

Forecasting Indicators for Sustainable Forest Management: Total Ecosystem Carbon for the Fort Nelson TSA

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Forest Carbon Forecasting in the Fort Nelson TSA

1. Introduction

The aim of this project is to improve the stewardship of British Columbia's forest through the development of knowledge for sustainable forest carbon management. Forest managers are interested in forest carbon management because of their desire to achieve good forest stewardship; to attain certification in sustainable forest management; and to contribute to the national reporting of greenhouse gas inventory, as part of Canada's commitment to the Kyoto Protocol.

For forest managers engaging in forest certification, there is a requirement to manage for forest carbon. For example, in the Canadian Standards Association or Canadian Council of Forest Minister's Criteria 4, Forest Ecosystem Contributions to Global Ecological Cycles, the criteria states that one must "maintain the processes that take carbon from the atmosphere and store it in forest ecosystems as well as protecting forestlands from deforestation or conversion of non-forests."

In order for forest managers to learn and understand how to better plan and manage their forests for forest carbon among other timber and non-timber values, it is critical to congregate existing information and provide forecasts of future forest conditions for resource assessment and trade-off.

This project will focus on the forecasts of total forest ecosystem carbon in the Fort Nelson Timber Supply Area (TSA). The forecasting results will be reported as outlined by the criteria and indicators developed in the *Sustainable Forest Management Plan in the Fort Nelson Defined Forest Area* by the Public Advisory Group (PAG). This is a multi-year project with the initial carbon analysis completed by March 31, 2005 and results are summarized in this report. A thorough review of the initial results; further investigation of tradeoffs between criteria and indicators and a possible comparison with the Canadian Budget Model-Canadian Forest Service (CBM-CFS3) will be completed in the next fiscal year (2005-2006). The intent of this project is not to replace the efforts by CFS but to provide an opportunity to report on forest carbon as undertaken within existing forest and stand level modeling that has been used for timber supply analysis, certification forecasting support, intensive silviculture, and landscape analysis. Once ready, it will be prudent to calibrate results from this project with those produced through CBM-CFS3¹.

¹ Initial discussions with the liaison officer of the CBM-CFS3 project, Stephen Kull, have already taken place and there are on-going discussions regarding integrating existing Fort Nelson data to the CBM-CFS3.

2. Project Objectives

The objectives of the project are:

1. To develop an accounting system of forest carbon in various carbon pools including: above ground biomass, below ground biomass, dead organic matter (snags, coarse woody debris and litter), and soils, as outlined in the IPCC Report on Good Practice Guidance for Land Use, Land-Use Change and Forestry (IPCC GPG-LULUCF, 2003);
2. To develop a knowledge base on the interactions and carbon transfer between different pools;
3. To predict current and future forest carbon conditions for the Fort Nelson TSA;
4. To demonstrate the integration of forest carbon in timber supply analysis where scenario analyses such as the impact of harvesting and natural disturbance would be conducted;
5. To show how forest carbon conditions changes over spatial and temporal scales;
6. To develop linkages between forecasted results and the CSA/ SFM framework (e.g. criteria and indicators, sustainable forest management plans, and monitoring guidelines); and
7. To provide a reporting protocol on forest carbon conditions in parallel to timber supply and CSA forecasting procedures.

3. Methods and Assumptions

With expert advice from university, other consultants and government, we developed a knowledge base on forest carbon and applied it in timber supply modelling and scenario analysis for predicting forest carbon and other resource conditions over time. Carbon forecasting consists of a three-stage process by developing: 1) a landscape-level dataset containing forest inventory and resource management data (e.g. the timber supply model), 2) a stand-level carbon attribute database, and 3) linking the stand-level data to a landscape-level timber supply model and apply it to a forecasting. Forecasting results will be summarized for the total productive forested land base in the TSA, which would track both the timber harvesting land base (THLB) and the non-harvestable land base (NHLB), totalling 5.7 million hectares out of the 9.8 million hectares in the TSA. The total THLB and NHLB area is 1,432,269 hectares and 4,308,943 hectares, respectively.

3.1 Timber Supply Model

Data such as forest inventory (Vegetation Resource Inventory was available for one-third of the TSA and the remaining areas contained old FC1/FIP inventory information) and resource management zones such as riparian management areas,

landscape units, and environmentally sensitive areas have been compiled into a spatial and non-spatial data set. The non-spatial data set was used as input for the timber supply model although the data can be linked back to a spatial environment. Furthermore, current management assumptions were incorporated into the model so that the best available information was utilized for predicting current forest conditions. Current management assumptions include:

- 1) *Areas excluded from harvest*: Defining the timber harvesting land base by excluding inoperable areas and areas managed for other non-timber values such as parks and seismic lines,
- 2) *Harvest rules*: Harvesting using the relative oldest first rule, and setting utilization limits and minimum harvest age criteria by analysis units,
- 3) *Regeneration assumptions*: Except for spruce and pine, natural regeneration of mixedwoods and deciduous stands are expected, and
- 4) *Management of Forest Cover*: achieve seral stage (mature plus old and old) targets and visual quality objectives.

For more details on timber supply/resource management assumptions, please refer to the Fort Nelson TSA Timber Supply Review 3 Data Package (2004).

The timber supply model used is the Forest Simulation and Optimization System (**FSOS**). **FSOS** is a forest and landscape-level tool used for evaluating the impacts of harvesting, forest management, silvicultural practices, and/or natural disturbance on forest growth and resources over time (Liu et al. 2001, 2000 and 1999). **FSOS** has been used on over 24 management units from small (<15,000 hectares) to very large (10 million hectares) forest areas across Canada. **FSOS** has been accepted for use in timber supply analysis by the chief forester in BC and has been applied to TFL 3, TFL 18, TFL 37, TFL 53, Soo TSA, Sunshine Coast TSA, Queen Charlotte TSA, Kingcome TSA, Robson Valley TSA, Fort Nelson TSA, Vanderhoof Forest District and Kalum TSA in BC. It has also been used for timber supply analysis and spatial harvest allocations in two management units in Ontario totalling several million hectares.

FSOS has been used for the current timber supply analysis for the Fort Nelson TSA as well as for the CSA certification forecasting for Canfor and BCTS thereby providing a unique linkage for analysis projects within this management unit.

3.2 Stand-level Model

The stand-level model, **FORECAST**, was used to predict total ecosystem carbon by stand groups (or analysis units). **FORECAST** is a management oriented stand-level forest growth simulator that has been federally and provincially approved for use in forest carbon modelling. The model was designed to accommodate a wide variety of harvesting and silvicultural systems in order to compare and contrast their effects on stand dynamics and productivity and other biophysical indicators including ecosystem carbon.

FORECAST uses a hybrid approach whereby local growth and yield data (often from TASS/TIPSY) are utilized to derive estimates of the rates of key ecosystem processes related to the productivity and resource requirements of selected species. This

information is combined with data describing rates of decomposition, nutrient cycling, light competition, and other ecosystem properties to simulate forest growth under changing management conditions as well as the storage of ecosystem carbon in above- and below-ground biomass, dead organic matter and soil pools. Growth occurs in annual time steps and depending upon the species being modelled, plant populations are initiated from seed or vegetatively. Stand development can occur with or without the presence of competition from non-target tree species and understory populations. Decomposition is simulated using a method in which specific biomass components are transferred at the time of litterfall, to one of a series of independent litter types. These litter types decompose at rates defined by empirical data. Further details of **FORECAST** calibration and its potential applications are provided in Kimmins et al. (1999) and Seely et al. (1999).

FORECAST provides total forest ecosystem carbon projections by stand types for the following carbon pools:

2. Total tree (above- and below-ground biomass),
3. Plant (calamagrostis grass and/or fireweed),
4. Litter,
5. Snags and coarse woody debris, and
6. Soils.

3.3 Linkage between Stand and Landscape-level Models

A series of stand derived analysis units were developed to represent the inventory within the Fort Nelson TSA based on leading species and site productivity. These analysis units are the same ones used in the timber supply and CSA forecasting (Section 4.2 of the *Fort Nelson TSA TSR 3 Data Package*). **FORECAST** runs were also developed based on these analysis units and therefore could be directly linked back to the analysis units currently applied in the **FSOS** model. Therefore, in **FSOS**, ecosystem carbon can be tracked over time similar to the method of tracking stand volume over time in timber supply models. A description of natural and managed stand analysis units is provided in Appendix 1 and the **FORECAST** carbon yield tables are in Appendix 2. Each analysis unit includes an estimate of the area-weighted average site index (based on the current inventory) and a transition pathway, which is used to determine the analysis unit that the stand will convert to following harvest (e.g. to a managed or natural stand condition).

After defining the analysis units in **FORECAST**, it was necessary to run the model in set-up mode to establish initial site conditions. In this stage, the model is run with nutrient feedback turned off to allow for the accumulation of vegetation, litter, and soil organic matter representative of the sites to be modelled, and reflective of the historical patterns of accumulation. In the Fort Nelson case study, natural stands were assumed to regenerate following stand-replacing fires and managed stands were assumed to develop after clear-cut harvesting and planting of seedlings.

3.4 Assumptions on Disturbances

Both anthropogenic and natural disturbances occur in the Fort Nelson TSA. Anthropogenic disturbances include harvesting stands for timber processing and raw logs sale but also includes land cleared for oil and gas activities. In this report, we will focus on harvesting in the forested land base where the dominant silvicultural method is clearcutting. Further work is required to appropriately consider oil and gas activities in relation to forest carbon forecasting.

Natural disturbance mechanisms such as fire, insects, disease, and wind activities are constantly occurring throughout the Fort Nelson TSA. Natural disturbances occur as small, common events (endemic) as well as extreme, significant events (epidemic) both at the stand and landscape levels. The predominant natural disturbance in the TSA is fire and spruce budworm and was modelled for the Fort Nelson TSA, using the following methods:

- 1) **as a reduction to the volume harvested in the timber supply model, as defined by a non-recoverable loss** – the premise is that historically these disturbances have occurred and if data is available over a period of time (5 or 10 years), the volume that is not fully salvaged or recovered following the disturbance is applied as an annual average volume reduction. This reduction of 106,355 m³/year in the TSA addresses the volume loss associated with significant events.
- 2) **as a reduction to each stand to account for small disturbances** – the premise is that small stand level disturbances occur within a given stand type which can be linked to the yield curve and analysis unit. These reductions are typically applied in the development of the yield curves and account for a stand level reduction associated with the disturbance that is expected to occur.
- 3) **as a modelled assumption whereby stands within the non-harvestable land base would be “disturbed”** – the premise is that stands in the non-harvesting land base, which are not influenced by operational forestry, do not grow forever and will eventually be subjected to a disturbance and decline. Based on the principles in the *Landscape Unit Planning Guide*, the stand age at which stands have likely experienced at least one natural disturbance is determined for each biogeoclimatic unit. These stand ages (or disturbance age) range from 119 years for deciduous stands in the Boreal White and Black Spruce zone to 280 years for the Spruce Willow Birch zone. In the non-harvesting land base, when a stand reaches its disturbance age, it is assumed that its volume has been lost and it will be reset to age zero and grow again. For more details refer to Section 9.5 of *the Fort Nelson TSA TSR 3 Data Package*. See Appendix 3, for the disturbance area modelled over time by BEC unit.

It is assumed that following harvest or a natural disturbance event, carbon in trees will be immediately released back into the atmosphere. It is understood that the assumptions proposed for natural disturbance are but one approach, which is most

common for TSR but is not the only possible methodology. Other natural disturbance methods will be explored in the future and once refined should be applied to future carbon analysis.

4. Results and Discussion

Three scenarios were completed in this project and resulted provided for comparison and analysis:

- 1) **Base Case scenario:** Current management assumptions are employed, with the harvest level set at the current allowable annual cut of 1.5 million cubic metres per year and natural disturbance is modeled (as outlined in Section 3.4). This scenario is selected as it best represents current forest conditions and management strategies.
- 2) **Harvest without natural disturbance:** Basically, this scenario is the same as the base case, except no natural disturbance is applied in the non-harvesting land base (non-recoverable losses and reductions to stand yields still apply). This scenario was selected to benchmark the impact of harvesting in the THLB on total ecosystem carbon, in the absence of natural disturbance in the NHLB.
- 3) **No harvest with natural disturbance:** Same as the base case but harvesting is not modeled. This scenario was selected to provide a benchmark of the impact of natural disturbance on the total ecosystem carbon, in the absence of forest management.

4.1 Current Forest Carbon Conditions

There is approximately 1,001 megatons (MT) of total ecosystem carbon currently stored in the 5,741,212 hectares of forested land in the Fort Nelson TSA (Table 1). About 44% of the total ecosystem carbon are from trees (aboveground biomass and roots) and about 53% are from soil and forest floor litter.

Under the *Fort Nelson Sustainable Forest Management (SFM) Plan*, Indicator 3-1 states: “The total forest ecosystem biomass and carbon pool, by forest type (hardwood pure, hardwood mixed, conifer pure, conifer mixed), age class, and successional stage is sustained.” Measures 3-1.1 and 3-1.2 relate to the carbon stored in trees and non-vegetation, respectively. These measures are addressed in Table 1. Results for forest ecosystem carbon by forest type are still pending and will be addressed in future work.

Table 1: Current forest carbon conditions in the Fort Nelson forested land base

	THLB (MT)	% THLB	NHLB (MT)	% NHLB	Total (MT)	% Total
Tree	150.1	50.1%	293.0	41.8%	443.1	44.3%
Plant	0.3	0.1%	2.2	0.3%	2.4	0.2%
CWD/Snags	5.7	1.9%	15.4	2.2%	21.1	2.1%
Litter	39.5	13.2%	122.0	17.4%	161.5	16.1%
Soil	104.3	34.8%	268.7	38.3%	373.0	37.3%
Total:	299.9	100.0%	701.3	100.0%	1,001.2	100.0%

In the forested land base, the total ecosystem carbon per hectare is 175 T/ha. In a provincial carbon analysis, Kurz et al. (2002) found that the aboveground biomass in the Fort Nelson area is approximately 25-50 T/ha. In our analysis, the total carbon in trees (above and below-ground biomass) in the forested land base is approximately 77 T/ha. Assuming a belowground to aboveground ratio of 0.2, our aboveground carbon is approximately 61-62 T/ha². This comparison should be used with caution as it is not clear as to the types of area (e.g. marginal forest land) that were included in the analysis by Kurz et al. These comparisons will be expanded upon in Phase 2 of this project.

4.2 Base Case

In the forested land base, the total ecosystem carbon fluctuates between 998 MT (at year 10) and 1,066 MT (at year 50) over a 250 years planning horizon (Figure 1). Considering the NHLB is three-quarters of the land base, natural disturbance in the NHLB plays a significant role in the release of carbon into the atmosphere. This can be seen in Figure 2, where in 10 years from now, a relatively large natural disturbance event is modeled and carbon stored in trees are released into the atmosphere; hence, a decline in carbon stored in the forest ecosystem. After which, carbon in the forest ecosystem (mainly, trees) accumulate more than what is released into the atmosphere until in year 55, another relatively large natural disturbance event is modeled and the carbon in trees are released. It should be noted that there is great uncertainty associated with modeling future natural disturbances and an option to address the uncertainty is to incorporate recent disturbance events into future forecasting.

The total ecosystem carbon in the THLB fluctuates between 300 MT (at year 0) and 333 MT (at 160 years). The slight decline in total carbon storage after 160 years may be due to the corresponding time, in which a conversion of older unmanaged to younger managed stands for spruce and pine species occurs. Generally, there is more carbon stored in older stands than younger stands.

² Personal communication with Brad Seely regarding the below to aboveground ratio.

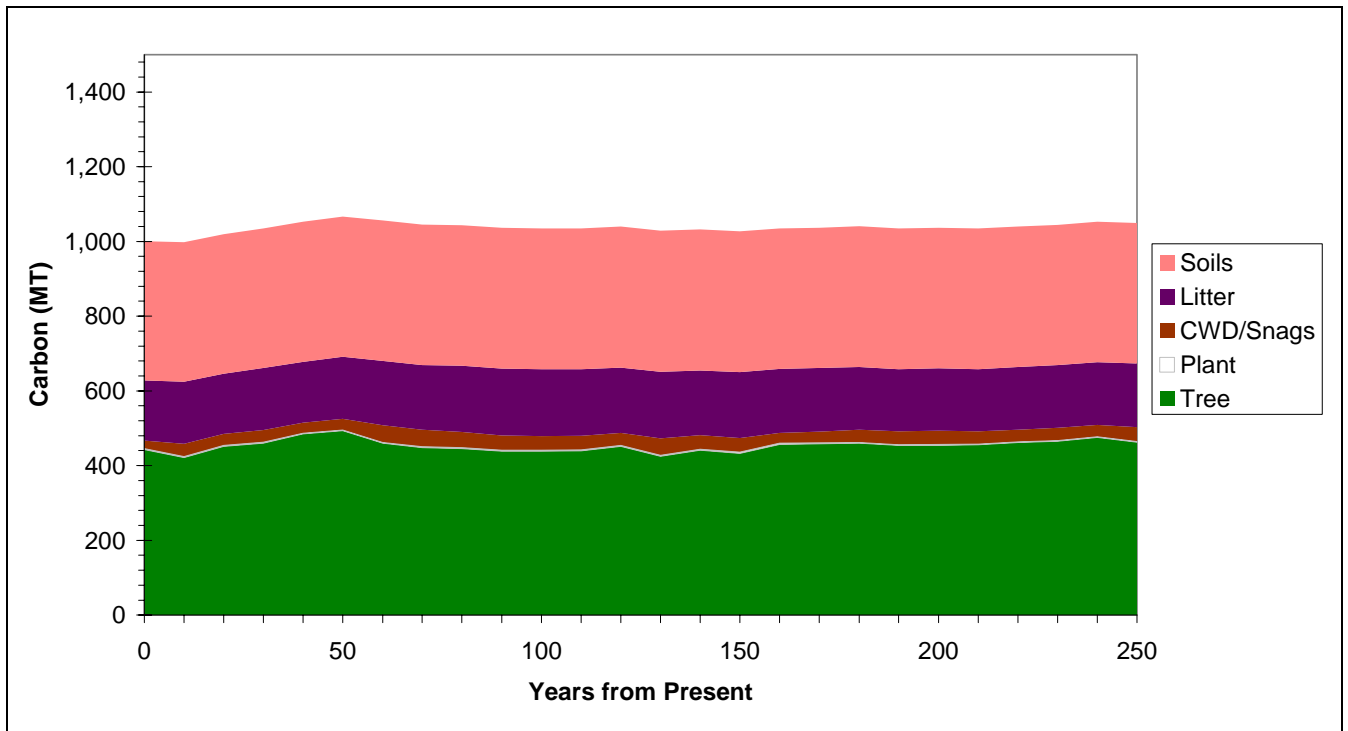


Figure 1: Total ecosystem carbon in the forested land base over time; base case scenario

