Western Forest Products Inc.
DEFINING A HIGHER STANDARD™

# SFM Plan 2023 – 2028
# Appendix 1:
# Detailed Indicator and Results

Nimpkish DFA and TFL 37

January 2025

# Table of Contents

# SFM Criteria, Values, Objectives, Indicators & Targets

This section of the SFM Plan describes the Nimpkish Woodlands SFM Values, Objectives, Indicators and Targets. As appropriate, an Acceptable Variance is provided for the performance level of each Target and a forecasted future condition is provided for each Indicator.

The section is organized according to the Criteria for Sustainable Forest Management, which was developed by the Canadian Council of Forest Ministers and adapted for the Canadian Standards Association's Sustainable Forest Management standard (CAN/CSA-Z809-16).

As further explanation of the organization of this section:

- The **Criteria** (e.g., below: 1.0 Conservation of Biological Diversity) and **Critical Elements** (e.g., 1.1 Ecosystem diversity) and their accompanying statements are derived from *Defining Sustainable Forest Management: A Canadian Approach to Criteria and Indicators* (Canadian Council of Forest Ministers, Ottawa, 1995).
- The subsidiary **Values**, **Objectives, Indicators, Targets**, **Acceptable Variances** and **Expected Future Condition** were developed for this plan as directed by the CSA Z809-08 CSA Standard, and through discussions among NWAC members, Central Island Forest Operation's staff and other Western Forest staff.

As used in this plan:

- **Values** are DFA characteristics, components, or qualities considered by the advisory groups to be important in relation to a CSA SFM element or other locally identified element.
- **Objectives** are broad statements describing a desired future state or condition of a value.
- **Indicators** are variables that measure or describe the state or condition of a value.
- **Targets** are specific statements describing a desired future state of condition of an indicator. Where possible, targets are clearly defined, time-limited and quantified.

**Acceptable Variances** specify the range of performance results (+ and/or – relative to the Target) that is deemed to be an acceptable outcome. A result outside this range does not always indicate unacceptable performance. (For example, it could reflect: the impact of an uncontrollable event, such as a natural disaster; the fact that the Target was based on poor quality or inadequate data; or the effects of a responsible choice between two competing Objectives.) A result outside the Acceptable Variance range does, however, require review, assessment and, possibly, a revision of either the objective, target or management practices.

- **Forecasts** are explicit statements of the expected future condition of an indicator.
- **Legal References** are provided where they exist.

# Performance Reporting

On an annual basis, the SFMP will be updated to include performance reporting information in order to facilitate review of the actual outcomes of each indicator (this will be reported within Appendix 1-this document). Most indicators, (but not all) are reported on an annual basis from January 1 – December 31. The monitoring report (Data Set) is completed by Englewood Forest Operations Management, and presented for review to NWAC each year.

Audits will also evaluate the quality, validity, and meaningfulness of the locally determined indicators and all of the targets.

## Management Review

A management review of the SFM requirements is completed annually as part of WFP's Environmental Management System Management Review process. This review ensures that progress towards SFMP continues to be suitable, adequate and effective. The review looks at all aspects of the SFM process, including the SFMP Plan, Annual Results, the public participation process, audit findings (internal and external audits) and corrective/ preventative action plans. The Management Review is scheduled each spring to verify that the SFM Plan is being implemented and the sustainable forest management process is functioning in the DFA. Significant effort and commitment has been demonstrated by the Englewood Forest Operation towards the sustainable forest management process, and this is reflected in the overall annual indicator performance (results are below).

## Summary of Results

In 2024, WFP Englewood Forest Operation was in conformance with 32 out of 39 indicators, 2 indicators were met with a variance, and 5 indicators were not met.

**Indicators outside variance:**

- **4.1.1 Net Carbon Uptake:** This target was not met as the net carbon uptake has trended downwards for two years.
- **5.1.1 Quantity and Quality of Timber and Non-timber Benefits Produced in the DFA, Target 1: Profile Targets**: This target was not met as the profile target for Fir was exceeded by 13%, which is more than the variance of 10%.
- **5.1.1 Quantity and Quality of Timber and Non-timber Benefits Produced in the DFA, Target 4: Number of Elk Tags:** This target was not met as the number of elk tags awarded on the DFA was less than the year previous, and exceeded the 10% threshold to meet the variance.
- **5.1.1 Quantity and Quality of Timber and Non-timber Benefits Produced in the DFA, Target 5: Mount Cain User Statistics:** This target was not met as the user statistics for the 2024 season were less than the previous, and the decrease was greater than the variance of 25%.
- **5.2.1 Level of Investment in Initiatives that Contribute to Community Sustainability, Target 1: Capital Spending:** This target was not met as it was the second year in a row of capital spending less than the target of $2 million.

**Indicators meeting variance:**

- **3.1.1 Level of Soil Disturbance, Target 1: Landslide NP:** This target was met with a variance as in the 5-year period between 2020-2024 the area converted to NP because of landslides induced by forest development activities was greater than the target of 0ha, but less than the variance of 10ha.
- **5.2.1 Level of Investment in Initiatives that Contribute to Community Sustainability, Target 3: Local Access to Raw Material:** This target was met with a variance as 2 of the 3 categories of raw materials were recovered from the DFA.

## Summary of Changes

This section includes a summary of the changes to the SFM Plan Indicators, Targets and Variance that have been made since the last version. This does not reflect minor editorial changes.

| Date | Indicator | Comment |
|---|---|---|
| November 2023 | Indicator 1.2.3 | Change in wording so that instead of the target being 95%, the target is at least 95%. Previous wording made achieving the target impossible unless the percentage of native species was exactly 95%. |

# Indicator 1.1.1: Ecosystem Area by Type

| Element: 1.1 Ecosystem Diversity<br>*Conserve ecosystem diversity at the stand and landscape levels by maintaining the variety of communities and ecosystems that naturally occur in the DFA. Establish forest plantations only in afforestation projects.* | | | | |
|---|---|---|---|---|
| **Value** | **Objective** | **Indicator** | **Target** | **Variance** |
| Older seral stages of each ecosystem types | Older seral stages of each ecosystem types found on the DFA are maintained | Ecosystem area by type | There is more than 50% of each ecosystem type (biogeoclimatic variant) in the productive forest area of the DFA within the mid to old seral stages at any time. | -5% (i.e. 45%) for up to 10 years. |

## History

CSA Core Indicator in under CSA Z809-08. No change in CSA Z809-16. Core indicator under CSA Z809-16.

## Justification

Habitat is an integral part of species diversity and population size. Two key characteristics of forest ecosystems are the community types (as driven largely by the species composition of the overstorey), and community seral stages (as driven by succession and disturbance processes). These factors are strong predictors of the biotic communities inhabiting a forest stand, and the overall forest landscape.

Ensuring there is more than 50% of ecosystem type by seral stage provides reasonable assurance that there is adequate representation being maintained and replaced at all times on the DFA.

The variance is meant to account for age class distribution imbalance that might develop or exist due to historical activity and/or land use decisions.

## Current Status & Interpretation

The distribution of ecosystem area by type for each seral stage on the Englewood Forest Operation DFA for the 2020-2024 reporting year is as follows:

