	Acer rubrum L.	Yes	2.19%
711	Sourwood	Oxydendrum arboreum (L.) DC.	Yes	2.12%
693	Blackgum	Nyssa sylvatica Marsh.	Yes	2.11%
762	Black Cherry	Prunus serotina Ehrh.	Yes	1.66%
972	American Elm	Ulmus americana L.	Yes	1.33%
541	White Ash	Fraxinus americana L.	Yes	1.03%
975	Slippery Elm	Ulmus rubra Muhl.	Yes	0.81%
391	Am Hornbeam, Musclewood	Carpinus caroliniana Walter	Yes	0.78%
837	Black Oak	Quercus velutina Lam.	Yes	0.76%
110	Shortleaf Pine	Pinus echinata Mill.	Yes	0.69%
951	American Basswood	Tilia americana L.	Yes	0.59%
491	Flowering Dogwood	Cornus florida L.	Yes	0.56%

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999	Other	Other	Yes	0.54%
407	Shagbark Hickory	<i>Carya ovata</i> (Mill.) K. Koch	Yes	0.48%
068	Eastern Redcedar	<i>Juniperus virginiana</i> L.	Yes	0.36%
402	Bitternut Hickory	<i>Carya cordiformis</i> (Wangenh.) K. Koch	Yes	0.34%
806	Scarlet Oak	<i>Quercus coccinea</i> Münchh.	Yes	0.27%
356	Serviceberry Spp.	<i>Amelanchier</i> Medik.	Yes	0.25%
827	Water Oak	<i>Quercus nigra</i> L.	Yes	0.22%
651	Cucumbertree	<i>Magnolia acuminata</i> (L.) L.	Yes	0.22%
831	Willow Oak	<i>Quercus phellos</i> L.	Yes	0.17%
922	Black Willow	<i>Salix nigra</i> Marsh.	Yes	0.13%
650	Magnolia Spp.	<i>Magnolia</i> L.	Yes	0.13%
372	Sweet Birch	<i>Betula lenta</i> L.	Yes	0.12%
471	Eastern Redbud	<i>Cercis canadensis</i> L.	Yes	0.11%
462	Hackberry	<i>Celtis occidentalis</i> L.	Yes	0.10%
826	Chinkapin Oak	<i>Quercus muehlenbergii</i> Engelm.	Yes	0.09%
521	Common Persimmon	<i>Diospyros virginiana</i> L.	Yes	0.08%
931	Sassafras	<i>Sassafras albidum</i> (Nutt.) Nees	Yes	0.08%
345	Mimosa, Silktree	<i>Albizia julibrissin</i> Durazz.	No	0.07%
820	Laurel Oak	<i>Quercus laurifolia</i> Michx.	Yes	0.06%
712	Paulownia, Empress tree	<i>Paulownia tomentosa</i> (Thunb.) Siebold & Zucc. ex Steud.	No	0.05%
313	Boxelder	<i>Acer negundo</i> L.	Yes	0.05%
971	Winged Elm	<i>Ulmus alata</i> Michx.	Yes	0.05%
682	Red Mulberry	<i>Morus rubra</i> L.	Yes	0.04%
332	Yellow Buckeye	<i>Aesculus flava</i> Aiton	Yes	0.03%
373	River Birch	<i>Betula nigra</i> L.	Yes	0.03%
367	Pawpaw	<i>Asimina triloba</i> (L.) Dunal	Yes	0.03%
129	Eastern White Pine	<i>Pinus strobus</i> L.	Yes	0.02%
341	Ailanthus	<i>Ailanthus altissima</i> (Mill.) Swingle	Yes	0.02%
544	Green Ash	<i>Fraxinus pennsylvanica</i> Marsh.	Yes	0.02%
662	Southern Crabapple	<i>Malus angustifolia</i> (Aiton) Michx.	Yes	0.02%
901	Black Locust	<i>Robinia pseudoacacia</i> L.	Yes	0.02%
410	Sand Hickory	<i>Carya pallida</i> (Ashe) Engl. & Graebn.	Yes	0.01%
461	Sugarberry	<i>Celtis laevigata</i> Willd.	Yes	0.01%
602	Black Walnut	<i>Juglans nigra</i> L.	Yes	0.01%
121	Longleaf Pine	<i>Pinus palustris</i> Mill.	Yes	0.01%
591	American Holly	<i>Ilex opaca</i> Aiton	Yes	0.01%

Part VI.B.2 - the Project Area consists of a mixed species distribution where no single species' prevalence, measured as the percent of basal area of all live trees in the Project Area, exceeds the percentage value of standing live carbon shown under the heading 'Species Diversity Index' in the Assessment Area Data File.

Preliminary Estimates (all species >5% of total BA):

Assessment Area: SE Middle Mixed Forest Cumberland Plateau & Valley (Minimum SDI: 65 percent)

Species ID	Common Name	Scientific Name	BA (sqft/ac) %
131	Loblolly Pine	<i>Pinus taeda</i> L.	20.02%
132	Virginia Pine	<i>Pinus virginiana</i> Mill.	11.41%
832	Chestnut Oak	Chestnut Oak	10.36%
611	Sweetgum	<i>Liquidambar styraciflua</i> L.	9.04%
833	Northern Red Oak	<i>Quercus rubra</i> L.	7.25%
802	White Oak	<i>Quercus alba</i> L.	6.23%

Assessment Area: SE Middle Mixed Forest Piedmont (Minimum SDI: 60 percent)

Species ID	Common Name	Scientific Name	BA (sqft/ac) %
132	Virginia Pine	<i>Pinus virginiana</i> Mill.	18.62%
318	Sugar Maple	<i>Acer saccharum</i> Marsh.	14.57%
131	Loblolly Pine	<i>Pinus taeda</i> L.	13.22%
409	Mockernut Hickory	<i>Carya alba</i> (L.) Nutt.	10.16%
611	Sweetgum	<i>Liquidambar styraciflua</i> L.	10.02%
403	Pignut Hickory	<i>Carya glabra</i> (Mill.) Sweet	7.43%
541	White Ash	<i>Fraxinus americana</i> L.	6.48%

Part VI.B.3a – The project area owned by the OPO is currently under third-party certification from the Sustainable Forestry Initiative (**Certificate number BV-SFIS-US191506**), whose certification standards require adherence to and verification of harvest levels which can be permanently sustained over time.

Part VI.B.3b - No more than 40% of the project area is in age classes younger than 20 years old

Part VI.B.4 – if the project does not meet the minimum of 1% of standing live stocks or 1 ton of carbon (C), then the project will ensure that structural elements are retained in sufficient quantities throughout the project life by continuing to implement project activities that do not include the active harvest or removal of standing or lying dead wood. Structural elements are also incorporated into management planning under the Resource Management Plan.

Preliminary Estimates:

Year	Metric tonnes CO ₂ e (tCO ₂ e)		Metric tonnes C (tC)		Percent
	Total Standing Live	Total Standing Dead	Total Standing Live	Total Standing Dead	
2019	113.26	1.81	30.89	0.49	1.60%