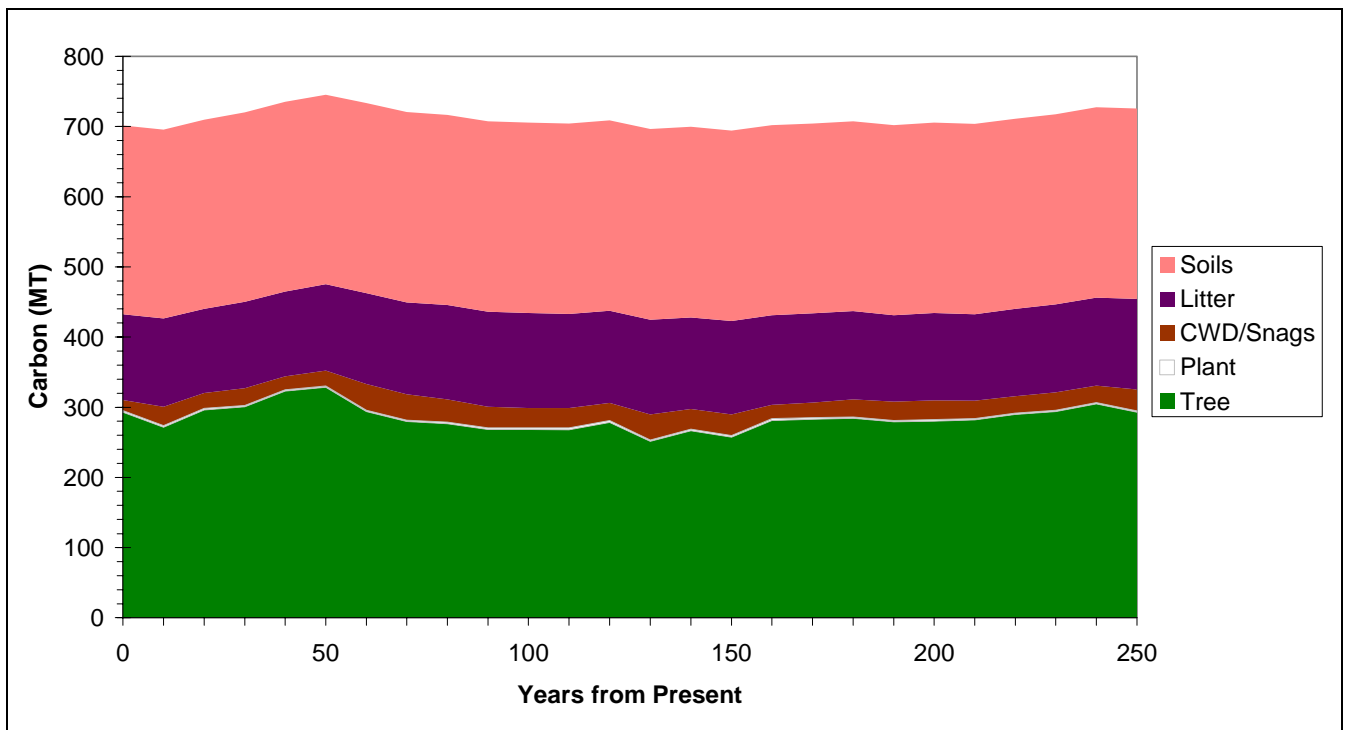


Figure 2: Total ecosystem carbon in the non-harvesting land base over time; base case scenario

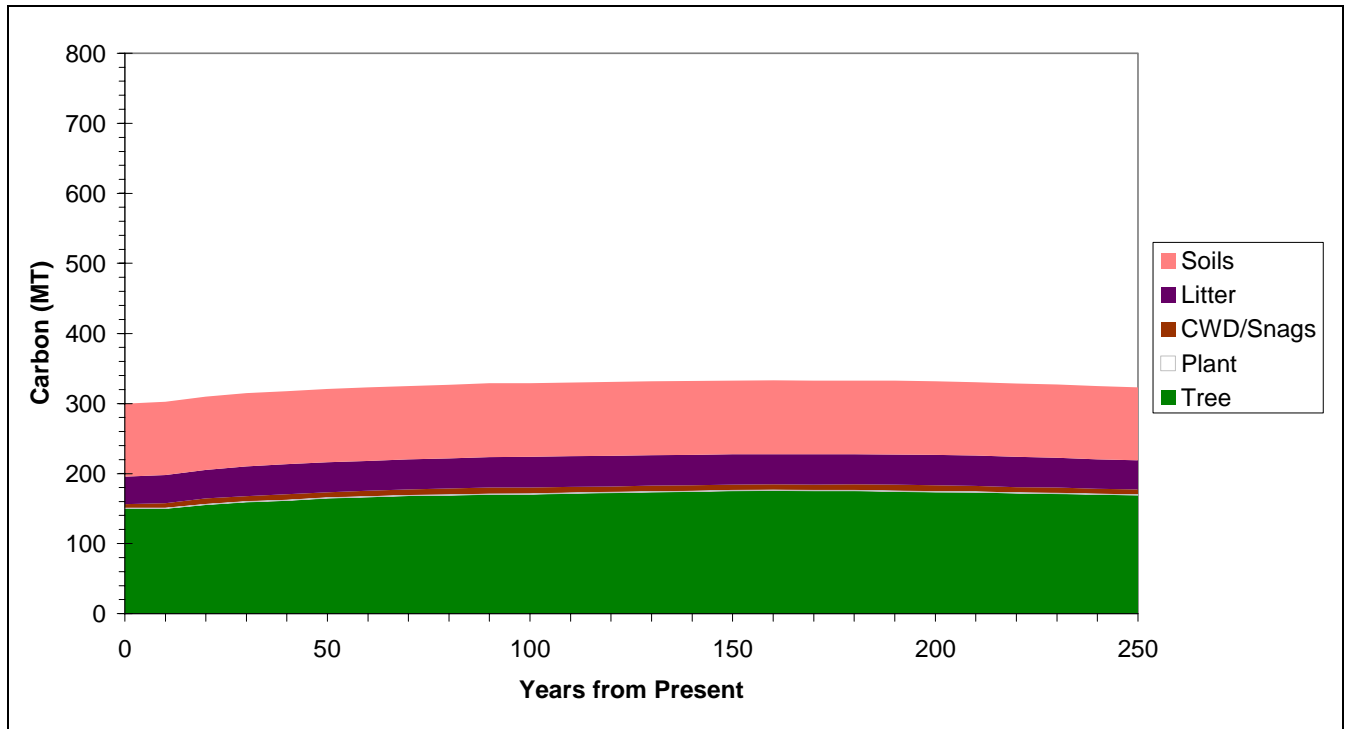


Figure 3: Total ecosystem carbon in the timber harvesting land base over time; base case scenario

Under the SFM Plan, Indicator 3-3 states “the processes that take carbon from the atmosphere and store it in forest ecosystems will be sustained.” Forest growth (volume and carbon) was modeled in 10-year time steps. The average rates of carbon sequestration can be calculated based on the following equation:

$$\text{Average Sequestration Rate}_t = (\text{Ecosystem } C_t - \text{Ecosystem } C_{t-10}) / 10$$

The average sequestration rate fluctuates between a net loss of 1.13 MT C/year and a sequestration of 2.13 MT C/year for the entire forested land base (Figure 4). In the THLB, the sequestration rate increases in the first 20 years after which, it declines. This may be explained by 1) our assumption that carbon is released immediately after harvest and 2) over time, more carbon is lost from the stands (through harvesting and normal processes of stand respiration) than being stored especially as the age class structure becomes more even-aged. In the NHLB, the carbon sequestration rate is strongly tied to natural disturbance events such that the rate would increase during periods of relatively small disturbances and decrease after a large natural disturbance event.

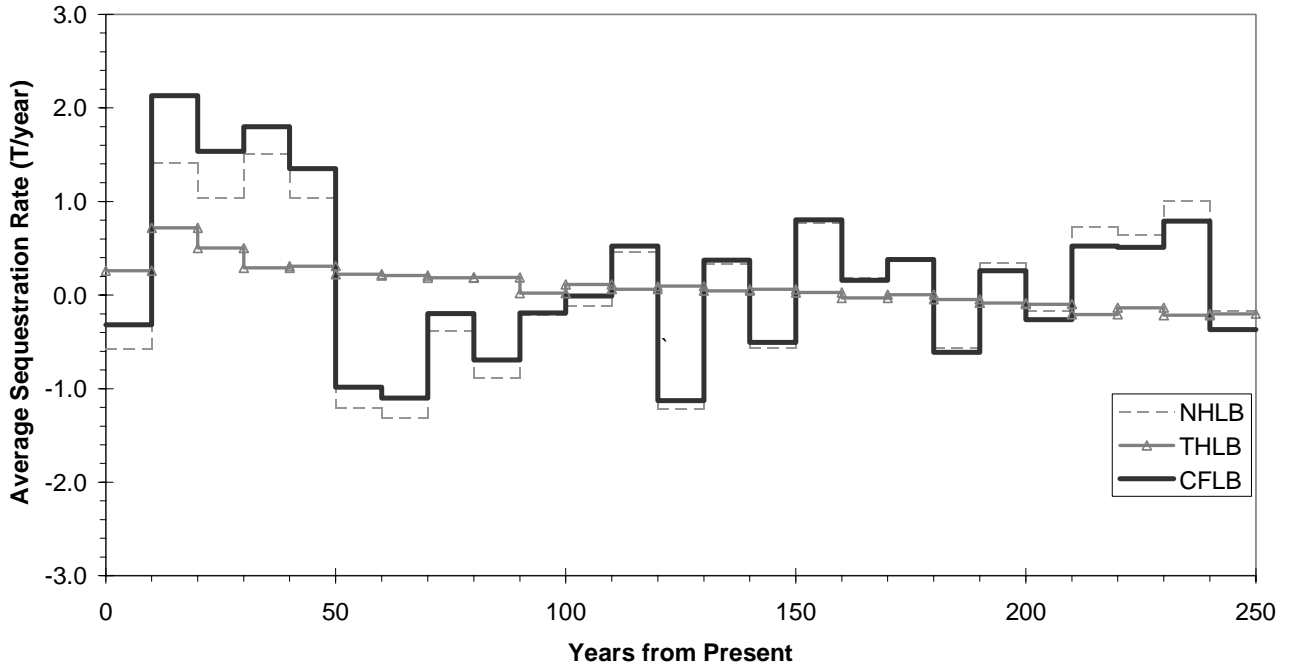


Figure 4: Sequestration rate (T/year) in the Fort Nelson TSA; base case scenario

5. Scenario Analysis

In scenario analysis, the “Harvest without Natural Disturbance” and the “No Harvest with Natural Disturbance” are provided for benchmarking and comparison of extreme events only and do not necessarily represent reality. If harvesting was to continue at the current AAC and natural disturbance in the NHLB were suppressed then the total ecosystem carbon would increase over the short-mid term and approach equilibrium in the long-term (Figure 5). The increase comes from the massive amount of carbon accumulated and stored, as forests in the NHLB age. The 250-year average of total ecosystem carbon in the “Harvest without Natural Disturbance” scenario is 233 MT more than that of the base case.

The distribution and trends in carbon storage by carbon pools in the “No Harvest with Natural Disturbance” are very similar to the base case, as expected by the significant impact that natural disturbance has on a rather large NHLB in both scenarios (Figure 6). The 250-year average of total ecosystem carbon in the “No Harvest with Natural Disturbance” is 35 MT more than the base case. Again, the loss of total ecosystem carbon storage from large natural disturbances could potentially be greater than the impact of harvesting. A total ecosystem carbon comparison of the scenarios is presented in Figure 7.

The average sequestration rate for each scenario is shown in Figure 8. The trend in sequestration rates for the base case and the “No Harvest with Natural Disturbance” are similar over time as natural disturbance plays a big role in whether the ecosystem is a carbon source or sink. Although more carbon is stored over time in the “Harvest without Natural Disturbance” scenario, the average sequestration rate declines because older stands accumulate less carbon per year than younger stands.

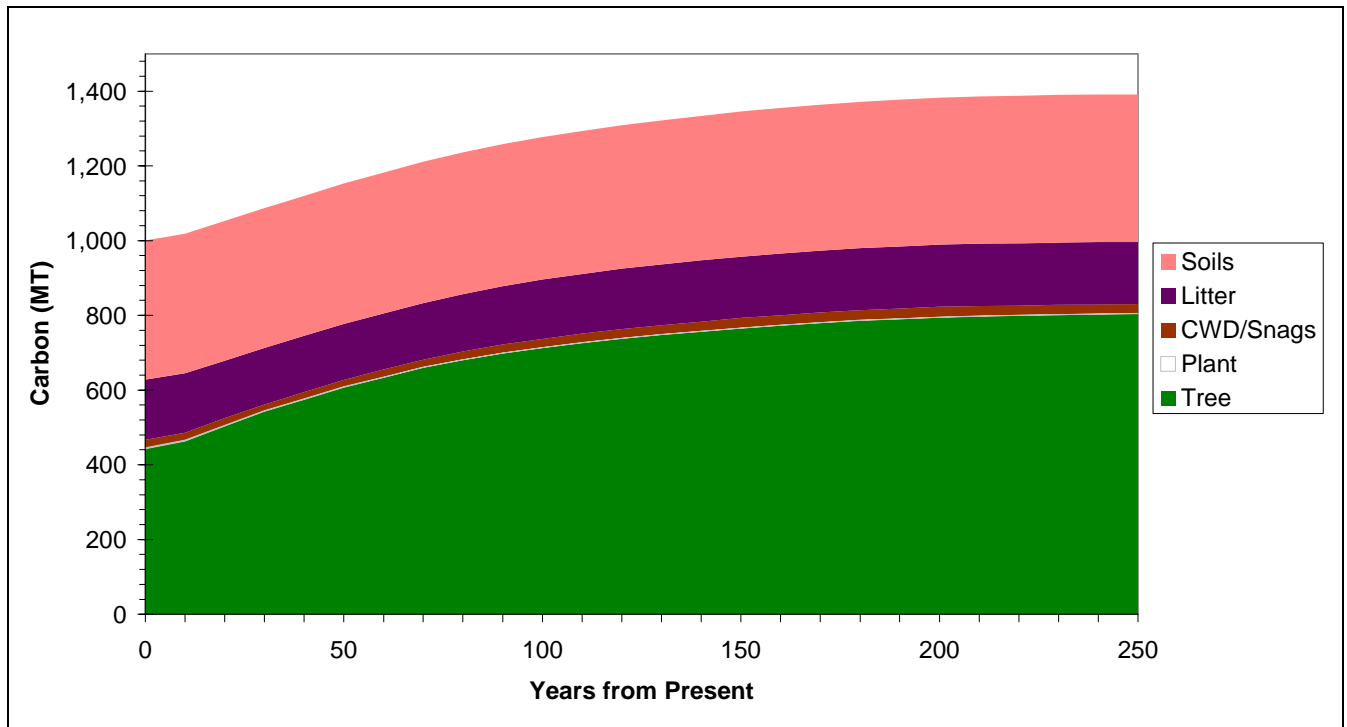


Figure 5: Total ecosystem carbon in the forested land base over time; harvest without natural disturbance scenario

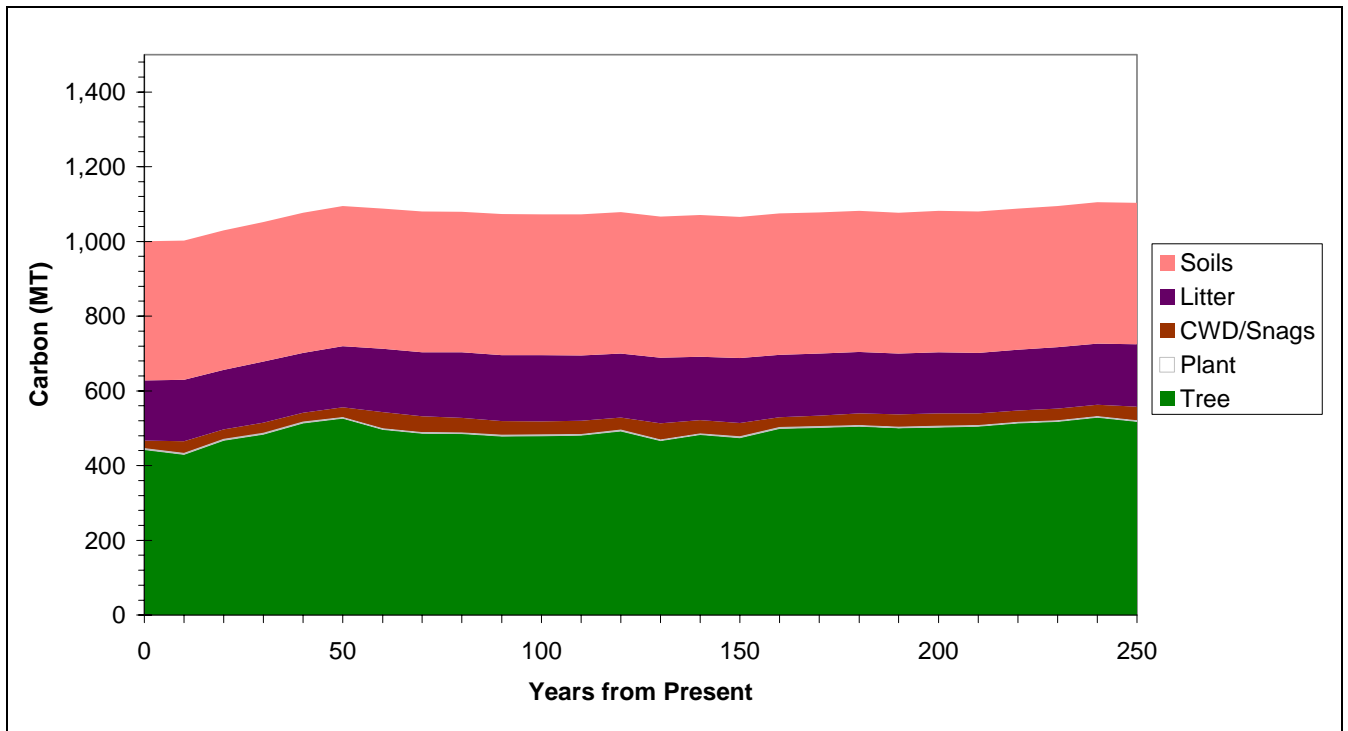


Figure 6: Total ecosystem carbon in the forested land base over time; no harvest with natural disturbance scenario