| BGC Unit | Seral stage | 2020 (ha) | 2021 (ha) | 2022 (ha) | 2023 (ha) | 2024 (ha) | 2020 % | 2021 % | 2022 % | 2023 % | 2024 % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| CWH vm1 | Early | 17,196 | 16,246 | 16,001 | 15,604 | 15,404 | 41 | 38 | 38 | 37 | 36 |
| | Mid | 11,067 | 12,089 | 12,175 | 12,492 | 12,597 | 26 | 29 | 29 | 29 | 30 |
| | Mature | 4,968 | 4,954 | 5,194 | 5,288 | 5,376 | 12 | 12 | 12 | 12 | 13 |
| | Old | 9,192 | 9,063 | 9,036 | 8,963 | 8,980 | 22 | 21 | 21 | 21 | 21 |
| **Total** | | **42,424** | **42,354** | **42,405** | **42,348** | **42,356** | | | | | |
| CWH vm2 | Early | 12,876 | 12,485 | 12,436 | 12,363 | 12,220 | 38 | 37 | 37 | 37 | 36 |
| | Mid | 4,058 | 4,619 | 4,853 | 4,958 | 5,166 | 12 | 14 | 14 | 15 | 15 |
| | Mature | 526 | 521 | 550 | 597 | 643 | 2 | 2 | 2 | 2 | 2 |
| | Old | 16,492 | 16,169 | 16,006 | 15,847 | 15,768 | 49 | 48 | 47 | 47 | 47 |
| **Total** | | **33,951** | **33,794** | **33,845** | **33,766** | **33,798** | | | | | |
| CWH xm2 | Early | 6,150 | 5,877 | 5,760 | 5,753 | 5,643 | 36 | 35 | 34 | 34 | 33 |
| | Mid | 3,803 | 4,126 | 4,016 | 3,918 | 3,591 | 22 | 24 | 24 | 23 | 21 |
| | Mature | 5,332 | 5,268 | 5,478 | 5,569 | 5,978 | 31 | 31 | 32 | 33 | 35 |
| | Old | 1,697 | 1,692 | 1,696 | 1,696 | 1,708 | 10 | 10 | 10 | 10 | 10 |
| **Total** | | **16,964** | **16,964** | **16,950** | **16,936** | **16,920** | | | | | |
| CWH mm1 | Early | 3,706 | 3,636 | 3,621 | 3,561 | 3,454 | 29 | 28 | 28 | 28 | 27 |
| | Mid | 7,646 | 7,994 | 7,959 | 8,012 | 7,752 | 61 | 62 | 62 | 62 | 60 |
| | Mature | 260 | 260 | 310 | 312 | 664 | 2 | 2 | 2 | 2 | 5 |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Old | 995 | 995 | 990 | 989 | 979 | 8 | 8 | 8 | 8 | 8 |
| **Total** | | **12,607** | **12,885** | **12,880** | **12,874** | **12,849** | | | | | |
| MH | Early | 3,672 | 3,816 | 3,860 | 3,783 | 3,856 | 19 | 19 | 20 | 19 | 20 |
| mm1 | Mid | 1,233 | 1,245 | 1,267 | 1,379 | 1,334 | 6 | 6 | 6 | 7 | 7 |
| | Mature | 123 | 129 | 132 | 132 | 131 | 1 | 1 | 1 | 1 | 1 |
| | Old | 14,739 | 14,577 | 14,534 | 14,444 | 13,991 | 74 | 74 | 73 | 73 | 72 |
| | | **19,767** | **19,767** | **19,793** | **19,737** | **19,311** | | | | | |

The following table illustrates how the percentage of **mid to older age classes** changed over the last several years for each ecosystem type.

| Year | CWHvm1 | CWHvm2 | CWHxm2 | CWHmm1 | MHmm1 |
|---|---|---|---|---|---|
| 2024 | 64% | 64% | 67% | 73% | 80% |
| 2023 | 62% | 64% | 66% | 72% | 81% |
| 2022 | 62% | 63% | 66% | 72% | 80% |
| 2021 | 62% | 64% | 65% | 72% | 81% |
| 2020 | 59% | 62% | 64% | 71% | 81% |
| 2019 | 59% | 63% | 62% | 72% | 84% |

The table above illustrates that within all biogeoclimatic units, there is greater than 50% of the area of ecosystem type found to be in the mid to older seral stages. This target is met for 2024.

## Strategies & Implementation

Government mandated reserves serve as a foundation to ensure representative ecosystem types in the older seral stages are preserved for the long term. They include:

- Ungulate Winter Ranges (UWR)
- Wildlife Habitat Areas (WHA)
- Old Growth Management Areas (OGMA)
- Riparian Reserves Zones (RRZ)
- Wildlife Tree Retention Areas (WTRA)

Additionally, a key supporting company strategy for maintaining elements of the current forest is the *Western Forest Strategy* which describes the use of retention silviculture systems throughout Western's tenures. The strategy was fully implemented in 2015 and it provides a target level of retention based on biological and other factors.

A second element of the strategy for this value is also prompt and effective reforestation or regeneration of harvested areas that aims to establish free growing stands of healthy trees of mixed species in sufficient numbers and within set time frames. In this way, harvested areas can be recruited to the mid to older seral stages in the shortest time frame possible.

## Forecasts

It is expected that the target will continue to be met based on trends from the last decade. At the current AAC level, just over 1% of the DFA forest land base can be harvested annually. The natural progression of stands from the Early seral stage to the Mid seral stage should be sufficient to achieve and maintain the target over the long term.

## Details/ Data Set

The biogeoclimatic zone variants are used as the basis for defining ecosystem types. This is consistent with the Vancouver Island Land Use Plan and with TFL Management Plans approved by the province.

Forest cover data is maintained in GIS layers along with ecosystem information. The intercept of the ecosystem types with the forest inventory information is then grouped by seral stages defined based on age as follows:

| Seral Stage | Definition |
|---|---|
| Early | 0 to 39 |
| Mid | 40 to 80 (40 to 120 in MH zone) |
| Mature | 81 to 250 (121 to 250 in MH zone) |
| Old | >250 |

## Monitoring

Parameters monitored on the DFA to measure indicator performance are:

- The ecosystem profile and location of harvested areas
- Forest inventory over time (adjusted for age, annual harvested area and permanent access structures)

The distribution of seral stages for each ecosystem types on the DFA is determined through the Cenfor database inventory and is reported out via an annual corporate GIS analysis.

# Indicator 1.1.2: Forest Area by Species Composition

| Element: 1.1. Ecosystem diversity<br>*Conserve ecosystem diversity at the stand and landscape levels by maintaining the variety of communities and ecosystems that naturally occur in the DFA. Establish forest plantations only in afforestation projects.* | | | | |
|---|---|---|---|---|
| **Value** | **Objective** | **Indicator** | **Target** | **Variance** |
| The species composition of the forest on the DFA | The overall species composition of the productive forest on the DFA remains stable over time. | Forest area by type or species composition. | The forest area (ha) by species composition remains within 2% of the baseline on a 5-years basis. | -1% (i.e. up to 3%) for up to 10 years. |

## History

New CSA Core Indicator in 2 under CSA Z809-08. No change in CSA Z809-16. Core Indicator under CSA Z809-16.

## Justification

Habitat is an integral part of species diversity and population size. Two key characteristics of forest ecosystems are the community types (as driven largely by the species composition of the overstorey), and community seral stages (as driven by succession and disturbance processes). These factors are strong predictors of the biotic communities inhabiting a forest stand, and the overall forest landscape.

Maintaining a stable species composition over time should support the maintenance of a healthy ecosystem. The 2% deviation from the baseline provides for the temporary species shift that may occur in the early stages of stand development. The 1% variance is meant to help account for temporary deviations engendered by operational market pressures and the plantations response to pests and weather abnormalities.

Climate change may affect this target in the long-term.

## Current Status & Interpretation

This indicator is reported out on a 5 year basis, next reporting is due in 2029.

Between 2009 and 2024, the distribution of forest stands by leading species on the North Vancouver Island Defined Forest Area is as follows:

| Leading Species | 2009 | 2014 | 2019 | 2024 | Percent deviation From 2019 |
|---|---|---|---|---|---|
| WesternHemlock | 50.3 | 48.3 | 48.6 | 55.7 | +7.1 |
| Douglas-fir | 22.7 | 23.3 | 23.1 | 22.6 | -0.5 |
| Yellow Cedar | 9.2 | 10.6 | 10.0 | 7.8 | -2.2 |
| Amabilis Fir | 5.4 | 6.2 | 7.0 | 7.1 | +0.1 |
| Western Red Cedar | 5.2 | 5.3 | 5.1 | 4.8 | -0.3 |
| Red Alder | 1.7 | 1.7 | 1.7 | 1.7 | 0 |
| Sitka Spruce | 0.1 | 0.1 | 0.1 | 0.2 | 0 |
| Pine | - | 0.2 | 0.2 | 0.1 | 0 |
| Misc. and NSR | 5.4 | 4.3 | 4.2 | 0 | -4.2 |

## Strategies & Implementation

The main strategy for ensuring a stable overall species composition on the DFA is:

- Prompt and effective reforestation of harvested areas with tree species ecologically suited to the site.

This is a legal requirement met through a combination of natural regeneration and planting, planted seedlings are specifically matched to the site's ecology.

In areas where browsing pressures are high, reforestation is the primary focus. This may involve physical protection of seedlings and/or multiple replants, however, in some extreme cases, this may require a species shift on a site to ensure the area is returned to a forested state.

