

## 2019 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. *Xaayda Haida* and public consultation of the Monitoring Plan and Report is required by FSC.

The following table summarizes the results of the 2019 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 2019, Taan achieved the established targets for 34 of the 36 indicators (94%). The indicator where the targets were not achieved are noted below and include: Windthrow Management Effectiveness and Cultural Heritage Resources, both of which are a reflection of past management strategies on older cutblocks harvested in 2018. Management strategies have been adjusted to reflect internal reporting and monitoring within late 2018 and 2019.

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	Harvest volume data not available yet for the ten-year period reporting set for this indicator but appears to be on track for meeting the target. 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 <i>Xaayda Haida</i> for Ts'uu/SGaahlan <i>red/yellow cedar</i> bark collection. Updated analysis shows slightly reduced Kaagan daajing <i>mushroom</i> within the Skidegate LU in the 35-50 and 51-65 age classes, accounting for recent harvesting and shift of area into the older 66-90 age class.
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 242,949m <sup>3</sup> and the AAC was 460,000m <sup>3</sup> .
Waste & Residue	Avoidable Waste is ≤ 100 m <sup>3</sup> /ha	Yes	The average waste and residue was 55.2m <sup>3</sup> /ha (5 blocks sampled). The level of avoidable waste decreased slightly this year and continues to remain 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 this year. Harvesting of Ts'uu/SGaahlan <i>red/yellow cedar</i> 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	No	There has not been any MFLNRO Forest and Range Evaluation Program (FREP) stand development monitoring completed for Taan tenures since 2012. However, some monitoring and field studies were completed as part of the updated Vegetation Resource Inventory (VRI) and was used in the new TSR.
Planting	≥85 % of seed source is from <u>Xaayda Gwaay,yaay Haida Gwaii</u>	Yes	A total of 361,600 trees were planted, with 96% of the seed originating from <u>Xaayda Gwaay,yaay Haida Gwaii</u> . Some <u>SGaahlan cypress</u> and Pine seedlings were sourced from the Vancouver Island and the Mainland Coast.
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	96.8% of Taan FG blocks were declared before the FG due date. Taan completed 1,567ha of surveys, which included the use of a drone to complete some of the surveys. BCTS completed surveys within the FLTC but did not report back to clarify if all were completed prior to the FG deadline.
Forest Health	Act on trends of importance that can be managed; minimize possibilities of outbreaks; early detection of any new species	Yes	<u>SGaahlan Yellow cedar</u> decline continues to be an issue. Taan continues to collaborate with UBC on research aimed at identifying suitable sites and strategies for successful regeneration. The total area of windthrow and <u>Jiidaal landslides</u> increased significantly from 2018 and 2017. Taan is completing assessments of the slide areas to determine if planting/ grass seeding is needed as well as any other mitigative actions.
Soil Conservation Effectiveness	Maintain average of ≤ 7% permanent access; 100% of cutblocks achieve soil conservation objectives	Yes	Taan had an average permanent access of 3.2%. Post-harvest inspections contained some action items for the removal of machine trails following harvesting (i.e., dispersal of the puncheon).
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). Taan continues to have a significant portion of the harvested blocks with high levels of stand level retention (63%) and forest influence (29% of blocks have >50% forest influence). Average cutblock size was 23.2ha, which is slightly over the target of 23ha. Skidegate LU average stand level retention is 69%.
Environmental Incidents	Minimize the number and size of environmental incidents; ≤ 5 events	Yes	There were no reportable spills, zero fires and zero avalanches. No slides were reported by Taan staff. Taan will follow up to assess the slides noted in the MU within the MFLNRO Forest Health Survey.

Composition & Observed Changes to Flora & Fauna			
Indicator ID	Target	Target Met	Comments
Species at Risk	Species status is tracked/ management responses undertaken	Yes	Species at Risk lists and species groups were updated to reflect government updates. Four new species added: earthworm, ground beetle and two non-vascular plants.
Sensitive Species Habitat	Maintain reserves; protect Ts'allang.nga MAMU habitat; maintain Stads K'un NOGO foraging habitat	Yes	Targets set by the LUOO are being followed. Taan is keeping apprised of the progress of the Stads K'un NOGO Recovery Team and the development of the Haida Gwaii Recovery Strategy. One new Stads K'un <i>goshawk</i> nest was identified, in Canoe. Updates were made to the total area identified for Goshawk nesting and forage area, as well as updated to all LUO reserve areas to account for any newly identified features/ nests.
Environmental & Social Impacts			
Indicator ID	Target	Target Met	Comments
Watershed Disturbance	# of watersheds exceeding the established thresholds improves	Yes	In 2019, there are no watersheds within the Management unit (MU) that exceed the FSC threshold of ECA >25% and there are no Sensitive Watersheds that exceed the LUO threshold of ECA >20%. Bill Creek (minor overlap in the MU of 11ha) and Brent Creek (35ha overlap in the MU) are over 25% ECA, and Brent Creek exceeds the LUO threshold of 20% (35ha overlap in the MU). Taan has not conducted any operations on these two minor overlap areas with the MU. This demonstrates watershed recovery over time through the application 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). One upland stream was assessed as not properly functioning and has been assigned follow up action to assess it for potential mitigative works.
FSC Riparian Budgets – Watershed Level	100% of streams meet FSC Budgets	N/A	Not assessed as this requirement is not included in the new FSC Standard, therefore this indicator will be removed from the 2020 Monitoring Report.
FSC Riparian Budgets – Stand Level	100% of Riparian budgets maintained at the stand level	No*	One cutblock showed a riparian deficit for an upland stream of -0.40ha, which is very minimal. This indicator will be removed from the 2020 Monitoring Report as it is not included within the new FSC Standard.
Water Quality Effectiveness	≥90% of areas measured have very low-low potential for amount of fine sediment entering a stream	Y	93% of the streams assessed had low or very low sedimentation potential noted. 7% indicated moderate potential. 42 sites were assessed, within 6 cutblocks.