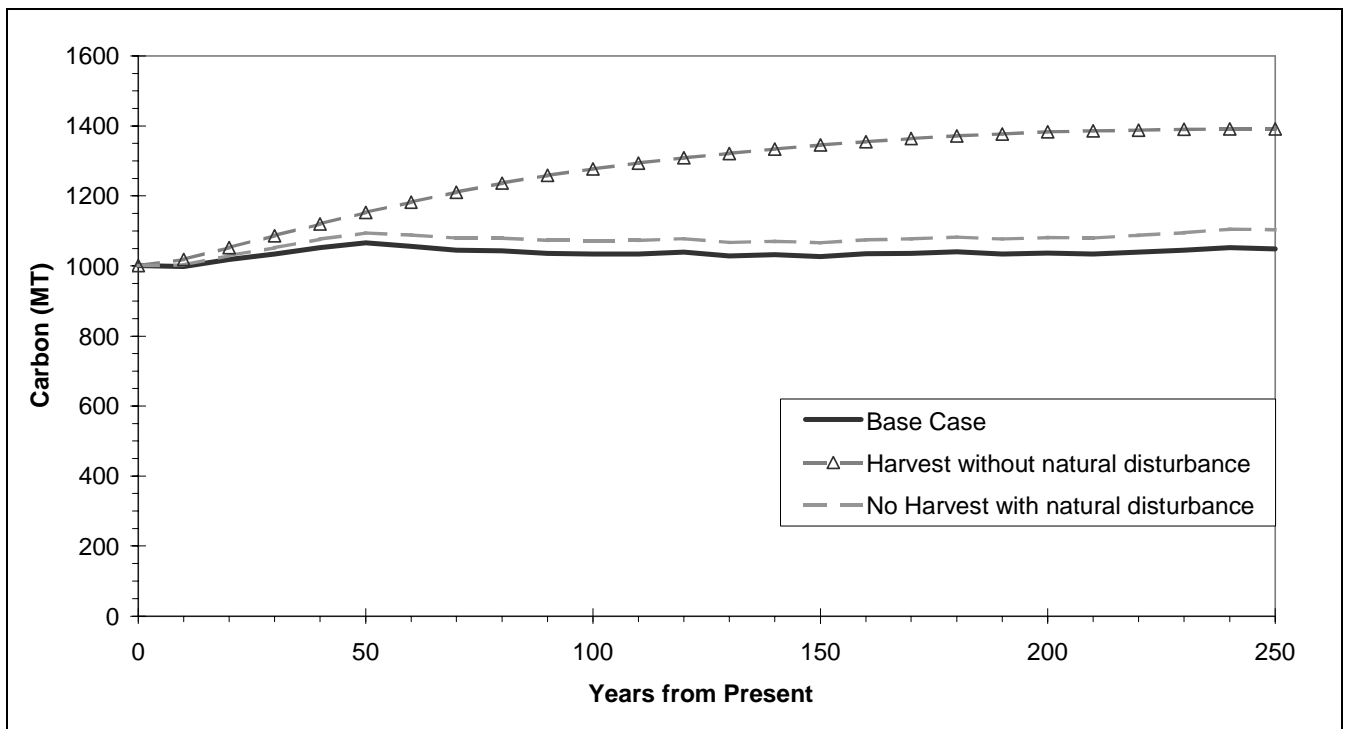


Figure 7: Scenario comparison of total ecosystem carbon in the forested land base over time

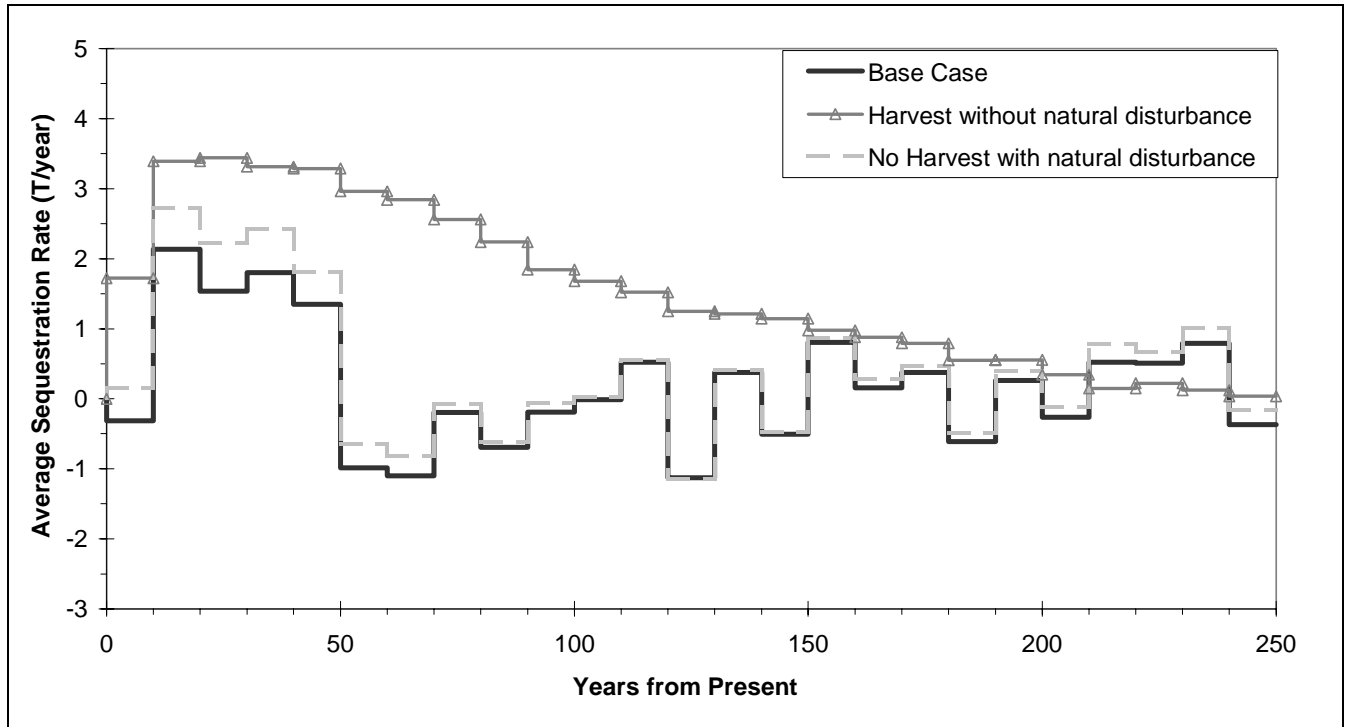


Figure 8: Scenario comparison of average sequestration rate in the forested land base over time

6. Conclusions and Recommendations

The results of this project provided some initial estimates of the current forest carbon conditions in the Fort Nelson TSA. The current total ecosystem carbon storage is 1,000 MT and fluctuates between 998 MT and 1,066 MT over a 250-year planning horizon. The sequestration rate in the base case (which represents current management practices and a consideration of natural disturbance events) also fluctuates between a net loss of 1.13 MT C/year and a sequestration of 2.13 MT C/year. Although the scenarios selected for comparison (“No Harvest with Natural Disturbance” and “Harvest without Natural Disturbance”) may not well represent reality, they provide benchmarks of extreme events. With an understanding of current management and the changes to the total ecosystem carbon by harvesting and natural disturbance, forest managers can begin to establish a forest carbon storage baseline and sequestration rate based on a target within a range of variation to fulfill their forest carbon requirements in forest certification. Moreover, base case sensitivities with alternative management activities and natural disturbance methods can be developed to further enhance our knowledge of forest carbon dynamics and management.

Recommendations on future work steps include:

- Design further scenarios, if necessary, to determine the effects and trade-offs of various management activities and/or natural disturbance,
- Provide a spatial map on carbon densities (C T/ha) or other carbon attributes, if desired by the licensees,
- Compare results with other models (e.g. CBM-CFS3).
- Conduct a review of this report by experts in carbon accounting and government, and
- Hold a meeting to discuss results with the Fort Nelson licensees and possibly the Public Advisory Groups.

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Appendix 1: Analysis Units in Timber Supply Analysis and in FORECAST

Table 1. Natural stand analysis units for the generation of stand table data with FORECAST.

FORECAST AU	TSA AUs	Leading Sp	ITG	SI range	AWA SI	Transition AU
101	011	S	21,23,24	<14.5	13	201
102	012	S	21,23,24	14.5 to 17.9	15	202
103	013	S	21,23,24	> 17.9	20	203
104	021, 101	S/Pl	25	<13.1	12	204
105	022, 102	S/Pl	25	13.1 to 16.9	15	205
106	023, 103	S/Pl	25	>16.9	20	206
107	031	S/At	26	<13.2	12	207
108	032	S/At	26	13.2 to 17.9	15	208
109	033	S/At	26	>17.9	20	209
110	041	At/S/Pl	41	<18.2	17	210
111	042	At/S/Pl	41	18.2 to 22	20	211
112	043	At/S/Pl	41	>22	24	212
113	051	At	42	<18.2	17	213
114	052	At	42	18.2 to 23.3	20	214
115	053	At	42	>23.3	24	215
116	061	Pl/S	27-30	<14.1	13	216
117	062	Pl/S	27-30	14.1 to 18.4	16	217
118	063	Pl/S	27-30	>18.4	20	218
119	071	Pl/At	31	<14.3	13	219
120	072	Pl/At	31	14.3 to 18.4	16	220
121	073	Pl/At	31	>18.4	20	221
122	081	Ac*/S/Pl	35	<16.2	15	222
123	082	Ac*/S/Pl	35	16.3 to 22.2	19	223
124	083	Ac*/S/Pl	35	>22.2	25	224
125	091	Ac*	36	<16.1	15	225
126	092	Ac*	36	16.1 to 23.1	19	226
127	093	Ac*	36	>23.1	25	227
128	111	Bl/S/Pl	18-20	<11	10	228
129	112	Bl/S/Pl	18-20	11 to 14.5	14	229
130	113	Bl/S/Pl	18-20	>14.5	16	230

Table 2. Managed stand analysis units for the generation of stand table data with FORECAST.

FORECAST AU	TSA AUs	Leading Sp	ITG	SI range	AWA SI
201	011	S	21,23,24	<14.5	13
202	012	S	21,23,24	14.5 to 17.9	15
203	013	S	21,23,24	> 17.9	20
204	021, 101	S/Pl	25	<13.1	12
205	022, 102	S/Pl	25	13.1 to 16.9	15
206	023, 103	S/Pl	25	>16.9	20
207	031	S/At	26	<13.2	12
208	032	S/At	26	13.2 to 17.9	15
209	033	S/At	26	>17.9	20
210	041	At/S/Pl	41	<18.2	17
211	042	At/S/Pl	41	18.2 to 22	20
212	043	At/S/Pl	41	>22	24
213	051	At	42	<18.2	17
214	052	At	42	18.2 to 23.3	20
215	053	At	42	>23.3	24
216	061	Pl/S	27-30	<14.1	13
217	062	Pl/S	27-30	14.1 to 18.4	16
218	063	Pl/S	27-30	>18.4	20
219	071	Pl/At	31	<14.3	13
220	072	Pl/At	31	14.3 to 18.4	16
221	073	Pl/At	31	>18.4	20
222	081	Ac*/S/Pl	35	<16.2	15
223	082	Ac*/S/Pl	35	16.3 to 22.2	19
224	083	Ac*/S/Pl	35	>22.2	25
225	091	Ac*	36	<16.1	15
226	092	Ac	36	16.1 to 23.1	19
227	093	Ac	36	>23.1	25
228	111	Bl/S/Pl	18-20	<11	10
229	112	Bl/S/Pl	18-20	11 to 14.5	14
230	113	Bl/S/Pl	18-20	>14.5	16

Appendix 2: FORECAST Carbon Data

Year	Yield ID	Tree	Plant	CWD/ Snags	Litter	Soil	Yield ID	Tree	Plant	CWD/ Snags	Litter	Soil	Yield ID	Tree	Plant	CWD/ Snags	Litter	Soil
0	101	0	0	60.3	56.9	67.1	102	0	0	70.5	65.6	81.5	103	0	0	74	71.8	96.1
10	101	0.6	0.3	37.8	49.3	66.9	102	0.8	1.7	47.5	55.5	81.3	103	0.7	2.3	52.9	60.5	95.7
20	101	1.3	1.2	16.5	55.9	64.3	102	1.7	1.7	24.9	62	78.2	103	1.9	2.2	31.3	64.4	92.1
30	101	2.4	1.9	3.8	54.3	64.8	102	3.9	2	8.3	61.4	79.2	103	4.9	2.2	14	62.4	93.1
40	101	3.7	1.9	0.4	48	62.2	102	7.7	1.9	1.5	54	76.1	103	9.9	2	3.5	58.9	89.5
50	101	6.1	1.7	0	36.6	61.5	102	14.2	1.8	0	41.3	75	103	18.5	1.6	0.4	42.8	88.2
60	101	10.8	1.8	0.1	25.2	62.2	102	25.7	1.2	0.2	26.2	75.7	103	33.6	0.8	0.3	28.7	88.4
70	101	18.9	1.5	0	19.5	63	102	45.7	0.3	0.2	18.2	76.6	103	59	0.1	0.4	22.2	88.3
80	101	31.7	0.9	0	13.5	63.2	102	69.4	0	0.2	16.9	76.4	103	84.1	0	0.4	21	87.7
90	101	49.1	0.1	0.2	13.3	62.4	102	89.5	0	0.7	19.4	75.5	103	106	0	1.1	23.3	87.2
100	101	65.5	0	0.1	15.2	61.2	102	108.2	0	0.7	23	74.8	103	126	0	1.5	26.5	86.7
110	101	78.8	0	0.7	18.3	60.6	102	117.5	0	2.1	25.9	74.6	103	137.2	0	3.3	30.2	86.4
120	101	89.6	0	0.5	21	60.4	102	127.3	0	1.9	28.6	74.9	103	147.4	0	3.2	33.9	86.6
130	101	99.1	0	0.4	22.4	60.6	102	136.5	0	1.7	30.5	75.2	103	156.9	0	3	35.9	87.1
140	101	106.5	0	1.1	24.1	61	102	143.1	0	2.8	32.8	75.6	103	163.5	0	4.2	38.1	87.6
150	101	115.2	0	0.9	25.1	61.2	102	151.8	0	2.5	33.6	76	103	172.9	0	3.7	38.9	88
160	101	121.9	0	1.9	25.9	61.6	102	157.8	0	4	34.2	76.6	103	179.3	0	5.2	39.1	88.6
170	101	130.6	0	1.6	27	62.1	102	166.7	0	3.3	35.2	77.2	103	189.2	0	4.2	39.3	89.4
180	101	138.6	0	1.4	27.5	62.6	102	174.8	0	3	35.1	78	103	198	0	3.8	39	90.3
190	101	143.8	0	2.5	28.6	63.2	102	179.3	0	4.3	35.9	78.9	103	203.2	0	5.3	39.9	91
200	101	150.7	0	2.2	28.9	63.8	102	186.1	0	3.9	35.8	79.6	103	210.8	0	4.7	39.6	91.7
210	101	154.8	0	3.6	29.1	64.5	102	189.7	0	5.4	35.7	80.3	103	214.2	0	6.6	39.2	92.5
220	101	161.1	0	3	30.1	65.1	102	195.8	0	4.6	36.6	80.9	103	219.9	0	5.7	39.3	93.2
230	101	166.2	0	2.6	30.3	65.7	102	200.8	0	4	36.5	81.5	103	222.8	0	4.9	36.7	93.9
240	101	167.8	0	3.7	31.2	66.4	102	201.8	0	5.4	37.2	82.3	103	222.3	0	6.4	33.7	94.7
250	101	171.3	0	3	31.3	67	102	205.4	0	4.3	36.8	83	103	225.9	0	5.7	31.4	94.8
260	101	171.9	0	4.4	31.4	67.6	102	204.4	0	6.1	35.8	83.7	103	227	0	7	30.7	94.3
270	101	175.4	0	3.7	32	68.4	102	206.4	0	5.1	33.5	84.4	103	231.3	0	6.1	31.3	93.7
280	101	178.7	0	3.1	32	69	102	209.2	0	4.6	30.1	85.1	103	235.3	0	5.4	31.4	93.2
290	101	179.4	0	4.3	32.6	69.7	102	210.2	0	5.9	29.1	85.1	103	236.4	0	6.6	32.2	92.8
300	101	182.8	0	3.6	32.6	70.4	102	214.7	0	5.1	28.6	84.5	103	240.3	0	5.9	32.1	92.3

Year	Yield ID	Tree	Plant	CWD/ Snags	Litter	Soil	Yield ID	Tree	Plant	CWD/ Snags	Litter	Soil	Yield ID	Tree	Plant	CWD/ Snags	Litter	Soil
0	104	0	0	38	46.3	59.7	105	0	0	79.8	71.7	92.3	106	0	0	78	77.7	112.6
10	104	1.1	0.2	17.7	41.8	59.5	105	1.4	1.8	51.8	63	91.8	106	1.4	2.4	52.9	66.7	112
20	104	2.6	1	2.7	45.6	56.9	105	3.4	1.7	24.2	72	88.2	106	4.4	2.1	27.4	73.1	107.5
30	104	4.4	1.6	0.4	38	56.9	105	8.4	1.8	7.1	68.7	89.3	106	12	1.9	9.6	70.2	108.4
40	104	6.2	1.8	0	33.7	54.5	105	17.5	1.5	1.2	59.6	85.7	106	25.7	1.3	1.9	59.6	104.1
50	104	9.1	1.6	0	28.7	53.8	105	33.3	0.9	0.2	43.9	84.5	106	49.4	0.3	0.7	44	102.3
60	104	15.3	1.4	0.1	22	54.5	105	60	0.1	0.3	30.8	85.6	106	82.9	0	0.6	35.1	102.4
70	104	25.1	1.2	0.2	18.6	54.9	105	89.6	0	0.7	25.9	86.8	106	112.4	0	1.5	31.2	103
80	104	39.6	0.5	0.1	17.6	54.6	105	114.2	0	0.7	25.8	87.4	106	137.9	0	1.7	31.7	103.6
90	104	56	0.1	0.5	17.2	54.4	105	131	0	2.2	28.7	87.4	106	155.1	0	3.4	34.4	103.7
100	104	69.8	0	0.2	18.7	54.2	105	145	0	1.9	32	87.2	106	170.8	0	3.2	37.3	103.7
110	104	78.5	0	0.7	19.8	54.4	105	153.2	0	2.9	33.9	87.5	106	181.1	0	4.6	38.7	104.1
120	104	86.8	0	0.4	21.3	54.7	105	162.8	0	2.2	36.3	87.9	106	192.8	0	4	40.6	104.5
130	104	93.6	0	0.9	22.3	55.1	105	170.1	0	3.1	37.3	88.3	106	200.8	0	5	41.1	104.9
140	104	100.1	0	1.2	24	55.3	105	176.7	0	4	39.1	88.8	106	207.7	0	6	42	105.5
150	104	106.5	0	1.4	24.9	55.6	105	183.2	0	4.9	39.3	89.4	106	214.5	0	7.1	41.2	106
160	104	112.2	0	1.8	25.6	56.1	105	189.2	0	5.7	40	90.1	106	220.1	0	7.9	40.9	106.6
170	104	117.6	0	1.9	26.4	56.6	105	194.8	0	5.9	41	90.8	106	224.7	0	7.9	41	107.1
180	104	123.2	0	1.4	26.9	57.1	105	200.8	0	5.2	41.6	91.4	106	229.9	0	6.8	40.8	107.3
190	104	111.2	0	11.9	27.5	57.6	105	177.9	0	23.5	42.4	92	106	196.8	0	31.1	40.6	107.3
200	104	93.1	0	21.7	37.1	58.1	105	145.4	0	43.2	56.7	92.6	106	153.8	0	56	58.8	107.4
210	104	97.4	0	15.7	36.7	58.6	105	149.8	0	35.6	54.5	93.2	106	157.4	0	47.7	54.3	107.5
220	104	103.4	0	9	38.3	59.7	105	155.5	0	26.6	54.7	94.9	106	163.1	0	38.1	52.5	109.2
230	104	108.6	0	4.1	38.2	60.1	105	158.9	0	17.7	53.9	95.6	106	168.2	0	29	52.5	109.4
240	104	111.1	0	2.7	36.4	60.3	105	160.2	0	11.5	51.3	96	106	170.2	0	21.8	53.7	108.8
250	104	115.1	0	1.5	32.5	60.8	105	165	0	6.4	46.1	96.4	106	174.9	0	13.7	52.4	108.6
260	104	117.1	0	2.4	29.6	61.8	105	167.4	0	5.7	40.5	96.3	106	177.1	0	9.1	49.5	108.7
270	104	121.4	0	1.9	28.8	62.6	105	172.9	0	3.9	36.6	96.2	106	181.6	0	5.4	45.6	108.7
280	104	125.8	0	1.5	28.3	63.2	105	178.4	0	3	32.9	96	106	186	0	3.4	40.8	108.6
290	104	128	0	2.3	28.9	63.8	105	180.8	0	4.2	31.2	95.9	106	187.9	0	3.7	37.1	108.6
300	104	132.1	0	1.8	29	64.3	105	186	0	3.5	29.9	95.4	106	192.1	0	3.1	33.6	108.3