## Forecasts

Natural species shifts due to climate change are projected to occur primarily as change in suitable elevation. This natural species shift is very slow and unlikely to drastically change the species being reforested.

The target is expected to continue being met as annual harvesting plans strive to follow the profile. WFP ensures reforestation of every block harvested, species harvested are replaced as often as feasible with the original species at the reforestation phase.

## Details/ Data Set

The forest cover data for the productive forest of the DFA is organized by stands of relatively homogeneous composition and age. The stand descriptors or labels include species composition organized hierarchically by species representation in the stand. Stands can be grouped based on the leading species as follows:

- Amabilis Fir
- Douglas-fir
- Western White Pine
- Red Alder
- Sitka Spruce
- Western Red Cedar
- Western Hemlock
- Yellow Cedar (Cypress)

The total area of the stands with the same leading species is then tallied. Stands not yet reforested or with their composition is not yet confirmed are grouped as NSR.

## Monitoring

To monitor performance on this indicator, the parameter that must be maintained for the DFA is:

- Forest inventory over time (adjusted annual harvested area and reforestation information).

The area of the stands in the DFA is grouped by their leading species.

Inventory is maintained through data entry (e.g., stocking survey results and free-growing assessment results) in CENFOR by the Timberlands Operations. Reports are run from this data by the corporate GIS team.

# Indicator 1.1.3: Forest Area by Age Class

| Element: 1.1. Ecosystem diversity<br>*Conserve ecosystem diversity at the stand and landscape levels by maintaining the variety of communities and ecosystems that naturally occur in the DFA. Establish forest plantations only in afforestation projects.* | | | | |
|---|---|---|---|---|
| **Value** | **Objective** | **Indicator** | **Target** | **Variance** |
| The distribution of age classes in the DFA | Older age classes on the DFA are maintained | Forest area by seral stage or age class | The percent of the productive forest area (ha) in the older age classes (81 to 250 +) is at least 25% of the DFA (on a five year basis). | -5% (i.e. down to 20%) for up to 10 years. |

## History

New CSA Core Indicator in 2010 under CSA Z809-08. No change in Z809-16. Core Indicator under CSA Z809-16.

## Justification

Habitat is an integral part of species diversity and population size. Two key characteristics of forest ecosystems are the community types (as driven largely by the species composition of the overstorey), and community seral stages (as driven by succession and disturbance processes). These factors are strong predictors of the biotic communities inhabiting a forest stand, and the overall forest landscape. Older age classes are often host to unique communities that would not otherwise be present across the forest landscape.

Maintaining a quarter of the forest in older age classes (81 + years) serves to ensure representation of these most unique communities is preserved.

The variance is meant to help account for age class distribution imbalances that might develop or exist due to historical activity and/or land use decisions.

## Current Status & Interpretation

This information is reported out in 5-year intervals, next reporting year is 2029. As demonstrated by the table below the area in the age classes 81 to >250 is well above 25%.

Between 2009 and 2024, the distribution of productive forest area by age class for the Englewood DFA is as follows:

| Age Classes | Ha (2009) | 2009 (%) | 2014 (%) | 2019 (%) | 2024 (%) |
|---|---|---|---|---|---|
| 0 - 39 | 47,613 | 38 | 35 | 34 | 32 |
| 40 - 80 | 21,201 | 17 | 20 | 20 | 24 |
| 81 - 120 | 4,181 | 3 | 3 | 6 | 8 |
| 121 - > 250 | 53,267 | 42 | 42 | 40 | 36 |

Although harvesting activities are concentrated within the older age classes, the data indicates that there is a healthy mid age (40 – 80) supply of growing stands to recruit from and maintain the targeted level of older age classes on the DFA.

The baseline data from 2019 has been carried through as this indicator is reported out in 5-year intervals. The 2024 data indicates that the older age classes 81-250 is 44%, this value is well over the targeted 25%. This target is met.

## Strategies & Implementation

Strategies to protect older age classes are primarily enforced via species habitat protection (See Core Indicator 1.2.1 & 1.2.2) such as identified Ungulate Winter Ranges (UWR) and Wildlife Habitat Areas (WHA). Another significant area of the DFA referred to as the Non-Contributing Land Base (NCLB) is not operable for physical and economic reasons, this area also contributes to the protection of older age classes. Over time, current young stands in the NCLB, and other protected habitat areas, will add to the supply of older age classes (see Core Indicator 1.2.2).

Elements of the current forest are maintained post-harvest through the use of retention silviculture systems described in the *Western Forest Strategy,* this strategy provides the target levels of retention for WFP tenures. Careful harvest management and reforestation strategies plan for a continuous cycle of diverse age classes throughout the DFA.

## Forecasts

Timber Supply Analysis done for TFL 37 is found in the current Management Plan and contains projections of age class distributions in accordance with this target. The recent government old growth deferral plan protecting over 350,000 hectares of British Columbia, indicates that old growth planning will continue to be a major part of forest management. It is forecasted that Western Forest Products will continue to develop strategies to ensure that harvesting is balanced with protection of these important age classes.

## Details/Data Set

The age classes used were chosen to match seral stages.

Forest cover data is maintained in a GIS database that includes stand age information current to a given year. This database is continually updated based on harvest activities. Corporate releases an age class report every five years which is then updated into this indicator.

## Monitoring

The parameter referenced to monitor performance for this indicator is:

- Forest inventory over time (adjusted annual harvested area).

The area of the stands on the DFA grouped by their age class is determined through the corporate GIS database.

Inventory is updated via data entry into the Cenfor database by the Timberlands Operations. The forest inventories are updated from this information on a periodic basis.

# Indicator 1.1.4: Degree of Within Stand Retention

| Element: 1.1 Ecosystem Diversity<br>*Conserve ecosystem diversity at the stand and landscape levels by maintaining the variety of communities and ecosystems that naturally occur in the DFA. Establish forest plantations only in afforestation projects.* | | | | |
|---|---|---|---|---|
| **Value** | **Objective** | **Indicator** | **Target** | **Variance** |
| The variety of structure at the stand level | A portion of the existing stand structure is retained | Degree of within-stand structural retention | Within-stand retention is achieved through the use of retention system according to the targets set in the Western Forest Strategy by VILUP Zones and eco-sections (See below). | -5% below target for 1 year |

## History

New CSA Core Indicator in 2010. Adjusted old indicator # 5.5 to better align with Forest Strategy. No change in Z809-16. Core Indicator under CSA Z809-16.

## Justification

In coastal BC, forest ecosystems have evolved in response to natural disturbance. Windthrow, insects, disease, fire and landslides create forests with an abundance of dispersed residual structure (e.g., live and dead standing trees in varying patterns).

There is strong scientific evidence that using a retention system across the landscape contributes to the management of biological diversity. The retention silvicultural system is designed to conserve biodiversity by sustaining species and ecological processes following disturbances. This is accomplished through maintaining habitat over time and reducing micro-climate effects of harvesting. In turn, retention enriches soil for regenerating trees by maintaining soil mycorrhizae and enhances connectivity by supporting the movement of mature and old forest species across the forested landscape (see Zielke and Bancroft 2017).

The targets for retention systems through the Western Forest Strategy are consistent with the government's Vancouver Island Land Use Plan, ensuring that diverse structure is maintained over the landscape through the retention of portions of existing stands.

The variance is meant to provide some operational flexibility particularly in difficult markets and restricted operating levels.

## Current Status & Interpretation

| Western Forest Strategy Zone (VILUP Zone) | Eco-section | WFP Operating Area | Target % Retention System 2020-2024 | 2020 | 2021 | 2022 | 2023 | 2024 |
|---|---|---|---|---|---|---|---|---|
| Special (SMZ) | NIM | CWHvm1, vm2, xm, mm1, MHmm1 | ≥90 | 100% | 100% | 100% | 100% | 100% |
| General Basic (GMZ) | NIM | CWHvm1, vm2, MHmm1 | ≥60% | 52% | 59% | 58% | 38% | 61% |
| General Dry (GMZ) | NIM | CWHxm, mm1 | ≥70% | 100% | 100% | 90% | 81% | 89% |
| Enhanced Basic (EFZ) | NIM | CWHvm1, vm2, MHmm1 | ≥50% | 100% | 63% | 77% | 25% | 62% |
| Enhanced Dry (EFZ) | NIM | CWHxm, mm1 | ≥60% | - | 100% | 71% | 100% | 71% |
| Enhanced Windy (EFZ) | NIM | - | ≥30% | - | 33% | 68% | 100% | 78% |

The targets for this indicator were all met.