Indicator ID	Target	Target Met	Comments
Research & Monitoring Projects	Report on participation and cooperation levels	Yes	Support for UBC carbon sequestration studies with fertilization research on HG cedar stands including greenhouse gas release studies. Also continued in-house Riparian Restoration studies of enhanced silviculture practices utilized in riparian stands.
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 totaled \$2,274,547.
Local Support & Agreements	Report on support/ donation levels; maintain completed agreements	Yes	In 2018, Taan supported several organizations and community groups through donations and support as well as firewood. Total approximately \$126,342.
Local Supplies & Services	Preference is given to local supplies and services	Yes	Taan supported 89 local vendors, and expenditures for vendors in <i>Xaayda Gwaay.yaay Haida Gwaii</i> was 40% 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 56% <i>Xaayda Haida</i> employment and 63% local employment. Contractors are 22% <i>Xaayda Haida</i> and 95% local employment.
Accident Frequency Rate	Taan - MIR $\leq$ 8.00	Yes	Accident rate has significantly improved over the last several years and was 5.4. There were four recordable incidents, all lost time (disc rupture in the back from a slip/ fall, faller struck by a snag/ branch, broken bones in hand from slip/ fall, and a scratched eye).
Public Consultation	100% of comments, complaints and disputes resolved in a timely manner	Yes	Noo disputes were received, however one complaint was observed on Facebook and one complaint was raised at a HaiCo Community Dinner related to fertilizer. Taan continues to work with many local residents and groups to improve communications and dialogue. Taan has established a public advisory group consisting of <i>Xaayda Haida</i> 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 1% of the harvest volume (2,4113m <sup>3</sup> ). Some of the wood waste was donated for firewood.
Inorganic Waste - Seedling Protectors	Implementation of removal plans	Yes	121,383 cones were removed from the Management Unit, mostly from previously declared FTG blocks. New installations was 43,915 and installations of recycled cones was 102,445.

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 to ensure that proposed cublocks are financially viable.
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	Analysis was updated using the new forest inventory. Four Landscape Units identified as less than 30% old forest: Lower Yakoun, Naikoon, Skidegate and Tlell (same as reported in 2016). The Skidegate LU shows decreases in mature and old forest from the 2016 analysis. The new Vegetation Resource Inventory mapping resulted in a significant shift in the old to mature forest area across Haida Gwaii.
Landscape Level Biodiversity - Connectivity	Linkages of reserves exist, stand retention creates a permeable matrix for old forest species	Yes	Analysis was updated using the new forest inventory and there is no significant change to the landscape connectivity levels from 2016. Taan has not completed any harvesting within the <u>XuulGaaws Kaahlil Sewell</u> 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	In 2019, no harvesting was completed within any site series identified as having a deficit of old forest retention under the LUO targets. In 2020, Taan determined that there are some issues with calculations of current ecosystem representation for planning blocks moving forward, as the LUO targets are based on the previous TEM mapping, but the new VRI mapping that was used in the new TSR shows a significant shift in the amount of identified old forest into mature forest seral.
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 “allowable disturbance” threshold of 20% of the portion within the MU is 268.4 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). One previous polygon identified as Intact Forest within the TSA no longer meets the size threshold to be considered a large landscape level forest according to FSC criteria (as a result of harvesting), north of Masset Inlet.
Invasive Species	Ensure monitoring and reporting of invasive plants is occurring	Yes	Invasive Plants were identified during surveys, several treatments occurred as well in partnership with the Invasive Plants Council.
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 1,655 features and 220.3ha of reserve area identified.
Windthrow Management Effectiveness	100% of blocks have TCM completed, did the TCM work as expected?	No	Windthrow occurred in 7 blocks that impacted LUOO reserves/ management zones (i.e., streams, yew patch and monumental tree reserves); Windthrow was also a concern from monitoring in 2018, 2017 and 2016. Management strategies were adjusted for tree crown modification prescriptions to include treatment of all LUO feature edges in fall of 2018. All of the blocks reviewed with windthrow reported in 2019 were harvested under the old treatment prescriptions.
Cultural Heritage Resource Management Effectiveness	100% of practices to maintain features categorized as well to very well	No	FREP monitoring was completed on older harvest areas and indicated poor maintenance of yew trees that was previously internally identified and reported by Taan. Taan has since revised management strategies to improve the protection of yew trees. Windthrow impacted 3 out of 5 CMT reserve zones in TOW001, 2 of which were hit with windthrown trees, related to the harvest of TOW001. Refer to windthrow indicator above.