Year	Yield ID	Tree	Plant	CWD/ Snags	Litter	Soil	Yield ID	Tree	Plant	CWD/ Snags	Litter	Soil	Yield ID	Tree	Plant	CWD/ Snags	Litter	Soil
0	107	0	0	38	46.3	59.7	108	0	0	79.8	71.7	92.3	109	0	0	78	77.7	112.6
10	107	1.2	0.4	17.7	41.8	59.6	108	1.4	2.1	51.8	63.6	91.9	109	1	2.7	52.9	68.5	111.9
20	107	2.5	1.3	2.7	46.1	56.9	108	2.8	1.9	24.2	72.5	88.2	109	3.4	2.5	27.4	74.6	107.7
30	107	3.3	2.1	0.5	39	57	108	7.3	1.9	7.1	69.3	89.4	109	10.9	2.2	9.6	71.7	108.6
40	107	3.1	2.4	0.1	34.6	54.7	108	16.6	1.7	1.2	59.3	85.8	109	24.6	1.8	1.9	60.1	104.4
50	107	4	2.4	0	29.1	54.1	108	33.2	1.3	0.1	44.9	84.6	109	46.1	1.1	0.6	43.1	102.9
60	107	8	2.1	0	22.4	54.9	108	58.9	0.6	0.4	29.7	85.8	109	77.3	0.3	0.8	30.9	103.2
70	107	15.2	2.2	0	18.7	55.2	108	92	0.1	0.9	23	87.2	109	111.6	0	1.6	26.5	103.4
80	107	24.3	2.1	0.1	17.3	54.6	108	119.2	0	1.2	21.9	87.4	109	140	0	2.1	26.4	103.1
90	107	34	1.8	0.2	14.2	54.4	108	139.5	0	1.7	24.9	86.8	109	161.1	0	3.3	30	102.5
100	107	47.2	1.1	0.1	13.4	53.9	108	157.7	0	1.7	27.6	86.1	109	179.6	0	3.6	33	101.8
110	107	59.2	0.4	0.5	13.9	53.4	108	169.4	0	3.5	30.4	85.9	109	190.2	0	6.1	36.1	101.7
120	107	70.5	0.1	0.4	15.7	53	108	180.4	0	3.5	33.6	86.2	109	201.4	0	6.3	39.3	102
130	107	79.9	0	0.4	18.3	52.7	108	187.6	0	4	35.9	86.8	109	210.1	0	6.6	41.2	102.5
140	107	86.1	0	0.9	20.5	52.8	108	191.6	0	5.2	38.6	87.6	109	211.6	0	10.5	44.2	103.3
150	107	92.9	0	0.8	21.6	53.2	108	198	0	5.1	39.9	88.3	109	206.4	0	17.6	47.2	104.1
160	107	98.3	0	1.6	22.5	53.7	108	202.3	0	6.5	40.6	89.1	109	201.7	0	21	48.9	105.2
170	107	102.7	0	3.3	23.9	54.1	108	202	0	11.7	41.3	90	109	202.2	0	18.5	49.8	106.4
180	107	97.7	0	10.1	28.3	54.6	108	184.7	0	26.9	47.6	90.9	109	206	0	12.3	48	107.6
190	107	103.3	0	7.7	28.8	55.2	108	189.5	0	20.7	49.1	92.1	109	208	0	8.9	44.8	108.9
200	107	110.5	0	4.3	29.1	56.2	108	196.6	0	12.6	49	93.4	109	213.1	0	5.3	40.4	109.6
210	107	115.1	0	2.8	29.1	56.9	108	199.3	0	7.8	47.9	94.4	109	213.8	0	6	36.5	110.2
220	107	121.3	0	1.8	28	57.8	108	204.6	0	5.2	44.2	95.8	109	218.2	0	4.8	34.6	110.2
230	107	126.8	0	1.4	26.8	58.6	108	207.5	0	4.3	39.2	97	109	222	0	4.1	33.1	109.7
240	107	129.1	0	2.3	27.1	59.4	108	206.7	0	5.6	34.4	98.1	109	222	0	5.6	33.3	109.1
250	107	132.9	0	1.7	27.3	59.9	108	210.5	0	4.6	31.1	98	109	225.5	0	4.8	32.9	108.3
260	107	134.1	0	2.9	27.4	60.4	108	211.3	0	6.2	29.8	97.2	109	225.5	0	6.2	32.6	107.4
270	107	137.9	0	2.2	28.1	60.9	108	215.9	0	5.3	30.2	96.1	109	228.8	0	5.4	33.1	106.7
280	107	141.5	0	1.7	28	61.5	108	220.8	0	4.5	30.1	95.1	109	232.4	0	4.6	32.7	105.9
290	107	142.6	0	2.9	28.7	62.1	108	221.8	0	6	31	94.2	109	232.7	0	5.8	33.2	105.3
300	107	146.2	0	2.2	28.7	62.5	108	226.4	0	5.1	31	93.5	109	236.2	0	5.1	32.7	104.6

Year	Yield ID	Tree	Plant	CWD/ Snags	Litter	Soil	Yield ID	Tree	Plant	CWD/ Snags	Litter	Soil	Yield ID	Tree	Plant	CWD/ Snags	Litter	Soil
0	110	0.3	0.1	42.3	43.3	72.2	111	0.3	0.1	50.1	48.2	82.5	112	0.4	0.1	79.6	63.5	91
10	110	3.6	2.1	24.4	39.4	71.3	111	4.6	2.2	29.5	43.6	81.4	112	5.1	2.4	51.2	58.6	90.5
20	110	9	2	6.9	40.4	70.4	111	13.1	1.7	9.2	44	80.4	112	15.6	1.5	22.8	59.3	89.6
30	110	26	0.8	0.6	33.5	70.2	111	37.1	0.4	1	35.8	80.3	112	43.3	0.2	7.4	50.5	90.3
40	110	51.4	0.1	0.2	25.4	69.8	111	65.6	0	0.4	27.5	80.2	112	72.9	0	2.8	40.4	90.5
50	110	77.2	0	0.9	22.5	70.2	111	89.9	0	1.4	24.5	80.9	112	98.1	0	2.4	34.3	91.9
60	110	100.7	0	1.3	22.3	70.3	111	114.3	0	1.9	24.4	80.8	112	124.3	0	2.4	31.3	91.9
70	110	116.1	0	3.5	25.2	70.5	111	132.1	0	4.7	27.6	80.5	112	144.6	0	5.4	31.3	91.5
80	110	126	0	3.4	28.1	70.5	111	146.8	0	4.7	29	80.3	112	163.8	0	5.3	30.7	91.4
90	110	129.9	0	3.4	30.6	70.8	111	156.1	0	4	28.7	80.4	112	175.5	0	5	30.7	91.5
100	110	133.9	0	3.4	30.9	71.5	111	166.3	0	3.8	28	80.5	112	184.9	0	5.5	31.2	91.5
110	110	135.3	0	4.9	30.5	72.5	111	169.1	0	6.3	29.1	80.7	112	186.9	0	8.1	32.8	91.6
120	110	138.7	0	4.2	28.2	73.5	111	173	0	6	30.2	80.9	112	191.2	0	7.4	33.6	91.8
130	110	141.2	0	3.9	26.3	74.1	111	175.1	0	5.9	31.6	81.3	112	193	0	7.5	34.6	92.1
140	110	145.6	0	3.2	26.1	74.2	111	179.2	0	4.6	32.8	81.7	112	198.2	0	5.8	35	92.5
150	110	147.6	0	3.9	26.8	74.2	111	180.7	0	5.4	33	82.3	112	200.9	0	6.3	35.2	93.1
160	110	150.1	0	4	28	74.5	111	183.5	0	5.2	32	83.1	112	205	0	5.9	34.3	93.6
170	110	143	0	9.2	30.7	74.9	111	183.5	0	6.1	31.2	83.7	112	205.7	0	7.1	33.3	94.3
180	110	133	0	14.1	33.5	75.3	111	178.3	0	10.4	31.8	84.1	112	206.9	0	6.9	32.5	94.7
190	110	133	0	14.1	33.5	75.3	111	178.3	0	10.4	31.8	84.1	112	206.9	0	6.9	32.5	94.7
200	110	133	0	14.1	33.5	75.3	111	178.3	0	10.4	31.8	84.1	112	206.9	0	6.9	32.5	94.7
210	110	133	0	14.1	33.5	75.3	111	178.3	0	10.4	31.8	84.1	112	206.9	0	6.9	32.5	94.7
220	110	133	0	14.1	33.5	75.3	111	178.3	0	10.4	31.8	84.1	112	206.9	0	6.9	32.5	94.7
230	110	133	0	14.1	33.5	75.3	111	178.3	0	10.4	31.8	84.1	112	206.9	0	6.9	32.5	94.7
240	110	133	0	14.1	33.5	75.3	111	178.3	0	10.4	31.8	84.1	112	206.9	0	6.9	32.5	94.7
250	110	133	0	14.1	33.5	75.3	111	178.3	0	10.4	31.8	84.1	112	206.9	0	6.9	32.5	94.7
260	110	133	0	14.1	33.5	75.3	111	178.3	0	10.4	31.8	84.1	112	206.9	0	6.9	32.5	94.7
270	110	133	0	14.1	33.5	75.3	111	178.3	0	10.4	31.8	84.1	112	206.9	0	6.9	32.5	94.7
280	110	133	0	14.1	33.5	75.3	111	178.3	0	10.4	31.8	84.1	112	206.9	0	6.9	32.5	94.7
290	110	133	0	14.1	33.5	75.3	111	178.3	0	10.4	31.8	84.1	112	206.9	0	6.9	32.5	94.7
300	110	133	0	14.1	33.5	75.3	111	178.3	0	10.4	31.8	84.1	112	206.9	0	6.9	32.5	94.7

Year	Yield ID	Tree	Plant	CWD/ Snags	Litter	Soil	Yield ID	Tree	Plant	CWD/ Snags	Litter	Soil	Yield ID	Tree	Plant	CWD/ Snags	Litter	Soil
0	113	0.4	0.1	35.3	32.3	63	114	0.6	0.1	40.2	35.4	71.5	115	0.6	0.1	71.6	53.5	96.5
10	113	4.3	2	19.2	30.9	61.8	114	6	2.1	21.9	34.3	70	115	6.9	2.7	44.5	49.8	94.8
20	113	9.1	2.2	3.7	32.1	61.4	114	13.7	1.8	4.4	35.1	69.5	115	21.7	1.1	16.7	49	95
30	113	22.5	0.7	0.1	25.6	60.9	114	37.2	0.1	0.2	26.3	69.1	115	54.6	0.1	2.1	42.1	95.2
40	113	46.8	0.1	0.2	19.3	61.2	114	62.1	0	0.3	20.5	69.5	115	82.3	0	0.7	30.2	96.3
50	113	68.5	0	0.9	19	61.5	114	83.9	0	1.3	20.2	70.1	115	107.1	0	2.4	25.5	97.8
60	113	90.1	0	1.1	20.3	61.3	114	104.9	0	2.1	22	69.8	115	132.6	0	3.2	24.2	97.8
70	113	104	0	3.7	23.5	61.3	114	117.8	0	5.1	25.6	69.5	115	151.5	0	7.3	27.6	96.7
80	113	113.2	0	4.4	25.6	61.5	114	129.5	0	4.7	25.8	69.3	115	165.7	0	7.5	29.2	95.9
90	113	113.2	0	5.5	26.8	61.9	114	132.2	0	5.3	25.7	69.5	115	167.8	0	8.2	30.6	95.5
100	113	119	0	3.9	23.1	62.5	114	139.6	0	4.6	23.3	69.7	115	174.1	0	7.4	28.8	95
110	113	119.6	0	4.8	21.4	63	114	139.2	0	6.2	23.6	70.1	115	171.4	0	9.8	29.1	94.9
120	113	120.8	0	4.1	19.5	62.9	114	138.6	0	5.2	22.5	70.1	115	169.4	0	8.4	28	94.3
130	113	116.4	0	5.1	19.6	62.9	114	131.5	0	6.5	22.5	70.2	115	159.4	0	9.8	27.9	93.7
140	113	113.8	0	4	18.8	62.6	114	127	0	5.1	21.2	69.9	115	152.6	0	7.9	26.2	92.9
150	113	107.2	0	4.5	18.7	62.4	114	118.4	0	5.9	20.9	69.6	115	141.7	0	8.1	25.1	92.2
160	113	103	0	3.6	17.6	61.9	114	113.4	0	4.4	19.4	69	115	134.9	0	6.2	22.7	91.2
170	113	97.2	0	4.1	17.1	61.5	114	105.8	0	5.3	18.8	68.5	115	125.8	0	6.8	21.3	90.2
180	113	93.5	0	3.7	16.3	60.8	114	101.4	0	4.5	17.7	67.7	115	120	0	6.1	19.7	88.9
190	113	93.5	0	3.7	16.3	60.8	114	101.4	0	4.5	17.7	67.7	115	120	0	6.1	19.7	88.9
200	113	93.5	0	3.7	16.3	60.8	114	101.4	0	4.5	17.7	67.7	115	120	0	6.1	19.7	88.9
210	113	93.5	0	3.7	16.3	60.8	114	101.4	0	4.5	17.7	67.7	115	120	0	6.1	19.7	88.9
220	113	93.5	0	3.7	16.3	60.8	114	101.4	0	4.5	17.7	67.7	115	120	0	6.1	19.7	88.9
230	113	93.5	0	3.7	16.3	60.8	114	101.4	0	4.5	17.7	67.7	115	120	0	6.1	19.7	88.9
240	113	93.5	0	3.7	16.3	60.8	114	101.4	0	4.5	17.7	67.7	115	120	0	6.1	19.7	88.9
250	113	93.5	0	3.7	16.3	60.8	114	101.4	0	4.5	17.7	67.7	115	120	0	6.1	19.7	88.9
260	113	93.5	0	3.7	16.3	60.8	114	101.4	0	4.5	17.7	67.7	115	120	0	6.1	19.7	88.9
270	113	93.5	0	3.7	16.3	60.8	114	101.4	0	4.5	17.7	67.7	115	120	0	6.1	19.7	88.9
280	113	93.5	0	3.7	16.3	60.8	114	101.4	0	4.5	17.7	67.7	115	120	0	6.1	19.7	88.9
290	113	93.5	0	3.7	16.3	60.8	114	101.4	0	4.5	17.7	67.7	115	120	0	6.1	19.7	88.9
300	113	93.5	0	3.7	16.3	60.8	114	101.4	0	4.5	17.7	67.7	115	120	0	6.1	19.7	88.9

b	Yield ID	Tree	Plant	CWD/ Snags	Litter	Soil	Yield ID	Tree	Plant	CWD/ Snags	Litter	Soil	Yield ID	Tree	Plant	CWD/ Snags	Litter	Soil
0	116	0	0	44.4	50.5	58.5	117	0	0	58	61.1	80.5	118	0	0	65	71.2	98.6
10	116	1.3	0.3	22.2	45.3	58.4	117	1.8	1.8	34.5	53	80.1	118	1.7	2.3	38.1	64.8	98.1
20	116	3.4	0.9	5	50	55.6	117	4.5	1.5	13	59.9	76.8	118	5.6	1.8	13.9	70.5	94
30	116	7.2	1.3	0.7	42.5	56.1	117	11.8	1.5	2.8	54.5	77.8	118	15.6	1.6	2.8	61.9	95
40	116	12.3	1.3	0	37.2	53.6	117	25.1	1.1	0.4	46.6	74.7	118	33.8	0.9	0.4	51.3	91
50	116	19.6	1	0.2	31.6	52.9	117	44.5	0.4	0.5	37.1	73.8	118	62.3	0.1	0.8	38.6	89.9
60	116	31.7	0.6	0.1	25.9	54.1	117	72	0.1	0.3	29.9	75.1	118	95.6	0	0.6	32.3	91.1
70	116	48	0.2	0.6	21.5	55.2	117	94.2	0	1.3	26.7	76.5	118	120.4	0	2	29.7	92.4
80	116	64.9	0	0.2	21.3	55.6	117	112.3	0	0.7	27.6	77.5	118	142.2	0	1.5	32	92.7
90	116	74.8	0	1.1	21.4	56	117	122.2	0	2.2	28.4	77.8	118	153.2	0	3.7	34	92.6
100	116	83.8	0	0.5	22.7	56.4	117	132.8	0	1.4	30.8	78.1	118	164.3	0	3	36.8	92.8
110	116	90.9	0	0.7	23.6	56.5	117	140.9	0	1.6	32	78.3	118	172	0	3.5	37.8	93.1
120	116	98	0	0.5	25	56.7	117	149.2	0	1	33.3	78.8	118	179.6	0	2.8	38.4	93.7
130	116	102.2	0	1.9	25.9	57	117	153	0	3.4	33.6	79.3	118	182	0	5.6	37.1	94.1
140	116	108.2	0	1.6	27.7	57.3	117	159.4	0	3.4	35	79.9	118	189.8	0	5.5	36.2	94.7
150	116	111.6	0	2.8	28.3	57.7	117	162.3	0	5.5	35.6	80.5	118	193.4	0	8.5	35.3	94.8
160	116	117.2	0	2	29.1	58.2	117	168.4	0	4.5	37.1	81.1	118	200.8	0	7.7	36.5	94.6
170	116	119.1	0	3	29.1	58.7	117	169.5	0	5.9	37.4	81.7	118	201.9	0	9.5	37.1	94.2
180	116	122.4	0	2.2	29.5	59.2	117	172.7	0	4.8	38.4	82.3	118	205.7	0	7.9	38.7	94
190	116	121.6	0	3.6	29.6	59.7	117	170.6	0	6.7	38.3	82.8	118	203.1	0	9.8	39.1	93.7
200	116	124.3	0	2.8	30.3	60.2	117	172.7	0	5.7	38.8	83.4	118	205.5	0	8.4	40	93.7
210	116	124.3	0	2.8	30.3	60.2	117	172.7	0	5.7	38.8	83.4	118	205.5	0	8.4	40	93.7
220	116	124.3	0	2.8	30.3	60.2	117	172.7	0	5.7	38.8	83.4	118	205.5	0	8.4	40	93.7
230	116	124.3	0	2.8	30.3	60.2	117	172.7	0	5.7	38.8	83.4	118	205.5	0	8.4	40	93.7
240	116	124.3	0	2.8	30.3	60.2	117	172.7	0	5.7	38.8	83.4	118	205.5	0	8.4	40	93.7
250	116	124.3	0	2.8	30.3	60.2	117	172.7	0	5.7	38.8	83.4	118	205.5	0	8.4	40	93.7
260	116	124.3	0	2.8	30.3	60.2	117	172.7	0	5.7	38.8	83.4	118	205.5	0	8.4	40	93.7
270	116	124.3	0	2.8	30.3	60.2	117	172.7	0	5.7	38.8	83.4	118	205.5	0	8.4	40	93.7
280	116	124.3	0	2.8	30.3	60.2	117	172.7	0	5.7	38.8	83.4	118	205.5	0	8.4	40	93.7
290	116	124.3	0	2.8	30.3	60.2	117	172.7	0	5.7	38.8	83.4	118	205.5	0	8.4	40	93.7
300	116	124.3	0	2.8	30.3	60.2	117	172.7	0	5.7	38.8	83.4	118	205.5	0	8.4	40	93.7

