

2016 Monitoring Report – Executive Summary

As part of Taan Forest's Forest Stewardship Council® (FSC®) Certification, we are required to develop and implement Monitoring Plans that address FSC requirements. An annual monitoring report is also required to be completed to assess performance in relation to the targets that have been established. Haida and public consultation of the Monitoring Plan and Report is required by FSC.

The following table summarizes the results of the 2016 FSC Annual Monitoring Report and has been developed to help improve dialogue by developing this executive summary of the results that is much shorter than the full report. The full report is available on the Taan Website:

<http://www.taanforest.com/index.php?page=sustainability>.

In 2016, Taan achieved the established targets for 33 of the 36 indicators (92%). This is an improvement over the 2015 performance (83%). The indicators where the targets were not achieved are noted below and include: FSC Riparian Budgets, Windthrow Management Effectiveness and Cultural Heritage Resource Management Effectiveness.

Yield of all Forest Products			
Indicator ID	Target	Target Met	Comments
Forest Products	Harvest Volumes are within +/- 20% of the 2- year forecasted harvesting profile each year	N/A	Harvest volume data not available yet for the ten year period reporting set for this indicator. Taan provided 15 logs to the Haida Gwaii Cultural Wood Program.
Non-Timber Forest Products	Cooperate with local organizations/ groups requesting access to NTFPs	Yes	Taan continues to cooperate with local Haida for cedar bark collection and consult with local mushroom pickers.
Sustainable Harvest Rates	Annual harvest rate is ≤125% of the projected LTHL	Yes	Taan continues to harvest at a rate that is well within the long term sustainable level, although it is below the AAC. Taan harvested 376,260m ³ in 2016 and the AAC was 460,000m ³ .
Waste & Residue	Avoidable Waste is ≤ 100 m ³ /ha	Yes	Average waste and residue was 89.9m ³ /ha (8 blocks sampled). The level of waste has been steadily improving over the last few years.
Growth Rates, Regeneration & Condition of the Forest			
Indicator ID	Target	Target Met	Comments
Growth & Yield Plots	No MFLNRO PSP/ G&Y plots are harvested unless 'approval' is received	Yes	There were no growth and yield/ permanent sample plots that were harvested in 2016. Harvesting of cedar plots is not permitted. There are 145 plots established in Taan tenures (22 MFLNRO and 123 Taan plots).
Stand Development	Develop and implement monitoring plan; respond to results	N/A	There has not been any Ministry of Forests, Lands and Natural Resource Operations (MFLNRO) Forest and Range Evaluation Program (FREP) stand development monitoring completed for Taan tenures since 2012. There are several Taan indicators that rely on the results of the FREP monitoring program. The MFLNRO shares the data/ results for the Taan tenure areas with Taan.
Planting	≥85 % of seed source is from Haida Gwaii	Yes	Since 2012, 95.5% of the trees planted (total of 1,269,836 trees) originated from Haida Gwaii seed. The 5-year trend from 2012 to 2016 indicates that Taan is planting significantly more red cedar and spruce than the 5-year average harvesting profile and less hemlock, cypress and pine. Hemlock is being under planted as it regenerates naturally where the sites are suitable.

Indicator ID	Target	Target Met	Comments
Reforestation Monitoring	Report on the areas monitored for reforestation; 100% of areas with free growing due are declared FG (5% variance is acceptable with rationale)	Yes	All Taan and BCTS FG blocks within the Taan FLTC were declared before the FG due date. Taan completed 2,225ha of surveys in 2016, which included the use of a drone.
Forest Health	Act on trends of importance that can be managed; minimize possibilities of outbreaks; early detection of any new species	Yes	Yellow cedar decline continues to be an issue on the FLTC. Taan continues to collaborate with UBC on research aimed at identifying suitable sites and strategies for successful regeneration. Windthrow damage was at its lowest recorded level since 2010 and there was a significant decrease in the landslides compared to 2015.
Soil Conservation Effectiveness	Maintain average of $\leq 7\%$ permanent access; 100% of cutblocks achieve soil conservation objectives	Yes	Taan had an average permanent access of 4.1% in a 5-yr period and 4.2% in 2016.
Stand-level Biodiversity Effectiveness	Various targets exist for SLBD (including range of opening size, range of internal retention patch size, Coarse Woody Debris, and Windthrow) Skidegate LU: maintain an average of 20% stand-level retention	Yes	This indicator uses FREP data. All targets were achieved for Stand Level Biodiversity including a 31.5ha average opening size (range 2.3-45.5), average internal patch size of 11.5, average stand level retention of 33.8%, average coarse woody debris of 36.9 pieces/ ha within retention areas and 50.6 pieces/ ha within harvest areas and average of 3% windthrow. The results are based on four cutblocks that were assessed by FREP in 2016. The average stand level retention in the Skidegate LU was 74.5%.
Environmental Incidents	Minimize the number and size of environmental incidents; ≤ 5 events	Yes	There were three minor spills (non-reportable therefore not a recordable incident for this indicator) related to logging truck and equipment mechanical failures and repairs. Other incidents included the disturbance of a heritage feature (midden site), a harvesting boundary trespass and an incident involving a minor slump of a ditch wall causing sedimentation.
Composition & Observed Changes to Flora & Fauna			
Indicator ID	Target	Target Met	Comments
Species at Risk	Species status is tracked/ management responses undertaken	Yes	Three species were added to the Monitoring Report for a total of 132 species being tracked.
Sensitive Species Habitat	Maintain reserves; protect MAMU habitat; maintain NOGO foraging habitat	Yes	Targets set by the LUO are being followed. Taan is keeping apprised of the progress of the NOGO Recovery Team. In 2016 a reserve was established around an identified eagles nest.