## Strategies & Implementation

Management strategies are described in the Western Forest Strategy document by Bill Beese, MF, RPF, Final Implementation Version approved July 24, 2007; and Retention System Implementation Standards June 2008.

A recent revision to the *Western Forest Strategy* clearly separates the Retention system from a Clearcut with Reserves. In January 2018, the Englewood Forest Operation planners were trained to use this revised approach, and it is currently being implemented in the DFA. A new forest strategy tool incorporating LiDAR into calculations for forest influence should ensure target retention percentages are met.

## Forecasts

The amount of retention system represented in percentages is expected to decrease in all Forest Strategy Zones, except for the Special management zone, but should return to levels well above the minimum targets applicable to each zone.

## Details/Data Set

The term retention system refers to a silvicultural system designed to meet the goals of the

variable retention approach. It was originally defined in the BC Operational Planning Regulations (March 1999) and has 3 requirements:

1) retention of trees distributed across the cutblock;
2) trees are left for the long term (at least one rotation);
3) distribution of leave trees achieves >50% "forest influence".

Forest influence is the area within one tree length of standing trees.

The specific definition of the retention system is:

*"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."*

All harvested cutblocks are tracked according to the silviculture system applied to them, those that meet the above definition are tallied and included in the annual report.

## Monitoring

Monitoring and reporting procedures used for this indicator are detailed in the *Western Forest Strategy*; and *Retention System Implementation Standards*. The primary means to track harvested area and its characteristics is through activity data entered into the Cenfor database by the Timberlands Operations. An annual report is generated by the Strategic Corporate Biologist.

# Indicator 1.2.1: Degree of Habitat Protection for Focal Species

| Element: 1.2 Species Diversity<br>*Conserve species diversity by ensuring that habitats and forest conditions for the native species found in the DFA are maintained through time, including habitats for known occurrences of species at risk.* | | | | |
|---|---|---|---|---|
| **Value** | **Objective** | **Indicator** | **Target** | **Variance** |
| Habitat for selected focal species, including species at risk | Maintain or increase habitat for selected focal species, including species at risk | Degree of habitat protection for selected focal species, including species at risk. | The amounts (in ha) of habitat protected for selected focal species remains the same or increase year after year. Selected focal species are Marbled Murrelet, Northern Goshawk, Black-tailed deer & Roosevelt elk and Keen's Myotis. | Decrease by 1%. |

## History

New CSA Core Indicator in 2010. No change in Z809-16. Core Indicator under CSA Z809-16.

## Justification

"Habitat, in terms of both quantity and quality, is a key component of the health of species and animal populations" (CSA Sustainable Forest Management, 2008). Wildlife habitat is a large part of forest management, protecting forest habitat for wildlife species in the short-term and long-term will allow for a sustainable working forest. Habitat reserved for focal species also contributes to abundance of many other wildlife species.

Ungulate winter ranges are areas identified as critical to the survival of local populations of ungulates during severe winters. On Vancouver Island, black-tailed deer and Roosevelt elk need areas with suitable forest and topographical features that can provide shelter, forage and snow interception. Roosevelt elk are on the BC provincial blue-list and have a BC Conservation Framework Priority 2 (BC Species and Ecosystems Explorer, 2010) as well as having local and cultural importance. Black-tailed deer are not considered a species of concern but have local importance for food, economic opportunity and recreation.

Marbled murrelets are small seabirds that nest inland with most nests being found on large boughs high in old conifers up to 30 km inland. Much work has been done along the coast to identify and rank suitable nesting habitat for marbled murrelets. Marbled murrelets are listed as Threatened on Schedule 1 of the Federal Species at Risk Act (SARA), provincially blue-listed, listed on the Forest and Range Practices Act (FRPA) Category of Species at Risk and

considered Identified Wildlife, and have a BC Conservation Framework Priority of 1 (BC Species and Ecosystems Explorer, 2010). Identified Wildlife are sensitive to habitat alteration associated with forest and range practices and are considered to be at risk (endangered, threatened, vulnerable or regionally important).

Northern goshawks are a relatively large forest dwelling hawk. They need a closed canopy forest with an open understory for nesting and foraging. The coastal subspecies is listed as Threatened on SARA Schedule 1, provincially red-listed, listed on the Forest and Range Practices Act (FRPA) Category of Species at Risk and are considered Identified Wildlife, and have a Conservation Priority of 1.

Keen's myotis is a medium sized bat with smallest distributional range of any North American bat. Its range is the Pacific coast region with most of the known population being found in coastal British Columbia, suggesting an association with coast forest habitats. Keen's myotis is listed as Special Concern on SARA Schedule 3, provincially red-listed, listed on the Forest and Range Practices Act (FRPA) Category of Species at Risk and are considered Identified Wildlife, and have a Conservation Priority of 1.

The variance is meant to help account for fluctuation due to spatial issues (e.g. map base or scale) and natural disturbance factors.

## Current Status & Interpretation

The five-year trend in habitat area protected for selected focal species is shown below:

| Habitat Type | Status | 2020 | 2021 | 2022 | 2023 | 2024 | Target Met (Y/N) |
|---|---|---|---|---|---|---|---|
| Ungulate Winter Range (UWR) | Legal | 5,694 | 5,694 | 5,694 | 5,695 | 5,695 | Y |
| | Proposed | 0 | 0 | 0 | 0 | 0 | |
| Marbled Murrelet Nesting Habitat | Legal | 1,427 | 1,427 | 1,427 | 1,427 | 1,427 | Y |
| | Proposed | 10 | 10 | 10 | 10 | 332 | |
| Goshawk Nesting Habitat | Legal | 2,595 | 2,595 | 2,595 | 2,595 | 2,595 | Y |
| | Proposed | 179 | 179 | 179 | 643 | 1,096 | |
| Keens Myotis | Legal | 174 | 174 | 174 | 174 | 174 | Y |
| | Proposed | 0 | 0 | 0 | 0 | 0 | |
| Red Legged Frog | Legal | 16 | 16 | 16 | 16 | 16 | Y |
| | Proposed | 0 | 0 | 0 | 0 | 0 | |

In 2012, low level aerial surveys altered delineated Marbled Murrelet nesting habitat using updated standards, this now serves as the baseline for suitable habitat area.

In 2013, decrease in the size of the Lukwa South proposal area changed Keen's Myotis and Goshawk nesting habitat in the Defined Forest Area (DFA).

The Quatsino Cave Amphipod proposed WHA was fully removed from TFL 37 via ground truthing in 2015.

In 2016, the DFA boundary increased, increasing the Ungulate Winter Range by four hectares. Marbled Murrelet Nesting Habitat decreased by 1 ha due to a rounding error.

No changes occurred for any of the habitat areas in 2017.

In 2018, the area proposed for MAMU habitat in the WHA's was made legal, some area overlapped with a legal OGMA making the legal area officially less than proposed though the entire proposed area became legally protected.

## Strategies & Implementation

- To spatially designate and legally establish Wildlife Habitat Areas and Old Growth Habitat Areas. WFP has a mix of legally established and proposed areas. The intent is to move proposed areas through the process to become legally established.
- When it is necessary to build roads through or harvest adjacent to one of these reserves, WFP attempts to minimize the impact and provides replacement habitat of similar quality, if necessary.
- Species at Risk training is delivered to the operations to aid staff in identifying and working around Species at Risk.
- Northern Goshawk Management Protocol has been developed to guide operations managing forest activities around nests.
- When other habitat is encountered that is actively used by a focal species including a species at risk, the site undergoes evaluation for potential candidacy as a permanent reserve.

## Forecasts

As more reserves such as WHAs, UWRs and OGMAs become legally established the habitat conserved for focal species is expected to increase over the short-term.

## Details/ Data Set

**Ungulate Winter Ranges** have been legally established for all tenures within the DFA. Ungulate Winter Range may also be available through other reserve areas (WHA, OGMA) but has not been spatially delineated as such. A total of 5681 ha for TFL 37 (U-1-001) were spatially established in October 2004. The indicator is measured as the total area spatially delineated and conserved for ungulate winter range. This area must meet or exceed the target of 5681 ha.