Year	Yield ID	Tree	Plant	CWD/ Snags	Litter	Soil	Yield ID	Tree	Plant	CWD/ Snags	Litter	Soil	Yield ID	Tree	Plant	CWD/ Snags	Litter	Soil
0	119	0	0	44.4	50.5	58.5	120	0	0	58	61.1	80.5	121	0	0	65	71.2	98.6
10	119	1.4	0.3	22.2	45.4	58.3	120	1.9	1.8	34.5	53	80.2	121	1.9	2.3	38.1	64.6	98.1
20	119	4	0.9	5	50	55.6	120	5.1	1.5	13	60	76.8	121	6.2	1.7	13.9	70.4	94
30	119	8.6	1.2	0.7	42.4	56.1	120	13.8	1.3	2.8	54.6	77.7	121	17.9	1.4	2.8	61.9	94.9
40	119	15.2	1.1	0	37	53.6	120	29.5	0.9	0.4	46.6	74.7	121	39.3	0.7	0.4	51.4	91
50	119	24.4	0.8	0.2	31.6	53.1	120	50.5	0.3	0.5	37.3	73.9	121	70.7	0.1	0.9	39.3	89.9
60	119	38	0.4	0.1	26.4	54.2	120	77.9	0	0.3	30.5	75.1	121	104	0	0.7	32.5	91.2
70	119	55.5	0.1	0.6	21.8	55.4	120	100	0	1.6	27.4	76.5	121	128.8	0	2.5	29.8	92.7
80	119	73.9	0	0.4	21.2	56	120	117.9	0	1.1	28	77.4	121	149.7	0	2.1	32	93
90	119	83.6	0	1.2	21.4	56.3	120	127.1	0	2.4	28.6	77.9	121	159.4	0	4.3	34	92.8
100	119	92.2	0	0.7	22.6	56.5	120	136.8	0	1.6	30.3	78.2	121	169.1	0	3.8	36.8	92.9
110	119	96.9	0	1.7	23.2	56.7	120	141.2	0	3.3	31	78.4	121	172.6	0	6.1	37.4	93.2
120	119	102	0	1.1	24.7	57	120	146.9	0	2.6	32	79	121	179.5	0	4.9	37.9	93.9
130	119	103.2	0	2.3	25	57.4	120	147.4	0	4.4	31	79.6	121	181.7	0	7.1	36	94.2
140	119	106.4	0	1.7	25.8	57.9	120	152.8	0	3.6	29.8	80.2	121	189.9	0	6	34.7	94.5
150	119	106.7	0	3.1	25.6	58.3	120	155.4	0	5.8	27.9	80.2	121	193.3	0	8.9	32.9	94.2
160	119	108.9	0	2.2	25.2	58.7	120	162.7	0	4.5	27.3	79.9	121	201.6	0	7.4	32.8	93.7
170	119	108.4	0	3.3	22.9	59	120	163.8	0	6.3	26.3	79.2	121	202.4	0	9.3	31.7	92.7
180	119	110.5	0	2.6	20.8	59	120	167.1	0	5.2	26.4	78.3	121	205	0	8.1	31.8	91.8
190	119	110.5	0	2.6	20.8	59	120	167.1	0	5.2	26.4	78.3	121	205	0	8.1	31.8	91.8
200	119	110.5	0	2.6	20.8	59	120	167.1	0	5.2	26.4	78.3	121	205	0	8.1	31.8	91.8
210	119	110.5	0	2.6	20.8	59	120	167.1	0	5.2	26.4	78.3	121	205	0	8.1	31.8	91.8
220	119	110.5	0	2.6	20.8	59	120	167.1	0	5.2	26.4	78.3	121	205	0	8.1	31.8	91.8
230	119	110.5	0	2.6	20.8	59	120	167.1	0	5.2	26.4	78.3	121	205	0	8.1	31.8	91.8
240	119	110.5	0	2.6	20.8	59	120	167.1	0	5.2	26.4	78.3	121	205	0	8.1	31.8	91.8
250	119	110.5	0	2.6	20.8	59	120	167.1	0	5.2	26.4	78.3	121	205	0	8.1	31.8	91.8
260	119	110.5	0	2.6	20.8	59	120	167.1	0	5.2	26.4	78.3	121	205	0	8.1	31.8	91.8
270	119	110.5	0	2.6	20.8	59	120	167.1	0	5.2	26.4	78.3	121	205	0	8.1	31.8	91.8
280	119	110.5	0	2.6	20.8	59	120	167.1	0	5.2	26.4	78.3	121	205	0	8.1	31.8	91.8
290	119	110.5	0	2.6	20.8	59	120	167.1	0	5.2	26.4	78.3	121	205	0	8.1	31.8	91.8
300	119	110.5	0	2.6	20.8	59	120	167.1	0	5.2	26.4	78.3	121	205	0	8.1	31.8	91.8

Year	Yield ID	Tree	Plant	CWD/ Snags	Litter	Soil	Yield ID	Tree	Plant	CWD/ Snags	Litter	Soil	Yield ID	Tree	Plant	CWD/ Snags	Litter	Soil
0	122	0.2	0	36.3	31.2	54.7	123	0.2	0	40.2	35.4	71.5	124	0.3	0	71.6	53.5	96.5
10	122	3	1	20.9	26.9	53.6	123	4.1	1.6	21.9	31.5	69.9	124	5.3	2.2	44.5	47.1	94.8
20	122	7	1.8	5.3	28.8	53.2	123	10.7	2.1	4.4	33	69.2	124	16.6	2	16.7	48	94.4
30	122	13.6	1.3	0.2	24.9	52.8	123	27.2	1.2	0.1	25.6	68.6	124	42.1	0.8	2	40.8	94.4
40	122	24.8	0.8	0.1	18.9	53.2	123	49.2	0.4	0.2	18.7	69.1	124	73.9	0.1	0.6	28	95.5
50	122	40.4	0.3	0.3	17.5	53.6	123	74	0.1	0.9	17.5	69.5	124	101.9	0	1.9	23.3	96.8
60	122	58.3	0.1	0.4	18.5	53.3	123	97.9	0	1.4	19.5	68.7	124	129.6	0	2.6	24.3	96.4
70	122	70	0	1.3	21	53.3	123	114.1	0	3.4	23.4	68.1	124	149.9	0	5.5	28.3	95.1
80	122	77.5	0	1.3	22.7	53.6	123	124	0	3.4	26.5	68	124	168.5	0	5.7	30	94.2
90	122	82.5	0	1.1	23.6	54.1	123	128.6	0	3.1	28.8	68.3	124	180.7	0	5.4	31.2	94
100	122	89.2	0	1	23.7	54.7	123	134.1	0	2.8	29.2	68.9	124	190	0	5.7	32.2	94
110	122	93.9	0	1.5	24	55.4	123	137.4	0	3.9	29.1	69.8	124	193.8	0	7.8	33.6	94.2
120	122	98.6	0	1.2	24.4	56.2	123	141.2	0	3.7	28.7	70.7	124	198.3	0	7.1	33.5	94.6
130	122	101.7	0	1.6	25	56.9	123	142.8	0	4.2	27.7	71.5	124	201	0	7	32.5	95
140	122	105.1	0	1.6	25.6	57.6	123	146	0	4	26.5	72.2	124	204.6	0	6.2	31.2	95.2
150	122	107.3	0	2.2	26.3	58.4	123	147.6	0	4.6	25.8	72.6	124	206.2	0	7.1	29.9	95.2
160	122	109.9	0	2.4	27	59.2	123	149.9	0	4.4	24.9	72.9	124	208.4	0	7	28.8	95
170	122	111.3	0	2.9	27.7	60.1	123	149.4	0	5.3	24.5	72.9	124	206.8	0	8.3	28.1	94.5
180	122	113.4	0	2.8	27.3	60.9	123	149.5	0	5.2	24	72.8	124	206	0	8.3	27.8	93.9
190	122	113.4	0	2.8	27.3	60.9	123	149.5	0	5.2	24	72.8	124	206	0	8.3	27.8	93.9
200	122	113.4	0	2.8	27.3	60.9	123	149.5	0	5.2	24	72.8	124	206	0	8.3	27.8	93.9
210	122	113.4	0	2.8	27.3	60.9	123	149.5	0	5.2	24	72.8	124	206	0	8.3	27.8	93.9
220	122	113.4	0	2.8	27.3	60.9	123	149.5	0	5.2	24	72.8	124	206	0	8.3	27.8	93.9
230	122	113.4	0	2.8	27.3	60.9	123	149.5	0	5.2	24	72.8	124	206	0	8.3	27.8	93.9
240	122	113.4	0	2.8	27.3	60.9	123	149.5	0	5.2	24	72.8	124	206	0	8.3	27.8	93.9
250	122	113.4	0	2.8	27.3	60.9	123	149.5	0	5.2	24	72.8	124	206	0	8.3	27.8	93.9
260	122	113.4	0	2.8	27.3	60.9	123	149.5	0	5.2	24	72.8	124	206	0	8.3	27.8	93.9
270	122	113.4	0	2.8	27.3	60.9	123	149.5	0	5.2	24	72.8	124	206	0	8.3	27.8	93.9
280	122	113.4	0	2.8	27.3	60.9	123	149.5	0	5.2	24	72.8	124	206	0	8.3	27.8	93.9
290	122	113.4	0	2.8	27.3	60.9	123	149.5	0	5.2	24	72.8	124	206	0	8.3	27.8	93.9
300	122	113.4	0	2.8	27.3	60.9	123	149.5	0	5.2	24	72.8	124	206	0	8.3	27.8	93.9

Year	Yield ID	Tree	Plant	CWD/ Snags	Litter	Soil	Yield ID	Tree	Plant	CWD/ Snags	Litter	Soil	Yield ID	Tree	Plant	CWD/ Snags	Litter	Soil
0	125	0.3	0	36.3	31.2	54.7	126	0.3	0	40.2	35.4	71.5	127	0.4	0	71.6	53.5	96.5
10	125	3.6	1.1	20.9	27.1	53.6	126	4.8	1.6	21.9	31.7	70	127	5.6	2.3	44.5	47.2	94.8
20	125	7.4	2	5.3	29.2	53.3	126	11.2	2.2	4.4	33.4	69.2	127	16.5	2.1	16.7	48.4	94.4
30	125	13.3	1.4	0.2	25.6	52.8	126	28.4	0.9	0.1	25.8	68.7	127	41.6	0.8	2	40.9	94.5
40	125	26.1	0.5	0.1	19.1	53.3	126	51.8	0.2	0.3	18.3	69.2	127	73.5	0.1	0.7	27.7	95.7
50	125	44.8	0.1	0.4	17	53.8	126	76.3	0	1.2	17.3	69.7	127	100.8	0	2.2	22.6	97.1
60	125	65.6	0	0.5	17.7	53.4	126	99.9	0	1.7	18.8	68.9	127	127.8	0	3	22.1	96.7
70	125	77.8	0	2.1	20.6	53.5	126	116.1	0	4.6	22.5	68.3	127	147.5	0	6.7	25.5	95.3
80	125	85.3	0	2.1	22.6	53.7	126	128.6	0	4.8	23.5	67.8	127	163.9	0	7.2	26.8	94.3
90	125	86.9	0	3	23.9	54.3	126	132.2	0	5.5	23.8	67.9	127	168	0	8.2	28.1	93.8
100	125	92.3	0	2.9	22.1	55	126	139.9	0	4.7	22.1	67.9	127	175.8	0	7	27.1	93.3
110	125	95	0	3.2	19.9	55.8	126	141.1	0	6.1	22.3	68.2	127	175.7	0	8.6	27.2	93.1
120	125	97.1	0	2.2	16.8	56.1	126	141.2	0	5.2	21.4	68.2	127	174.5	0	7.8	26.2	92.4
130	125	95.1	0	2.8	15.6	55.9	126	136.1	0	5.8	21.1	68.3	127	166.9	0	8.5	26	91.8
140	125	93.9	0	2.2	14.6	55.4	126	132.5	0	4.5	19.9	68.1	127	160.9	0	6.9	24.4	91
150	125	90.2	0	2.5	14.6	55	126	125.7	0	4.8	19.3	67.8	127	151.3	0	7.1	23.4	90.2
160	125	87.7	0	2.1	14.1	54.5	126	121	0	3.9	18	67.2	127	144.8	0	5.7	21.4	89.3
170	125	83.9	0	2.6	14.1	53.9	126	114.2	0	4.9	17.5	66.7	127	135.7	0	6.8	20.3	88.3
180	125	81.5	0	2.6	13.8	53.3	126	109.4	0	4.9	16.9	66	127	129.3	0	6.7	19.2	87
190	125	81.5	0	2.6	13.8	53.3	126	109.4	0	4.9	16.9	66	127	129.3	0	6.7	19.2	87
200	125	81.5	0	2.6	13.8	53.3	126	109.4	0	4.9	16.9	66	127	129.3	0	6.7	19.2	87
210	125	81.5	0	2.6	13.8	53.3	126	109.4	0	4.9	16.9	66	127	129.3	0	6.7	19.2	87
220	125	81.5	0	2.6	13.8	53.3	126	109.4	0	4.9	16.9	66	127	129.3	0	6.7	19.2	87
230	125	81.5	0	2.6	13.8	53.3	126	109.4	0	4.9	16.9	66	127	129.3	0	6.7	19.2	87
240	125	81.5	0	2.6	13.8	53.3	126	109.4	0	4.9	16.9	66	127	129.3	0	6.7	19.2	87
250	125	81.5	0	2.6	13.8	53.3	126	109.4	0	4.9	16.9	66	127	129.3	0	6.7	19.2	87
260	125	81.5	0	2.6	13.8	53.3	126	109.4	0	4.9	16.9	66	127	129.3	0	6.7	19.2	87
270	125	81.5	0	2.6	13.8	53.3	126	109.4	0	4.9	16.9	66	127	129.3	0	6.7	19.2	87
280	125	81.5	0	2.6	13.8	53.3	126	109.4	0	4.9	16.9	66	127	129.3	0	6.7	19.2	87
290	125	81.5	0	2.6	13.8	53.3	126	109.4	0	4.9	16.9	66	127	129.3	0	6.7	19.2	87
300	125	81.5	0	2.6	13.8	53.3	126	109.4	0	4.9	16.9	66	127	129.3	0	6.7	19.2	87