Environmental & Social Impacts			
Indicator ID	Target	Target Met	Comments
Watershed Disturbance	# of watersheds exceeding the established thresholds improves	N/A	Updated analysis for watershed disturbance had not yet been completed by Taan at the time the Monitoring Report was completed.
Riparian Management Effectiveness	Continually improve the percentage of properly functioning streams	N/A	This Indicator is reported every five years in relation to the target. 2016 monitoring results show two S5 streams as properly functioning but at risk, and one S3 stream as not properly functioning due to road erosion and old logging activity. An additional stream was noted as functional but at risk for windthrow. An action item has been generated to assess the streams and implement remediation.
Indicator ID	Target	Target Met	Comments
FSC Riparian Budgets – Watershed Level	100% of streams meet FSC Budgets	No, but stand level management implemented to address.	GIS analysis of all streams in Taan tenures how that the FSC Riparian Budgets for streamside retention are not met for all watersheds (due to past logging activities). Taan has implemented a stand level tracking system to ensure that the FSC requirements for stream reserve and management zones are achieved at the stand level. See the next indicator below.
FSC Riparian Budgets – Stand Level	100% of Riparian budgets maintained at the stand level	No	Twenty-four cutblocks were reviewed for conformance with the FSC Riparian Budget requirements (Riparian Budget Trackers). Two blocks (THR002 and THR002A, one combined assessment) did not conform with stand-level riparian budgets as the harvesting plans resulted in a 0.25ha deficit in the requirements for stream class S6B and the watershed analysis results (Three-mile creek) show the watershed already in a deficit for stream class S6B. S6B streams are S6 streams that are connected to fish streams (i.e., the first 150m of an S6 stream after connectivity to a fish stream).
Water Quality Effectiveness	≥90% of areas measured have very low-low potential for amount of fine sediment entering a stream	N/A	This indicator is a FREP monitoring indicator that is reported every five years.
Research & Monitoring Projects	Report on participation and cooperation levels	Yes	Taan continued support for the collaborative data sharing initiative (CHN & BC Government), UBC research projects, FREP monitoring program and Northern Goshawk monitoring projects.
Government Revenue	100% of required payments are completed in a timely manner	Yes	Taan has completed all payments to government within the required timeframes. Payments for 2016 totaled \$1,079,442.
Local Support & Agreements	Report on support/ donation levels; maintain completed agreements	Yes	In 2016, Taan supported 15 training sessions for 324 workers, the forestry forum, Haida Leadership Field Tour, Village of Port Clements, Sandspit Logger's Sports, Skidegate Band Council, University of BC, Susan Ellis and many members of the public through firewood donations. Total approximately \$24,500.
Local Supplies & Services	Preference is given to local supplies and services	Yes	Taan supported 80 local vendors in 2016, and expenditures for vendors in Haida Gwaii was 48% of the total budget spent on local supplies and services.
Local Employment	Employment opportunities are advertised locally and preference is given to local hires	Yes	Taan has 75% local employment for employees, 56% Haida employment, 94% of contractors are local and contractors report 23% Haida employment.

