Hishuk-ish-tsawalk
(everything is one)

Towards
Sustainable Forest Management

West Island Timberlands

Sustainable Forest Management Plan

2005 Data Set

May 2006
<table>
<thead>
<tr>
<th>Indicator</th>
<th>Code</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent of commercial tree species in the Defined Forest Area (DFA)</td>
<td>1</td>
<td>See 2003 Report</td>
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<tr>
<td>considered to historic baseline</td>
<td></td>
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<tr>
<td>Percent of the productive DFA that has &gt;30% of area in 0-20 year age</td>
<td>2</td>
<td></td>
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<tr>
<td>class in a given landscape unit</td>
<td></td>
<td></td>
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<tr>
<td>Aspatial modeling of old seral stages [old growth] at the landscape and</td>
<td>3</td>
<td></td>
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<tr>
<td>variant level</td>
<td></td>
<td></td>
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<tr>
<td>Number of units (as defined below) where inadequate old growth (as</td>
<td>4</td>
<td></td>
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<tr>
<td>defined below) exists</td>
<td></td>
<td></td>
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<tr>
<td>Number of opportunities for WIWAG to participate in the West Island</td>
<td>5</td>
<td></td>
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<tr>
<td>Timberlands (WIT) Old Growth Management Area (OGMA) planning process</td>
<td></td>
<td></td>
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<tr>
<td>Percent of area harvested using Variable Retention (VR)</td>
<td>6</td>
<td></td>
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<tr>
<td>Forest Ecosystem Network</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>Stand level retention in all cutblocks as percent of total cutblock area</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>Number of at-risk species in the DFA for which management programs</td>
<td>9</td>
<td></td>
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<tr>
<td>exist as identified in the FDP.</td>
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<td></td>
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<tr>
<td>Number of identified species at-risk in the DFA</td>
<td>10</td>
<td></td>
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<tr>
<td>Sensitive Ecosystem Inventory</td>
<td>11</td>
<td>no report at May11-06</td>
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<tr>
<td>Existence of a habitat management program for identified species of</td>
<td>12</td>
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<tr>
<td>special interest (includes a list)</td>
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<td>Annual percent of opening areas in permanent access structures</td>
<td>13</td>
<td></td>
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<tr>
<td>Operationally-caused fire damage by area</td>
<td>14</td>
<td></td>
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<tr>
<td>Area harvested as percent of the total productive forest area</td>
<td>15</td>
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<tr>
<td>Area harvested as percent of the total productive forest area in each</td>
<td>16</td>
<td></td>
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<tr>
<td>Landscape unit for last 5 years for those areas greater than 10,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>hectares.</td>
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<tr>
<td>Area of operationally-related windthrow</td>
<td>17</td>
<td>no report at May11-06</td>
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<tr>
<td>Area of slides originating in harvested areas or roads</td>
<td>18</td>
<td></td>
</tr>
<tr>
<td>Area out of conformance with free growing objectives</td>
<td>19</td>
<td></td>
</tr>
<tr>
<td>Equivalent years of Not Sufficiently Re foresed (NSR) as 5-year rolling</td>
<td>20</td>
<td></td>
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<tr>
<td>average</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Area out of conformance with regeneration delay obligations</td>
<td>21</td>
<td></td>
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<tr>
<td>% productive forest area in the DFA converted to non-forest use.</td>
<td>22</td>
<td></td>
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<tr>
<td>The number of rare, endangered or otherwise significant features</td>
<td>23</td>
<td></td>
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<tr>
<td>destroyed by harvest activity</td>
<td></td>
<td></td>
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<tr>
<td>Openings harvested in which soil disturbance exceeds pre-harvest level</td>
<td>24</td>
<td></td>
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<tr>
<td>as determined by a post harvest assessment</td>
<td></td>
<td></td>
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<tr>
<td>Percent of stream length of S4 fish streams buffered ≥ 15 meters in</td>
<td>25</td>
<td>See 2003 Report</td>
</tr>
<tr>
<td>areas harvested annually</td>
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<td></td>
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<tr>
<td>Percent of stream length of S4 non-fish streams buffered ≥ 15 meters in</td>
<td>26</td>
<td>See 2003 Report</td>
</tr>
<tr>
<td>areas harvested annually</td>
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<td></td>
</tr>
<tr>
<td>Percent of stream length of S5 streams buffered ≥ 15 meters in areas</td>
<td>27</td>
<td>See 2003 Report</td>
</tr>
<tr>
<td>harvested annually</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percent of S6 streams with a ≥15 meter buffer in areas harvested</td>
<td>28</td>
<td>See 2003 Report</td>
</tr>
<tr>
<td>annually</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percent of openings harvested where reserve zones (as per table</td>
<td>29</td>
<td></td>
</tr>
<tr>
<td>attached) are not maintained (steam crossings are excluded)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provide ranking and trend line for watersheds in the DFA</td>
<td>30</td>
<td>no report at May11-06</td>
</tr>
<tr>
<td>Change in area of water bodies</td>
<td>31</td>
<td></td>
</tr>
<tr>
<td>Indicator</td>
<td>2003-05</td>
<td>Source</td>
</tr>
<tr>
<td>-------------------------------------------------------------------------</td>
<td>---------</td>
<td>---------------</td>
</tr>
<tr>
<td>Enhance the long term uptake and storage of carbon</td>
<td>32</td>
<td>See 2003 Report</td>
</tr>
<tr>
<td>Forest management practices continue to provide opportunities for NTFP</td>
<td>33</td>
<td>See 2003 Report</td>
</tr>
<tr>
<td>harvesting</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Annual harvest (5 year average) as percent of LTHL</td>
<td>34</td>
<td></td>
</tr>
<tr>
<td>Percent of harvesting adjacent to protected areas that is VR</td>
<td>35</td>
<td></td>
</tr>
<tr>
<td>Percent of park perimeter harvested within previous 5 years.</td>
<td>36</td>
<td></td>
</tr>
<tr>
<td>Percent of roads from recreation road inventory that are maintained.</td>
<td>37</td>
<td></td>
</tr>
<tr>
<td>Percent of DFA covered by a recreational inventory</td>
<td>38</td>
<td></td>
</tr>
<tr>
<td>Number of hectares in which visual condition fails to meet Visual Quality</td>
<td>39</td>
<td></td>
</tr>
<tr>
<td>Objectives</td>
<td></td>
<td></td>
</tr>
<tr>
<td>$ of WIT wages, salaries, contracts compared to previous years</td>
<td>40</td>
<td></td>
</tr>
<tr>
<td>The portion of employment spending in Indicator 41 that is within the</td>
<td>41</td>
<td>See 2003 Report</td>
</tr>
<tr>
<td>Alberni Clayoquot Region</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employee and contractor (to include small bus, logging and silviculture</td>
<td>42</td>
<td>See 2003 Report</td>
</tr>
<tr>
<td>contractors) jobs/cubic meter of fibre logged within the DFA.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The portion of jobs in Indicator 42 that are within the Alberni Clayoquot</td>
<td>43</td>
<td>See 2003 Report</td>
</tr>
<tr>
<td>Region</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of local (Alberni Clayoquot Region) processing jobs (including</td>
<td>44</td>
<td>See 2003 Report</td>
</tr>
<tr>
<td>Coulson and Norske) that are associated with fibre from the DFA</td>
<td></td>
<td></td>
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<tr>
<td>Total percent of Major Contractor non-wage spending within the Alberni</td>
<td>45</td>
<td>See 2003 Report</td>
</tr>
<tr>
<td>Clayoquot Region as a % of total non-wage expenditures.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total % of Weyerhaeuser non-wage spending that is within the Alberni</td>
<td>46</td>
<td>See 2003 Report</td>
</tr>
<tr>
<td>Clayoquot Region</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of all contracts let and their subcontractors and the portion of</td>
<td>47</td>
<td>See 2003 Report</td>
</tr>
<tr>
<td>those that live in the Alberni Clayoquot Region</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Annual harvest level compared to last 5 years</td>
<td>48</td>
<td></td>
</tr>
<tr>
<td>Conversations with the Advisory around conversion of 2nd growth fibre</td>
<td>49</td>
<td>See 2003 Report</td>
</tr>
<tr>
<td>locally have taken place.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Annual harvest compared to local log consumption that is provided by</td>
<td>50</td>
<td></td>
</tr>
<tr>
<td>Weyerhaeuser</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total $ spent on capitol improvements in Weyerhaeuser mill facilities.</td>
<td>51</td>
<td>See 2003 Report</td>
</tr>
<tr>
<td>Number of First Nations that have requested a Cultural Heritage Resource</td>
<td>52</td>
<td></td>
</tr>
<tr>
<td>contract vs. the number who have one</td>
<td></td>
<td></td>
</tr>
<tr>
<td>% of surveys conducted out of the number requested</td>
<td>53</td>
<td></td>
</tr>
<tr>
<td>First Nations information sharing and referrals program</td>
<td>54</td>
<td></td>
</tr>
<tr>
<td>Percent of blocks where agreement is reached around the management of</td>
<td>55</td>
<td></td>
</tr>
<tr>
<td>Cultural Heritage Resource contracts.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of First Nations signing contracts.</td>
<td>56</td>
<td></td>
</tr>
<tr>
<td>Contract $ paid to all First Nations contractors compared to previous</td>
<td>57</td>
<td></td>
</tr>
<tr>
<td>years.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percent of changes to operational plans as a result of responding to</td>
<td>58</td>
<td></td>
</tr>
<tr>
<td>public comments.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The number of communication activities implemented compared to the</td>
<td>59</td>
<td></td>
</tr>
<tr>
<td>communications plan list.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percent of planners oriented to red/blue list species annually</td>
<td>60</td>
<td></td>
</tr>
<tr>
<td>Number of programs or presentations that target youth for forest</td>
<td>61</td>
<td></td>
</tr>
<tr>
<td>awareness/information.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percent of workers that are trained/year in the First Nations Cultural</td>
<td>62</td>
<td></td>
</tr>
<tr>
<td>Awareness Program.</td>
<td></td>
<td></td>
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Location: EMS/SFM/2005/Dataset/sfm_plan_2005_dataset_contents_may06.xls
Revised: May 11-06
CONSIDER PRINTED DOCUMENT UNCONTROLLED
Check the WIT, EMS Website for the most up to date version.
**Indicator 2:** Percent of productive DFA that has >30% of area in **0-20 year age class** in a given landscape unit

**Value:** Maintain representative ecosystem types at landscape level.

**Goal:** Percent of the productive DFA that has >30% of area in 0-20 year age class in a given landscape unit

**Objective:** Less than 2% of the total productive area.

**Acceptable Variance:** ± 4%

**Forecast:** Zero

**Performance:** Crown & Private

<table>
<thead>
<tr>
<th>year</th>
<th>LU outside objective as % of productive (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>1.97</td>
</tr>
<tr>
<td>2004</td>
<td>0.9</td>
</tr>
<tr>
<td>2003</td>
<td>0.9</td>
</tr>
<tr>
<td>2002</td>
<td>1.7</td>
</tr>
<tr>
<td>2001</td>
<td>1.6</td>
</tr>
<tr>
<td>2000</td>
<td>1.7</td>
</tr>
</tbody>
</table>

**Notes:** Island Timberlands not reported. FN and BCTS awareness only.

**Data Protocol:**

**Responsibility:**
Cascadia – Planning Forester

**Reporting:**
Cascadia - Pacific GIS Consulting

**Source:** All data is from GIS in the form of ArcInfo coverages, with the exception of logging updates which came from Genus.

**Comments:**

- **2005** - Small areas (slivers) exist with the DFA which have no landscape unit designation. This amounts to 193 ha for landscape units.

- **2004** - Small areas (slivers) exist with the DFA which have no landscape unit designation.

- **2003** - Small areas (slivers) exist with the DFA which have no landscape unit designation. Does not include BCTS harvested area. No Landscape Units are 100% within the DFA. Seven Landscapes Units have more than 80% of their area within the DFA; Cameron (80.5%), China (81.5%), Corrigan (94.5%), Cous (94.4%), Klanawa (82.9%), Nahmint (95.6%) and Sproat Lake (95.5%).
**Indicator 3:** The number of Landscape Units [LU] where non-contributing landbase unit is analyzed.

**Value:** The representation of the non-contributing landbase.

**Objective:** The level of the non-contributing landbase is understood.

**Target:** In 2006, once OGMA designations are complete, analyze the non-contributing landbase in 4 landscape units.

**Acceptable Variance:** - 1 (or 3)

**Forecast:** all

**2006 – 2009 SFM Plan:** Indicator 2.

**Performance:** Crown only

<table>
<thead>
<tr>
<th>year</th>
<th>LU’s analyzed (number)</th>
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<tbody>
<tr>
<td>2005</td>
<td>3</td>
</tr>
<tr>
<td>2004</td>
<td>0</td>
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</table>

**Notes:** Island Timberlands, FN, BCTS not reporting.

**Data Protocol:**

**Responsibility:**
Cascadia - Planning Forester

**Reporting:**

**Source:**

**Comments:**

2005 - Three landscape units (Caycuse, Nitinat and Walbran) were analyzed and presented at a WIWAG eco-subcommittee meeting.

2004 - The non-contributing landbase is analyzed following draft OGMA designations. This was done for Sproat in 2002. No others have been done.
Indicator 4: Number of units (as defined below) where inadequate old growth (as defined below) exists.