Year	Yield ID	Tree	Plant	CWD/ Snags	Litter	Soil	Yield ID	Tree	Plant	CWD/ Snags	Litter	Soil	Yield ID	Tree	Plant	CWD/ Snags	Litter	Soil
0	128	0	0	31.8	35.5	51	129	0	0	46.4	48.4	69.5	130	0	0	46.6	51.3	76.6
10	128	0.6	0.2	14.1	33.6	51.1	129	0.7	0.4	23	45	69.5	130	0.7	1.8	24.7	46.1	76.7
20	128	1.5	1.2	5.6	34.5	49.1	129	1.8	1.4	9.7	47	66.8	130	2	1.9	11	49	73.7
30	128	2.3	1.9	1.6	32.3	49.1	129	4.2	1.9	3.6	42.2	66.9	130	4.6	2.1	5	42.7	73.9
40	128	2.8	2.1	0.3	30.3	47.2	129	7.3	1.8	0.8	36.2	64.3	130	7.8	2	1.4	38.5	71.1
50	128	3.4	2.1	0	26.6	46.7	129	11.3	1.7	0.1	29.3	63.4	130	12.2	1.8	0.3	28.9	70
60	128	4.3	1.9	0	22.5	47.3	129	17.8	1.4	0	20.1	64.2	130	19.7	1.3	0.1	19	70.7
70	128	5.2	2.1	0.2	17.8	47.5	129	28.3	0.7	0.1	14.5	64.4	130	31.6	0.6	0.1	14.7	70.5
80	128	7.2	2.1	0.1	17.8	47.3	129	42.4	0.1	0.2	14.2	63.8	130	47	0.1	0.2	15.4	69.5
90	128	10.6	2	0	14.4	47.2	129	56.3	0	0.2	15.8	62.9	130	61.7	0	0.2	17.3	68.5
100	128	15.2	1.8	0.1	11.6	47.1	129	68.2	0	0.6	18.1	62.4	130	74.6	0	0.7	19.9	68
110	128	21.9	1.3	0	10.8	46.7	129	78.3	0	0.4	21.2	62.1	130	85.5	0	0.5	23.1	67.7
120	128	30.1	0.7	0.1	11.1	46.2	129	85.5	0	0.3	23.6	62.3	130	93.5	0	0.5	25.6	67.9
130	128	38.2	0.2	0.2	12.3	45.8	129	90.3	0	0.7	25.9	62.7	130	98.3	0	1	28.1	68.4
140	128	46.7	0	0.1	13.7	45.5	129	95.1	0	0.6	27.4	63.3	130	103	0	1	30	69
150	128	52.9	0	0.5	15.2	45.4	129	98.5	0	1.3	28.4	64	130	106.3	0	1.7	31.2	69.6
160	128	57.9	0	0.4	17	45.5	129	102.6	0	1.1	29.6	64.7	130	110.2	0	1.6	32.4	70.4
170	128	62.1	0	0.3	18.6	45.8	129	107.1	0	0.9	29.9	65.5	130	114.9	0	1.3	32.5	71.3
180	128	65	0	0.6	20.2	46.1	129	110.6	0	1.4	30	66.3	130	118.7	0	1.8	32.3	72.2
190	128	68.3	0	0.6	21.2	46.5	129	115.4	0	1.2	29.6	67	130	124.4	0	1.6	31.2	73
200	128	70.9	0	1	21.4	47.1	129	119.8	0	2.1	28.8	67.6	130	129.8	0	2.3	30.1	73.7
210	128	74.2	0	0.9	21.7	47.7	129	125.6	0	1.8	29	68.2	130	135.9	0	2.2	30.3	74.3
220	128	77.9	0	0.7	21.5	48.3	129	131.3	0	1.6	29	68.7	130	142	0	1.8	30	74.7
230	128	80.6	0	1.1	21.1	48.9	129	134.9	0	2.2	29.5	69.2	130	145.5	0	2.5	28.7	75.2
240	128	83.8	0	1	20.7	49.4	129	138.8	0	2	29.5	69.6	130	149.8	0	2.3	26.9	75.6
250	128	86	0	1.5	20.3	49.8	129	140.7	0	2.8	28.3	70.3	130	152.7	0	2.8	25.7	75.6
260	128	88.7	0	1.3	20.4	50.2	129	143.5	0	2.5	27	70.7	130	156.2	0	2.7	25.7	75.4
270	128	91.2	0	1.1	20.3	50.4	129	146.5	0	2	25.5	70.9	130	160	0	2.1	25.7	75.1
280	128	92.6	0	1.5	20.2	50.6	129	147.8	0	2.5	24.9	70.8	130	161.8	0	2.6	26	74.9
290	128	94.5	0	1.4	19.9	50.7	129	150.3	0	2.5	24.7	70.5	130	164.5	0	2.4	25.7	74.8
300	128	96.6	0	1.3	19.5	50.9	129	153.4	0	2.1	24.6	70.2	130	167.4	0	2	25.4	74.6

Year	Yield ID	Tree	Plant	CWD/ Snags	Litter	Soil	Yield ID	Tree	Plant	CWD/ Snags	Litter	Soil	Yield ID	Tree	Plant	CWD/ Snags	Litter	Soil
0	201	0	0	8.7	54.7	62.4	202	0	0	10.4	66	76	203	0.3	0	11.1	71.7	87.4
10	201	1.4	0.4	3.7	28.1	63.2	202	1.6	2	4.4	36.1	76.8	203	2	2.3	4.9	42.3	88
20	201	3.5	1.7	0.7	21.7	63.6	202	4.1	2.1	0.9	28.2	77.2	203	6	2.3	1.3	32.7	88.4
30	201	8	1.7	0	18.4	63.9	202	9.5	1.9	0	22.2	78.1	203	14.2	1.8	0.2	23.1	89.4
40	201	15.1	1.5	0	18.3	61.5	202	18.3	1.5	0	18.6	75.3	203	27.9	1.1	0.1	17	86.5
50	201	27.7	0.9	0	15	59.9	202	33.8	0.7	0.1	14.1	73.4	203	51	0.2	0.2	14.8	84.5
60	201	48.2	0.2	0.3	13.2	59.2	202	57.8	0.1	0.5	13.7	72.3	203	77.7	0	1	16.6	82.8
70	201	68.8	0	0.2	14.5	58.6	202	80.5	0	0.4	16.3	71	203	102	0	1	20.6	81.5
80	201	85.1	0	0.2	17.4	58.1	202	99.1	0	0.5	20.2	70.2	203	118.6	0	1.6	25.2	80.8
90	201	93.5	0	0.9	20.4	57.9	202	107.7	0	1.6	24.2	69.8	203	125.7	0	3	29.8	80.6
100	201	101.7	0	0.7	22	58.1	202	116.1	0	1.4	26.3	70	203	133.9	0	2.5	32.2	80.9
110	201	107.9	0	1.6	23.2	58.5	202	122.2	0	2.5	28	70.4	203	139.9	0	3.7	33.9	81.3
120	201	116.6	0	1.1	24.8	58.9	202	131.2	0	2	30	70.8	203	149.1	0	3.3	35.8	81.8
130	201	125.1	0	0.8	25.4	59.4	202	140.2	0	1.8	30.7	71.3	203	158.5	0	3.1	36.2	82.4
140	201	131.2	0	1.7	26.5	60	202	146.5	0	2.8	32	71.9	203	164.9	0	4.3	37.5	83.2
150	201	139.5	0	1.3	26.8	60.6	202	155.1	0	2.4	32.2	72.6	203	174.3	0	3.7	37.4	83.9
160	201	144.9	0	2.7	27	61.2	202	161	0	3.8	32.5	73.3	203	180.8	0	5.1	37.1	84.8
170	201	153	0	2.1	28.1	61.8	202	169.8	0	3.1	33.4	73.9	203	190.7	0	4	37.5	85.6
180	201	160.4	0	1.7	28.4	62.4	202	177.5	0	2.8	33.4	74.7	203	199.4	0	3.5	37.3	86.3
190	201	164.6	0	3	29.6	63	202	181.5	0	4.3	34.3	75.6	203	203.9	0	5.3	38.2	87.1
200	201	170.9	0	2.5	29.8	63.6	202	188.4	0	3.7	34.3	76.1	203	211.3	0	4.6	37.8	87.8
210	201	174	0	4.1	30.1	64.3	202	191.3	0	5.5	34.5	76.9	203	214.9	0	6.3	37.7	88.6
220	201	179.4	0	3.5	31.1	64.9	202	197.2	0	4.7	35.4	77.6	203	220.7	0	5.5	38.4	89.2
230	201	184	0	2.9	31.2	65.6	202	202	0	4	35.5	78.3	203	224.3	0	4.9	37.5	89.9
240	201	184.4	0	4.1	32.1	66.3	202	202.6	0	5.2	36.2	79	203	222.4	0	6.5	35.1	90.7
250	201	187.5	0	3.3	32.2	67	202	205.6	0	4.3	35.8	79.6	203	225.5	0	5.6	31.7	91.4
260	201	187.6	0	4.8	32.1	67.6	202	205	0	6.1	35.2	80.4	203	226.1	0	7.1	30.1	91.4
270	201	190.8	0	3.8	32.8	68.3	202	206.8	0	5.2	34.6	81.2	203	230.2	0	6.3	30.4	90.9
280	201	193.7	0	3.3	32.7	69	202	209.1	0	4.4	31.3	81.9	203	234.5	0	5.6	30.5	90.3
290	201	193.5	0	4.7	33.6	69.7	202	209.4	0	5.9	29.3	82.4	203	235.2	0	7	31.5	89.9
300	201	196.5	0	4	33.4	70.3	202	213.9	0	4.9	28.2	82.1	203	239.1	0	6.2	31.3	89.5

Year	Yield ID	Tree	Plant	CWD/ Snags	Litter	Soil	Yield ID	Tree	Plant	CWD/ Snags	Litter	Soil	Yield ID	Tree	Plant	CWD/ Snags	Litter	Soil
0	204	0	0	7.6	49.7	56.4	205	0	0	13.7	78.2	89.1	206	0	0	13.9	82.4	104.4
10	204	1.4	0.3	2.9	25.9	57	205	1.8	2.1	6.4	42.8	89.8	206	2.5	2.9	6.6	50.3	104.8
20	204	3.5	1.5	0.2	20	57.2	205	4.7	2.1	1.5	33.6	90	206	7.2	2.5	1.7	37.2	104.6
30	204	7.8	1.6	0	17.2	57.3	205	11.1	1.9	0.1	26.4	91	206	17.9	1.8	0.2	23.9	106
40	204	15	1.4	0	16.7	55.2	205	22.3	1.5	0	20.3	87.6	206	36.5	0.8	0.1	19	102.3
50	204	27.2	1	0	17	53.8	205	41.9	0.6	0.1	16.2	85.1	206	66.9	0.1	0.4	18.4	99.4
60	204	46	0.2	0.2	15.9	53.1	205	70.4	0.1	0.5	16.5	83.5	206	96.9	0	1.1	21	97.2
70	204	65.9	0	0.2	16.7	52.7	205	95.7	0	0.6	19.4	82.1	206	123.2	0	1.6	25.2	96
80	204	79.4	0	0.1	18.1	52.7	205	116.3	0	0.8	23.4	81.2	206	143.2	0	2.2	29.9	95.2
90	204	87	0	0.7	19.6	53.1	205	126.1	0	2.2	27.8	80.7	206	152.3	0	3.6	34.5	95
100	204	95.2	0	0.4	21	53.3	205	135.5	0	1.9	30.6	80.7	206	161.9	0	3.1	37.1	95.2
110	204	101.6	0	1.2	22.1	53.6	205	142.1	0	3	32.4	81.1	206	168.2	0	4.5	38.8	95.6
120	204	110.2	0	0.8	23.4	53.9	205	151.7	0	2.6	34.4	81.5	206	177.9	0	4.1	40.6	96.1
130	204	118.3	0	0.7	23.9	54.4	205	160.5	0	2.7	35.3	81.9	206	186.7	0	4.6	41.3	96.7
140	204	124.5	0	1.5	24.9	55	205	166.8	0	3.9	36.8	82.6	206	193.4	0	5.8	42.6	97.5
150	204	131.9	0	1.4	25.2	55.5	205	175.4	0	3.7	37.1	83.2	206	201.6	0	6.1	42.4	98.3
160	204	137.4	0	2.4	25.6	56.1	205	181	0	5.2	37.2	84	206	207.8	0	7.4	42.2	99.2
170	204	144.3	0	2.1	26.6	56.7	205	188.9	0	4.8	38.1	84.8	206	215.7	0	6.8	43.1	100
180	204	150.9	0	1.6	27	57.2	205	196.2	0	4.3	38.2	85.5	206	223.2	0	6.1	43.2	100.6
190	204	147.1	0	7.6	28	57.7	205	192	0	11.1	39.1	86.2	206	212	0	17.5	43.9	101.4
200	204	142.5	0	12.4	32.3	58.3	205	185.2	0	17.1	43.9	86.9	206	197.8	0	28.2	49.7	102.1
210	204	145.9	0	11.2	32	58.9	205	188.4	0	15.5	43.6	87.6	206	198.3	0	26.4	45.4	102.9
220	204	151.7	0	7.8	33.1	59.8	205	194.6	0	11.5	44.7	88.6	206	202.4	0	21.9	41.4	104.3
230	204	156.3	0	4.8	33.8	60.3	205	199.6	0	8	44.7	89.3	206	206.8	0	17.6	39.5	104.4
240	204	157.2	0	4.2	34.2	60.7	205	199.9	0	7.4	44.8	89.9	206	208	0	15.6	39.9	103.8
250	204	160.4	0	2.8	32.8	61.3	205	201.7	0	5.3	41.2	90.6	206	212.7	0	11.6	39.4	103.2
260	204	161	0	3.9	31.3	62.1	205	201	0	6.3	35.3	91.6	206	213.7	0	10.3	38.9	102.8
270	204	164.4	0	3	30.8	62.8	205	204.8	0	5.3	31.7	92.1	206	218.1	0	7.5	38.6	102.3
280	204	168	0	2.4	30.2	63.5	205	209.4	0	4.6	29.6	91.7	206	222.3	0	5.8	37	101.9
290	204	168.5	0	3.7	30.8	64.1	205	211.2	0	5.8	29.5	91	206	223.4	0	6.3	35.9	101.6
300	204	171.9	0	3	30.7	64.6	205	216.3	0	5	29.3	90.3	206	227.2	0	5.5	34.3	101.3

Year	Yield ID	Tree	Plant	CWD/ Snags	Litter	Soil	Yield ID	Tree	Plant	CWD/ Snags	Litter	Soil	Yield ID	Tree	Plant	CWD/ Snags	Litter	Soil
0	207	0	0	5.2	40.6	53.3	208	0	0	14.2	75.9	87.3	209	0	0.1	16.2	79.4	101.8
10	207	1.4	0.5	1.5	20.2	53.9	208	1.4	2.5	6	42.7	88.1	209	1.3	3.4	8.2	51.4	102.4
20	207	3.9	1.7	0.1	16.1	54.2	208	4.2	2.3	1	32.2	89	209	4.9	3.1	2.4	36.9	103.2
30	207	8.8	1.6	0	15.7	53.9	208	11.8	2	0	25.3	89.7	209	14.9	2.5	0.4	24.1	104.4
40	207	17	1.2	0	16.5	52.1	208	26.1	1.6	0	20.5	86.6	209	32.5	1.7	0.2	18.6	101.5
50	207	30.6	0.9	0	16.1	51.1	208	49	0.9	0.2	16.3	84.6	209	59.1	0.7	0.4	16.3	99.1
60	207	49.5	0.3	0.2	16.1	50.7	208	80.8	0.2	0.6	15.9	83.3	209	92.7	0.1	1.1	17.7	97
70	207	67.1	0.1	0.4	17.3	50.5	208	108.3	0	1.3	18.5	82.1	209	121.2	0	1.9	21.6	95.3
80	207	77.8	0	0.5	19	50.6	208	130.5	0	1.6	22.2	81	209	144.4	0	2.6	25.7	94.1
90	207	83.3	0	0.9	20.9	51	208	144.1	0	2.6	27.3	80.2	209	161.1	0	3.8	31	93.3
100	207	89.3	0	0.6	21.7	51.5	208	152.2	0	2.5	30.5	80.2	209	172.3	0	3.9	34.6	93.2
110	207	94	0	1.3	22.4	52.1	208	156	0	3.9	32.6	80.7	209	176.4	0	5.6	37.2	93.8
120	207	100.5	0	1	23.4	52.7	208	162.7	0	3.6	34.7	81.4	209	183.1	0	5.2	39.6	94.7
130	207	106.7	0	1	23.9	53.3	208	169	0	3.9	36	82	209	189.9	0	5.3	40.8	95.4
140	207	111.6	0	1.6	24.7	53.9	208	173.6	0	4.8	37.6	82.7	209	195	0	6.2	42.3	96.2
150	207	117.5	0	1.5	25.1	54.6	208	180.2	0	4.5	37.6	83.6	209	202.4	0	6	42	97
160	207	122.1	0	2.3	25.4	55.2	208	184.4	0	5.9	37.6	84.7	209	207.8	0	7.2	41.6	97.9
170	207	123.5	0	5.3	26.4	55.9	208	185	0	10.4	38.5	85.6	209	210.4	0	10.9	42.3	99
180	207	114.2	0	13.7	32.1	56.5	208	169.3	0	24.6	44.9	86.3	209	197.9	0	23.9	47.8	99.9
190	207	119.7	0	9.1	32.6	57.4	208	174.6	0	18.7	46.5	87.2	209	203.3	0	18.9	49.3	100.7
200	207	126.8	0	3.7	32.4	58.6	208	182.2	0	11.1	46.5	88.5	209	210.3	0	12	48.2	102
210	207	130.8	0	2.7	30.3	59.5	208	186	0	6.7	46	89.7	209	211.2	0	8	45.5	103.4
220	207	136.9	0	2.1	28	60.5	208	192.5	0	4.7	42.3	91	209	214.6	0	5.5	38.8	104.7
230	207	142.3	0	1.7	26.9	61.4	208	196.9	0	4	38.3	92.1	209	218.8	0	4.5	33.3	105.4
240	207	144.3	0	2.7	27.9	61.8	208	195.8	0	5.4	34.9	93.2	209	219.7	0	5.9	31.9	105.2
250	207	148	0	2.1	28.4	62	208	199.3	0	4.3	31.1	93.5	209	224	0	5.1	31.1	104.4
260	207	149	0	3.3	28.7	62.5	208	200	0	6	29.2	93.3	209	224.7	0	6.7	31.1	103.4
270	207	152.6	0	2.6	29.5	63	208	204.8	0	5.1	29.3	92.5	209	228.7	0	6	31.8	102.5
280	207	156.2	0	2.1	29.4	63.5	208	209.9	0	4.2	29.2	91.7	209	232.6	0	5.3	31.9	101.7
290	207	157.1	0	3.3	30.2	64.1	208	211.4	0	5.7	30.2	91	209	233	0	6.7	32.8	101.1
300	207	160.5	0	2.6	30.2	64.6	208	215.9	0	4.8	30.1	90.3	209	236.9	0	5.8	32.5	100.4