**Marbled murrelet nesting habitat** has been delineated within the DFA. Potentially suitable habitat was modelled and further assessed and ranked by low-level aerial surveys in 2002 and 2003. The surveys followed provincial standards ranking the habitat nil to very high quality. Habitat ranked moderate to very high is generally considered "suitable" habitat. In the short-term suitable habitat is protected in a variety of reserves. Some reserves, wildlife habitat areas, have

been specifically delineated for marbled murrelets. Other species' Wildlife Habitat Areas Old Growth Management Areas, and Ungulate Winter Ranges may incidentally encompass suitable nesting habitat. This indicator is a measure of the amount of inventoried suitable nesting habitat reserved within the DFA. The amount should be consistent or increase from the current state and not be less than 5046 ha.

**Goshawk nesting habitat** mapping is available for the TFL. For the current process the amount of goshawk habitat is based solely on areas that will not be harvested due to the presence of goshawk nests. There are currently 15 known nest territories within the DFA. Ten territories were formally established in March 2003 as 2595 ha of WHA while the others have been voluntarily conserved by WFP. This indicator is a measure of the amount of habitat reserved around known nests. The amount should be consistent or increase from the current state and not be less than 2595 ha.

**Keen's myotis** appear to be associated with coastal forest habitats and karst features. More research needs to be done before accurate mapping of potential habitat is available. This measure is an indicator of the amount of area reserved due to the presence of known winter hibernation or maternity roost sites. The amount should increase from the current state of 0 ha with 2 proposed reserves currently being negotiated.

## Monitoring

- Reserves are mapped spatially in a layer of the GIS. Changes in boundaries are tracked by Corporate Forestry biologists.
- All habitat supply will be monitored spatially relative to the target every year.
- Nests are documented when they are located and appropriate management strategies are developed within site-level plans.
- Known nests will be monitored for activity when forest management activities are planned nearby.

# Indicator 1.2.2: Suitable Long-term Habitat for Focal Species

| Element: 1.2 Species Diversity<br>*Conserve species diversity by ensuring that habitats and forest conditions for the native species found in the DFA are maintained through time, including habitats for known occurrences of species at risk.* | | | | |
|---|---|---|---|---|
| **Value** | **Objective** | **Indicator** | **Target** | **Variance** |
| Availability of suitable habitat for selected focal species, including species at risk | To ensure the long-term availability of habitat for selected focal species including species at risk. | Degree of suitable habitat in the long term for selected focal species, including species at risk. | On a 5-year basis, the amount (in ha) of potentially suitable habitat available within WHA, UWR, OGMA and NCLB remains the same or increases over time. The selected focal species are Marbled Murrelet, Black-tailed deer & Roosevelt elk | UWR – decrease by 1%<br>MAMU – decrease by 2% |

## History

New CSA Core Indicator in 2010. No changes in Z809-16. Core Indicator under CSA Z809-16.

## Justification

Mature forest is integral to the survival of many wildlife species. While young forests should develop the attributes of mature habitat over time, it is important to ensure critical habitat is available by protecting areas of mature forest that are potentially suitable habitat.

Ungulate winter ranges are areas identified as critical to the survival of local populations of ungulates during severe winters. On Vancouver Island, black-tailed deer and Roosevelt elk need areas with suitable forest and topographical features that are able to provide shelter, forage and snow interception. Roosevelt elk are on the BC provincial blue-list and have a BC Conservation Framework Priority 2 (BC Species and Ecosystems Explorer, 2010) as well as having local and cultural importance. Black-tailed deer are not considered a species of concern but have local importance for food, economic opportunity and recreation.

Marbled Murrelets are small seabirds that nest inland with a majority of nests being found on large boughs high in old conifers up to 30 km inland. Much work has been done along the coast to identify and rank suitable nesting habitat for Marbled Murrelets. Marbled Murrelets are listed as Threatened on Schedule 1 of the Federal Species at Risk Act (SARA), provincially blue-listed, listed on the Forest and Range Practices Act (FRPA) Category of Species at Risk and considered Identified Wildlife, and have a BC Conservation Framework Priority of 1 (BC Species and Ecosystems Explorer, 2010). Identified Wildlife are considered to be sensitive to habitat alteration associated with forest and range practices and are considered to be at risk (endangered, threatened, vulnerable or regionally important).

The variance is meant to help account for fluctuation due to spatial issues (e.g. map base or

scale) and natural disturbance factors. For marbled murrelet the variance is also to account for the inaccuracies of the modelling and the inability to predict the quality of the habitat.

## Current Status & Interpretation

At the end of 2009, the baseline amount of potentially suitable habitat for selected focal species that is currently available in the DFA was as follows. Data is updated at 5-year intervals, next report will occur in 2029.

| Type of Habitat/ Protected Species | Measure | Type of Habitat Protected/ Species | Area (ha) | | | | Target Met (Y/N) | Variance Met (Y/N) |
|---|---|---|---|---|---|---|---|---|
| | | | 2009 | 2013 | 2019 | 2024 | | |
| Ungulate Winter Range | Spatially delineated ungulate winter range | Legal | 5681 | 5685 | 5694 | 5694 | Y | N/A |
| | | NCLB | 0 | 0 | 0 | 0 | | |
| MAMU Nesting Habitat | Potentially Suitable Habitat in WHA, UWR, OGMA and NCLB | Legal | 7068 | 8684 | 7002 | 8606 | Y | N/A |
| | | NCLB | 4633 | 7844 | 4641 | 29,109 | | |

*The increase in the amount of potential MAMU nesting habitat is due to remapping of areas and the new inclusion of younger suitable trees outside previously existing reserve boundaries

## Strategies & Implementation

- To spatially designate and legally establish Wildlife Habitat Areas, Ungulate Winter Range and Old Growth Habitat Areas. WFP has a mix of legally established and proposed areas. The intent is to move proposed areas through the process to become legally established. Proposed OGMAs and WHAs will be managed as if established.
- When it is necessary to build roads through or harvest adjacent to one of these reserves, WFP attempts to minimize the impact and provides replacement habitat of similar quality, if necessary.
- As committed in Operational Plans, WFP ensures areas of equivalent marbled murrelet habitat are available in the Timber Harvesting Land Base (THLB) if suitable habitat is harvested in the NCLB.
- Western's Forest Strategy around variable retention will leave a legacy of mature and old forest attributes.
- As reliable habitat modelling tools and parameters become available for different species, WFP will apply them to its land base to guide the evolution of management prescriptions.

## Forecasts

Ungulate winter range is expected to not change over time as winter range is based on topographical and forested characteristics that are not expected to change significantly.

The quantity of potentially suitable habitat for Marbled Murrelet includes both currently suitable habitat and future potentially suitable habitat (i.e. trees that are currently too young). This cannot account for habitat quality (features such as moss development), as it is not easily modeled. The variance between potentially suitable habitat and actual suitable habitat has been considered when planning for adequate habitat area. Potentially suitable habitat was forecasted using the below parameters from the Marbled Murrelet recovery team:

For forests greater than 250 years old there was an assumption that the old growth characteristics would not change significantly in the long term and the following parameters were used: Forested area > 250 years old and > 28.5 m tall. These parameters are from the "Most Likely" category defined in Table 3 in the Marbled Murrelet Conservation Assessment 2003, Part B.

2) For forests younger than 250 years old there is a potential to develop the necessary attributes. It was assumed that trees with a moderate or better site index had the potential to develop the characteristics and the following parameters were used: Forested area ≤ 250 years old and Site Index ≥18.

Goshawk nesting habitat mapping is not currently available. The Northern Goshawk Recovery Team is in the process of creating and testing a habitat model for Vancouver Island. Once this model is released it may be used to calculate the amount of habitat conserved within reserves.

## Details/ Data Set

**Ungulate Winter Ranges** have been legally established for all tenures within the DFA. A total of 5,685 ha has been legally designated through one order (for more details see above indicator). Ungulate Winter Range may also be available through other reserve areas (WHA, OGMA) but has not been spatially delineated as such. Established UWR should remain as such in the long-term because of the old-growth characteristics of the UWR and long intervals between natural disturbances in the ecosystems. The indicator is measure as the total area spatially delineated and conserved for ungulate winter range over the long-term and must meet or exceed the target of 5,681 ha.