Value: Variety and patterns of ecosystem types at landscape level

Goal: Maintain representative ecosystems across the landscape

Definitions:
Unit: Variant within a landscape unit within the DFA that is greater than 250 hectares.
Inadequate old growth: inadequate is defined as per the provincial guidelines

Objective: Do not increase the number of units where inadequate old growth exists

Acceptable Variance: Two units increase

Forecast: Zero increase

2002 SFM Plan: Reported previously (in part) as Indicators # 3

Performance: Crown & Private

<table>
<thead>
<tr>
<th>year</th>
<th>inadequate old growth (units)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005 (1)</td>
<td>0</td>
</tr>
<tr>
<td>2004</td>
<td>3</td>
</tr>
<tr>
<td>2003</td>
<td>3 (2) baseline</td>
</tr>
<tr>
<td>2002</td>
<td>13 (3)</td>
</tr>
</tbody>
</table>

Notes:
(1) Island Timberlands not reported. FN and BCTS awareness only.
(2) landscape units greater than 250 hectares
(3) includes all landscape units

Harvested blocks are reported in the year that harvesting is completed.

Data Protocol:

Responsibility:
Cascadia - Planning Forester
Island Timberlands - D. Medves

Reporting:
Cascadia - Pacific GIS Consulting
**Indicator 4:** Number of units (as defined below) where inadequate *old growth* (as defined below) exists cont.

**Source:** All data is from GIS in the form of ArcInfo coverages, with the exception of logging updates which came from Genus.

**Comments:**

**2004** – The productive forest area for Indicator 4 is less than the productive area reported in Indicator 2 as Indicator 4 does not report Landscape Units (LU) and Biogeoclimatic Ecosystem Classification (BEC) units with less than 250 hectares. Also “Slivers,” which are narrow gaps created when linework from TRIM base mapping (1:20,000) and Government BEC zones (1:250,000) do not match exactly; do not show up in the data. And finally, areas with a BEC designation of Alpine Tundra (AT) are not included.

**2003** – A unit is a variant within a landscape unit within the DFA that is greater than 250 hectares. Old growth stands are 250+ years for all species except for pine, alder and maple where stands are mature at 140+ years. LU/BEC Growth targets were taken from: Table 2.8a Old Growth Retention Report, February 26, 2004, Regional landscape Unit Planning Database v2.01. Old Growth targets in landscape units with a Low BEO are reduced to 1/3 of the full target.
**Indicator 5:** Number of opportunities for WIWAG to participate in the West Island Timberlands (WIT) **Old Growth Management Area (OGMA) planning process.**

**Value:** Variety and patterns of ecosystem types at landscape level

**Goal:** Maintain representative ecosystems across the landscape

**Objective:** Invitations are extended to WIWAG for 100% of Landscape Unit planning meetings

**Acceptable Variance:** 25%

**Forecast:**

**Performance: Crown only**

<table>
<thead>
<tr>
<th>year</th>
<th>meetings (number)</th>
<th>WIWAG attendance (number)</th>
<th>WIWAG attendance (percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>3</td>
<td>3</td>
<td>100%</td>
</tr>
<tr>
<td>2004</td>
<td>3</td>
<td>3</td>
<td>100%</td>
</tr>
<tr>
<td>2003</td>
<td>4</td>
<td>3</td>
<td>75%</td>
</tr>
</tbody>
</table>

**Notes:** Island Timberlands, FN and BCTS awareness only.

**Data Protocol:**

**Responsibility:**
Cascadia - Planning Forester

**Reporting:**

**Source:**

**Comments:**

**2005** - Four meetings (Renfrew Aggregate – 1, Central Aggregate – 3) were held in 2005. WIWAG members were not invited to the introductory meeting for the Central Aggregate as it dealt with methodology and data sources.

**2004** - Three meetings for the Renfrew Aggregate (Nitinat, Walbran and Caycuse Landscape Units) were held, with WIWAG member(s) present for all three.

Meetings for the Barkley Aggregate (Henderson and Effingham Landscape Units) were held. WIWAG reps were invited, but declined. This area is now part of the BCTS takeback.
Indicator 6: Percent of area harvested using **Variable Retention** (VR)

**Value:** Variety and patterns of ecosystem types at landscape level.

**Goal:** Harvest activities reflect natural landscape patterns.

**Objective** [annual]: Year 2003-2005 80% VR by area

**Acceptable Variance:** ±15%

**Forecast:** 90 %

**2002 SFM Plan:** Reported previously as Indicator # 5

**Performance:** Crown & Private

<table>
<thead>
<tr>
<th>year</th>
<th>Variable Retention (percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>94.3</td>
</tr>
<tr>
<td>2004</td>
<td>87</td>
</tr>
<tr>
<td>2003</td>
<td>78</td>
</tr>
<tr>
<td>2002</td>
<td>78</td>
</tr>
<tr>
<td>2001</td>
<td>67</td>
</tr>
<tr>
<td>2000</td>
<td>65</td>
</tr>
<tr>
<td>1999</td>
<td>30</td>
</tr>
</tbody>
</table>

**Notes:** Island Timberlands not reported.
**Indicator 6**: Percent of area harvested using **Variable Retention** (VR) cont.

**Data Protocol:**

**Responsibility:**
Cascadia - Planning Forester

**Reporting:**
Cascadia - D. Bryant (contractor)
FN – D. Bryant (contractor)
BCTS - Timber Sales Program Forester

**Source:** Variable Retention Tracking Spreadsheet - Weyerhaeuser

**Comments:**

**2004**
BCTS does not use VR, instead they use ‘Retention’ systems. The retention system is defined under the Forest Practices Code as “a silvicultural system that is designed to (a) retain individual trees or groups of trees to maintain structural diversity over the area of the cutblock for at least one rotation, and (b) leave more than half the total area of the cutblock within one tree height from the base of a tree or group of trees, whether or not the tree or group of trees is inside the cutblock.”

**2003**
Hayes - The shortfall has been created by Hayes inheriting SP approved cutblocks that were engineered prior to 2003. All of the remaining cutblocks are 100% VR. In other words, all of 2003 engineering has been 100% VR with the exception of 862119. This cutblock will not be harvesting complete until 2004 (hence not in current VR reporting). The FDP identified 862119 as having significant windthrow challenges and therefore was not a suitable candidate for VR.

**2002** - Small Business or roads not included. VR hectares are calculated by adding up the total hectares logged (within the year) of each block considered to be a Variable Retention block. The retention system is defined under the Forest Practices Code as “a silvicultural system that is designed to (a) retain individual trees or groups of trees to maintain structural diversity over the area of the cutblock for at least one rotation, and (b) leave more than half the total area of the cutblock within one tree height from the base of a tree or group of trees, whether or not the tree or group of trees is inside the cutblock.”
**Indicator 7:** Forest Ecosystem Network (FEN)

**Value:** Connectivity and fragmentation

**Goal:** Forest connectivity is maintained (in order to protect genetic and species migration and relationships throughout the landscape unit)

**Objective** [annual]: Maintain the Forest Ecosystem Network in each LU until such time as the LU planning process has identified OGMA’s

**Acceptable Variance:** Zero

**Forecast:**

**Performance:** Crown & Private

<table>
<thead>
<tr>
<th>year</th>
<th>Connectivity (y/n)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>yes</td>
</tr>
<tr>
<td>2004</td>
<td>yes</td>
</tr>
<tr>
<td>2003</td>
<td>yes</td>
</tr>
<tr>
<td>2002</td>
<td>yes</td>
</tr>
</tbody>
</table>

**Notes:** Island Timberlands not reporting. FN and BCTS awareness only.

**Data Protocol:**

**Responsibility:**
Cascadia - Planning Forester

**Reporting:**
Cascadia - Planning Forester

**Source:**

**Comments:**
Data for this indicator does not include the Park Trade or other minor private land holdings.

**2004** – No changes were noted.
**Indicator 8: Stand level retention** in all cutblocks as percent of total cutblock area

**Value:** Stand level diversity

**Goal:** Structural diversity is maintained at the stand level

**Objective [annual]:** ≥ 15% in 2003-2005

**Acceptable Variance:** 10% for a lower limit

**Forecast:** 30%

**2002 SFM Plan:** Reported previously as Indicator # 7

**Performance: Crown & Private**

<table>
<thead>
<tr>
<th>year</th>
<th>stand retention as % of TAUP (percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>29.3</td>
</tr>
<tr>
<td>2004</td>
<td>23</td>
</tr>
<tr>
<td>2003</td>
<td>22</td>
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<tr>
<td>2002</td>
<td>23</td>
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<tr>
<td>2001</td>
<td>38</td>
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<tr>
<td>2000</td>
<td>27</td>
</tr>
<tr>
<td>1999</td>
<td>18</td>
</tr>
</tbody>
</table>
**Indicator 8: Stand level retention** in all cutblocks as percent of total cutblock area cont.

**Data Protocol:**

**Responsibility:**
Cascadia - Planning Forester
Island Timberlands – D. Medves

**Reporting:**
Cascadia - Planning Forester
Island Timberlands – Inventory Forester
FN – Planning Forester, Cascadia
BCTS - Timber Sales Program Forester

**Source:** Variable Retention Tracking Spreadsheet

**Comments:**

2005 – Island Timberlands harvested two cutblocks (not recorded) with single stem. Another 100 hectare (gross) cutblock with a total TAUP of 23.2 ha, was not recorded as well.

2002 - Data for this indicator does not include the Park Trade, other minor private land holdings, Small Business, or roads.

Stand level retention consists of all timber leave components designated to a block, such as timber leave areas, riparian areas and wildlife tree patches. This total retention may consist of more than 10% of the total area under prescription. However, a block may not be considered VR due to its slash areas not being under edge influence (more than 2 tree lengths from a timber edge).

This indicator reflects the amount of retention areas which are linked to the SP. Target VR is 15%.
Indicator 9: Number of at-risk species in the DFA for which management programs exist as identified in the FDP.

Value: At-risk species

Goal: At-risk species are identified and their habitat needs are maintained.

Objective: Support habitat management programs in co-operation with regulatory agencies and others

Acceptable Variance: -2

Forecast: n/a

Performance: Crown & Private

<table>
<thead>
<tr>
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<th>Management Programs</th>
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</thead>
<tbody>
<tr>
<td>2005</td>
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<tr>
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<td>6</td>
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<td>2003</td>
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<td>2001</td>
<td>6</td>
</tr>
<tr>
<td>2000</td>
<td>4</td>
</tr>
</tbody>
</table>

Notes: Island Timberlands and FN not reporting.

Identified Species of Special interest that are currently managed for include:

- Great Blue Heron
- Keen’s Long-eared Myotis (*Myotis keenii*)
- Marbled Murrelet
- Northern (Queen Charlotte) Goshawk
- Red-legged Frog
- Roosevelt Elk
- Scouler’s Corydalis (*Cordalis scouleri*)
- Vancouver Island Marmot
**Indicator 9:** Number of at-risk species in the DFA for which management programs exist as identified in the FDP cont.

**Data Protocol:**

**Responsibility:**
- Cascadia - Planning Forester
- BCTS – Timber Sales Program Forester

**Reporting:**
- Cascadia - Planning Forester
- BCTS – Timber Sales Program Forester

**Source:**

**Comments:**

**2005**

Two major amendments the 2001-2005 Alberni East FDP were approved in 2005. As a result, one of the amendments added two at-risk species: Scouler’s Corydalis and Keen’s Long-eared Myotis.

BCTS – Many of these [habitat management programs] are TFL wide programs. BCTS follows what is in the FDP/management plan. In addition, for cutblocks in the BCTS FDP there are strategies for red-legged frogs. BCTS’ ISO EMS includes objectives for SAR and IWMS.

**2004**

BCTS – Many of these [habitat management programs] are TFL wide programs. BCTS follows what is in the FDP/management plan. For cutblocks in the BCTS FDP, there are strategies for red-legged frogs.

**2003**

BCTS - No new FDPs in 2003. FDP discusses red-legged frogs and MaMu. BCTS does not manage the TFL 44 landbase – by harvesting Cat. A cutblocks from Weyerhaeuser’s FDP, we assume that species requiring wide-ranging management regimes are adequately considered for management.

There were no new FDP’s for 2003. Major amendments for Alberni East and West will be approved in 2004.
Indicator 10: Number of identified species at-risk in the DFA

Value: At-risk species

Goal: Population of species are not put at risk as a result of forest management activities.

Objective: Zero increase in at-risk status attributable to management activities

Acceptable Variance: Zero

Forecast: Zero

Performance: Crown & Private

<table>
<thead>
<tr>
<th>year</th>
<th>increase</th>
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<tr>
<td>2005</td>
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<td>2002</td>
<td>0</td>
</tr>
<tr>
<td>2001</td>
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</tbody>
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Notes: FN and BCTS awareness only.

Data Protocol:

Responsibility:
Cascadia – Planning Forester
Island Timberlands – D. Medves

Reporting:
Cascadia - Forest Ecologist (Nanaimo)
Island Timberlands – D. Medves

Source: BC Species and Ecosystem Explorer, found at the BC Conservation Data Centre (CDC) website http://srmwww.gov.bc.ca/cdc/.

Comments:
2005 - No changes for vertebrates.
Oregon selaginella (Selaginella oregana) is suspected to be widespread on the West Coast, and has been added to the red list. Not likely to be an issue on commercial forested sites, will be noted in training sessions.

2004 - No animal data changes for red listed species occurred in the South Island District. Five vascular plants were added in 2004 and three were removed in British Columbia; two of the added species and two of the removed species (now on Blue list) occur in the South Island District.
2003 - Thirty-one (31) Red List (extirpated, endangered or threatened) animal species.
Ten (10) vascular plants occur or have the potential to occur. The vascular plant listings were updated in March 2004, with the CDC additions for 2003. Mosses are not included.