Year	Yield ID	Tree	Plant	CWD/ Snags	Litter	Soil	Yield ID	Tree	Plant	CWD/ Snags	Litter	Soil	Yield ID	Tree	Plant	CWD/ Snags	Litter	Soil
0	210	0.2	0	11.5	58.5	72.6	211	0.3	0.1	11.6	62.9	80.5	212	0.4	0.1	12.6	68.1	91.5
10	210	2.6	2	4.4	37	73.4	211	4.2	2.4	3.7	39.2	80.6	212	5.3	3	3.2	43.1	91.3
20	210	8.6	1.8	0.6	25.1	75.1	211	13.7	1.7	0.3	23.6	82.4	212	19.5	1.6	0.2	23.6	93.4
30	210	26.3	0.9	0.1	20.5	74.9	211	39.8	0.4	0.2	16.5	82.9	212	51.1	0.2	0.3	16.7	93.9
40	210	57.6	0.1	0.2	17	73.1	211	74.5	0.1	0.4	17.1	81.3	212	87.3	0	0.7	18.4	92.1
50	210	89.3	0	1.2	18.3	72.1	211	101.1	0	1.7	20.2	80.1	212	115	0	2.4	22.4	90.5
60	210	115.2	0	1.9	20.1	71.6	211	125.8	0	2.4	22.9	79.1	212	141.6	0	3.1	25.5	89.3
70	210	132	0	4.8	24.7	71.1	211	142	0	5.5	27.5	78.5	212	158.8	0	6.5	30.1	88.4
80	210	146.1	0	4.8	26.9	70.7	211	155.6	0	5.3	29.6	78.3	212	174.7	0	6.3	31.7	88
90	210	153.7	0	4.3	27.6	70.9	211	163.2	0	4.6	29.6	78.6	212	183.9	0	5.9	32.4	88.2
100	210	162.1	0	3.7	27	71.3	211	172.1	0	4.1	28.6	79.1	212	191.6	0	6.1	32.8	88.5
110	210	165.4	0	5.3	27.1	71.8	211	174.2	0	6.4	29.1	79.6	212	192.3	0	8.8	33.9	89.2
120	210	169.2	0	4.7	27.3	72.3	211	177.7	0	6	29.8	79.9	212	196.2	0	7.8	34.9	89.7
130	210	170.2	0	5.1	28.4	72.7	211	178.8	0	6.2	31	80.4	212	198.1	0	7.8	36.1	90.3
140	210	172.9	0	4.3	29.2	73.2	211	181.9	0	5.1	32.1	80.8	212	203.3	0	6	36.7	90.9
150	210	173.1	0	5.5	30.4	73.7	211	183.3	0	5.8	33.2	81.4	212	205.9	0	6.9	36.5	91.6
160	210	174.8	0	5.5	31.4	74.3	211	185.5	0	5.6	33.6	82.1	212	209.8	0	6.7	35.4	92.4
170	210	168.2	0	10.5	33.9	75.1	211	184.5	0	6.8	33.3	82.8	212	201.1	0	14.7	36.2	93.2
180	210	156.8	0	16	37.4	76	211	185	0	6.4	32.3	83.5	212	189.5	0	20.9	39.1	93.5
190	210	156.8	0	16	37.4	76	211	185	0	6.4	32.3	83.5	212	189.5	0	20.9	39.1	93.5
200	210	156.8	0	16	37.4	76	211	185	0	6.4	32.3	83.5	212	189.5	0	20.9	39.1	93.5
210	210	156.8	0	16	37.4	76	211	185	0	6.4	32.3	83.5	212	189.5	0	20.9	39.1	93.5
220	210	156.8	0	16	37.4	76	211	185	0	6.4	32.3	83.5	212	189.5	0	20.9	39.1	93.5
230	210	156.8	0	16	37.4	76	211	185	0	6.4	32.3	83.5	212	189.5	0	20.9	39.1	93.5
240	210	156.8	0	16	37.4	76	211	185	0	6.4	32.3	83.5	212	189.5	0	20.9	39.1	93.5
250	210	156.8	0	16	37.4	76	211	185	0	6.4	32.3	83.5	212	189.5	0	20.9	39.1	93.5
260	210	156.8	0	16	37.4	76	211	185	0	6.4	32.3	83.5	212	189.5	0	20.9	39.1	93.5
270	210	156.8	0	16	37.4	76	211	185	0	6.4	32.3	83.5	212	189.5	0	20.9	39.1	93.5
280	210	156.8	0	16	37.4	76	211	185	0	6.4	32.3	83.5	212	189.5	0	20.9	39.1	93.5
290	210	156.8	0	16	37.4	76	211	185	0	6.4	32.3	83.5	212	189.5	0	20.9	39.1	93.5
300	210	156.8	0	16	37.4	76	211	185	0	6.4	32.3	83.5	212	189.5	0	20.9	39.1	93.5

Year	Yield ID	Tree	Plant	CWD/ Snags	Litter	Soil	Yield ID	Tree	Plant	CWD/ Snags	Litter	Soil	Yield ID	Tree	Plant	CWD/ Snags	Litter	Soil
0	213	0.4	0.1	9.7	46.9	62.6	214	0.5	0.1	10	53.6	69.4	215	0.6	0.1	15.1	65.3	95.9
10	213	3.9	1.8	2.6	30.5	62.9	214	5.1	1.8	1.8	34.3	69.5	215	6.3	2.8	4.1	42.4	95.2
20	213	8.1	2.1	0.1	20.5	64.4	214	11.7	1.8	0.1	20.6	71.6	215	21.5	1	0.2	23.4	97.2
30	213	21.7	0.6	0.1	18.2	64.1	214	36.3	0.1	0.1	15.8	71.4	215	55.6	0.1	0.4	16.9	97.4
40	213	49.2	0.1	0.2	17.2	62.8	214	67.6	0	0.3	17.2	70	215	88.6	0	0.7	18.6	96
50	213	76.2	0	1	19.7	61.4	214	92.5	0	1.6	20.6	69	215	114.5	0	3.1	23.1	94.6
60	213	100.6	0	1.3	20.6	61.1	214	113.8	0	2.7	23	68.5	215	139	0	4.2	25.6	93.1
70	213	115.7	0	4.4	23.4	61.5	214	126.2	0	5.9	26.7	68.4	215	155.1	0	8.1	29.5	92.5
80	213	126.5	0	4.6	24.8	61.7	214	137.1	0	5.5	27.1	68.5	215	167.1	0	8.1	30.5	92.2
90	213	128.7	0	5.1	24.9	62.1	214	138.5	0	6	27	69	215	168.6	0	8.4	30.8	92.3
100	213	135.3	0	4.3	22.5	62.4	214	145.2	0	5.1	24.2	69.4	215	174.8	0	7.2	28.5	92.3
110	213	135	0	5.9	22.4	62.9	214	144.2	0	6.7	24.3	69.9	215	172.1	0	9.6	28.5	92.4
120	213	134.7	0	5	21.3	63.1	214	143.3	0	5.5	22.9	70	215	170.4	0	8.3	27.3	92
130	213	128.1	0	6.2	21.2	63.3	214	135.8	0	6.9	22.9	70.1	215	160.8	0	9.7	27.3	91.6
140	213	124.4	0	4.7	19.9	63.1	214	131.3	0	5.5	21.6	69.9	215	154.1	0	7.9	25.8	90.9
150	213	116.9	0	5.2	19.5	63	214	122.6	0	6.1	21.1	69.6	215	143.4	0	8.2	24.8	90.2
160	213	112.4	0	4	18.3	62.6	214	117.4	0	4.7	19.7	69	215	136.8	0	6.2	22.5	89.3
170	213	105.7	0	4.8	17.7	62.2	214	109.7	0	5.5	19	68.5	215	127.9	0	6.7	21.1	88.4
180	213	101.6	0	4.3	16.9	61.6	214	105.2	0	4.8	17.9	67.8	215	122.2	0	6	19.6	87.2
190	213	101.6	0	4.3	16.9	61.6	214	105.2	0	4.8	17.9	67.8	215	122.2	0	6	19.6	87.2
200	213	101.6	0	4.3	16.9	61.6	214	105.2	0	4.8	17.9	67.8	215	122.2	0	6	19.6	87.2
210	213	101.6	0	4.3	16.9	61.6	214	105.2	0	4.8	17.9	67.8	215	122.2	0	6	19.6	87.2
220	213	101.6	0	4.3	16.9	61.6	214	105.2	0	4.8	17.9	67.8	215	122.2	0	6	19.6	87.2
230	213	101.6	0	4.3	16.9	61.6	214	105.2	0	4.8	17.9	67.8	215	122.2	0	6	19.6	87.2
240	213	101.6	0	4.3	16.9	61.6	214	105.2	0	4.8	17.9	67.8	215	122.2	0	6	19.6	87.2
250	213	101.6	0	4.3	16.9	61.6	214	105.2	0	4.8	17.9	67.8	215	122.2	0	6	19.6	87.2
260	213	101.6	0	4.3	16.9	61.6	214	105.2	0	4.8	17.9	67.8	215	122.2	0	6	19.6	87.2
270	213	101.6	0	4.3	16.9	61.6	214	105.2	0	4.8	17.9	67.8	215	122.2	0	6	19.6	87.2
280	213	101.6	0	4.3	16.9	61.6	214	105.2	0	4.8	17.9	67.8	215	122.2	0	6	19.6	87.2
290	213	101.6	0	4.3	16.9	61.6	214	105.2	0	4.8	17.9	67.8	215	122.2	0	6	19.6	87.2
300	213	101.6	0	4.3	16.9	61.6	214	105.2	0	4.8	17.9	67.8	215	122.2	0	6	19.6	87.2

Year	Yield ID	Tree	Plant	CWD/ Snags	Litter	Soil	Yield ID	Tree	Plant	CWD/ Snags	Litter	Soil	Yield ID	Tree	Plant	CWD/ Snags	Litter	Soil
0	216	0	0	7	52.5	57.7	217	0	0	9.5	69.1	79.4	218	0	0	11.5	78.6	93.1
10	216	2.1	0.3	1.6	28.1	58.3	217	2.9	1.9	3.2	37.8	80	218	3.8	2.5	4.2	48	93.7
20	216	6.4	1.5	0.1	21.1	58.3	217	8.5	1.8	0.3	29	80.1	218	12.1	1.9	0.7	34.7	93.7
30	216	15.1	1.4	0	18.4	58.4	217	20.6	1.4	0.1	23.2	81	218	30	1	0.2	23.7	95.1
40	216	30	0.9	0	19.4	56.3	217	42.7	0.6	0.1	20.8	78	218	60.8	0.2	0.3	22.5	91.8
50	216	47.4	0.4	0.6	20.3	55.1	217	73	0.1	1	21.3	76.2	218	92.1	0	1.5	24.1	89.9
60	216	66.1	0.1	0.2	21.4	54.8	217	99	0	0.6	23.3	75.8	218	119.8	0	1	27.2	89.2
70	216	78.5	0	1.1	21.6	54.8	217	115.2	0	2	25.3	75.6	218	137.1	0	2.8	29.7	88.8
80	216	89.3	0	0.5	23.2	55.2	217	129	0	1.2	28.5	75.5	218	152.4	0	1.9	32.9	88.6
90	216	95.5	0	1.7	24.1	55.7	217	135.8	0	2.8	29.9	75.6	218	159.1	0	4.1	34.4	88.7
100	216	103.5	0	0.9	26.2	56.2	217	145	0	1.9	32.4	76.1	218	168.7	0	3.2	37	89.2
110	216	109.9	0	1	27	56.6	217	151.9	0	2.1	33.2	76.5	218	175.2	0	3.8	37.7	89.6
120	216	116.1	0	0.6	27.7	57.2	217	159	0	1.4	34	77.2	218	181.6	0	3	38.4	90.5
130	216	118.3	0	2.6	27.6	57.8	217	160.4	0	4.3	33.6	77.8	218	181.5	0	6.2	37.4	91.2
140	216	123	0	2.2	28.5	58.5	217	165.2	0	4.2	33.8	78.5	218	186.8	0	6.2	35.9	91.9
150	216	124.4	0	4	28.5	59	217	165.5	0	7.2	32.6	79.2	218	189.4	0	9.5	33.3	92.2
160	216	128.3	0	3	29.2	59.6	217	170.4	0	6.4	32.3	79.9	218	196.1	0	8.6	33.5	92.2
170	216	127.6	0	4.5	29.1	60	217	169.9	0	8.4	32.1	80	218	195.9	0	10.7	33	91.5
180	216	128.8	0	3.4	29.5	60.6	217	172.3	0	6.8	33.4	79.7	218	198.8	0	9	33.4	90.8
190	216	126.1	0	4.9	29.3	60.9	217	169.1	0	8.4	32.8	79.3	218	195.5	0	10.5	32.5	89.9
200	216	127.6	0	4	29.9	61.3	217	171.5	0	7.2	32.3	79.3	218	196.9	0	9.1	32.5	89
210	216	127.6	0	4	29.9	61.3	217	171.5	0	7.2	32.3	79.3	218	196.9	0	9.1	32.5	89
220	216	127.6	0	4	29.9	61.3	217	171.5	0	7.2	32.3	79.3	218	196.9	0	9.1	32.5	89
230	216	127.6	0	4	29.9	61.3	217	171.5	0	7.2	32.3	79.3	218	196.9	0	9.1	32.5	89
240	216	127.6	0	4	29.9	61.3	217	171.5	0	7.2	32.3	79.3	218	196.9	0	9.1	32.5	89
250	216	127.6	0	4	29.9	61.3	217	171.5	0	7.2	32.3	79.3	218	196.9	0	9.1	32.5	89
260	216	127.6	0	4	29.9	61.3	217	171.5	0	7.2	32.3	79.3	218	196.9	0	9.1	32.5	89
270	216	127.6	0	4	29.9	61.3	217	171.5	0	7.2	32.3	79.3	218	196.9	0	9.1	32.5	89
280	216	127.6	0	4	29.9	61.3	217	171.5	0	7.2	32.3	79.3	218	196.9	0	9.1	32.5	89
290	216	127.6	0	4	29.9	61.3	217	171.5	0	7.2	32.3	79.3	218	196.9	0	9.1	32.5	89
300	216	127.6	0	4	29.9	61.3	217	171.5	0	7.2	32.3	79.3	218	196.9	0	9.1	32.5	89

Year	Yield ID	Tree	Plant	CWD/ Snags	Litter	Soil	Yield ID	Tree	Plant	CWD/ Snags	Litter	Soil	Yield ID	Tree	Plant	CWD/ Snags	Litter	Soil
0	219	0	0	7.2	47.3	58	220	0	0	10.1	63.9	79.3	221	0	0	12.9	78.2	93.3
10	219	2.6	0.3	1.7	25.8	58.3	220	3.1	1.8	3.1	36.3	79.9	221	2.7	2.6	4.7	48.2	94
20	219	8.5	1.3	0.2	19.4	58.6	220	9.5	1.8	0.4	27.5	80.1	221	10	2	0.7	34	94.3
30	219	19.9	1.1	0	18.1	58.1	220	25	1.1	0.1	21.9	80.3	221	27.8	1.2	0.2	22.8	95.5
40	219	38.7	0.5	0.1	19	56.2	220	52.5	0.3	0.2	20.1	77.7	221	58.5	0.2	0.3	21.2	92.4
50	219	58.9	0.1	0.7	19.8	55.1	220	83.7	0	1.1	21.3	76.2	221	91.5	0	1.4	23	90.5
60	219	77.3	0	0.3	20.8	55.1	220	109.9	0	0.7	23.9	75.9	221	120.8	0	1	26.3	89.5
70	219	88.6	0	1.4	22	55.3	220	125.9	0	2.5	26.3	75.6	221	139.7	0	2.9	29.3	88.9
80	219	98.8	0	0.8	24.6	55.5	220	139.2	0	1.7	29.4	75.6	221	155.4	0	2.4	32.9	88.6
90	219	104.2	0	1.8	26.1	55.8	220	145.4	0	3.1	30.9	75.8	221	161.9	0	4.2	34.3	88.8
100	219	111.2	0	1	28	56.3	220	153.6	0	2.3	33.1	76.3	221	170.1	0	3.5	36.5	89.4
110	219	114.1	0	2.4	28.3	56.9	220	155.8	0	4.3	33.9	76.9	221	172.2	0	5.9	37.2	89.9
120	219	118.9	0	1.5	29	57.7	220	160.9	0	3.2	34.8	77.8	221	176.9	0	4.7	37.7	90.7
130	219	119.5	0	3.1	28.6	58.5	220	160.2	0	5.2	33.7	78.5	221	177.3	0	6.9	35	91.3
140	219	123	0	2.3	29.1	59.2	220	163.7	0	4.4	32.3	79.4	221	184.6	0	5.9	33	91.9
150	219	123.1	0	4	28.7	59.8	220	164.9	0	6.8	29.6	79.8	221	187.3	0	8.8	31.1	91.7
160	219	126.1	0	2.8	28.4	60.5	220	171.1	0	5.4	28.5	79.9	221	195.2	0	7.2	31.2	91.1
170	219	124.3	0	4	26.6	61	220	171.4	0	7.2	27.3	79.3	221	195.6	0	9.2	30.4	90.2
180	219	125.4	0	3.2	24.7	61.4	220	174.4	0	5.8	27.4	78.5	221	198.5	0	7.7	30.7	89.3
190	219	125.4	0	3.2	24.7	61.4	220	174.4	0	5.8	27.4	78.5	221	198.5	0	7.7	30.7	89.3
200	219	125.4	0	3.2	24.7	61.4	220	174.4	0	5.8	27.4	78.5	221	198.5	0	7.7	30.7	89.3
210	219	125.4	0	3.2	24.7	61.4	220	174.4	0	5.8	27.4	78.5	221	198.5	0	7.7	30.7	89.3
220	219	125.4	0	3.2	24.7	61.4	220	174.4	0	5.8	27.4	78.5	221	198.5	0	7.7	30.7	89.3
230	219	125.4	0	3.2	24.7	61.4	220	174.4	0	5.8	27.4	78.5	221	198.5	0	7.7	30.7	89.3
240	219	125.4	0	3.2	24.7	61.4	220	174.4	0	5.8	27.4	78.5	221	198.5	0	7.7	30.7	89.3
250	219	125.4	0	3.2	24.7	61.4	220	174.4	0	5.8	27.4	78.5	221	198.5	0	7.7	30.7	89.3
260	219	125.4	0	3.2	24.7	61.4	220	174.4	0	5.8	27.4	78.5	221	198.5	0	7.7	30.7	89.3
270	219	125.4	0	3.2	24.7	61.4	220	174.4	0	5.8	27.4	78.5	221	198.5	0	7.7	30.7	89.3
280	219	125.4	0	3.2	24.7	61.4	220	174.4	0	5.8	27.4	78.5	221	198.5	0	7.7	30.7	89.3
290	219	125.4	0	3.2	24.7	61.4	220	174.4	0	5.8	27.4	78.5	221	198.5	0	7.7	30.7	89.3
300	219	125.4	0	3.2	24.7	61.4	220	174.4	0	5.8	27.4	78.5	221	198.5	0	7.7	30.7	89.3