**Marbled Murrelet nesting habitat** has been delineated within the DFA. Potentially suitable habitat was modeled. Of the potentially suitable habitat within the DFA the areas within wildlife habitat areas, ungulate winter range and old growth management areas and found within the non-contributing landbase (generally unharvestable) will be retained in the long-term. The potentially suitable habitat available in reserves was calculated using the current legal and proposed WHA, UWR and OGMAs. The non-contributing landbase was calculated using data from the TFL 37 Management Plan 10 dataset created for the timber supply analysis, which was updated for 2018.

This indicator is a measure of the amount of potentially suitable nesting habitat retained within the DFA over the long-term. The amount should be consistent or increase from the current state and not be less than 11,701 ha.

## Monitoring

- Reserves are mapped spatially in a layer of the GIS. Changes in boundaries are tracked by Corporate Forestry biologists.
- Potential habitat supply will be monitored spatially relative to the target every 5 years.
- Non-contributing landbase will be recalculated with new timber supply analysis

# Indicator 1.2.3: Regeneration of Native Species

| Element: 1.2 Species Diversity<br>*Conserve species diversity by ensuring that habitats and forest conditions for the native species found in the DFA are maintained through time, including habitats for known occurrences of species at risk.* | | | | |
|---|---|---|---|---|
| **Value** | **Objective** | **Indicator** | **Target** | **Variance** |
| The existing pool of genes within tree species on the DFA | The existing pool of genes within tree species on the DFA is maintained | Proportion of regeneration comprised of native tree species | The proportion of regeneration comprised of native tree species at least 95% | None |

## History

This is a core indicator established in 2008 by CSA Z809 is maintained as a core indicator under the CSA Z809-16 standard. The target percent for this indicator was adjusted from 100% to 95% to allow for planting of non-native noble fir in higher elevations where research dictates it is acceptable. This change was approved by the NWAC on March 14, 2019.

## Justification

The target is based on legal requirements under FRPA and the associated Chief Forester's Standards for Seed Use. The targets accounts for slight variations where government approved (e.g., planting of non-native noble fir in elevations where research indicates it is acceptable).

## Current Status & Interpretation

This target has been met in 2024 with 99.4% of the total 468,575 planted trees being native species.

The DFA's regenerated species profile by percent planted for 2020-2024 are as follows:

| Year | Ba | Cw | Yc | Fd | Hw / Hm | Alder | Ss | Pw | Grand/ Noble Fir | Total |
|---|---|---|---|---|---|---|---|---|---|---|
| 2024 | 1.9 | 11.7 | 13.0 | 52.4 | 17.0 | 1.7 | 1.7 | 0 | 0.6 | 99.4% |
| 2023 | 0.4 | 20.9 | 24.4 | 38.7 | 11.8 | 0 | 3.8 | 0 | 0 | 100% |
| 2022 | 0.7 | 19.0 | 19.2 | 33.3 | 25.2 | 0.5 | 2.2 | 0 | 0 | 100% |
| 2021 | 2.4 | 21.1 | 43.4 | 15.4 | 16.5 | 0 | 0 | 0 | 1.2 | 98.8% |
| 2020 | 0 | 20.4 | 15.1 | 62.6 | 0.7 | 0 | 0.8 | 0.4 | 0 | 100% |
| Species Profile | 1.1 | 18.7 | 23.0 | 40.5 | 14.2 | 0.4 | 1.7 | 0.08 | 0.4 | 100% |

## Strategies & Implementation

Noble fir is not native to Canada. It is found at higher elevations in Washington, Oregon and California. It has been approved for planting in BC at higher elevations where research projects have indicated good performance and survival. The Forest Stewardship Plan includes stocking standards with Noble or Grand Fir for these sites.

Trees planted in the DFA are primarily native species planted within the approved seed transfer limits. Areas declared free growing on the DFA tend to have a percentage of naturally occurring seedlings, these natural volunteers ensure the continuation of the existing forest genetics.

## Forecasts

Assuming climate change does not trigger species extirpation, it is expected that native tree species will continue to be planted and natural regeneration of trees will continue to significantly augment planted areas at historical levels and contribute to genetic diversity. This target will be achieved as it relates to legal requirements (FRPA, the Chief Foresters Standards for Seed Use, and the Central Island Forest Stewardship Plan).

Also, there is no expectation of changes in regulation that would alter the current standard of reforestation with ecologically suited species and allow the introduction of exotic species.

## Details/ Data Set

The species planted are primarily Fd, Yc, Hw/Hm, and Cw with lesser amounts of Ba, Ss, DR, and Bp/Bg to promote diversity in the plantations. Species such as Sitka spruce and western white pine is reforested at a lower percent due to susceptibility to Sitka spruce weevil and white pine blister rust. Resistant seed for both species is planned to become available and may be planted at higher densities in the future. Red ader was planted in 2019 as a part of genetic gain research, and to meet market demands. Some red alder was planted once again in 2022 to fill plant in the blocks planted in 2019, which experienced alder mortality due to frost.

## Monitoring

The Field Planner or designate compiles the data from the CENFOR database and reports on the indicator performance in the annual SFM Report.

# Indicator 1.2.4: Management Practices for Habitat Features

| Element: 1.2 Species Diversity<br>*Conserve species diversity by ensuring that habitats and forest conditions for the native species found in the DFA are maintained through time, including habitats for known occurrences of species at risk.* | | | | |
|---|---|---|---|---|
| **Value** | **Objective** | **Indicator** | **Target** | **Variance** |
| Native Species Diversity | Diversity of habitats to sustain a natural diversity of native species is retained on the DFA. | Percent consistency with management practices to address special habitat features | Where worker safety is not compromised, all cutblocks harvested over any 5-year period are managed to address special habitat features identified. | None |

## History

This was indicator #10 in SFMP 10 and is not a core indicator under CSA Z809-16.

## Justification

Stand-level management of special habitat features contribute to the maintenance of biodiversity on the DFA. This indicator measures the level to which stand-level wildlife habitat management strategies are followed.

Habitat requirements of most species at risk have been researched enough to allow the development of protective management areas, these are known as habitat features and may include bird nests or bear dens. Once habitat features are identified, management strategies are defined in both site plans and harvest instructions. No variance is permitted.

## Current Status & Interpretation

In 2024 four blocks that required management for special habitat features were surveyed post harvest.

BC111, KC026, NS074, and TS016 had bear dens within the cutblock area. All of these dens were found during the pre-harvest phases of cutblock development and engineered out of the harvest area (retained in wildlife tree retention areas associated with the blocks). Road building and harvest activities took place outside of the denning window, or after dens had been assessed for residency and found empty.

Harvest instructions dictate that If any previously unidentified features were encountered during harvest, the crews were to stop immediately and inform a WFP supervisor for further instruction.

| Year | Cutblocks requiring Special Habitat Feature Management | Harvest Area Consistent[1](ha) | Total Harvest Area[2] (ha) | Percent Consistency (%) |
|---|---|---|---|---|
| 2024 | BC111, KC026, NS074, TS016 | 66.9 | 66.9 | 100 |
| 2023 | BC130, DA019, LG206, ME020, MU363, NA125, NS072 | 105.2 | 105.2 | 100 |
| 2022 | KC123, LG222, MU173, MU174, NA024, NE068, WS136 | 164.8 | 164.8 | 100 |
| 2021 | DA307, DA458, TS156A, TS242 | 80.8 | 80.8 | 100 |
| 2020 | MU163, NA400, TS127B | 99.2 | 99.2 | 100 |

***Indicator results for special habitat features***

1. *Harvest area of cutblocks that contain special habitat features and that are consistent with Site Plans, Harvest Instructions and Harvest Completion Plans. The harvest area consistent is the area that is derived from Cenfor reported Block Merchantable Area*
2. *Total harvest area of cutblocks that contain special habitat features.*

## Strategies & Implementation

Strategies to appropriately manage special habitat features are based on information already in place (e.g., National Recovery Teams of Environment Canada, Identified Wildlife Management Strategy) and on recent scientific literature. Appropriate management strategies are implemented in site level plans to ensure the development or maintenance of species' habitat.

Special habitat features are managed on a case-by-case basis as they are discovered. Bear dens, large stick nests, great blue heron colonies and active nests of other bird species are retained as they are located and where worker safety is not compromised. Additional habitat surrounding bear dens is prescribed on a site-specific basis.

## Forecasts

It is anticipated that the target will be met in the future.