2002 - (2) The 2002 Data Set showed 50 (fifty) animal species that were listed as species at risk.
Indicator 10: Number of identified species at-risk in the DFA (cont.)

Vertebrates

Currently managed for (3)
Northern Goshawk (*laingi* subspecies)
Marbled Murrelet
Vancouver Island Marmot

No active management plan (24)
Brandt's Cormorant
Common Murre
Common Ringlet (butterfly, *insulana* subspecies)
Common Water Shrew (*brooksi* subspecies)
Double-crested Cormorant
Edith's Checkerspot (butterfly)
Greenish Blue (butterfly)
Johnson's Hairstreak (butterfly)
Keen's Long-Eared Myotis (bat)
Killer Whale (Northeast Pacific resident population)
Killer Whale (West Coast transient population)
Large Marble (butterfly)
Lewis's Woodpecker (Georgia Depression)
Leatherback Turtle
Northern Sea Lion
Gopher Snake
Peregrine Falcon (*anatum* subspecies)
Purple Martin
Sea Otter
Sharp-tailed Snake
Vesper Sparrow (*affinis* subspecies)
Western Bluebird (Georgia Depression)
Western Meadowlark (Georgia Depression)
Wolverine

Not in DFA (4)
Cowichan lake Lamprey
Enos Lake Benthic Stickleback
Enos Lake Limnetic Stickleback
Yellow-billed Cuckoo
**Indicator 10:** Number of identified *species at-risk* in the DFA (cont.)

**Vascular Plants**

Bold indicates Red-listed vascular plants which occur or have the potential to occur in forests of commercial value in the DFA.

<table>
<thead>
<tr>
<th>Scientific Name</th>
<th>English Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abronia umbellata ssp. breviflora</td>
<td>pink sand-verbena</td>
</tr>
<tr>
<td>Acaulon muticum var. rufescens</td>
<td>acaulon moss (non-vascular)</td>
</tr>
<tr>
<td>Allium crenulatum</td>
<td>Olympic onion</td>
</tr>
<tr>
<td>Allium geyeri var. tenerum</td>
<td>Geyer's onion</td>
</tr>
<tr>
<td>Alopecurus carolinianus</td>
<td>Carolina meadow-foxtail</td>
</tr>
<tr>
<td><strong>Aster curtus</strong></td>
<td><strong>white-top aster</strong></td>
</tr>
<tr>
<td>Aster radulinus</td>
<td>rough-leaved aster</td>
</tr>
<tr>
<td>Balsamorhiza deltaoida</td>
<td>deltoid balsamroot</td>
</tr>
<tr>
<td>Calitriche marginata</td>
<td>winged water-starwort</td>
</tr>
<tr>
<td>Camissonia contorta</td>
<td>contorted-pod evening-primrose</td>
</tr>
<tr>
<td>Cardamine parviflora var. arenicola</td>
<td>small-flowered bitter-cress</td>
</tr>
<tr>
<td>Carex feta</td>
<td>green-sheathed sedge</td>
</tr>
<tr>
<td>Carex interrupta</td>
<td>green-fruitied sedge</td>
</tr>
<tr>
<td>Carex tumulicola</td>
<td>foothill sedge</td>
</tr>
<tr>
<td>Castilleja ambigua ssp. ambigua</td>
<td>paintbrush owl-clover</td>
</tr>
<tr>
<td>Castilleja levisecta</td>
<td>golden paintbrush</td>
</tr>
<tr>
<td>Centaurium muehlenbergii</td>
<td>Muhlenberg's centaury</td>
</tr>
<tr>
<td>Cephalanthera austiniae</td>
<td>phantom orchid</td>
</tr>
<tr>
<td>Clarkia purpurea ssp. quadrivulnera</td>
<td>small-flowered godetia</td>
</tr>
<tr>
<td>Crassula connata var. connata</td>
<td>erect pygmyweed</td>
</tr>
<tr>
<td>Epilobium densiflorum</td>
<td>dense spike-primrose</td>
</tr>
<tr>
<td>Epilobium torreyi</td>
<td>brook spike-primrose</td>
</tr>
<tr>
<td>Fraxinus latifolia</td>
<td>Oregon ash</td>
</tr>
<tr>
<td>Grindelia hirsutula var. hirsutula</td>
<td>hairy gumweed</td>
</tr>
<tr>
<td>Hutchinsia procumbens</td>
<td>hutchinsia</td>
</tr>
<tr>
<td>Idahoa scapigera</td>
<td>scalepod</td>
</tr>
<tr>
<td>Juncus kelloggii</td>
<td>Kellogg's rush</td>
</tr>
<tr>
<td>Lasthenia glaberrima</td>
<td>smooth goldfields</td>
</tr>
<tr>
<td>Lathyrus littoralis</td>
<td>grey beach peavine</td>
</tr>
<tr>
<td>Leymus triticoides</td>
<td>creeping wildrye</td>
</tr>
<tr>
<td>Lomatium dissectum var. dissectum</td>
<td>fern-leaved desert-parsley</td>
</tr>
<tr>
<td>Lomatium grayi</td>
<td>Gray's desert-parsley</td>
</tr>
<tr>
<td>Lotus formosissimus</td>
<td>seaside birds-foot trefoil</td>
</tr>
<tr>
<td>Lotus pinnatus</td>
<td>bog birds-foot trefoil</td>
</tr>
<tr>
<td>Lupinus densiflorus var. densiflorus</td>
<td>dense-flowered lupine</td>
</tr>
<tr>
<td>Lupinus lepidus</td>
<td>prairie lupine</td>
</tr>
<tr>
<td>Lupinus oreganus var. kincaidii</td>
<td>Kincaid's lupine</td>
</tr>
<tr>
<td>Lupinus rivularis</td>
<td>streambank lupine</td>
</tr>
<tr>
<td>Madia minima</td>
<td>small-headed tarweed</td>
</tr>
<tr>
<td>Marah oreganus</td>
<td>manroot</td>
</tr>
<tr>
<td>Meconella oregana</td>
<td>white meconella</td>
</tr>
<tr>
<td>Microseris bigelovii</td>
<td>coast microseris</td>
</tr>
</tbody>
</table>
Indicator 10: Number of identified species at-risk in the DFA (cont.)

Vascular Plants

*Microseris lindleyi*  
Lindley's microseris

*Mimulus dentatus*  
tooth-leaved monkey-flower

*Minuartia pusilla*  
dwarf sandwort

*Montia diffusa*  
branching montia

*Navarretia intertexta*  
needle-leaved navarretia

*Orobanche pinorum*  
pine broomrape

*Orthocarpus bracteosus*  
rosy owl-clover

*Orthocarpus imbricatus*  
mountain owl-clover

*Oxalis oregana*  
redwood sorrel

*Piperia candida*  
white-lip rein orchid

*Plagiobothrys figuratus*  
fragrant popcornflower

*Plagiobothrys tenellus*  
slender popcornflower

*Pleuricospora fimbriolata*  
fringed pinesap

*Psilocarphus elatior*  
tall woolly-heads

*Psilocarphus tenellus var. tenellus*  
slender woolly-heads

*Ranunculus alismifolius var. alismifolius*  
water-plantain buttercup

*Ranunculus californicus*  
California buttercup

*Ranunculus lobbii*  
Lobb's water-buttercup

*Rubus nivalis*  
snow bramble

*Salix lemmonii*  
Lenmon's willow

*Sanicula arctopoides*  
snake-root sanicle

*Sanicula bipinnatifida*  
purple sanicle

*Schoenoplectus americanus*  
Olney's bulrush

*Selaginella oregana*  
Oregon selaginella

*Silene scouleri ssp. grandis*  
Scouler's campion

*Thelypteris nevadensis*  
Nevada marsh fern

*Tonella tenella*  
small-flowered tonella

*Trifolium cyathiferum*  
cup clover

*Triglochin concinna*  
graceful arrow-grass

*Trillium ovatum var. hibbersonii*  
dwarf trillium

*Triphysaria versicolor ssp. versicolor*  
bearded owl-clover

*Triteleia howellii*  
Howell's triteleia

*Utricularia ochroleuca*  
ochroleucous bladderwort

*Verbena hastata var. scabra*  
blue vervain

*Viola praemorsa ssp. praemorsa*  
yellow montane violet

*Wolffia columbiana*  
Columbian water-meal

*Yabea microcarpa*  
California hedge-parsley
**Indicator 12:** Existence of a *habitat management program* for identified species of special interest (includes a list)

**Value:** Identified species of special interest

**Goals:** Identified species of special interest and localized populations are inventoried and strategies for their habitat needs are in effect

**Objective:** Support habitat programs in cooperation with regulatory agencies and others

**Acceptable Variance:** Zero increase

**Forecast:** n/a

**Performance:** Crown & Private

Identified Species of Special interest that are currently managed for in the DFA include:

- Columbia Black-tailed Deer
- Black Bear
- Bald Eagle

<table>
<thead>
<tr>
<th>year</th>
<th>currently managed (number)</th>
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</thead>
<tbody>
<tr>
<td>2005</td>
<td>3</td>
</tr>
<tr>
<td>2004</td>
<td>3</td>
</tr>
<tr>
<td>2003</td>
<td>3</td>
</tr>
<tr>
<td>2002</td>
<td>3</td>
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<tr>
<td>2001</td>
<td>3</td>
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<tr>
<td>2000</td>
<td>4</td>
</tr>
<tr>
<td>1999</td>
<td>4</td>
</tr>
</tbody>
</table>

**Notes:** FN did not report
Indicator 12: Existence of a **habitat management program** for identified species of special interest (includes a list) cont.

**Data Protocol:**

**Responsibility:**
Cascadia - Planning Forester  
Island Timberlands – D. Medves

**Reporting:**
Cascadia - Planning Forester  
Island Timberlands – D. Medves  
BCTS – Timber Sales Program Forester

**Source:**

**Comments:**

**2005**

BCTS – Many of these [habitat management programs] are TFL wide programs. BCTS follows what is in the FDP/management plan. In addition, for cutblocks in the BCTS FDP there are strategies for red-legged frogs. BCTS’ ISO EMS includes objectives for SAR and IWMS.

**2004**

BCTS – Many of these [habitat management programs] are TFL wide programs. BCTS follows what is in the FDP/management plan. For cutblocks in the BCTS FDP, there are strategies for red-legged frogs.

**2003**

BCTS - BCTS does not manage the TFL 44 landbase – by harvesting Cat. A cutblocks from Weyerhaeuser’s FDP, we assume that species requiring wide-ranging management regimes are adequately considered for management.

**2002**

Species of Special Interest are those species identified by the MoF, MWLAP, or the public as requiring special consideration in operational plans. These species of special interest are not considered at risk. The Forest Development Planner annually reviews the correspondence from the agencies, and ensures that measures to protect these species are incorporated into the Forest Development Plans.
Indicator 13: Annual percent of opening areas in permanent access structures

Value: Human induced-disturbance and stress

Goal: minimize impacts on forest health due to human-induced disturbance and stress

Objective: ≤7% of opening areas in permanent access structures

Acceptable Variance: ± 1%

Forecast: 5%

Performance: Crown & Private

<table>
<thead>
<tr>
<th>year</th>
<th>Measured Access as percent of gross area</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>5.4</td>
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<tr>
<td>2004</td>
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<tr>
<td>2003</td>
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<td>1998</td>
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<td>1997</td>
<td>6.6</td>
</tr>
<tr>
<td>1996</td>
<td>5.7</td>
</tr>
</tbody>
</table>

Notes: FN did not report.
Indicator 13: Annual percent of opening areas in permanent access structures cont.

Data Protocol:

Responsibility:
Cascadia - Planning Forester
Island Timberlands – D. Medves

Reporting:
TM Pearson & Co. – Alberni East, Alberni West
Island Timberlands – C. Vukovic
BCTS - Timber Sales Program Forester

Source:
Measured Access - Genus Stocking Status (NP UNN), TAUP – Genus Silviculture Prescription Table

Comments:
2003 - Blocks selected were based on harvest complete 2003
BCTS - includes only roads within cutblocks, as all other roads are assumed to be Weyerhaeuser’s responsibility.

2002 - If measured access was unavailable then SP Permanent access was used. A harvest of start of 2002 was used, and includes blocks where harvest complete is still planned.
Data includes SBFEP and R/W, does not include salvage operations, Sproat Park Trade, or other minor private land holdings.
This objective (indicator) reflects standards/regulations found in the Forest Practices Code of BC.
Indicator 14: Operationally-caused fire damage by area

Value: Human induced-disturbance and stress

Goal: minimize impacts on forest health due to human-induced disturbance and stress

Objective: Zero hectares

Acceptable Variance: +10 hectares

Forecast: 5 hectares

Performance: Crown & Private

<table>
<thead>
<tr>
<th>year</th>
<th>fires</th>
<th>area (hectare)</th>
</tr>
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<tr>
<td>2005</td>
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<td>2003</td>
<td>7</td>
<td>19.7</td>
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<tr>
<td>2002</td>
<td>3</td>
<td>5.1</td>
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<tr>
<td>2001</td>
<td>0</td>
<td>0</td>
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<td>2000</td>
<td>0</td>
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</tr>
<tr>
<td>1999</td>
<td>3</td>
<td>9.8</td>
</tr>
</tbody>
</table>

Notes: FN did not report.

