

ACR248 Listing Addendum A

9.1.1.1

14. A description of how the offset project meets (or will meet) the definition of “Natural Forest Management” (refer to Section 3.8.2), including:

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

Part VI.B.1 – the project will consist of at least 95% native species based on the estimated sum of carbon in the standing live carbon pool. The assessment shall be conducted using estimates of stems per acre for Reforestation Projects and basal area per acre for Improved Forest Management and Avoided Conversion Projects.

Example:

Species ID	Common Name	Scientific Name	BA (sqft/ac)	Percent
129	Eastern White Pine	Pinus strobus L.	0.74	0.80%
261	Eastern Hemlock	Tsuga canadensis (L.) Carrière	2.42	2.62%
315	Striped Maple	Acer pensylvanicum L.	1.22	1.32%
316	Red Maple	Acer rubrum L.	18.00	19.51%
318	Sugar Maple	Acer saccharum Marsh.	15.76	17.08%
371	Yellow Birch	Betula alleghaniensis Britton	10.33	11.20%
400	Hickory	Carya Nutt.	8.00	8.67%
531	American Beech	Fagus grandifolia Ehrh.	15.76	17.08%
541	White Ash	Fraxinus americana L.	0.93	1.01%
543	Black Ash	Fraxinus nigra Marsh.	0.28	0.30%
743	Bigtooth Aspen	Populus grandidentata Michx.	0.96	1.04%
761	Pin Cherry	Prunus pensylvanica L. f.	0.36	0.39%
762	Black Cherry	Prunus serotina Ehrh.	4.50	4.88%
802	White oak	Quercus alba L.	8.00	8.67%
833	Northern red oak	Quercus rubra L.	4.00	4.34%
951	American Basswood	Tilia americana L.	0.21	0.23%
998	Other Live/Dead Hardwood	Other hardwood	0.78	0.85%
Total Native			92.25	100.00%
Total			92.25	100.00%

Part VI.B.2 - the Project Area will naturally consist 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.

Example:

Assessment Area: Northern Hardwoods (SDI: 70 percent)

Species ID	Common Name	Scientific Name	BA (sqft/ac)	Percent
129	Eastern White Pine	Pinus strobus L.	0.74	0.80%

261	Eastern Hemlock	<i>Tsuga canadensis</i> (L.) Carrière	2.42	2.62%
315	Striped Maple	<i>Acer pensylvanicum</i> L.	1.22	1.32%
316	Red Maple	<i>Acer rubrum</i> L.	18.00	19.51%
318	Sugar Maple	<i>Acer saccharum</i> Marsh.	15.76	17.08%
371	Yellow Birch	<i>Betula alleghaniensis</i> Britton	10.33	11.20%
400	Hickory	<i>Carya</i> Nutt.	8.00	8.67%
531	American Beech	<i>Fagus grandifolia</i> Ehrh.	15.76	17.08%
541	White Ash	<i>Fraxinus americana</i> L.	0.93	1.01%
543	Black Ash	<i>Fraxinus nigra</i> Marsh.	0.28	0.30%
743	Bigtooth Aspen	<i>Populus grandidentata</i> Michx.	0.96	1.04%
761	Pin Cherry	<i>Prunus pensylvanica</i> L. f.	0.36	0.39%
762	Black Cherry	<i>Prunus serotina</i> Ehrh.	4.50	4.88%
802	White oak	<i>Quercus alba</i> L.	8.00	8.67%
833	Northern red oak	<i>Quercus rubra</i> L.	4.00	4.34%
951	American Basswood	<i>Tilia americana</i> L.	0.21	0.23%
998	Other Live/Dead Hardwood	Other hardwood	0.78	0.85%
Total (weighted by strata acres)			92.25	100.00%

Assessment Area: Cove Forests (SDI: 70 percent)