## Details/ Data Set

This indicator is assessed based on WFP's forest operations being in conformance with internal plans (i.e. Site Plans and Harvesting Instructions) that are in place to address identified special habitat features:

The wildlife section in each Site Plan and Harvesting Instruction are reviewed for "Special Habitat Feature" prescriptions. The results of Post-Harvest Assessments are normally used to confirm that harvesting and road-building activities were conducted in accordance with the plans.

**Ultimately results are compiled as follows:**

| ***Calculation*** | **% HA $_{CONSISTENT}$ = HA $_{CONSISTENT}$ / HA $_{TOTAL}$** |
|---|---|
| ***Variables*** | % HA $_{CONSISTENT}$ Percentage of cutblock harvest area that is consistent with Site Plans and Harvesting Instructions for special habitat features, and based on a 5-year period.<br>HA $_{CONSISTENT}$ Harvest area of cutblocks that contain special habitat features and that are consistent with Site Plans and Harvesting Instructions over a 5-year period.<br>HA $_{TOTAL}$ Total harvest area of cutblocks that contain special habitat features, based on a 5-year period. |
| ***Notes*** | 1. *Cutblocks are included in calculation if a harvest completion date is recorded for MoF reporting purposes*<br>2. *5-year reporting period is the most recent 5 Calendar years (January – December)* |

For annual reporting purposes, it is recommended that cutblocks having special habitat features be mentioned in a text statement.

## Monitoring

Special habitat features are documented when located, and appropriate management strategies are developed within site-level plans. These results are summarized annually in the SFM annual report by the Area Planner.

# Element 1.3: Genetic Diversity

There are no core indicators in the CSA Z809-16 standard for genetic diversity.

# Indicator 1.3.1: Percentage of Trees Planted Annually That are GMOs

| Element: 1.3 Genetic Diversity<br>*Conserve genetic diversity by maintaining the variation of genes within species and ensuring that reforestation programs are free of genetically engineered trees.* | | | | |
|---|---|---|---|---|
| **Value** | **Objective** | **Indicator** | **Target** | **Variance** |
| Genetically engineered trees. | Genetically modified organisms are not introduced in the DFA | The percent of the trees planted annually that are genetically modified organisms. | The percent of the trees planted annually that are genetically modified organisms is 0%. | None |

## History

New Indicator in 2010 for the new concept of genetically modified organisms introduced in CSA Z809-08. There is not a requirement under the CSA Z809-16 Standard, however on November 23, 2017 it was decided by the NWAC to keep the indicator.

## Justification

The target aligns with the current legal status: no genetically modified organisms are currently planted within the Englewood Defined Forest Area.

## Current Status & Interpretation

| Year | Number of Genetically Modified Organisms Planted |
|---|---|
| 2024 | 0 |
| 2023 | 0 |
| 2022 | 0 |
| 2021 | 0 |
| 2020 | 0 |

In 2024, only seedlings from registered seedlots were planted on the DFA. No genetically modified organisms were planted. This target has been met.

## Strategies & Implementation

Reforestation only occurs through planting of seedlings from seedlots registered for use in British Columbia that comply with the Chief Forester's Standards for Seed Use. Alternatively, natural regeneration enhances reforestation efforts and maintains the original genetics of the forest area.

## Forecasts

Currently, there is no expectation that genetically modified organisms would be permitted for reforestation.

## Details/ Data Set

The seedlot number of all stock planted in the DFA is entered in silviculture records.

## Monitoring

Silviculture records, including seedlot, are maintained in the Cenfor database by the Silviculture Planner.

# Indicator 1.4.1: Protection of Identified Sacred and Culturally Important Sites

| Element: 1.4 Protected areas & sites of special biological & cultural significance<br>*Respect protected areas identified through government processes. Co-operate in broader landscape management related to protected areas and sites of special biological or cultural significance. Identify sites of special biological, geological, heritage, or cultural significance within the DFA, and implement management strategies appropriate to their long-term maintenance* | | | | |
|---|---|---|---|---|
| **Value** | **Objective** | **Indicator** | **Target** | **Variance** |
| Identified sacred and culturally important sites on the DFA | Provide protection for identified sacred and culturally important sites on the DFA | Protection of sites of special significance. | Target 1 – 100% of identified sacred and culturally important sites are protected or managed according to measures by WFP and First Nations. | None |
| | | | Target 2 – All cutblocks harvested over any 5-year period are consistent with management practices to address karst features. | ≥ 5% of the target. |

## Target 1: Identified Culturally Important Sites

### History

New CSA Core Indicator in 2010 under CSA Z809-16 (previously Indicator 1.4.2). Old indicators #35 & #47 were adjusted to align with this new Core Indicator.

### Justification

To meet the intention of this indicator, sites with sacred and cultural significance were chosen as targets. Culturally important sites are those sites that have been identified by First Nations (field survey or other) that require additional management.

### Current Status & Interpretation

In 2023 there were 7 harvest blocks with cultural features that were visited post-harvest in 2023 to confirm the cultural features were still intact.

Within the WFP Environmental Management System (EMS), a harvest completion plan site visit, typically completed by a planner is to be completed within 6 weeks of the final harvest

completion and no later than 6 months. WFP is committed to this process and has an incident tracking system to track all completed inspections and action items related to the inspections.

## Strategies & Implementation

The FSP contains commitments for post approval consultation on Cultural Heritage Resources, and the Heritage Conservation Act applies to operational activities. Additionally, a MFLNRO District letter on Cutting Permit consultation guides cutting permit applications.

As part of the Information Sharing process, all proposed cutblocks are shared with the appropriate First Nations group. Generally, responses are received and blocks that need to be walked to determine the presence of archeological or cultural features are identified. These identified proposed developments are assessed. Any features found may have a management strategy applied, these strategies are agreed upon by the appropriate First Nation group and WFP Planners.

## Forecasts

The target is anticipated to continue being met based on the importance of these sites. Given the importance of relationships with First Nation with EFO staff and the growing need to collaborate with First Nation groups, no change in company policy is anticipated.

Currently, management strategies are jointly developed through First Nation and EFO staff collaboration. WFP maintains open communication via face to face meetings, phone, letter, and email communications for a mutually agreeable management prescription.

## Details/ Data Set

| Year | Cutblocks Requiring Cultural Feature Management | Harvest Area Consistent[1] (ha) | Total Harvest Area[2] (ha) | Percent Consistent (%) |
|---|---|---|---|---|
| 2024 | CE041, ME202, MKE046, NE121, UN200<br>**DANYAS LP BLOCKS:** BC111, DA126, DA309A, LG059, NS049A, NS074, NS106WF | 198.7 | 198.7 | 100 |
| 2023 | BC207,DA004, KH504, LG206, WS138<br>**DANYAS LP BLOCKS:** BC217WF, NS017 | 110.7 | 110.7 | 100 |
| 2022 | BC205, LG301, LG303, NA027, NE123, TS250, WS254A<br>**DANYAS LP BLOCKS:** NA024 | 150.0 | 150.0 | 100 |
| 2021 | LG063, MQ357, NA020, NA227, WS017A | 53.1 | 53.1 | 100 |
| 2020 | ME007, WS134<br>**DANYAS LP BLOCKS:** BC070 | 81.4 | 81.4 | 100 |

## Monitoring

The monitoring process is through Cutblock Inspections and Harvest Completion Plans. The Area Planner is the reporting responsibility for this information. Non-conformances and non-compliances are to be communicated to WFP's Operations Forester, who would then take action(s) required to remedy the situations.

# Target 2: Karst

## History

Previously indicator 35 in SFM Plan 10, carried forward to SFMP 17-22.

## Justification

Karst resources were included as a target due to the importance of karst to local recreational caver's, spelunkers and scientists.

Karst values within forested landscapes is an important consideration when proposing harvesting and development projects. Under the Government Action Regulation, an order has been brought into force that now provides a legislated level of protection to karst features. The GAR order states the following are considered resource features:

- Karst caves,
- Significant surface karst features,
- Very high or high vulnerability karst terrain

Within the Defined Forest Area there are areas that are surveyed that have the above-mentioned features. Karst is considered a geological resource feature and site of special significance that exists within the defined forest area. There are active cavers, scientists and recreationists who frequent the karst features that exist within the Defined Forest Area.

This target monitors WFP's consistency with implementing prescriptions for karst features. A variance of greater or equal than 5% of the Total Area under Prescription is allowed for this target. The variance has been applied to allow for opportunity to complete Harvest Completion Plans that may have not been completed due to snow or inaccessibility.