Data Protocol:

Responsibility:
Cascadia - EMS / Planning Forester
Island Timberlands – D. Medves

Reporting:
Cascadia - Planning Forester
Island Timberlands – Inventory Forester
BCTS - Timber Sales Program Forester

Source:

Comments:
2003 - For all operational caused fires a post mortem fire analysis with the Contract Supervisor, Silviculture Forester and Production Superintendent was completed in October 2003. A number of identified action item were determined to prevent escaped slash fires. They are as follows; better assessment of conditions before lighting of piles, and more aggressive mop-up.
**Indicator 15: Area harvested** as percent of total productive forest area

**Value:** Human-induced disturbance and stress

**Goal:** Minimize impacts on forest health due to human-induced disturbance and stress

**Objective** [annual]: < 1%

**Acceptable Variance:** ± 0.5%

**Forecast:** 1%

**2002 SFM Plan:** Reported previously as Indicator # 13

**Performance: Crown & Private**

<table>
<thead>
<tr>
<th>year</th>
<th>area harvested as % of productive</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>0.95</td>
</tr>
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<td>2002</td>
<td>0.92 (2)</td>
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<tr>
<td>2001 (3)</td>
<td>0.56</td>
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<tr>
<td>2000</td>
<td>0.74</td>
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<td>1999</td>
<td>0.68</td>
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<td>1998</td>
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</tr>
<tr>
<td>1997</td>
<td>0.57</td>
</tr>
<tr>
<td>1996</td>
<td>0.64</td>
</tr>
</tbody>
</table>

**Notes:** Island Timberlands and FN did not report

1. Does not include BCTS harvested area.
2. revised, excludes roaded area
3. 2001 and earlier includes roaded area
**Indicator 15:** Annual area harvested as percent of total productive forest area cont.

**Data Protocol:**

**Responsibility:**
Cascadia - EMS / Planning Forester

**Reporting:**
Cascadia - Pacific GIS
BCTS - Timber Sales Program Forester

**Source:** VR reports for area harvested.

**Comments:**

2004 – Increase due to MoF programs. Productive area excludes roads.

2003 - DFA Boundary changed in 2002 and 2003, to reflect the transfer of the Barclay Unit. Roaded area is a 6.5 m buffer (13 m wide total) on FDP roads with the following classes; main, non-main, perm, semi and temp.

2002 - Data includes SBFEP and R/W, does not include salvage operations, Sproat Park Trade, or other minor private land holdings.

The total productive area is determined from the current (1997) forest inventory. The forest inventory is updated periodically (usually every one or two years) for areas harvested, and stand assessments. The Inventory Analyst, Nanaimo Woodlands, produces reports on the current inventory. No changes were made to the inventory in 2002.

There were two changes which resulted in less productive forest area being reported for 2002;

1. The DFA boundary changed.

2. Road area is now excluded from the productive forest land base. The road area is calculated by applying a buffer of 6.5 metres on each side of the road centerline. This buffer was applied to roads with the status of maintained, non-maintained, permanent, semi-permanent and temporary.
Indicator 16: Area harvested as percent of the total productive forest area in each Landscape Unit for last 5 years, for those areas greater than 10,000 hectares.

Value: Human-induced disturbance and stress

Goal: Minimize impacts on forest health due to human-induced disturbance and stress

Objective [annual]: Establish baseline and trends in order to identify areas of high impact

Acceptable Variance: n/a

Forecast: n/a

Performance: Crown & Private

<table>
<thead>
<tr>
<th>Landscape Unit with area &gt; 10,000 hectares</th>
<th>Percent of Total Productive Forest in Landscape Unit (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corrigan</td>
<td>5.58</td>
</tr>
<tr>
<td>Great Central</td>
<td>3.60</td>
</tr>
<tr>
<td>Henderson</td>
<td>2.87</td>
</tr>
<tr>
<td>Klanawa</td>
<td>9.49</td>
</tr>
<tr>
<td>Nitinat</td>
<td>3.96</td>
</tr>
<tr>
<td>Sarita</td>
<td>2.31</td>
</tr>
</tbody>
</table>

Notes:
Island Timberlands and FN not reported.

Data Protocol:
Responsibility:
Cascadia - EMS / Planning Forester

Reporting:
Cascadia - Pacific GIS
BCTS - Timber Sales Program Forester

Indicator 16: Area harvested as percent of the total productive forest area in each Landscape Unit for last 5 years, for those areas greater than 10,000 hectares cont.
**Source:**
Area harvested equals NAR (net area reforested) & PAS (permanent access structures)
Harvested blocks are reported in the year that harvesting is completed.

**Comments:**
2005 – BCTS; Corrigan 58 ha., Klanawa 79 ha., Nitinat 16 ha.
Indicator 17 Area of operationally-related windthrow

Value: Human-induced disturbance and stress

Goal: Minimize impacts on forest health due to human-induced disturbance and stress

Discussion: This indicator measures the relative area impact of disturbance of harvesting activities on an annual basis.

Objective: < 5% harvest area

Acceptable Variance: + 5%

Forecast: 2%

Performance: Crown & Private

<table>
<thead>
<tr>
<th>year</th>
<th>windthrow as % of area harvested</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>1.1</td>
</tr>
<tr>
<td>2004</td>
<td>0.2</td>
</tr>
<tr>
<td>2003</td>
<td>1.7</td>
</tr>
<tr>
<td>2002</td>
<td>3.7</td>
</tr>
<tr>
<td>2001</td>
<td>0.6</td>
</tr>
</tbody>
</table>

Notes: FN did not report

Data Protocol:

Responsibility:
Cascadia - Planning Forester
Island Timberlands - D. Medves

Reporting:
Cascadia - Planning Forester
Island Timberlands – D. Medves
BCTS - Timber Sales Program Forester

Source: VR reports for area harvested.

Comments:
2003 –
Hayes - Any windthrow discovered was reported to DRH Consulting. DRH then assessed the windthrow to determine if was salvageable (physical and economic considerations). If the timber was salvageable, DRH completed the planning requirements, and the timber was salvaged under one of several salvage contracts WIT has with different organizations.
Indicator 18: Area of slides originating in harvested areas or roads

Value: Human-induced disturbance and stress

Goal: minimize impacts on forest health due to human-induced disturbance and stress

Objective: < 10 hectares

Acceptable Variance: <20 hectares

Forecast: 2.0 hectares

2002 SFM Plan: Reported previously as Indicator # 15

Performance: Crown & Private

<table>
<thead>
<tr>
<th>year</th>
<th>slides (hectares)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>7.6</td>
</tr>
<tr>
<td>2004</td>
<td>2.3</td>
</tr>
<tr>
<td>2003</td>
<td>6.5</td>
</tr>
<tr>
<td>2002</td>
<td>6.1</td>
</tr>
<tr>
<td>2001</td>
<td>3.8</td>
</tr>
<tr>
<td>2000</td>
<td>0.6a</td>
</tr>
<tr>
<td>1999</td>
<td>5.2</td>
</tr>
<tr>
<td>1998</td>
<td>1.0</td>
</tr>
</tbody>
</table>

Notes: FN did not report.
Indicator 18: Area of slides originating in harvested areas or roads cont.

Data Protocol:

Responsibility:
Cascadia - Planning Forester
Island Timberlands – D. Medves

Reporting:
Cascadia - Planning Forester
Island Timberlands – D. Medves
BCTS - Timber Sales Program Forester

Source:

Comments:

2003 & 2002 - Environmental Occurrence reports are completed for all slides that have occurred and are kept on file in the Planning Department. Copies are sent to Ministry of Forests, Ministry of Environment and the Department of Fisheries & Oceans.

When two or more slides are reported in a drainage area, a recce flight will be carried out as soon as possible. At a minimum, a recce flight of the DFA will be done after the winter months.

Slides of significant size in harvested areas or initiated on roads will have a terrain assessment completed by a professional and any remedial action will be scheduled.

Action Plan: Review each slide for preventative actions
**Indicator 19:** Area out of compliance with Free Growing [FG] objectives

**Value:** Human-induced disturbance and stress

**Goal:** Human-induced disturbance and stress is rehabilitated promptly

**Discussion:** This indicator measures the Unit’s success at achieving free growing commitments in Silviculture Prescriptions. These commitments are derived from the MoF “Establishment to Free Growing Guidebook for the Vancouver Forest Region.” A Silviculture Prescription provides benchmarks for evaluating regeneration success, the utilization of the productive areas and the maintenance of forest ecosystems. The objective reflects requirements of the Forest Practices Code of BC Act.

**Objective** [annual]: Identify and reduce the non-compliance area to below 150 hectares

**Acceptable Variance:** 100 hectares

**Forecast:** Zero

**2002 SFM Plan:** Reported previously as Indicator # 16

**Performance:** Crown & Private

<table>
<thead>
<tr>
<th>Year</th>
<th>Standard Units not declared FG in 2005 (hectares / units)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>73 / not reported</td>
</tr>
<tr>
<td>2004</td>
<td>216.1 / 14</td>
</tr>
<tr>
<td>2003</td>
<td>29 / 4</td>
</tr>
<tr>
<td>2002</td>
<td>60 / 2</td>
</tr>
</tbody>
</table>

**Notes:** FN did not report

<table>
<thead>
<tr>
<th>Year</th>
<th>Area in compliance (hectares)</th>
<th>Openings in compliance (number)</th>
<th>Area out of compliance (hectares)</th>
<th>Openings out of compliance (number)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>2,216</td>
<td>47</td>
<td>288</td>
<td>9</td>
</tr>
<tr>
<td>2000</td>
<td>832</td>
<td>23</td>
<td>743</td>
<td>21</td>
</tr>
<tr>
<td>1999</td>
<td></td>
<td></td>
<td></td>
<td>18</td>
</tr>
</tbody>
</table>
**Indicator 19:** Area out of compliance with **Free Growing** objectives cont.

**Data Protocol:**

**Responsibility:**
Cascadia - Planning Foresters  
Island Timberlands – D. Medves

**Reporting:**
Cascadia, Alberni West - D. Bryant (contractor)  
Cascadia, Alberni East – Planning Forester  
Island Timberlands - Kevin  
BCTS - Timber Sales Program Forester

**Source:** Genus

**Comments:**

**2005**

Alberni East

Block 851204 (Br. 417B8) – This is a Franklin Forest Products cutblock. One stratum of SU C is not 150% of competing vegetation. Another six growing seasons are required to achieve 150% in this stratum.

Block 973106 (Coleman Road 210) – The failure to achieve the late free growing date of July 2005, as documented in the RESULTS database, was due to a date discrepancy in the GENUS database maintained by Cascadia Forest Products. The GENUS commencement date was March 1992, with a late free growing date of March 2006. In July 1991, falling commenced on the wide right of way. Falling in the remainder of the setting began in March 1992. This later date was tracked in the FORKS system, with the likely thought that wide right of way was similar to falling the road right of way. However, the correct harvest commencement date should be July 1991, resulting in a late free growing date of July 2005 for all standard units within the cutblock. One stratum of SU A is not 150% of the competing vegetation. Another 5 growing season is required to achieve 150% in this stratum. One stratum of SU B is not 150% of the competing vegetation. Another three growing seasons is required to achieve 150% in this stratum.
**Indicator 19:** Area out of compliance with **Free Growing** objectives cont.  

**2004**

Sproat – SP Amendments have been submitted for all of the nine SUs not declared Free Growing (the amendments were submitted prior to the expiry of the Late FG Assessment Period). Sproat includes crown, private inside TFL 44, and private outside TFL 44 (Park Trade).

Great Central Lake (contract) – An SP Amendment has been submitted for the one SU not declared Free Growing (it was submitted prior to the expiry of the Late FG Assessment Period).

Alberni East – SP Amendments have been submitted for all of the four SU’s not declared Free Growing (the amendments were submitted prior to the expiry of the Late FG Assessment Period). Includes Crown and private inside TFL 44.
**Indicator 20:** Equivalent years of Not Sufficiently Reforested (NSR) as 5-year rolling average

**Value 7:** Ecosystem recovery from disturbance and stress

**Goal 10:** Forest management activities do not compromise the ability of the ecosystem to recover (see also Goals 12 & 13)

**Objective:** Maintain NSR equivalency at <3 years harvest area

**Acceptable Variance:** Zero

**Forecast:** 1.5 years

**Performance:** Crown & Private

<table>
<thead>
<tr>
<th>Year</th>
<th>NSR equivalency (years)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>0.57</td>
</tr>
<tr>
<td>2004</td>
<td>0.35</td>
</tr>
<tr>
<td>2003</td>
<td>1.0</td>
</tr>
<tr>
<td>2002</td>
<td>1.8</td>
</tr>
<tr>
<td>2001</td>
<td>1.7</td>
</tr>
<tr>
<td>2000</td>
<td>1.2</td>
</tr>
<tr>
<td>1999</td>
<td>1.4</td>
</tr>
<tr>
<td>1998</td>
<td>1.6</td>
</tr>
</tbody>
</table>

**Notes:** Island Timberlands and FN did not report
Indicator 20: Equivalent years of Not Sufficiently Reforested (NSR) as 5-year rolling average cont.

Data Protocol:

Responsibility:
Cascadia - Planning Foresters
Island Timberlands – D. Medves

Reporting:
Cascadia, Alberni West - TM Pearson & Co.
Cascadia, Alberni East - Planning Forester
Island Timberlands -
BCTS - Timber Sales Program Forester

Source: Genus

Comments:

2005 - Alberni West: Area Harvested includes Permanent Access Structures (PAS) hectares. Sproat (all) includes crown and mixed mark blocks that have not been amended.

2004 - Alberni West: For blocks where stocking status has not been updated in Genus, the NAR was reduced by planted ha to calculate NSR. Blocks using Standing Stem harvesting have no NAR so ha not included in NSR. Does not include Nootka/Port Eliza operating areas.

All [BCTS] cutblocks are planted within 1 year of harvest completion.

Sproat (all) includes crown, private inside TFL 44, and private outside TFL 44 (Park Trade).

