

## 2017 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 2017 FSC Annual Monitoring Report for each indicator and has been developed to help improve dialogue by providing a summary report 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>.

For simplicity, the Ministry of Forests, Lands, Natural Resource Operations and Rural Development will be referred to with the MFLNRO acronym.

In 2017, Taan achieved the established targets for 35 of the 36 indicators (97%). This is an improvement over the 2016 performance (92%). The indicators where the targets were not achieved are noted below and include: Windthrow Management Effectiveness.

Yield of all Forest Products			
Indicator ID	Target	Target Met	Comments
Forest Products	Harvest Volumes within 5% over a 10-year period; report the amount of monumental cedar provided to the Cultural Wood Program.	Yes	Target was revised slightly in late 2017 to accommodate a longer reporting timeframe in relation to the harvest volumes by species in relation to the Timber Supply Review projections. Harvest volume data not available yet for the ten-year period reporting set for this indicator. Taan provided 13 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. In 2017, on-going communication was held with a group of local mushroom pickers (regarding a submitted Grievance under our FSC® Certification (on-going).
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 266,562m <sup>3</sup> in 2017 and the AAC was 460,000m <sup>3</sup> .
Waste & Residue	Avoidable Waste is ≤ 100 m <sup>3</sup> /ha	Yes	Average waste and residue was 93.9m <sup>3</sup> /ha (3 blocks sampled). The level of increased slightly this year compared to past years, however was lower than the average for the coast region.

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 2017. 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	In 2017, a total of 167,085 trees were planted, with 92% of the seed originating from Haida Gwaii. Some pine and yellow cedar seedlings were sourced from Vancouver Island. Similar to the 5 -year trend from 2012-2016, Taan is planting more red cedar and spruce and cypress than the 5-year average harvesting profile and less hemlock and pine. Hemlock is being under planted as it regenerates naturally where the sites are suitable.
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 999ha of surveys in 2017, which included the use of a drone to complete some of the surveys.
Forest Health	Act on trends of importance that can be managed; minimize possibilities of outbreaks; early detection of any new species	Yes	In 2017, yellow cedar decline, pine sawfly, windthrow floods and landslides decreased in occurrences. 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. Mt. Pine Beetle was observed for the first time in Haida Gwaii in 2017, with estimated 95ha of light impact.
Soil Conservation Effectiveness	Maintain average of ≤ 7% permanent access; 100% of cutblocks achieve soil conservation objectives	Yes	Taan had an average permanent access of 4.2% in a 5-yr period (2013-2017) and 4.2% in 2017. In 2017, post-harvest inspections prescribed minor corrective actions related to the rehabilitation of machine trails, clearing of plugged culverts, road deactivation and grass seeding. Corrective actions were prescribed and completed.
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 is a FREP monitoring indicator that is reported every five years (to be reported in 2020). One salvage block was sampled by FREP in 2017. Taan continues to have a significant portion of the harvested blocks with high levels of stand level retention (86%) and forest influence (44% of blocks have >50% forest influence). In 2017 there was no old forest harvesting within any eco-rep areas identified as having a deficit of old forest.
Environmental Incidents	Minimize the number and size of environmental incidents; ≤ 5 events	Yes	In 2017 there were 28 minor spills (all to land and non-reportable therefore not a recordable incident for this indicator), no fires and no avalanches. There was a total of 7 landslide reports, with only 5 being reportable (2 were natural slides).

Composition & Observed Changes to Flora & Fauna			
Indicator ID	Target	Target Met	Comments
Species at Risk	Species status is tracked/ management responses undertaken	Yes	Minor changes to were made to the species lists, including some changes in status and name changes.  In 2017 MFLNRO published implementation plans for both the Northern Goshawk (NOGO) and the Marbled Murrelet MAMU). Additionally, the Haida Nation recently announced that the stad k'un (Northern Goshawk) is the national bird of Haida Gwaii and will be developing an Islands-based recovery strategy for their protection.
Sensitive Species Habitat	Maintain reserves; protect MAMU habitat; maintain NOGO foraging habitat	Yes	Targets set by the LUOO are being followed. Taan is keeping apprised of the progress of the NOGO Recovery Team and the development of the Haida Gwaii Recovery Strategy. In 2017, one new Goshawk nest was identified on Haida Gwaii, but not within the Taan tenures.
Environmental & Social Impacts			
Indicator ID	Target	Target Met	Comments
Watershed Disturbance	# of watersheds exceeding the established thresholds improves	Yes	Between 2015 and 2017, watershed boundaries were refined, resulting in several watersheds that previously showed a very small overlap with Taan tenures, being re-mapped and removed from Taan tenures.  In 2017 the following Sensitive Watersheds that currently exceed the allowable 20% ECA threshold under the LUO, and where no harvesting is permitted: Brent Creek, Mamin River 4. The following non-sensitive watersheds that have ECA restrictions under FSC requirements (>25% ECA), where no harvesting is currently permitted under FSC are: Bill Creek, Brian Creek 2, Log Creek 3. These results show significant improvement in watershed condition with the full implementation of the LUO.
Riparian Management Effectiveness	Continually improve the percentage of properly functioning streams	N/A	This indicator is a FREP monitoring indicator that is reported every five years (to be reported in 2020)
FSC Riparian Budgets – Watershed Level	100% of streams meet FSC Budgets	No, but stand level management implemented to address.	An updated analysis was not completed in 2017, as this indicator is not included in the new draft FSC Canada Standards and is anticipated to be dropped once the new standard is finalized.
FSC Riparian Budgets – Stand Level	100% of Riparian budgets maintained at the stand level	Yes	In 2017, 17 out of 18 cutblocks were reviewed for conformance with the FSC Riparian Budget requirements (Riparian Budget Trackers). Once block did not have any upland streams identified and therefore an assessment was not required. All cutblocks reviewed had 100% conformance with Stand-level FSC Riparian Budget requirements.
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 (to be reported in 2020)

