

Appendix D: Single Entry Dispersed Retention System (SEDRS) Stocking Obligations

Haida Gwaii Single Entry Dispersed Retention System (SEDRS) Stocking Standards

The procedures below outline the stocking standard and survey process to determine if stocking obligation has been met on partially harvested blocks on Haida Gwaii. These procedures are as of yet untested on Haida Gwaii and may be amended as necessary.

As this method/ policy has yet to be implemented operationally on Haida Gwaii it is be considered as part of an adaptive management process, and may be reviewed and improved on an ongoing basis. It is acknowledged that the SEDRS stocking standard will need to be reviewed in the next 5 years (i.e., at the end of the term, of the FSP), including a review of any Timber Supply impacts. To ensure that there are no significant adverse impact to the Timber Supply, application of the SEDRS stocking standard will be limited to less that 0.1% of the Timber Harvesting Landbase, on an annual basis, for all Plan Holders combined.

Regen and Free-Growing Obligation Timing

Where required, the regen obligation date for stands managed under the SEDRS stocking standard is between 2 and 6 years, from harvest commencement.

Where required, the Free Growing obligation for stands managed under the SEDRS stocking standard is between 2 and 20 years, from harvest commencement, consistent with even-aged stocking standards.

If the stocking obligations are met after 2-years, a Free-Growing declaration may be made, consistent with FPPR s. 97 or 97.1.

Species Selection

Overstorey and understorey tree species acceptability is the same as described for the even-aged stocking standards in Appendix C, for the applicable site-series. Given that overstorey densities will be variable, depending on the level of harvesting, light interception by the overstorey will be factored into the species acceptability for a particular harvest area and balanced against individual tree species shade tolerance. Shade tolerant species will be considered acceptable where residual basal area is high, whereas, shade intolerant species will not.

Post-Harvest Sampling Procedures

Stratification

The sampling procedures described are to be applied to areas with a residual basal area (RBA) of >5 to $< 40\text{m}^2/\text{ha}$. As such, development areas will be stratified according to the following criteria:

- Areas $> 0.1\text{ha}$ with $\leq 5\text{m}^2/\text{ha}$ will be assessed according to even-aged stocking standards and survey procedures.
- Areas $\geq 0.25\text{ha}$ uncut will be classified as group retention and be removed from the NAR and survey area.

Overstorey

- Measure overstorey RBA using a prism that is suited to the tree sizes on site to capture, on average, a minimum of 4 trees per plot in an uncut portion of the stand (or cut and leave trees). The cruise compilation should guide the choice of prism size.
- Tally all overstorey trees, by species, as either crop trees or non-crop trees (as defined in Appendices 1 and 2 of SEDRS Discussion Paper, dated November 5, 2009). Only overstorey crop trees contribute to RBA and the determination of differential from potential (DFP), as presented in Table 1.
- Acceptable overstorey crop trees must meet the criteria specified in the Appendix F, based on the SEDRS Discussion Paper, dated November 5, 2009.

Understorey

An unimpeded well-spaced stem must be:

- Outside of the drip-line of overstorey trees.
- Healthy trees that meet the advanced regeneration criteria, as defined in Appendix G, based on the SEDRS Discussion Paper, dated November 5, 2009.
- Greater than the minimum described height for all species identified as suitable for the site (heights are determined as 75% of the heights provided in the Reference Guide for FDP Stocking Standards – for the Vancouver Forest Region ⁵ (MOF, November 2010).
- Unimpeded by vegetation (herbaceous or shrubs overtopping the stem).

Key elements of survey methodology

- Pre-stratify: Identify SEDRS areas using stratification criteria described above
- Plots: establish 1 plot per ha within a stratum (SU) with a minimum of 5 plots per stratum (SU), and a maximum of 15 plots per stratum (SU)
- Plot Size: 0.005ha (3.99m radius)
- Measurements: Determine RBA and the UWS stems per plot

Stocking Decision

Use Table 13, to determine Deviation-from-Potential and stocking category (open [O], partially stocked [P] or stocked [S]) for each plot. A block is deemed stocked if:

- average DFP value for all plots is ≤ 0.2 , and
- proportion of plots in the S (stocked) category is $\geq 60\%$, and
- proportion of plots in the O (open) category is $\leq 20\%$

⁵ http://www.for.gov.bc.ca/hfp/silviculture/stocking_stds.htm

Table 13: Deviation from Potential

Overstorey BA (m ² /ha)	Well Spaced Trees in Plot*									
	0	1	2	3	4	5	6	7	8	
5	0.86	0.65	0.45	0.30	0.19	0.11	0.06	0.02	0.00	
6	0.82	0.62	0.43	0.28	0.18	0.11	0.06	0.02	0.00	
7	0.77	0.58	0.40	0.27	0.17	0.10	0.05	0.02	0.00	
8	0.72	0.55	0.38	0.25	0.16	0.09	0.05	0.02	0.00	
9	0.67	0.51	0.35	0.23	0.15	0.09	0.05	0.02	0.00	
10	0.62	0.47	0.32	0.21	0.14	0.08	0.04	0.02	0.00	
11	0.57	0.43	0.30	0.20	0.12	0.07	0.04	0.02	0.00	
12	0.52	0.39	0.27	0.18	0.11	0.07	0.04	0.01	0.00	
13	0.47	0.35	0.24	0.16	0.10	0.06	0.03	0.01	0.00	
14	0.42	0.32	0.22	0.15	0.09	0.05	0.03	0.01	0.00	
15	0.38	0.28	0.20	0.13	0.08	0.05	0.03	0.01	0.00	
16	0.33	0.25	0.17	0.11	0.07	0.04	0.02	0.01	0.00	
17	0.29	0.22	0.15	0.10	0.06	0.04	0.02	0.01	0.00	
18	0.26	0.19	0.13	0.09	0.06	0.03	0.02	0.01	0.00	
19	0.22	0.17	0.12	0.08	0.05	0.03	0.02	0.01	0.00	
20	0.19	0.14	0.10	0.07	0.04	0.02	0.01	0.01	0.00	
21	0.16	0.12	0.08	0.06	0.04	0.02	0.01	0.00	0.00	
22	0.13	0.10	0.07	0.05	0.03	0.02	0.01	0.00	0.00	
23	0.11	0.08	0.06	0.04	0.02	0.01	0.01	0.00	0.00	
24	0.09	0.07	0.05	0.03	0.02	0.01	0.01	0.00	0.00	
25	0.07	0.05	0.04	0.02	0.02	0.01	0.00	0.00	0.00	
26	0.05	0.04	0.03	0.02	0.01	0.01	0.00	0.00	0.00	
27	0.04	0.03	0.02	0.01	0.01	0.00	0.00	0.00	0.00	
28	0.02	0.02	0.01	0.01	0.01	0.00	0.00	0.00	0.00	
29	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	
30 – 40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

* Total number of well-spaced trees in a 0.005ha plot at a minimum inter-tree distance of 1.5m

	“Open”
	“Partially Stocked”
	“Stocked”