Area Harvest does not include Permanent Access Structures (PAS) hectares.

2003 - Sproat (all) includes crown, private inside TFL 44, and private outside TFL 44 (Park Trade).

Area Harvest does not include Permanent Access Structures (PAS) hectares.

2002 - Data includes SBFEP and R/W. Data includes salvage operations, Sproat Park Trade, or other minor private land holdings. Blocks which were started and not completed (no stocking status) then logged hectares were used for NSR, which includes R/W.

Blocks which are not complete and/or released for Waste and Residue or Post Harvest have no recorded stocking status.

This objective (indicator) reflects standards/regulations found in the Forest Practices Code of BC.

Franklin includes Alberni East and contract operations, located at great Central and Uchucklesit.
**Indicator 21:** Area out of compliance with regeneration delay obligations

**Value:** Ecosystem recovery from disturbance and stress.

**Goal:** Area out of conformance with regeneration delay obligations.

**Discussion:**

**Objective:** Zero

**Acceptable Variance:** < 40 hectares non-conformance, annually

**Forecast:** Zero

**2002 SFM Plan:** Reported as Indicator # 17

**Performance:** Crown & Private

<table>
<thead>
<tr>
<th>Year</th>
<th>Area out of compliance (hectares)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>31</td>
</tr>
<tr>
<td>2004</td>
<td>18</td>
</tr>
<tr>
<td>2003</td>
<td>37</td>
</tr>
<tr>
<td>2002</td>
<td>2</td>
</tr>
</tbody>
</table>

**Notes:** FN did not report.

**Data Protocol:**

**Responsibility:**
Cascadia - Planning Foresters
Island Timberlands – D. Medves

**Reporting:**
Cascadia - Planning Foresters
BCTS - Timber Sales Program Forester
Island Timberlands - Kevin

**Source:** Genus
Indicator 21: Area out of compliance with regeneration delay obligations cont.

Comments:

2005
One SU in cutblock 863107-8655 has a RG due of June 2005. The SU is within an unharvested helicopter area. An SP Amendment was submitted January 2005 to amend RG for this SU to June 2008. The Sp Amendment was rejected by the MoF. The SU is stocked with mature timber.

BCTS – The out of compliance SUs are found in two (of three) cutblocks in a TSL that has not been harvested.

2004
Sproat - All three SUs have data issues (incorrect or missing pieces) in Genus, and are Private land blocks.

Alberni East – An SP Amendment has been submitted for the SU dot declared (the amendment was submitted prior to the expiry delay). The SU area was not felled until very close to the expiry of regeneration delay. The SU was planted in the next available planting window (September 2004).

2003 -
Alberni East
In three blocks (753203, 781312, 971215), three SUs (2.0 ha) are comprised of rehabbed road, which could not be confirmed if completed. In two blocks (772206 and 973108), four SUs (34.6 ha) have species planted that do not match the SP. An SP Amendment is planned for blocks 772206 and 973108 for 2004 to address stocking standards.

2002 - Compliance for regeneration and free growing status, both for EMS and MoF, are tracked by Standards Units (SU) through the use of Genus an integrated resource management system. Previous years' (2001 and earlier) tracking was done by block. A Standards Unit is an area of a Silviculture Prescription that is managed through the uniform application of a silviculture system, stocking standards and soil conservation standards. Data is based on the year (2002) of compliance.

Data does not include SBFEP, R/W, salvage operations, Sproat Park Trade, or other minor private land holdings.

Hectares displayed are Net Area to be Reforested (NAR).

This objective (indicator) reflects standards/regulations found in the Forest Practices Code of BC.
**Indicator 22:** % [productive] forest area in the DFA converted to non-forest use [including roaded area]

**Value 8:** Forested land

**Goal 11:** There is no significant conversion of forested land to other uses without due public process

**Discussion:** This indicator provides a measure of sustainability of the forest land base

**Objective:** Limit conversion to non-forest use to 0.001% per year

**Acceptable Variance:** <0.0027%

**Forecast:** Stable

**2002 SFM Plan:** Reported as Indicator # 18

**Performance:** Crown & Private

<table>
<thead>
<tr>
<th>Year</th>
<th>Forest area including roaded area (hectares)</th>
<th>Conversion (percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>146,313</td>
<td>baseline</td>
</tr>
<tr>
<td>2004</td>
<td>262,774</td>
<td>0.00</td>
</tr>
<tr>
<td>2003</td>
<td>262,774</td>
<td>3.40</td>
</tr>
<tr>
<td>2002</td>
<td>271,443</td>
<td>0.24</td>
</tr>
<tr>
<td>2001</td>
<td>272,059</td>
<td>1.37</td>
</tr>
<tr>
<td>2000</td>
<td>268,562</td>
<td>baseline</td>
</tr>
</tbody>
</table>

**Notes:**
Island Timberlands did not report. FN and BCTS awareness only.
DFA boundary changed in 2002, 2003 and 2005
**Indicator 22:** % **productive forest** area in the DFA converted to non-forest use cont.

**Data Protocol:**

**Responsibility:**
Cascadia - EMS / Planning Forester
Island Timberlands -

**Reporting:**
Cascadia - Pacific GIS Consulting

**Source:** All data is from GIS in the form of ArcInfo coverages, with the exception of logging updates which came from Genus.

**Comments:**

2003 - DFA productive forest withdrawn from the Barclay Unit is 8,418 hectares. DFA boundary changed in 2002 and 2003. Roaded area is 6.5 m buffer (13 m wide total) on FDP roads with the following classes; main, non-main, perm, semi and temp.

2002 - The total productive area is determined from the current (1997) forest inventory. The forest inventory is updated periodically (usually every one or two years) for areas harvested, and stand assessments. The Inventory Analyst, Nanaimo Woodlands, produces reports on the current inventory. No changes were made to the inventory in 2002.

There were two changes which resulted in less productive forest area being reported for 2002;

- The DFA boundary changed.
- Exclusion of roaded area (13m buffer for roads), due to a change in the definition of Productive Forest
Indicator 23: The number of rare, endangered or otherwise significant features destroyed by harvest activity

Value 10: Rare, endangered or under represented features

Goal 13: Rare endangered or under represented features are identified and their important qualities are protected

Objective [annual]: Zero rare, endangered or otherwise significant features destroyed by harvest activity.

Acceptable Variance: - Zero

Forecast: Zero

2002 SFM Plan: This is a new indicator.

Performance: Crown & Private

<table>
<thead>
<tr>
<th>Year</th>
<th>Significant features destroyed</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>0</td>
</tr>
<tr>
<td>2004</td>
<td>0</td>
</tr>
<tr>
<td>2003</td>
<td>0</td>
</tr>
</tbody>
</table>

Notes: FN did not report.

Data Protocol:

Responsibility:
Cascadia - Planning Forester
Island Timberlands – D. Medves

Reporting:
Cascadia - Planning Forester
Island Timberlands – D. Medves
BCTS - Timber Sales Program Forester

Source:

Comments:
2003 – BCTS did not report.
Indicator 24: Openings harvested in which soil disturbance exceeds pre-harvest level as determined by a post-harvest assessment.

Value: Soil quality

Goal: Natural levels of soil productivity and stability are sustained.

Discussion:

Objective: [No more than 5% of any opening, or] no more than 1 opening

Acceptable Variance: 1 opening

Forecast: Zero

Performance: Crown only

<table>
<thead>
<tr>
<th>Year</th>
<th>Openings exceeding allowable soil disturbance (number)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>0</td>
</tr>
<tr>
<td>2004</td>
<td>0</td>
</tr>
<tr>
<td>2003</td>
<td>0</td>
</tr>
<tr>
<td>2002</td>
<td>0</td>
</tr>
<tr>
<td>2001</td>
<td>0</td>
</tr>
<tr>
<td>2000</td>
<td>0</td>
</tr>
<tr>
<td>1999</td>
<td>0</td>
</tr>
<tr>
<td>1998</td>
<td>0</td>
</tr>
</tbody>
</table>

Notes: Island Timberlands awareness only. FN did not report.

Data Protocol:

Responsibility:

Cascadia - Planning Foresters

Reporting:

Cascadia – Planning Foresters
BCTS - Timber Sales Program Forester

Source:

Comments:
**Indicator 29:** Percent of openings harvested where reserves zones are not maintained (stream crossings are excluded)

**Value 14:** Riparian areas (fresh and marine)

**Goal 17:** Riparian areas are managed to protect water quality, water flow and the habitat needs of land and aquatic species

**Objective:** Full reserve zones as per table attached.

**Acceptable Variance:** 2 %

**Forecast:** 100 %

**Performance:** Crown only

<table>
<thead>
<tr>
<th>Year</th>
<th>Openings reserve zones not maintained (percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>0.00</td>
</tr>
<tr>
<td>2004</td>
<td>0.88</td>
</tr>
<tr>
<td>2003</td>
<td>0.00</td>
</tr>
</tbody>
</table>

**Notes:** Island Timberlands, awareness only.

**Previous:**

<table>
<thead>
<tr>
<th>Year</th>
<th>FS 107 write-up</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
<td>0</td>
</tr>
<tr>
<td>2001</td>
<td>0</td>
</tr>
<tr>
<td>2000</td>
<td>0</td>
</tr>
<tr>
<td>1999</td>
<td>0</td>
</tr>
</tbody>
</table>
Indicator 29: Percent of openings harvested where reserves zones (as per table attached) are not maintained (stream crossings are excluded) cont.

Data Protocol:
Responsibility:
Cascadia - Planning Forester

Reporting:
Cascadia - Planning Forester
BCTS - Timber Sales Program Forester
FN - Planning Forester, Cascadia

Source: Incident Tracking System (ITS)

Comments:

<table>
<thead>
<tr>
<th>Riparian Class</th>
<th>Reserve Zone width (m)</th>
<th>Management Zone width (m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>L1</td>
<td>10</td>
<td>0</td>
</tr>
<tr>
<td>L2</td>
<td>10</td>
<td>20</td>
</tr>
<tr>
<td>L3</td>
<td>0</td>
<td>30</td>
</tr>
<tr>
<td>L4</td>
<td>0</td>
<td>30</td>
</tr>
<tr>
<td>S1 (1)</td>
<td>0</td>
<td>100</td>
</tr>
<tr>
<td>S1</td>
<td>50</td>
<td>20</td>
</tr>
<tr>
<td>S2</td>
<td>30</td>
<td>20</td>
</tr>
<tr>
<td>S3</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>S4</td>
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<td>30</td>
</tr>
<tr>
<td>S5</td>
<td>0</td>
<td>30</td>
</tr>
<tr>
<td>S6</td>
<td>0</td>
<td>20</td>
</tr>
<tr>
<td>W1</td>
<td>10</td>
<td>40</td>
</tr>
<tr>
<td>W2</td>
<td>10</td>
<td>20</td>
</tr>
<tr>
<td>W3</td>
<td>0</td>
<td>30</td>
</tr>
<tr>
<td>W4</td>
<td>0</td>
<td>30</td>
</tr>
<tr>
<td>W5</td>
<td>10</td>
<td>40</td>
</tr>
</tbody>
</table>

L - lake, S - stream, W - wetland (shallow open water, marsh, swamp, fen, bog)
**Indicator 29:** Percent of openings harvested where reserves zones (as per table attached) are not maintained (stream crossings are excluded) cont.

**Notes:**

**2004** – Block 153108 (Henderson) – RRZ on Clemens Creek crosses Henderson Main and infringes on block edge. A variance was received from the MoF due to the existing road which was already in the RRZ, Leaving standing trees on the top side of the road was determined to be unfeasible.

**2003** – Only BCTS reported.

**2002** - Reserve zones are established for wetlands, lakes and streams using the following guidebooks; Riparian Management Area, Gully Assessment Procedures, Fish Stream Identification, Channel Assessment Procedure, and Community Watershed.

Reserve Zone requirements are audited by the prescribing Silviculture Forester for compliance. Silviculture prescriptions are not approved by the District Manager with reserve zones that do not meet the Forest Practices Code of BC.

Data for this indicator does not include the Park Trade or other minor private land holdings.

This objective (indicator) reflects standards/regulations found in the Forest Practices Code of BC.
 Indicator 31: Change in area of **water bodies**

Value 16: Ecological cycles

Goal 18: Natural hydrological regimes are perpetuated and damaged watersheds (water quality or riparian values) are restored

Discussion: This indicator measures the area of lakes, wetlands and large streams in the DFA. It provides an indication of the impact of forest management on water resources.

Objective: Maintain current area of water bodies

Acceptable Variance: Zero

Forecast: Stable

Previous (2002) SFM Plan: Reported previously as Indicator # 27

Performance: **Crown & Private**

<table>
<thead>
<tr>
<th>Year</th>
<th>Area of water bodies (1) (hectares)</th>
<th>Area of water bodies, w/o swamps (hectares)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>765</td>
<td></td>
</tr>
<tr>
<td>2003</td>
<td>15,670</td>
<td>14,934</td>
</tr>
<tr>
<td>2002</td>
<td>15,959</td>
<td>15,200</td>
</tr>
<tr>
<td>2001</td>
<td>15,976</td>
<td>15,214</td>
</tr>
<tr>
<td>2000</td>
<td>15,983</td>
<td>15,222</td>
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<tr>
<td>1999</td>
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<td>15,222</td>
</tr>
<tr>
<td>1998</td>
<td>no data</td>
<td>15,222</td>
</tr>
</tbody>
</table>

Notes: Cascadia and Island Timberlands have not reported. BCTS and FN awareness only. DFA boundary changed in 2002, 2003 and 2005.