Indicator ID	Target	Target Met	Comments
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. In 2017/18, Taan also worked closely with a Hydrologist to study LiDAR data of some specific watersheds in order to better assess Hydrological Recovery and improve forward planning.
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 2017 totaled \$1,828,266.
Local Support & Agreements	Report on support/ donation levels; maintain completed agreements	Yes	In 2017, Taan supported several organizations and community groups through donations and support as well as firewood. Total approximately \$9,000.
Local Supplies & Services	Preference is given to local supplies and services	Yes	Taan supported 89 local vendors in 2017, and expenditures for vendors in Haida Gwaii was 54% 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 65% local employment for employees and 53% Haida employment. 91% of contractors are local and contractors report 26% Haida employment.
Accident Frequency Rate	Taan - MIR $\leq$ 8.00	Yes	Accident rate has significantly improved over the last three years and was 6.2 for 2017. There were seven recordable incidents, six lost time and one medical treatment. Incidents included struck by, trip/fall, chainsaw cut, concussion, and a steam burn.
Public Consultation	100% of comments, complaints and disputes resolved in a timely manner	Yes	No FSC complaints or disputes received. Taan received a grievance filed by a group of local residents related to proposed harvesting in Skidegate Lake and potential for losses to livelihood related to mushroom picking. Taan completed brushing of Mamin Mainline as requested by a local 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. Additionally, consultation was completed for the proposed Forest Stewardship Plan and the FSC Management Plan, HCVF Assessment, Monitoring Report and FSC Controlled Wood Risk Assessment in 2017. Taan has established a public advisory group consisting of Haida representatives. The group has had several meetings and meets regularly.
Dryland Sort (DLS) Wood Waste	DLS waste disposal is $\leq$ 10% of the volume harvested	Yes	DLS waste comprised 0.9% of the harvest volume (2,500.9m <sup>3</sup> ). 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	47,063 cones were removed from the FLTC in 2017, 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 2017.
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.	Yes	No change from the 2016 report (analysis is completed every 5 years).
Landscape Level Biodiversity - Connectivity	Linkages of reserves exist, stand retention creates a permeable matrix for old forest species	Yes	No change from the 2016 report (analysis is completed every 5 years). Taan has not completed any harvesting within the Sewell Landscape Unit, which is the only landscape unit identified as requiring improvements in connectivity.
Landscape Level Biodiversity - Ecosystem Rep.	Maintain representation levels as set by LUO (by site series)	Yes	Ecosystem Representation is monitored spatially for compliance with the Forest Stewardship Plan and the LUOO targets. Harvesting did not occur in any deficit areas in 2017.
HCVF Large Landscape Level Forests (LLLF)	≤20% disturbance in LLLF Polygons (measured in relation to the portion of the LLLF within Taan Tenures)	Yes	The % disturbance threshold within LLLF Forest Polygon was revised to be measured in relation to the proportion of the intact forest located within the MU (per FSC Motion 65). The revised “allowable disturbance” threshold of 20% of the portion within the MU is 210.8 ha. Taan has never completed, nor has any plans for harvesting within the small narrow section of intact forest located in the north-west section of TFL 60 (in LLLF polygon 1).
Invasive Species	Ensure monitoring and reporting of invasive plants is occurring	Yes	In 2017, a location of knotweed was identified within a special use permit area located within the Haida Tenure. Discussion with MFLNRO regarding the potential for treatment of Bull Thistle using a biological control have been initiated (but will have to meet FSC requirements/ restrictions).
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 LUOO with 2,720 features and 289.3ha of reserve area identified in 2017.
Windthrow Management Effectiveness	100% of blocks have TCM completed, did the TCM work as expected?	No	Windthrow occurred in four blocks that impacted LUOO reserves/ management zones (i.e., streams, yew patch and monumental tree reserves). Windthrow treatments were not completed for several blocks at the time of the post-harvest assessment but have since been confirmed that treatments are complete. Windthrow was also a concern from monitoring in 2016. An internal investigation was completed to assess the immediate and root causes and develop corrective/ preventative actions to address. E.g., “Fingers” or protrusions into the cutblock to protect LUOO features will be made wider in size and will have Tree Crown Modification as the default prescription. Taan will also conduct a windthrow workshop with the engineers to discuss challenges and solutions.
Cultural Heritage Resource Management Effectiveness	100% of practices to maintain features categorized as well to very well	N/A	There were no cultural heritage resource FREP assessment completed in 2017.