Species ID	Common Name	Scientific Name	BA (sqft/ac)	Percent
261	Eastern Hemlock	<i>Tsuga canadensis</i> (L.) Carrière	2.42	2.52%
315	Striped Maple	<i>Acer pensylvanicum</i> L.	1.22	1.27%
316	Red Maple	<i>Acer rubrum</i> L.	18.00	18.75%
318	Sugar Maple	<i>Acer saccharum</i> Marsh.	15.76	16.41%
371	Yellow Birch	<i>Betula alleghaniensis</i> Britton	10.33	10.76%
400	Hickory	<i>Carya</i> Nutt.	8.00	8.33%
531	American Beech	<i>Fagus grandifolia</i> Ehrh.	15.76	16.41%
541	White Ash	<i>Fraxinus americana</i> L.	0.93	0.97%
543	Black Ash	<i>Fraxinus nigra</i> Marsh.	0.28	0.29%
621	Yellow poplar	<i>Liriodendron tulipifera</i> L.	9.00	9.37%
743	Bigtooth Aspen	<i>Populus grandidentata</i> Michx.	0.96	1.00%
761	Pin Cherry	<i>Prunus pensylvanica</i> L. f.	0.36	0.37%
802	White oak	<i>Quercus alba</i> L.	8.00	8.33%
833	Northern red oak	<i>Quercus rubra</i> L.	4.00	4.17%
951	American Basswood	<i>Tilia americana</i> L.	0.21	0.22%
998	Other Live/Dead Hardwood	Other hardwood	0.78	0.81%
Total (weighted by strata acres)			96.01	100.00%

Assessment Area: Oak-Hickory (SDI: 65 percent)

Species ID	Common Name	Scientific Name	BA (sqft/ac)	Percent
129	Eastern White Pine	<i>Pinus strobus</i> L.	0.74	0.91%
316	Red Maple	<i>Acer rubrum</i> L.	10.00	12.27%
318	Sugar Maple	<i>Acer saccharum</i> Marsh.	15.76	19.33%
400	Hickory	<i>Carya</i> Nutt.	14.00	17.17%
531	American Beech	<i>Fagus grandifolia</i> Ehrh.	15.76	19.33%
541	White Ash	<i>Fraxinus americana</i> L.	0.93	1.14%
543	Black Ash	<i>Fraxinus nigra</i> Marsh.	0.28	0.34%
761	Pin Cherry	<i>Prunus pensylvanica</i> L. f.	0.36	0.44%
762	Black Cherry	<i>Prunus serotina</i> Ehrh.	4.50	5.52%
802	White oak	<i>Quercus alba</i> L.	9.50	11.65%
833	Northern red oak	<i>Quercus rubra</i> L.	8.70	10.67%

951	American Basswood	Tilia americana L.	0.21	0.26%
998	Other Live/Dead Hardwood	Other hardwood	0.78	0.96%
Total (weighted by strata acres)			81.52	100.00%

Assessment Area: Mixed Hardwoods (SDI: 70 percent)

Species ID	Common Name	Scientific Name	BA (sqft/ac)	Percent
129	Eastern White Pine	Pinus strobus L.	0.20	0.22%
261	Eastern Hemlock	Tsuga canadensis (L.) Carrière	2.42	2.66%
315	Striped Maple	Acer pensylvanicum L.	1.22	1.34%
316	Red Maple	Acer rubrum L.	18.00	19.80%
318	Sugar Maple	Acer saccharum Marsh.	15.76	17.33%
371	Yellow Birch	Betula alleghaniensis Britton	10.33	11.36%
400	Hickory	Carya Nutt.	8.00	8.80%
531	American Beech	Fagus grandifolia Ehrh.	15.76	17.33%
541	White Ash	Fraxinus americana L.	0.93	1.02%
543	Black Ash	Fraxinus nigra Marsh.	0.28	0.31%
743	Bigtooth Aspen	Populus grandidentata Michx.	0.96	1.06%
761	Pin Cherry	Prunus pensylvanica L. f.	0.36	0.40%
762	Black Cherry	Prunus serotina Ehrh.	4.50	4.95%
802	White oak	Quercus alba L.	8.00	8.80%
833	Northern red oak	Quercus rubra L.	4.00	4.40%
951	American Basswood	Tilia americana L.	0.21	0.23%
Total (weighted by strata acres)			90.93	100.00%

Part VI.B.3b - Please see Part V.I - No more than 40% of the project area is in age classes younger than 20 years old:0-20 years (<5%); 20+ years (>95%).

Part VI.B.4 – if the project does not meet the maximum 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 FSC certification.

Example of analysis:

Year	Metric tonnes CO ₂ e		Metric tonnes C		Percent
	TSL	TSD	TSL	TSD	
2014	113.69	2.82	31.03	0.77	2.48%