(1) includes large rivers, lakes, and swamp

Data Protocol:

Responsibility:
Cascadia – EMS / Planning Forester
Island Timberlands – D. Medves

Reporting:
Indicator 31: Change in area of water bodies cont.

Compilation:
Source: All data is from GIS in the form of ArcInfo coverages, with the exception of logging updates which came from Genus.

Inventory Section reports (1:20 000 scale) on the area of lakes, wetlands and large streams at each inventory update. This includes the inventory summaries in TFL Management Plans. No re-inventory of water bodies took place in 2002.

Care needs to be taken in interpreting historical records of the area of water because of changes in map standards and boundaries.

Base line data is the 1997 Inventory area of 15,222 ha.
**Indicator 34:** Annual harvest (5 year average) as percent of [Long Term Harvest Level LTHL]

**Value 19:** Timber harvest

**Goal 23:** Maintain harvest at LTHL as it applies to the harvestable land area

**Discussion:** This indicator combines recent rates of timber harvest with the projected long-term harvest rate for the forest. Previously referred to as Long Run Sustained Yield (LRSY) in the 2002 SFM Plan.

**Objective:** ±10% of LTHL for 2003-2005

**Acceptable Variance:** ±15% of LTHL

**Forecast:** LTHL

**Previous (2002) SFM Plan:** Reported previously as Indicator # 30

**Performance:** Crown only

<table>
<thead>
<tr>
<th>Harvest period</th>
<th>Average harvest (m³)</th>
<th>LTHL (m³)</th>
<th>Average Harvest as % of LTHL</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005-2005</td>
<td>1,584,239</td>
<td>1,166,000</td>
<td>136</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>5 year harvest period</th>
<th>Average harvest (m³)</th>
<th>LTHL (m³)</th>
<th>Average Harvest as % of LTHL</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000-2004</td>
<td>1,718,520</td>
<td>1,602,000</td>
<td>107</td>
</tr>
<tr>
<td>1999-2003</td>
<td>1,586,980</td>
<td>1,602,000 (3)</td>
<td>99</td>
</tr>
<tr>
<td>1998-2002</td>
<td>1,531,031</td>
<td>1,661,000 (2)</td>
<td>92</td>
</tr>
<tr>
<td>1997-2001</td>
<td>1,474,989</td>
<td>1,604,000 (1)</td>
<td>92</td>
</tr>
<tr>
<td>1996-2000</td>
<td>1,570,413</td>
<td>1,583,000</td>
<td>99</td>
</tr>
<tr>
<td>1995-1999</td>
<td>1,657,304</td>
<td>1,583,000</td>
<td>105</td>
</tr>
</tbody>
</table>

**Notes:** Island Timberlands, awareness only.

**Data Protocol:**

**Responsibility:**
Cascadia - EMS / Planning Forester

**Reporting:**
Cascadia - Nanaimo Timberlands Planning Forester
FN - Nanaimo Timberlands Planning Forester
BCTS – Nanaimo Timberlands Planning Forester
**Indicator 34:** Annual harvest (5 year average) as percent of [Long Term Harvest Level LTHL] cont.

**Source:** Annual harvest volumes are based on official MoF scale volumes. For more detail refer to Indicator 48.

LTHL, the long term harvest level is dependent on area, the productivity of the forestland, level of silviculture (e.g. numbers of trees established per ha, control of competing vegetation, fertilization etc.) and harvest constraints (e.g. restrictions on the rate of harvest). All of these factors are defined in the strategic analysis.

**Comments:**

**2005**

A small portion of the harvest came from the Sproat area in early 2005. Average harvest as % of LTHL does not allow for Sproat Lake take-back areas. LTHL will be reduced when recalculated due to a smaller DFA.

The DFA is undergoing significant change. The private land was removed in 2004 and now the take-back areas are being removed from the DFA. It is not appropriate to compare the LTHL for a smaller DFA with previous year’s harvest from a significantly larger DFA. Therefore, this indicator has been reinitiated, starting in 2005.

The LTHL for 2005 is an estimate from the average m$^3$/ha of Timber Harvesting Landbase (THLB) from the TFL 44 MP #4 analysis multiplied by the THLB area after excluding the private lands that were in the DFA (this is the area across which harvest occurred in 2005). Note that if in addition the take-back areas in the Sproat Lake, Cous and Nahmint landscape areas are also excluded then the estimated LTHL decreases to 927,000 m$^3$. These rough estimates will be revised when the next analysis is completed. The 2005 harvest includes 173,727 m$^3$ from a tenure awarded for under-cut volume from the 1995 to 1999 cut control period. If this volume is excluded than the “regular” harvest of 1,410,510 is 121% of the estimated LTHL.

**2003**

BCTS - harvest (net) on TFL 44 in 2003 was 84.9 ha. Much of the Ucluelet area was removed from the DFA in 2003 – thereby reducing the LTHL.
Indicator 35: Percent of harvesting adjacent to protected areas that is VR

Value 20: Parks and Ecological Reserves

Goal 24: Management planning considers the location and characteristics of protected areas with respect to connectivity, fragmentation, representative ecosystems etc.

Objective: 80% in 2003 - 2005

Acceptable Variance: - 10%

Forecast: 95%

Performance: Crown & Private

<table>
<thead>
<tr>
<th>Year</th>
<th>VR adjacent (percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>100</td>
</tr>
<tr>
<td>2004</td>
<td>100</td>
</tr>
<tr>
<td>2003</td>
<td>100</td>
</tr>
<tr>
<td>2002</td>
<td>100</td>
</tr>
<tr>
<td>2001</td>
<td>80</td>
</tr>
<tr>
<td>2000</td>
<td>77</td>
</tr>
</tbody>
</table>

Notes: FN did not report

Data Protocol:

Responsibility:
Cascadia - Planning Forester
Island Timberlands – D. Medves

Reporting:
Cascadia - Planning Forester
Island Timberlands – D. Medves
BCTS - Timber Sales Program Forester

Source:
Comments:
Indicator 36: Percent of protected area perimeter harvested within previous 5 years

Value 20: Parks and Ecological Reserves

Goal 24: Management planning considers the location and characteristics of protected areas with respect to connectivity, fragmentation, representative ecosystems etc.

Objective: < 7%

Acceptable Variance: <9.5% within three years

Forecast: < 5%

2002 SFM Plan: Reported previously as Indicator # 31

Performance: Crown & Private

<table>
<thead>
<tr>
<th>Year</th>
<th>% of protected area perimeter harvested in previous 5 yrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>6.9</td>
</tr>
<tr>
<td>2004</td>
<td>8.00</td>
</tr>
<tr>
<td>2003</td>
<td>9.48</td>
</tr>
<tr>
<td>2002</td>
<td>9.10</td>
</tr>
<tr>
<td>2001</td>
<td>7.96</td>
</tr>
<tr>
<td>2000</td>
<td>10.11</td>
</tr>
</tbody>
</table>

Notes:
FN did not report.
Previous reporting (2000 to 2004) did not include the Pacific Rim National Park

Data Protocol:

Responsibility:
Cascadia - Planning Forester
Island Timberlands – D. Medves

Reporting:
Cascadia - Pacific GIS Consulting
Island Timberlands – D. Medves
BCTS - Timber Sales Program Forester

Source: All data is from GIS in the form of ArcInfo coverages, with the exception of logging updates which comes from Genus.
Indicator 36: Percent of protected area perimeter harvested within previous 5 years cont.

Comments:
2005 - Assumed same park perimeter (revised) as 2004
2004 - BCTS – 500m for 2004, 400m reported in 2003 [see 2003].
2003 - The reduction is due to a significant amount of harvesting occurring adjacent to protected areas 6 years ago (i.e. in 1998). Does not include BCTS harvested area. DFA boundary changed in the Carmanah / Walbran area.

Park perimeter for 2003 originally reported as 72 km..
2002 - Current performance reflects a disproportionate amount of mature forests adjacent to protected areas. This performance level will improve slowly over time

The percent of protected area perimeter harvested within the previous 5 years, will be calculated annually, utilizing the productive forest only. The measurement procedure is to use the GIS to buffer the park perimeters by 100 meters, then intersect the buffered coverage with the forest cover. (1997 forest inventory).

Select only those stands that are less than 5 years old and recalculate to compute the percentage of protected area perimeter harvested within the previous 5 years.

No stand level reinventory took place in 2002. Changes that resulted in differences between 2001 and 2002 dataset/reporting include;

- Exclusion of roaded area (13m buffer for roads), due to a change in the definition of Productive Forest
- Areas within 100m of the park perimeter were logged in 2002.

The 2003 plan will be reviewed to ensure the performance is within variance.

1999 – 1997 inventory
Indicator 37: The percent of roads identified in the Recreation Access Inventory that are accessible. (Inventory includes class of roads by 2-wheel, 4-wheel, and foot access).

Value: Access to recreation areas.

Objective: To maintain public access to the recreation areas identified in the DFA, and outlined in the Recreation Access Inventory.

Target: The percent of identified roads accessible by 2-wheel, and 4-wheel is 90%.

Forecast: 90 %

Variance: - 5%


Performance: Crown & Private

<table>
<thead>
<tr>
<th>Year</th>
<th>Identified roads with access (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>100</td>
</tr>
<tr>
<td>2004</td>
<td>98</td>
</tr>
<tr>
<td>2003</td>
<td>97</td>
</tr>
<tr>
<td>2002</td>
<td>97</td>
</tr>
</tbody>
</table>

Notes: BCTS and FN awareness only.
**Indicator 37:** The percent of roads identified in the Recreation Access Inventory that are accessible. Inventory includes class of roads by 2-wheel, 4-wheel, and foot cont..

**Data Protocol:**

**Responsibility:**
Cascadia - Planning Forester
Island Timberlands – D. Medves

**Reporting:**
Cascadia - Planning Forester
Island Timberlands – Inventory Forester

**Source:** Recreation Access Inventory (November 2004)

**Comments:**

**2004**
H11/Spur 4 [Underwood Cove], deactivated - foot. Taylor 505/550 gated – 4W. Cous Creek Road gated in winter – 2W. Ash 113K and 113E, culverts failing, impassable near top – 4W.

**2003**
Recreation Access Inventory (April 2002)
Alberni East - H11 bridge removed
Sproat crown – Katlum Creek bridge removed, Taylor 560 road not maintained.

**2002**
Recreation Access Inventory (April 2002)
Two roads were identified as not having access, N600 (log pile) and Katlum Creek (slides).

The Recreation Access Inventory (sector priority) was produced by the West Island Woodlands Advisory Group’s Recreation Sub-committee, and is located on the WIWAG’s website [http://www.wiwag.org](http://www.wiwag.org). Access, for purpose of this indicator, is defined as 4-wheel drive, within 500 metres of the identified feature.

‘Major’ recreation areas will need to be reviewed for 2003.
Indicator 38: Percent of DFA covered by a recreational inventory

Value: Recreation & tourism

Goal: [Company] is respectful of the high value of tourism and recreation and other user activities within the DFA

Objective [term]: Maintain inventory of recreational values and incorporate into planning process.

Acceptable Variance: 95% of DFA inventoried

Forecast: 100%

2002 SFM Plan: Reported previously as Indicator # 33

Performance: Crown & Private

<table>
<thead>
<tr>
<th>Year</th>
<th>Inventoryed (percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>98.9</td>
</tr>
<tr>
<td>2004</td>
<td>97</td>
</tr>
<tr>
<td>2003</td>
<td>97</td>
</tr>
<tr>
<td>2002</td>
<td>97</td>
</tr>
<tr>
<td>2001</td>
<td>97</td>
</tr>
<tr>
<td>2000</td>
<td>99</td>
</tr>
<tr>
<td>1999</td>
<td>99</td>
</tr>
</tbody>
</table>

Notes: Island Timberlands and FN not reported
**Indicator 38**: Percent of DFA covered by a recreational inventory cont.

**Data Protocol:**

**Responsibility:**
Cascadia - Planning Forester  
Island Timberlands – D. Medves

**Reporting:**
Cascadia - Pacific GIS Consulting  
Island Timberlands -  
BCTS – Timber Sales Program Forester

**Source:** All data is from GIS in the form of ArcInfo coverages, with the exception of logging updates which come from Genus.

**Comments:**

**2005**

BCTS – Inventory is for TFL 44, BCTS has no recreational inventory.

Large lakes are not included in spatial fabric of the Recreation Inventory dataset. This indicator compares the gross DFA area with the gross inventory area, therefore lakes from the forest cover inventory have been included with the area reported as recreation inventory for this calculation.

**2004**

BCTS – Inventory is for TFL 44, BCTS has no recreational inventory.

**2003** - The recreational inventory for the Park Trade) was completed in 2002. The data has yet to be loaded into GIS, and will be entered by December 31, 2005.

**2002** - A Recreation Inventory was completed for TFL 44 in June 1995, with additional information added in 1997. The Recreation Analysis and Management Strategy Report (Juan De Fuca Consulting,) including the remaining portion of the DFA (Park Trade), was completed in 2002. However, as of December 31, 2002 it had not been entered into GIS format.

Large lakes are not included in the area covered by the Recreation Inventory dataset. This indicator compares the gross DFA area with the gross Recreation Inventory area. Inventory lakes were added to the Recreation Inventory area for the 2002 calculation.

The data is used for the Management Plan as well as the FDP.

Data for this indicator does not include the Park Trade or other minor private land holdings.
**Indicator 39:** Number of hectares in which visual condition fails to meet **Visual Quality Objectives** [VQO].