Year	Yield ID	Tree	Plant	CWD/ Snags	Litter	Soil	Yield ID	Tree	Plant	CWD/ Snags	Litter	Soil	Yield ID	Tree	Plant	CWD/ Snags	Litter	Soil
0	222	0.1	0	5.7	44.6	55.5	223	0.1	0	9.6	58.1	68.9	224	0.3	0	13.5	69.3	94
10	222	2	1.5	1.6	22.8	56.2	223	2.5	1.8	3.4	31.1	69.8	224	4.6	2.4	4.3	40	93.8
20	222	6.3	1.8	0.1	16.5	57.4	223	7.5	1.7	0.3	21.6	71.5	224	15.3	2	0.4	24.2	95.3
30	222	15.9	1.5	0	15.1	56.9	223	20.5	1.3	0.1	18.7	71.3	224	39.5	0.8	0.2	16.6	95.8
40	222	31.6	1	0.1	17	55.2	223	43	0.6	0.2	16.5	69.3	224	75.4	0.1	0.6	16.8	93.9
50	222	51.7	0.4	0.4	17.4	54	223	74.6	0.1	0.9	16.4	68.1	224	105.6	0	2	20.2	92.2
60	222	76.9	0.1	0.7	17.5	53.3	223	101.6	0	1.5	17.6	67.5	224	133	0	2.8	23.4	90.8
70	222	95.6	0	2.2	19.3	53.2	223	119.5	0	3.9	21.4	67	224	152.2	0	5.8	28.3	89.9
80	222	108.4	0	2.3	21	53.5	223	133.6	0	4.2	24	66.5	224	167.8	0	5.9	30.7	89.2
90	222	114.6	0	2.1	23.3	54	223	142.3	0	3.8	25.7	66.7	224	177.9	0	5.5	31.4	89.3
100	222	118.6	0	1.9	24.7	54.5	223	150.4	0	3.4	26.1	67.1	224	186.5	0	5.7	32.1	89.7
110	222	120.4	0	2.6	25.4	55.4	223	154.1	0	4.5	26.6	67.7	224	189.4	0	7.8	33.3	90.2
120	222	123.1	0	2.4	25.9	56.2	223	158.1	0	4.3	26.9	68.3	224	193.4	0	7.2	32.9	90.7
130	222	124.2	0	3.1	26.6	57.1	223	159.1	0	5.1	28.2	69	224	196	0	7	31.7	91.5
140	222	126.3	0	3	27.2	58	223	161	0	4.7	28.5	69.6	224	199.8	0	6	30.4	91.9
150	222	127.7	0	3.4	28	58.8	223	161.4	0	5.6	28.3	70.3	224	201.2	0	7.1	29.2	92
160	222	129.3	0	3.7	28.1	59.8	223	161	0	7	28	71	224	203.5	0	7	28.2	91.9
170	222	130.1	0	4.2	28.2	60.7	223	146.7	0	16.6	30.7	71.6	224	201.7	0	8.5	27.6	91.6
180	222	131.4	0	4	27.5	61.6	223	136.5	0	19.8	33.1	72	224	199.9	0	9.3	27.6	91
190	222	131.4	0	4	27.5	61.6	223	136.5	0	19.8	33.1	72	224	199.9	0	9.3	27.6	91
200	222	131.4	0	4	27.5	61.6	223	136.5	0	19.8	33.1	72	224	199.9	0	9.3	27.6	91
210	222	131.4	0	4	27.5	61.6	223	136.5	0	19.8	33.1	72	224	199.9	0	9.3	27.6	91
220	222	131.4	0	4	27.5	61.6	223	136.5	0	19.8	33.1	72	224	199.9	0	9.3	27.6	91
230	222	131.4	0	4	27.5	61.6	223	136.5	0	19.8	33.1	72	224	199.9	0	9.3	27.6	91
240	222	131.4	0	4	27.5	61.6	223	136.5	0	19.8	33.1	72	224	199.9	0	9.3	27.6	91
250	222	131.4	0	4	27.5	61.6	223	136.5	0	19.8	33.1	72	224	199.9	0	9.3	27.6	91
260	222	131.4	0	4	27.5	61.6	223	136.5	0	19.8	33.1	72	224	199.9	0	9.3	27.6	91
270	222	131.4	0	4	27.5	61.6	223	136.5	0	19.8	33.1	72	224	199.9	0	9.3	27.6	91
280	222	131.4	0	4	27.5	61.6	223	136.5	0	19.8	33.1	72	224	199.9	0	9.3	27.6	91
290	222	131.4	0	4	27.5	61.6	223	136.5	0	19.8	33.1	72	224	199.9	0	9.3	27.6	91
300	222	131.4	0	4	27.5	61.6	223	136.5	0	19.8	33.1	72	224	199.9	0	9.3	27.6	91

Year	Yield ID	Tree	Plant	CWD/ Snags	Litter	Soil	Yield ID	Tree	Plant	CWD/ Snags	Litter	Soil	Yield ID	Tree	Plant	CWD/ Snags	Litter	Soil
0	225	0.2	0	7.1	41	55.1	226	0.3	0	12	51.2	67.9	227	0.4	0	15	62.3	94.3
10	225	2.9	1.4	1.9	22.3	55.7	226	4.2	1.6	4.9	29.1	67.8	227	5.1	2.3	5.5	36.6	93.5
20	225	6	1.9	0.1	16.2	57	226	10	2.2	1.2	18.9	69.7	227	15.6	2.1	0.5	22.5	95
30	225	15.4	1.3	0	15.5	56.1	226	27.9	1	0.2	15.7	69.4	227	40	0.8	0.3	16	94.8
40	225	33.9	0.4	0.1	15	54.8	226	56.5	0.1	0.3	14.4	68.2	227	74.9	0.1	0.6	15.6	93.3
50	225	59.6	0	0.6	16.3	53.5	226	82.2	0	1.4	16.7	67.2	227	103.6	0	2.2	18.9	91.7
60	225	83.2	0	0.8	17.2	53	226	105.1	0	2	18.6	66.5	227	130.4	0	3.1	21.5	90.3
70	225	99	0	3.1	19.6	53	226	120.3	0	5	22.7	66	227	147.1	0	6.9	25.6	89.2
80	225	111.3	0	3.2	20.6	53.2	226	132	0	5.1	24.1	65.8	227	161.2	0	7.3	26.7	88.6
90	225	115.4	0	3.8	21.8	53.7	226	134.5	0	5.9	24.4	66	227	164.6	0	8.2	27.8	88.6
100	225	121.5	0	3.2	20.2	54	226	141.2	0	4.9	22.5	66.3	227	172.4	0	6.8	26.6	88.5
110	225	122.3	0	4.3	19.3	54.4	226	142.1	0	6.4	22.3	66.6	227	172.2	0	8.6	26.7	88.6
120	225	123.5	0	3.6	17.8	54.6	226	142.4	0	5.4	21.4	66.8	227	171.5	0	7.6	25.7	88.3
130	225	119.8	0	4.5	17.8	54.8	226	137.3	0	6	21.1	67	227	164.4	0	8.3	25.4	88
140	225	117.4	0	3.6	17.2	54.7	226	133.6	0	4.7	20	66.9	227	158.5	0	6.8	24	87.4
150	225	111.7	0	4.1	17.2	54.7	226	126.7	0	5	19.4	66.7	227	149.6	0	6.8	22.9	86.9
160	225	108.1	0	3.3	16.3	54.5	226	122.1	0	4	18.1	66.2	227	143.1	0	5.5	21.1	86.1
170	225	102.4	0	4.1	16.1	54.3	226	115.2	0	5.1	17.6	65.8	227	134.4	0	6.6	20.1	85.2
180	225	98.6	0	4.1	15.7	53.9	226	110.6	0	5	16.9	65.1	227	128.1	0	6.5	19	84.2
190	225	98.6	0	4.1	15.7	53.9	226	110.6	0	5	16.9	65.1	227	128.1	0	6.5	19	84.2
200	225	98.6	0	4.1	15.7	53.9	226	110.6	0	5	16.9	65.1	227	128.1	0	6.5	19	84.2
210	225	98.6	0	4.1	15.7	53.9	226	110.6	0	5	16.9	65.1	227	128.1	0	6.5	19	84.2
220	225	98.6	0	4.1	15.7	53.9	226	110.6	0	5	16.9	65.1	227	128.1	0	6.5	19	84.2
230	225	98.6	0	4.1	15.7	53.9	226	110.6	0	5	16.9	65.1	227	128.1	0	6.5	19	84.2
240	225	98.6	0	4.1	15.7	53.9	226	110.6	0	5	16.9	65.1	227	128.1	0	6.5	19	84.2
250	225	98.6	0	4.1	15.7	53.9	226	110.6	0	5	16.9	65.1	227	128.1	0	6.5	19	84.2
260	225	98.6	0	4.1	15.7	53.9	226	110.6	0	5	16.9	65.1	227	128.1	0	6.5	19	84.2
270	225	98.6	0	4.1	15.7	53.9	226	110.6	0	5	16.9	65.1	227	128.1	0	6.5	19	84.2
280	225	98.6	0	4.1	15.7	53.9	226	110.6	0	5	16.9	65.1	227	128.1	0	6.5	19	84.2
290	225	98.6	0	4.1	15.7	53.9	226	110.6	0	5	16.9	65.1	227	128.1	0	6.5	19	84.2
300	225	98.6	0	4.1	15.7	53.9	226	110.6	0	5	16.9	65.1	227	128.1	0	6.5	19	84.2

Year	Yield ID	Tree	Plant	CWD/ Snags	Litter	Soil	Yield ID	Tree	Plant	CWD/ Snags	Litter	Soil	Yield ID	Tree	Plant	CWD/ Snags	Litter	Soil
0	228	0	0	3.3	32.3	45.9	229	0	0	5.4	50.6	64	230	0	0	2.6	33.4	68.7
10	228	0.8	0.2	0.5	15.9	46.4	229	0.8	0.4	1	25.1	64.9	230	1.2	1.6	0.4	18.3	69.4
20	228	2.3	1.5	0	12.7	46.6	229	2.3	2	0.1	18.7	65.3	230	3.8	2.2	0	16.9	69.6
30	228	5.2	1.8	0	13.2	46.2	229	5.3	2.1	0	16.3	65.1	230	8.7	1.9	0	17.8	67.6
40	228	9	1.5	0	15	44.7	229	9.1	1.9	0	17.3	62.8	230	14.9	1.4	0	16.1	65.4
50	228	13.6	1.3	0.1	14.7	43.7	229	14.5	1.6	0.1	13.4	61.1	230	23.7	0.8	0.2	12.8	64.1
60	228	20.6	0.9	0	14.7	43.3	229	23.6	1	0.1	11.4	60.3	230	37.7	0.2	0.2	12.9	63.3
70	228	28.9	0.5	0	15.2	43.1	229	37.4	0.3	0.1	12	59.4	230	52.8	0	0.2	15	62.4
80	228	37.5	0.2	0.1	15.7	43.1	229	50.4	0	0.2	14.1	58.4	230	64.9	0	0.4	18.2	61.9
90	228	45.8	0	0.1	16.2	43.2	229	62.7	0	0.2	16.7	57.8	230	74.5	0	0.4	21	61.9
100	228	51.5	0	0.4	17.2	43.6	229	70.9	0	0.6	19.3	57.6	230	80.1	0	0.9	23.2	62.1
110	228	56.4	0	0.2	18.6	44.2	229	77.2	0	0.4	21.9	57.9	230	85.3	0	0.6	25.7	62.6
120	228	60.8	0	0.2	19.6	44.8	229	82.7	0	0.4	23.6	58.3	230	90.1	0	0.6	27.1	63.2
130	228	64.1	0	0.4	20.8	45.4	229	86.6	0	0.7	25.4	58.9	230	93.4	0	1	28.5	64
140	228	67.7	0	0.3	21.4	46.1	229	91	0	0.6	26.5	59.6	230	97.3	0	0.8	29.2	64.9
150	228	70.3	0	0.8	21.7	46.8	229	94.1	0	1.2	26.9	60.4	230	100.1	0	1.4	29.4	65.8
160	228	73.7	0	0.6	22.5	47.5	229	98	0	1	27.9	61.2	230	103.9	0	1.2	30.3	66.6
170	228	77	0	0.5	22.8	48.2	229	102.3	0	0.8	28.1	62	230	108.3	0	1	30.2	67.5
180	228	79.3	0	0.9	23.4	48.9	229	105.5	0	1.3	28.4	62.8	230	111.6	0	1.5	30.1	68.3
190	228	82.2	0	0.7	23.7	49.5	229	109.8	0	1.2	28.2	63.5	230	116.9	0	1.3	29.2	69
200	228	84.3	0	1.3	23.5	50.1	229	113.9	0	1.9	27.6	64.1	230	121.8	0	2	28.2	69.6
210	228	87.6	0	1.1	23.5	50.6	229	119.2	0	1.7	27.7	64.8	230	128.3	0	1.8	28.3	70.1
220	228	91.5	0	0.8	23.1	51.1	229	124.7	0	1.3	27.8	65.3	230	134.3	0	1.5	28.2	70.7
230	228	94.3	0	1.2	23	51.6	229	128.2	0	2	28.3	65.7	230	138.1	0	2.2	28.7	71.1
240	228	97.8	0	1	22.9	51.9	229	132.4	0	1.8	28.4	66.2	230	142.3	0	2	28.5	71.5
250	228	99.7	0	1.7	22.8	52.1	229	134.6	0	2.5	28.3	66.7	230	144.4	0	2.7	27.1	71.9
260	228	102.3	0	1.5	23.2	52.5	229	137.5	0	2.3	28	67.2	230	147.6	0	2.4	26.1	72.3
270	228	104.7	0	1.1	23.2	52.9	229	140.1	0	1.9	26.4	67.7	230	151	0	1.8	25	72.3
280	228	105.9	0	1.5	23.6	53.2	229	141.4	0	2.3	25	68.2	230	152.5	0	2.3	24.9	72.2
290	228	107.8	0	1.4	23.7	53.5	229	143.7	0	2.3	24.2	68.2	230	155.3	0	2.2	24.7	72
300	228	110	0	1.3	23.7	53.9	229	146.9	0	1.9	23.9	67.9	230	158.4	0	1.9	24.6	71.8

Year	Yield ID	Tree	Plant	CWD/ Snags	Litter	Soil	Yield ID	Tree	Plant	CWD/ Snags	Litter	Soil	Yield ID	Tree	Plant	CWD/ Snags	Litter	Soil
0	231	0	0	60.3	56.9	67.1	232	0	0	60.3	56.9	67.1	233	0	0	60.3	56.9	67.1
10	231	0.6	0.3	37.8	49.3	66.9	232	0.6	0.3	37.8	49.3	66.9	233	0.6	0.3	37.8	49.3	66.9
20	231	1.3	1.2	16.5	55.9	64.3	232	1.3	1.2	16.5	55.9	64.3	233	1.3	1.2	16.5	55.9	64.3
30	231	2.4	1.9	3.8	54.3	64.8	232	2.4	1.9	3.8	54.3	64.8	233	2.4	1.9	3.8	54.3	64.8
40	231	3.7	1.9	0.4	48	62.2	232	3.7	1.9	0.4	48	62.2	233	3.7	1.9	0.4	48	62.2
50	231	6.1	1.7	0	36.6	61.5	232	6.1	1.7	0	36.6	61.5	233	6.1	1.7	0	36.6	61.5
60	231	10.8	1.8	0.1	25.2	62.2	232	10.8	1.8	0.1	25.2	62.2	233	10.8	1.8	0.1	25.2	62.2
70	231	18.9	1.5	0	19.5	63	232	18.9	1.5	0	19.5	63	233	18.9	1.5	0	19.5	63
80	231	31.7	0.9	0	13.5	63.2	232	31.7	0.9	0	13.5	63.2	233	31.7	0.9	0	13.5	63.2
90	231	49.1	0.1	0.2	13.3	62.4	232	49.1	0.1	0.2	13.3	62.4	233	49.1	0.1	0.2	13.3	62.4
100	231	65.5	0	0.1	15.2	61.2	232	65.5	0	0.1	15.2	61.2	233	65.5	0	0.1	15.2	61.2
110	231	78.8	0	0.7	18.3	60.6	232	78.8	0	0.7	18.3	60.6	233	78.8	0	0.7	18.3	60.6
120	231	89.6	0	0.5	21	60.4	232	89.6	0	0.5	21	60.4	233	89.6	0	0.5	21	60.4
130	231	99.1	0	0.4	22.4	60.6	232	99.1	0	0.4	22.4	60.6	233	99.1	0	0.4	22.4	60.6
140	231	106.5	0	1.1	24.1	61	232	106.5	0	1.1	24.1	61	233	106.5	0	1.1	24.1	61
150	231	115.2	0	0.9	25.1	61.2	232	115.2	0	0.9	25.1	61.2	233	115.2	0	0.9	25.1	61.2
160	231	121.9	0	1.9	25.9	61.6	232	121.9	0	1.9	25.9	61.6	233	121.9	0	1.9	25.9	61.6
170	231	130.6	0	1.6	27	62.1	232	130.6	0	1.6	27	62.1	233	130.6	0	1.6	27	62.1
180	231	138.6	0	1.4	27.5	62.6	232	138.6	0	1.4	27.5	62.6	233	138.6	0	1.4	27.5	62.6
190	231	143.8	0	2.5	28.6	63.2	232	143.8	0	2.5	28.6	63.2	233	143.8	0	2.5	28.6	63.2
200	231	150.7	0	2.2	28.9	63.8	232	150.7	0	2.2	28.9	63.8	233	150.7	0	2.2	28.9	63.8
210	231	154.8	0	3.6	29.1	64.5	232	154.8	0	3.6	29.1	64.5	233	154.8	0	3.6	29.1	64.5
220	231	161.1	0	3	30.1	65.1	232	161.1	0	3	30.1	65.1	233	161.1	0	3	30.1	65.1
230	231	166.2	0	2.6	30.3	65.7	232	166.2	0	2.6	30.3	65.7	233	166.2	0	2.6	30.3	65.7
240	231	167.8	0	3.7	31.2	66.4	232	167.8	0	3.7	31.2	66.4	233	167.8	0	3.7	31.2	66.4
250	231	171.3	0	3	31.3	67	232	171.3	0	3	31.3	67	233	171.3	0	3	31.3	67
260	231	171.9	0	4.4	31.4	67.6	232	171.9	0	4.4	31.4	67.6	233	171.9	0	4.4	31.4	67.6
270	231	175.4	0	3.7	32	68.4	232	175.4	0	3.7	32	68.4	233	175.4	0	3.7	32	68.4
280	231	178.7	0	3.1	32	69	232	178.7	0	3.1	32	69	233	178.7	0	3.1	32	69
290	231	179.4	0	4.3	32.6	69.7	232	179.4	0	4.3	32.6	69.7	233	179.4	0	4.3	32.6	69.7
300	231	182.8	0	3.6	32.6	70.4	232	182.8	0	3.6	32.6	70.4	233	182.8	0	3.6	32.6	70.4

Year	Yield ID	Tree	Plant	CWD/ Snags	Litter	Soil
0	234	0	0	60.3	56.9	67.1
10	234	0.6	0.3	37.8	49.3	66.9
20	234	1.3	1.2	16.5	55.9	64.3
30	234	2.4	1.9	3.8	54.3	64.8
40	234	3.7	1.9	0.4	48	62.2
50	234	6.1	1.7	0	36.6	61.5
60	234	10.8	1.8	0.1	25.2	62.2
70	234	18.9	1.5	0	19.5	63
80	234	31.7	0.9	0	13.5	63.2
90	234	49.1	0.1	0.2	13.3	62.4
100	234	65.5	0	0.1	15.2	61.2
110	234	78.8	0	0.7	18.3	60.6
120	234	89.6	0	0.5	21	60.4
130	234	99.1	0	0.4	22.4	60.6
140	234	106.5	0	1.1	24.1	61
150	234	115.2	0	0.9	25.1	61.2
160	234	121.9	0	1.9	25.9	61.6
170	234	130.6	0	1.6	27	62.1
180	234	138.6	0	1.4	27.5	62.6
190	234	143.8	0	2.5	28.6	63.2
200	234	150.7	0	2.2	28.9	63.8
210	234	154.8	0	3.6	29.1	64.5
220	234	161.1	0	3	30.1	65.1
230	234	166.2	0	2.6	30.3	65.7
240	234	167.8	0	3.7	31.2	66.4
250	234	171.3	0	3	31.3	67
260	234	171.9	0	4.4	31.4	67.6
270	234	175.4	0	3.7	32	68.4
280	234	178.7	0	3.1	32	69
290	234	179.4	0	4.3	32.6	69.7
300	234	182.8	0	3.6	32.6	70.4

Appendix 3: Natural Disturbance Modelled in the Non-Harvesting Land Base