Indicator ID	Target	Target Met	Comments
Accident Frequency Rate	Taan - MIR \leq 8.00	Yes	Accident rate has significantly improved over the last two years and was 6.0 for 2016. There were seven recordable incidents, six lost time and one restricted work case. Incidents included muscle strains, one broken leg, three struck by injuries to face/ eye and one knee injury.
Public Consultation	100% of comments, complaints and disputes resolved in a timely manner	Yes	No FSC complaints or disputes received. Taan provided maps to MMAC upon request; brushed Mamin Mainline as requested by a resident and continues to address complaints in a timely manner. Taan continues to work with many local residents and groups to improve communications and dialogue.
Indicator ID	Target	Target Met	Comments
Dryland Sort (DLS) Wood Waste	DLS waste disposal is \leq 10% of the volume harvested	Yes	DLS waste comprised 0.7% of the harvest volume (2,640.9m ³). This is for all Taan DLSs. Some of the wood waste was donated for firewood (public and graduating class fundraiser), pole shavings and ends were also donated for stake manufacturing (cedar stakes used for the seedling protector cones installed on cedar to protect from deer browse).
Inorganic Waste - Seedling Protectors	Implementation of removal plans	Yes	87,174 cones were removed from the FLTC in 2016, mostly from previously declared FTG blocks.
Costs, Productivity & Efficiency			
Indicator ID	Target	Target Met	Comments
Forest Management Efficiencies	Pro-formas are completed and evaluated for every development area	Yes	A total of 40 pro-Formas (cost and margins analysis) were completed for 2016.
High Conservation Value Forests			
Indicator ID	Target	Target Met	Comments
Landscape Level Biodiversity – Overview	Maintain at least 30% of an LU in old seral, minimize roads, and maintain a geographic distribution of forest interior.	Pending	2012 results show Skidegate and Masset inlet have high and med-high vulnerability ratings for overall landscape biodiversity 'health'. Skidegate Lake is the only landscape unit with <30% old forest). Analysis was completed in 2016 and the review of the results are pending. The final Monitoring Report will include the new summary of the current conditions.
Landscape Level Biodiversity - Connectivity	Linkages of reserves exist, stand retention creates a permeable matrix for old forest species	Yes	There has not been any harvesting conducted by Taan within the Sewell LU, where connectivity improvement has been identified as required.
Landscape Level Biodiversity - Ecosystem Representation	Maintain representation levels as set by LUO (by site series)	Yes	The FSP tracking ledger is a planning tool used to review LUO targets for blocks being planned for harvesting. A review of the ledger shows one planned cutblock with harvesting in a deficit ecosystem within the Skidegate Landscape Unit, CWH wh 11 (GRA002). The Site Plan notes that the 11 site series represents about 5% of the mosaic and is therefore not suitable for retention to meet the ecological representation targets.

Indicator ID	Target	Target Met	Comments
HCVF Large Landscape Level Forests (LLLLF)	≤ 5% disturbance in LLLF Polygons	Yes	Taan currently has not completed, nor has any plans for harvesting planned within the small narrow section of intact forest located in the north-west section of TFL 60 (in LLF polygon 1).
Invasive Species	Ensure monitoring and reporting of invasive plants is occurring	Yes	Taan identified and surveyed several occurrences of foxglove in the SKI area. The site was assessed and treatment options are being reviewed. On Haida Gwaii there were 23 new invasive plant sites added.
LUO/ FSP Annual Reporting	Provide a summary of the results of the LUO/ FSP annual reporting	Yes	Taan continues to demonstrate stand-level implementation of the LUO with 3,743 features and 413.7ha of reserve area identified in 2016.
Windthrow Management Effectiveness	100% of blocks have TCM completed, did the TCM work as expected?	No	Windthrow occurred in six blocks that impacted an LUO feature (i.e., streams, yew patch and monumental tree reserves). Four of these blocks did not have tree crown modification treatments completed prior to, or during harvesting as prescribed (as a result the blocks were exposed to winter storms without the treatments being completed). Windthrow treatments have still not been completed for DAT009 but it is already being tracked in the operations tracker to ensure it gets completed. Corrective and Preventative action plans are being developed (an internal investigation will be completed to review the issues and develop appropriate action items).
Cultural Heritage Resource Management Effectiveness	100% of practices to maintain features categorized as well to very well	No	FREP Monitoring identified two Monumental Reserves in MCL004 that were impacted by windthrow. TCM was completed, however the edges with the windthrow were not treated. One devil's club stem was also impacted by windthrow. In PHT002, a devil's club stem was not identified during the CFI Surveys or other forest development phases. A Post Harvest Incident Tracking form was completed by the Council of the Haida Nation (CHN) for the devil's club find. Some corrective and preventative actions have been recommended from the CHN. The issues with this indicator also link to the windthrow issues noted above and an internal investigation will be completed.