**Value:** Recreation & tourism

**Goal:** [Company] is respectful of the high value of tourism and recreation and other user activities within the DFA

**Discussion:** The purpose of a Visual Landscape Inventory is to provide information about the visual condition, characteristics and sensitivity to alteration of areas and travel corridors. A Visually Sensitive Area (VSA) may include viewscapes visible from communities, public use areas, travel corridors, including roadways and waterways, and any other viewpoint so identified through a referral or planning process.

**Objective** [term]: Reduce the number hectares from previous reports

**Acceptable Variance:** +5%

**Forecast:** Zero

**Previous (2002) SFM Plan:** Reported previously Indicator # 36

**Performance:** Crown & Private

<table>
<thead>
<tr>
<th>Year</th>
<th>Area of VQO failure (percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>5.18</td>
</tr>
<tr>
<td>2002</td>
<td>7.04</td>
</tr>
<tr>
<td>2000</td>
<td>8.07</td>
</tr>
</tbody>
</table>

**Notes:** Island Timberlands and FN not reported.

**Data Protocol:**

**Responsibility:**
Cascadia - Planning Forester
Island Timberlands – D. Medves

**Reporting:**
Cascadia - Pacific GIS Consulting
Island Timberlands –
BCTS – Timber Sales Program Forester

**Source:** All data is from GIS in the form of ArcInfo coverages, with the exception of logging updates which came from Genus.
**Indicator 39:** Number of hectares in which visual condition fails to meet Visual Quality Objectives [VQO] cont.

**Comments:**

**2005** – Site plans for all BCTS cutblocks requiring VIAs are consistent with their results and recommendations.

**2003** – No updates were done in 2003. All 2003 harvesting met VQO requirements. Traditionally the inventory is updated at each Management Plan submission. As MP’s are likely disappearing, a system to update the inventory on a continuous basis will need to be devised.

Not applicable to British Columbia Timber Sales (BCTS). Individual cutblocks harvested by BCTS are designed and harvested to meet VQOs. Weyerhaeuser is responsible for visual inventory.

**2002** - Data for this indicator does not include the Park Trade or other minor private land holdings. The visual inventory area within the DFA only was used.

Existing Visual Condition (EVC) is a measure of the present level of landscape alteration caused by human activities. EVC values are taken from Form 15 (EVC, Final Values) of the VQO inventory.

The official inventory is updated periodically, not annually. Visual Impact Assessments (VIA’s) for cutblocks, may influence a polygon’s EVC.
**Indicator 40:** The dollar value of harvest by [productive forest] hectares.

**Value:** The value of the annual harvest from the DFA.

**Objective:** The total harvest value is stable or increasing over time.

**Target:** The harvest value is stable or increasing over time.

**Variance:** – 4%

**Forecast:** inflation

**2006 - 2009 SFM Plan:** Indicator 39.

**Performance:** Crown only

<table>
<thead>
<tr>
<th>Year</th>
<th>Average harvest value ($/hectare)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>916.65</td>
</tr>
<tr>
<td>2004 (1)</td>
<td>688.78</td>
</tr>
</tbody>
</table>

**Notes:** Island Timberlands, BCTS and First Nations awareness only.
(1) revised, as unable to verify source for 2004

**Data Protocol:**

**Responsibility:**
Cascadia - EMS / Planning Forester

**Reporting:**
Cascadia - JN Malbon & Associates (contractor)

**Source:** Ministry of Forests and Range, Historical Coast Log Market Reports, One-month ending December 31.

**Comments:**
Indicator 48: **Annual harvest** level compared to last 5 years

**Value 22:** Community stability

**Goal 28:** Community stability is enhanced by a balanced annual extraction rate

**Discussion:** This indicator compares actual timber harvest with harvest targets. It provides an indication of sustainability and of contribution to the local and provincial economies.

**Objective:** Annual cut is within -15% / +25% of previous 5 year average

**Acceptable Variance:** -20%, + 30%

**Forecast:** +5%

**Previous (2002) SFM Plan:** Reported previously as Indicator # 41

**Performance:** Crown only

<table>
<thead>
<tr>
<th>Year</th>
<th>Annual harvest as percent of 5 yr. average (percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>92</td>
</tr>
<tr>
<td>2004 (1)</td>
<td>132</td>
</tr>
<tr>
<td>2003 (1)</td>
<td>101</td>
</tr>
<tr>
<td>2002</td>
<td>120</td>
</tr>
</tbody>
</table>

**Notes:**

Island Timberlands awareness only.

The DFA is undergoing significant change. The private land was removed in 2004 and now the take-back areas are being removed from the DFA. It is not appropriate to compare the 2005 harvest with previous year’s harvests from a significantly larger DFA.

(1) Incorrectly reported as; 143% for 2004, and 100% for 2005.
Indicator 48: **Annual harvest** level compared to last 5 years cont.

Data Protocol:

Responsibility:
Cascadia - EMS / Planning Forester

Reporting:
Cascadia - Planning Forester, Nanaimo
FN – Planning Forester, Nanaimo (Cascadia)
BCTS – Planning Forester, Nanaimo (Cascadia)

Source:

Comments:
DFA harvest includes BCTS and FN tenures (e.g. undercut volumes) and includes residue.

The Chief Forester determines the TFL 44 Allowable Annual Cut (AAC) every five years as part of the Management Plan process.

Scaled harvest volumes are accumulated in the MoF harvest database. The TFL 44 harvest is confirmed from the MoF "cut control" letter.

2005

Island Timberlands harvest was estimated.

For most of 2005, the TFL 44 AAC was 1,327,000 m$^3$. Effective December 5, 2005 the AAC was reduced by 39,500 m$^3$ to 1,287,500 m$^3$ for the Maa-Nulth Designated Area. The weighted average AAC for the year was the 1,324,078 m$^3$. In the table this has been reduced by 20,000 (estimated Clayoquot contribution) to 1,304,078.

The definition of the DFA has changed to include areas in TFL 44, only in which Cascadia is involved (i.e. to exclude the take-back areas in the Sproat Lake, Cous and Nahmint landscape units). For this transition year, however, AAC and harvest are reported for all of TFL 44 except Clayoquot.
Indicator 48: **Annual harvest** level compared to last 5 years cont.

2004

Substantial change in TFL 44 occurred during 2004. The private land was removed from TFL 44, effective from July 9 2004, reducing the TFL AAC from 1,700,000 m³ (1,675,000 m³ in the DFA) to 1,327,000 m³. (for simplicity the 2004 reporting for this indicator includes private land as if part of TFL 44 for the full year).

Reallocation of the 20% take-back occurred on December 31, 2004. Of the total TFL 44 AAC of 1,327,000 m³, 946,744 m³ is allocated to Weyerhaeuser and 380,256 m³ is allocated to BC Timber Sales (BCTS), First Nations and the community forest.

Harvest (scale & residue) in TFL 44 is estimated at 2,206,186 m³ of which Weyerhaeuser contributed 2,094,349 m³ and BCTS and the Huu-ayaht harvested 111,837 m³. During late 2003 the MoF billing system was inoperable for a period – it is estimated that approximately 68,000 m³ of harvest that occurred in 2003 was instead reported as if it occurred in 2004.

2003

The TFL 44 AAC was re-determined as 1,700,000 m³, effective from August 1 2003. This excludes the Ucluelet area that has been removed from TFL 44 and from the DFA. It is estimated that 1,675,000 m³ is in the DFA (excludes Clayoquot) and this includes allocations of 1,593,392 m³ to Weyerhaeuser and 81,608 m³ for Small Business. The AAC value of 1,703,460 m³ in the table is a prorate of the different AACs that applied for parts of the year.

During late 2003 the MoF billing system was inoperable for a period – it is estimated that approximately 68,000 m³ of harvest that occurred in 2003 will instead be reported as if occurred in 2004.

2002

The current AAC for TFL 44 is 1,766,200 m³. Of this 1,760,000 m³ is in the DFA and 6,200 m³ is in the Clayoquot Sound. The 1,760,000 m³ includes allocations of 1,635,598 m³ to Weyerhaeuser, 81,698 m³ for Small Business and 48,994 m³ for Small Business / other.

The Chief Forester is expected to announce a new AAC determination for TFL44 in mid 2003, at which time an adjustment for the Ucluelet Working Circle is expected.
Indicator 50: [Five year average] Annual harvest compared to local log consumption that is provided by [company].

Value: Community Stability

Goal: Contribute to and support local economic benefits

Objective: Maintain or increase ration of logs consumed locally by [company] operations versus WIT harvest

Variance: -10%

Forecast: even flow

Performance: Crown only

<table>
<thead>
<tr>
<th>Year</th>
<th>Converted locally as % of harvest 5 yr. average</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>86.2</td>
</tr>
<tr>
<td>2004</td>
<td>86.1</td>
</tr>
<tr>
<td>2003</td>
<td>93.9</td>
</tr>
</tbody>
</table>

Notes: Island Timberlands, BCTS and FN awareness only.

Data Protocol:

Responsibility:
Cascadia - EMS / Planning Forester

Reporting:
Cascadia - Planning Forester, Nanaimo

Comments:
2005

Harvest is scale (excludes residue) from Cascadia operations (only) in TFL 44. These preliminary estimates are from the harvest billing system – they will be confirmed or revised when the TFL 44 Cut Control letter is received (expected April 2006).

Cascadia wood to local mills includes harvest from all of Cascadia’s operations in 2005 that went to the following mill/destinations: Alberni Pacific Division, Somass, Catalyst (Port Alberni), Coulsons, Ditidaht, Huu-ay-aht, Franklin forest Products, Coleman road Shake & Shingle, Marion Creek Forest Products, Nagaard Sawmills, Phil Woodfin.
Indicator 52: Number of First Nations that have requested a Cultural Heritage Resource [CHR] contract vs. the number who have one

Value: Aboriginal rights

Goal: Support First Nations’ ability to fully exercise their aboriginal rights through the protection and provision of access to natural and cultural heritage resources

Objective: 100% of First Nations that want one have a CHR contract with WY

Acceptable Variance: 20%

Forecast: 100%

Previous (2002) SFM Plan: Reported previously as Indicator # 50

Performance: Crown only

<table>
<thead>
<tr>
<th>Year</th>
<th>Contracts requested (number)</th>
<th>Contracts (number)</th>
<th>Contracts (percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>5</td>
<td>1</td>
<td>20</td>
</tr>
<tr>
<td>2004</td>
<td>4</td>
<td>4</td>
<td>100</td>
</tr>
<tr>
<td>2003</td>
<td>6</td>
<td>6</td>
<td>100</td>
</tr>
<tr>
<td>2002</td>
<td>6</td>
<td>5</td>
<td>83</td>
</tr>
</tbody>
</table>

Notes: Island Timberlands, BCTS and FN awareness only.

Data Protocol:

Responsibility:
Cascadia - Planning Forester

Reporting:
Cascadia - Planning Forester

Source:

Comments:
2005 - Uchucklesaht, Tseshaht, Hupacasath, Huu-ay-aht, and Ditidaht
2004 – Uchucklesaht, Tseshaht, Huu-ay-aht and Ditidaht
**Indicator 53**: Percent of surveys [Cultural Heritage Surveys] conducted vs. number requested

**Value**: Aboriginal rights

**Goal**: Support First Nations’ ability to fully exercise their aboriginal rights through the protection and provision of access to natural and cultural heritage resources

**Objective**: 90% of requested surveys are conducted

**Acceptable Variance**: 10%

**Forecast**: 100 %

**2002 SFM Plan**: Reported previously as Indicator # 49.

**Performance**: Crown & Private

<table>
<thead>
<tr>
<th>Year</th>
<th>Surveys conducted (percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>98.5</td>
</tr>
<tr>
<td>2004</td>
<td>100</td>
</tr>
<tr>
<td>2003</td>
<td>100</td>
</tr>
<tr>
<td>2002</td>
<td>100</td>
</tr>
</tbody>
</table>

**Note**: BCTS and FN did not report.

**Data Protocol:**

**Responsibility**:
Cascadia - Planning Forester
Island Timberlands – D. Medves

**Reporting**:
Cascadia - Planning Forester
Island Timberlands – W. French

**Comments**:
Indicator 54: First Nations information sharing and referrals program

Value: Aboriginal rights

Goal: Support First Nations’ ability to fully exercise their aboriginal rights through the protection and provision of access to natural and cultural heritage resources

Objective: Maintain 5 programs and increase based on those who are willing.

Acceptable Variance: Zero

Forecast: 100%

Performance: Crown only

<table>
<thead>
<tr>
<th>Year</th>
<th>FN’s with information sharing and referrals program (number/percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>8 / 100</td>
</tr>
<tr>
<td>2004</td>
<td>10 / 100</td>
</tr>
<tr>
<td>2003</td>
<td>10 / 100</td>
</tr>
<tr>
<td>2002</td>
<td>10 / 100</td>
</tr>
<tr>
<td>2001</td>
<td>10 / 100</td>
</tr>
<tr>
<td>2000</td>
<td>10 / 100</td>
</tr>
<tr>
<td>1999</td>
<td>10 / 100</td>
</tr>
</tbody>
</table>

Notes: Island Timberlands, BCTS and FN awareness only.

Data Protocol:

Responsibility:
Cascadia - Planning Forester

Reporting:
Cascadia - Planning Forester

Comments:

2005
Cascadia – Level of interaction varied from simple notification to detailed block reviews.

2004 – No progress has been made with the Ucluelet band.

2003 - Ucluelet has indicated a desire to participate, with correspondence and a draft CHR contract being forwarded.
Indicator 55: Percent of blocks by band where agreement is reached around the management of Cultural Heritage Resources [CHR].

