
ATTACHMENT G

LUBRECHT EXPERIMENTAL FOREST CARBON OFFSET PROJECT

1 NATURAL FOREST MANAGEMENT CRITERIA FOR FOREST OFFSET PROJECTS

1.1 Natural forest management requirement

1.1.1 Native species (Part VI B(1))

“Native species: Project consists of at least 95% native species based on the sum of carbon in the standing live pool. The assessment shall be conducted using estimates of basal area per acre for IFM projects.” (Excerpt from Table 3.1 of the FOP)

100% of the species are consistent with the natural forest type of the Assessment Area (Table 1).

1.2 Composition of native species (Part VI B(2))

1.2.1 By basal area (Part VI B(2))

The project consists of over 95% native species based on the basal area per acre of life trees (Table 1).

Table 1. Project Area consists of 100% native species; no single species represented > 70% of basal area in the Assessment Area.

Common name	Mean standing live basal area (ft ²)/ac	% of mean standing live basal area (ft ²)/acre
Black cottonwood	0.4	0.43%
Douglas fir	53.7	58.12%
Engelmann spruce	0.7	0.76%
Grand fir	0.4	0.43%
Lodgepole pine	7.9	8.55%
Ponderosa pine	16.1	17.42%
Quaking aspen	0	0.00%
Rocky Mountain juniper	0.1	0.11%
Subalpine fir	0.1	0.11%
Western Larch	13	14.07%
Total	92.4	100.00%

1.2.2 Species diversity index (Part VI B(2))

“Composition of native species: 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 ARB’s protocol.” (Excerpt from Table 3.1 of the FOP)

Species Diversity Indices in the Montana Rocky Mountains Supersection are 70% for the Montana Rockies Mixed Conifer assessment area. The Project Area has a mixed species distribution that is consistent with native forests of the region. Douglas fir represented 58% of basal area in the only Assessment Area (Montana Rockies Mixed Conifer) followed by Ponderosa pine with 17% of the basal area (Table 1); no single species represented > 70% of basal area in the Assessment Area.

1.3 Distribution of age classes/sustainable management (Part VI B(3))

1.3.1 Adherence to a renewable long-term management plan (Part VI B(3a))

The landholdings controlled by the Forest Owner are operating under a renewable long-term management plan that demonstrates harvest levels can be permanently sustained over time. A decrease in the standing live tree carbon stocks over any 10 consecutive year period might be demonstrably necessary to substantially improve the project area’s resistance to wildfire, insect, and/or disease risks and will be documented and based on relevant published peer reviewed research. The decrease might be also due to a planned balancing of age classes as detailed in a long-term management plan fulfilling the requirements of Section 3.1 (B) (1) of the Forest Carbon Protocol.

1.3.2 Uneven-aged silvicultural practices (Part VI B(3a))

The Project Area is managed by silvicultural tending practices such as thinning and salvage harvesting and are supplemented by variable-retention regeneration harvests that are designed to pro-actively recruit new cohorts of shade-intolerant species, and thereby promote resilience via structural complexity and species diversity. Elements of remaining intact old-growth forest have been reserved from treatment, and relict old-growth trees in actively managed stands are retained during harvest whenever possible. As a result of these strategies, the Lubrecht Forest landscape is expected to increase in age, complexity, species diversity, and health, while also exhibiting the breadth of forest species and ecosystems that are typical of western Montana.

1.3.3 Age distribution ((Part VI B(3b))

On a watershed scale up to 10,000 acres the Project Area has no more than 40 percent of their forested acres in ages less than 20 years. (Areas impacted by Significant Disturbance may be excluded from this test.)

1.4 Structural elements: standing Dead C pool requirement (Part VI B(4))

Standing dead represents > 1% of the standing live carbon stock and > 1 metric ton of carbon per acre (Table 2). Uneven-aged management in the project scenario will ensure lying dead wood will be commensurate with recruitment from standing dead trees.

Uneven-aged management within the Project Area will ensure the structural elements are retained in sufficient quantities through-out the project life. We have calculated a preliminary standing dead carbon value of 1.3 MG CO₂e/acre (meeting the requirements for Structural Elements in Table 3.2 of the FOP) and do not expect the standing dead quantity to change overtime.

Table 2: Initial standing dead.

Metric	Unit	Value
Standing-live (AG & BG)	MT C/acre	20.5
Standing dead (AG & BG)	MT C/acre	1.3
Standing dead (AG & BG)	% of standing live carbon stocks	6.2%