Value: Aboriginal rights

Goal: Support First Nations’ ability to fully exercise their aboriginal rights through the protection and provision of access to natural and cultural heritage resources

Discussion: Weyerhaeuser pursues agreements from all First Nation(s) that have traditional territory covering archaeological sites that may be impacted by proposed forestry related activities. This includes the harvesting and/or the management of non-harvested cultural heritage resources. Consent on the management of significant features (as defined in the Heritage Conservation Act) is sought from First Nation(s) claiming the area where modifications are proposed.

Objective: Achieve 100% First Nation consent on management and/or protection of identified Cultural Heritage Resources

Acceptable Variance: -15%

Forecast: 100%

Performance: Crown only

<table>
<thead>
<tr>
<th>Year</th>
<th>Consent of implementation plans (percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>100%</td>
</tr>
<tr>
<td>2004</td>
<td>100</td>
</tr>
<tr>
<td>2003</td>
<td>100</td>
</tr>
<tr>
<td>2002</td>
<td>100</td>
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<tr>
<td>2001</td>
<td>100</td>
</tr>
<tr>
<td>2000</td>
<td>100</td>
</tr>
<tr>
<td>1999</td>
<td>100</td>
</tr>
</tbody>
</table>

Notes: Island Timberlands, BCTS and FN awareness only

Data Protocol:
Responsibility:
Cascadia - Planning Forester

Reporting:
Cascadia – Planning Forester

Comments:
Indicator 56: Number of **First Nations signing contracts**.

Value: Aboriginal rights

Goal: Provide opportunities for harvest and other forest management activities for First nations.

Objective: Maintain, or increase the number of FN contracts [in place].

Acceptable Variance: Less one

Forecast:

Performance: **Crown only**

<table>
<thead>
<tr>
<th>Year</th>
<th>Contracts (number)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>22</td>
</tr>
<tr>
<td>2004</td>
<td>19</td>
</tr>
<tr>
<td>2003</td>
<td>11</td>
</tr>
<tr>
<td>2002</td>
<td>7</td>
</tr>
</tbody>
</table>

Notes: Island timberlands, BCTS and FN awareness only.

Data Protocol:

Responsibility:
Cascadia - Planning Forester

Reporting:
Cascadia – Planning Forester

Comments:

2005
Ditidaht – shake/shingle, blowdown, logging, construction (4)
Hupacasath – planting, blowdown (3)
Huu-ay-aht – CMT, planting, shake/shingle, blowdown, logging, construction (9)
Tseshahaht – planting (2)
Uchucklesaht – planting, shake/shingle (3)
Cowichan – planting (1)
Indicator 57: Proportion of wood volume harvested by FN annually.

Value: First Nations’ derivation of economic benefits from the DFA.

Objective: To increase First Nation’s derivation of economic benefits from the DFA.

Target: Proportion of wood volume harvested by FN annually stays stable or increases.

Variance: -10%

Forecast: stable


Performance: Crown only

<table>
<thead>
<tr>
<th>Year</th>
<th>FN harvest as percent of harvest (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>14.7</td>
</tr>
<tr>
<td>2004</td>
<td>10.8 (1)</td>
</tr>
</tbody>
</table>

Notes:
Island Timberlands, BCTS and FN awareness only.
(1) reported incorrectly as 8.4%

Data Protocol:

Responsibility:
Cascadia - EMS / Planning Forester

Reporting:
Cascadia - Scaling Specialist

Source: Salvage and prime volumes tracked by monthly scale reports. Huu-Chuck volume obtained through MoF Harvest Billing System.

Comments:
2005 - Undercut awards for FN’s distort, and will continue to do so for the next couple of years, the data for this Indicator.

2004 - FN harvest includes 159,196 m3 of salvage and prime logging, and 31,896 m3 by Huu-Chuck.
**Indicator 58:** Percent of changes to operational plans as a result of responding to public comments.

**Value:** Decision-making process

**Goal:** The input of interested and affected parities is valued and every effort is made to accommodate reasonable requests

**Objective:** 100% commitment to incorporating reasonable concerns into the planning process.

**Acceptable Variance:** -10%

**Forecast:** 100%

**Performance:** Crown only

<table>
<thead>
<tr>
<th>Year</th>
<th>Changes in operational plans (percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>100</td>
</tr>
<tr>
<td>2004</td>
<td>100</td>
</tr>
<tr>
<td>2003</td>
<td>100</td>
</tr>
<tr>
<td>2002</td>
<td>100</td>
</tr>
</tbody>
</table>

**Notes:** Island Timberlands, BCTS and FN awareness only.

**Data Protocol:**

**Responsibility:**
Cascadia - Planning Forester

**Reporting:**
Cascadia - Planning Forester

**Comments:**

**2005** - Hayes – two reasonable comments agreed to (FDPMA#4). Alberni Environmental Coalition provide comments which were general in nature.

**2004** - Hayes – two reasonable comments agreed to.

Alberni West – no FDP or FDP amendments were done in 2004. No public comments were received, which resulted in change(s) to an operational plan(s).

EMS – A local resident has requested notification of any prescribed burning. An ITS item requires annual review of burning plans. 27 comments were compiled from the ITS report, of which 8 were operationally (WIT) related, one resulting in an ITS item to be reviewed annually

**2003** – Hayes did not report
Indicator 59: Number of communications activities implemented compared to the communications plan list.

Value: Education

Goal: [Company] supports an education/communications program that promotes and explains ecosystem values and management and processing activities

Discussion: The Integrated Communication Plan for WIT and WIWAG was developed in 2002, updated March 2005, and is posted on the WIWAG website; [http://www.wiwag.org](http://www.wiwag.org)

Objective: 2005 -100%, 2004 – 75%, 2003 - 50% of activities implemented

Acceptable Variance: ±10% of activities

Forecast:

Performance: Crown only

<table>
<thead>
<tr>
<th>Year</th>
<th>Communication activities (number)</th>
<th>Activities Implemented (number/percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>Total</td>
<td>27</td>
</tr>
<tr>
<td></td>
<td>Public &amp; Stakeholder groups</td>
<td>17</td>
</tr>
<tr>
<td></td>
<td>WIWAG</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Employees &amp; Contractors</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Youth</td>
<td>2</td>
</tr>
<tr>
<td>2004</td>
<td></td>
<td>28</td>
</tr>
<tr>
<td>2003</td>
<td></td>
<td>22</td>
</tr>
</tbody>
</table>

Notes: Island Timberlands, BCTS and FN awareness only.

Data Protocol:

Responsibility:
Cascadia - EMS / Planning Forester

Reporting:
Recording Secretary - WIWAG

Comments: See attached Communications Plan
**Indicator 59:** Number of *communications activities* implemented compared to the communications plan list cont.

**Integrated Communications Plan for WIT Division & WIWAG**

**Possible Activities:**

**Directed at Public & Stakeholder Groups**
- **Y** - Recreation Sector-based meetings or focus groups as required (WIWAG)
- **N** - Public Open House and Annual Report (WIWAG)
- **Y** - Members share information between the Advisory & their interest groups (WIWAG)
- **N** - Seminar series (WIWAG)
- **Y** - Website to include minutes, agendas, ToR, SFM Plan, FDPs, brochure, etc. (WIT)
- **Y** - WIWAG Brochure
- **Y** - TFL 44 Logging Rd. & Recreation Guide (WIT)(printed 2002)
- **Y** - Fact sheets - what is certification, DFA, stumpage for dummies (WIT)
- **Y** - Distribution of WIWAG minutes (agendas etc.) to members, and others (WIWAG)
- **Y** - Press releases and articles (AV Times, corporate newsletters) promotion of WIWAG events and certification accomplishments/milestones (BOTH) *(Certification Shorts - Jan/05, WIWAG brochure - July 05)*
- **Y** - Participate in community events, such National Forest Week and Fall Fair (WIT) *(July 05 – Forest Fest, September 05 – Fall Fair)*
- **Y** - Promote Weyerhaeuser's public involvement processes, such as FDP public review/comment (WIT)
- **Y** - Utilize a 'feedback form' at all public events (WIWAG)
- **Y** - Designate a WIWAG spokesperson & respond to media inquiries (WIWAG)
- **Y** - Customer Tours (WIT)
- **Y** - Invite all FN with an interest in the TFL to host a WIWAG meeting and/or make presentations(WIWAG)
- **Y** - Road closure notices to members and stakeholders/posted on website (new 2004)
- **n/a** - Signage on logging roads replaced (new 2004)

**Directed at WIWAG Members**
- **Y** - Distribution of corporate newsletters to WIWAG members (WIT)
- **Y** - Tours, WIWAG members & press (WIT)
Indicator 59: Number of communications activities implemented compared to the communications plan list cont.

Integrated Communications Plan for WIT Division & WIWAG

Possible Activities:

Directed at Employees & Contractors
- Y - EMS training (WIT)
- Y - FN Cultural Awareness Program (WIT)
- Y - Planners oriented to red/blue species (WIT)
- Y - WIWAG Minutes distributed (WIT)
- Y - Attendance at WIWAG meetings is encouraged (WIT)
- Y - Certification Shorts” newsletter developed & distributed (WIWAG)(January 2005)

Directed at Youth
- Y - Funding for Forestry Awareness Program with SD #70 for Grade 5 students [Gently Down the Creek] (WIT)
- Y - ADSS Forestry Program Liaison (WIT/Hayes)
Indicator 60: Percent of planners oriented to red/blue list species annually

Value: Education

Goal: [Company] supports an education/communications program that promotes and explains ecosystem values and management and processing activities

Objective [term]: All planners complete red/blue listed species awareness and location orientation within previous 24 months [2002 & 2003]

Acceptable Variance: -50%

Forecast: All planners oriented

Performance: Crown & Private

<table>
<thead>
<tr>
<th>Year</th>
<th>Planners oriented (percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>77 %</td>
</tr>
<tr>
<td>2004</td>
<td>92</td>
</tr>
<tr>
<td>2003</td>
<td>46</td>
</tr>
<tr>
<td>2002</td>
<td>50</td>
</tr>
<tr>
<td>2001</td>
<td>0</td>
</tr>
</tbody>
</table>

Notes: Island Timberlands not reporting. BCTS and FN awareness only.

Data Protocol:

Responsibility:
Cascadia - EMS / Planning Forester
Island Timberlands – D. Medves

Reporting:
Cascadia, Alberni West - D. Bryant (contractor)
Cascadia, Alberni East – Planner Supervisor, Hayes

Comments:
2003 - A strike late in 2003 limited the ability to complete training as planned. Sessions are to be arranged in 2004 for the remaining planners, as well as a follow-up session for those who attended the 2002 session.
Indicator 61: Programs or presentations that target youth forest awareness/information

Value: Education

Goal: [Company] supports an education/communications program that promotes and explains ecosystem values and management and processing activities

Objective [term]: Two strategies that target youth awareness and participation in forest management are developed

Acceptable Variance: Zero

Forecast:
Performance: Crown only

2005 – Twelve (12) Grade 5 classes participated in the Gently Down the Creek program, with Weyerhaeuser providing funding for the 2 of the four modules; Riparian Management/Forest Ecology and Forest Economics. ADSS instructor, Brian Laviolette, visited Cascadia's Alberni East and West operations on a number of occasions.

2004 – Ten (10) Grade 5 classes participated in the Gently Down the Creek program, with Weyerhaeuser providing funding for the 2 of the four modules; Riparian Management/Forest Ecology and Forest Economics. The ADSS Forestry Program is scheduled for commencement in 2005.

2003 - At the November 13, 2003 WIWAG meeting, a Youth Forest Education paper was presented by Neil Malbon (Neil Malbon & Associates) and discussed by those in attendance. Subsequent meetings with Rick Avis (WIWAG), Dave Chitty (Alberni Valley Enhancement Association), Steve Chambers (Weyerhaeuser) and Neil Malbon resulted in two proposals. The two proposals; Gently Down the Creek (Grade 5), and ADSS Forestry Program (Grade 12) will be brought forward by Steve Chambers for funding approval. Weyerhaeuser approved funding for the Gently Down the Creek program.

2002 - The Integrated Communication Plan for WIT and WIWAG was developed in 2002 and is posted on the WIWAG website; http://www.wiwag.org

Notes: Island Timberlands, BCTS and FN awareness only

Data Protocol:
Responsibility: Cascadia - EMS / Planning Forester
Reporting: Cascadia - JN Malbon & Associates (contractor)
Comments:
Indicator 62: Workers trained in the **FN Cultural Awareness Program**

**Value:** Education

**Goal:** [Company] supports an education/communications program that promotes and explains ecosystem values and management and processing activities

**Objective:** Ensure that 70% of workers are trained each year

**Acceptable Variance:** -10%

**Forecast:** All employees

**2002 SFM Plan:** Reported previously (in part) as Indicator # 57

**Performance: Crown & Private**

<table>
<thead>
<tr>
<th>Year</th>
<th>Employees trained (percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>59</td>
</tr>
<tr>
<td>2004</td>
<td>85</td>
</tr>
<tr>
<td>2003</td>
<td>7</td>
</tr>
</tbody>
</table>

**Notes:** Island Timberlands not reported, BCTS and FN awareness only.

**Data Protocol:**

**Responsibility:**
Cascadia - EMS / Planning Forester
Island Timberlands – D. Medves

**Reporting:**
Cascadia - D. Bryant (contractor) for other contractors and WIT
Island Timberlands -

**Source:**
First Nations training was incorporated into EMS training. The McGhan Training System is a computer based program containing information and questions to be reviewed and answered.

**Comments:**

**2004**

For 2005 Hayes will be covered for this indicator thru their own EMS awareness reviews, and will not be reported here.

For 2005 “Certification Shorts” (an information email briefing the WIWAG minutes) will be sent on a regular basis. This was arranged late in 2004