## Current Status & Interpretation

The 2024 target was met for this indicator. Only one block with karst features was harvested. It was assessed post-harvest and found to have achieved the pre-harvest prescription for the associated karst features. Results are summarized in the table below.

The WFP Environmental Management System (EMS) requires a Harvest Completion Plan done ideally within 6 weeks of the "final" cutblock inspection but no longer than 6 months.

## Details/ Data Set

| Year | Cutblocks Requiring Special Areas Management | Total Harvest Area (ha)[2] | Percent Consistency (%) |
|---|---|---|---|
| 2024 | NS074 | 18.4 | 100 |
| 2023 | NA117, NS031A, NS072 | 55.6 | 100 |
| 2022 | AT106, AT221, AT290C, BC239WF, KH019, NA027, NE068, WS255 | 109.6 | 100 |
| 2021 | NA020 | 5.2 | 100 |
| 2020 | N/A | N/A | N/A |

*1. Harvest area of cutblocks that address karst features and that are consistent with Site Plans and Harvest Instructions.*

*2. Total harvest area of cutblocks that address karst features.*

## Strategies & Implementation

A karst inventory identifies the vulnerability potential as well as any known features and information is included as new karst features are discovered. WFP conducts a karst field assessment when a proposed cutblock or road is located within an area mapped as moderate or higher karst vulnerability potential. This assessment includes:

- Establishing the general bounds for the primary karst catchment associated within the proposed development activity;
- Conducting a ground search of appropriate intensity;
- Identifying and mapping the locations of cave entrances and significant surface karst features;
- Evaluating and classifying caves and other notable karst features; and
- Documenting the significant features that are found through measurement, narrative descriptions, illustrations and photography.

Measures are then recommended to mitigate impacts to the significant cave and karst features. The range of possible protective measures during road building and harvesting phases includes:

- Relocating roads and cutblock boundaries;
- Establishing reserves;
- Employing alternative harvest systems;
- Enhancing the supervision and monitoring of specific activities;
- Restricting road building or harvesting practices;
- Imposing weather or timing restrictions for specific activities; and
- Committing to manage for or rehabilitate impacted features.

A Timberlands Policy and Practices Standard on Karst Management was created in April 2015 to ensure appropriate karst management. It is a proprietary document for professionals and karst specialists overseeing or preparing Karst Field Assessments (KFA) and developing karst management prescriptions for WFP. The WFP Karst Management Guidelines accompanies this document and provides more detailed guidance on Karst Management based on the 2003 Provincial karst inventory and management procedures.

## Forecasts

Karst management is integral to the planning process and is now a legislated requirement. A change in government policy that would relax requirements is not anticipated. This target is expected to continue to be met based on past performance.

## Details/ Data Set

This indicator is assessed based on WFP's forest operations being in conformance with internal plans (i.e. Site Plans and Harvesting Instructions) that are in place to address karst features:

- Pertinent sections in each Site Plan and Harvesting Instruction are reviewed for references to the existence of karst features as well as associated prescriptions. Periodic monitoring and/or WFP's final inspection reports are used to confirm that harvesting and road building activities were conducted in accordance with the plans.

**Results are complied as follows:**

| ***Calculation*** | **% HA $_{CONSISTENT}$ = HA $_{CONSISTENT}$ / HA $_{TOTAL}$** |
|---|---|
| ***Variables*** | % HA $_{CONSISTENT}$ — Percentage of cutblock harvest area that is consistent with Site Plans and Harvesting Instructions that address karst features, and based on a 5-year period.<br>HA $_{CONSISTENT}$ — Harvest area of cutblocks that address karst features and that are consistent with Site Plans and Harvesting Instructions over a 5-year period.<br>HA $_{TOTAL}$ — Total harvest area of cutblocks that address karst features, based on a 5-year period. |
| ***Notes*** | 1. *Cutblocks are included in calculation if a harvest completion date is recorded for MOF reporting purposes*<br>2. *5-year reporting period is the most recent 5 Calendar years (January – December)* |

## Monitoring

The Area Planner will ensure that data is compiled, and performance reported, in the annual SFM Plan. Cultural/Archaeological Surveys are tracked in a database (Cengea) and considered when site plans and harvesting instructions are prepared. Cutblock Site Plans that contain cultural and karst features/prescriptions are reviewed annually alongside logging activities. Non-conformances and non-compliances are communicated to WFP's Operations Planning Foresters, who will take remedial action(s). The primary monitoring process will be through Cutblock Inspections and Harvest Completion Plans.

# Indicator 1.4.2: Protected Area Management

| Element: 1.4 Protected areas & sites of special biological & cultural significance<br>*Respect protected areas identified through government processes. Co-operate in broader landscape management related to protected areas and sites of special biological and cultural significance. Identify sites of special biological, geological, heritage, or cultural significance within the DFA, and implement management strategies appropriate to their long-term maintenance.* | | | | |
|---|---|---|---|---|
| **Value** | **Objective** | **Indicator** | **Target** | **Variance** |
| Protected areas identified on the DFA through government processes | Respect and maintain protected areas identified on the DFA through government processes. | Proportion of identified sites with implemented management strategies | 100% of identified sites have implemented management strategies reported annually. | None. |

## History

New Core Indicator in 2010. Core Indicator under CSA Z809-16. The Indicator number has been revised from 1.4.1 to 1.4.2 to match the update to the standard.

## Justification

The target aligns with the current legal status. Government processes normally results in government orders that give legal status to the new requirements.

## Current Status & Interpretation

This target has been met in that all sites identified for protection or management strategies have management strategies. Several Government processes, past and ongoing, have served to identify areas for protection or special management:

**The Protected Area Strategy (PAS):** In July 1993, the government of BC established the Protected Area Strategy (PAS) for British Columbia committed to expanding a protected area system that would protect 12% of the province by 2000. Recommendations began in January 1992 as part of the Commission on Resources and the Environment (CORE). The products of this process were submitted to Cabinet in February 1994, and the recommendations were embodied in the subsequent Vancouver Island Land Use Plan. Cabinet endorsed a final set of boundaries on April 15, 1995 which encompassed 78,342 ha of new protected areas. A second group was formed to identify “special feature” areas. Nominations were accepted from the public and First Nations stakeholder groups. The process resulted in an additional 11,770 ha of protected areas announced in February 1996. Currently, 13.1% of Vancouver Island, or about 439,000 ha has protected status distributed throughout Vancouver Island’s 10 eco-sections. The DFA contains 3 of the eco-sections

**The Old Growth Management Area (OGMA) process:** In 2000, in response to CORE, the Vancouver Island Land Use Plan was completed and included the identification of Resource Management Zones with specific Old Growth retention requirements. An ongoing Land Use Planning process involving Western and the Ministry of Environment is being used to spatially locate Old Growth Management Areas (OGMA) to be retained. All OGMA’s are legally established.

**The Ungulate Winter Range (UWR) process:** In August of 2003, a Memorandum of Understanding (MOU) on the Establishment of Ungulate Winter Ranges and Related Objectives was developed between MWLAP, the Ministry of Forests (MOF) and the Ministry of Sustainable Resource Management (MSRM). The purpose of the Memorandum of Understanding (MOU) is to expedite and facilitate the orderly confirmation and establishment of ungulate winter ranges (UWR) and related objectives across the province, in order to support the Forest Practices Code and the new *Forest and Range Practices Act* (FRPA). The MOU clarifies general ministry roles and responsibilities and outlines procedures and considerations to facilitate timely delivery of this initiative. It replaces previous agreements concerning coordination, administrative processes, and consultation requirements. The MOU identifies 3 types of UWR and objectives. The intent is to facilitate, through due process, the cooperative development of objectives to support the FRPA while at the same time maintaining the foundation of stakeholder support, where UWR and objectives have been established through Cabinet-approved strategic land use planning processes

**The Designated Wildlife Habitat Areas (WHA) process:** The Government's Identified Wildlife Management Strategy (IWMS) Version 2004 was released in May 2004 and replaces IWMS Volume 1, released in 1999. IWMS Version 2004 contains an updated list of identified wildlife, updated species accounts and updated procedures for implementing the IWMS. The IWMS provides direction, policy, procedures and guidelines for managing Identified Wildlife. The goals of the Strategy are to minimize the effects of forest and range practices on Identified Wildlife situated on Crown land and to maintain their limiting habitats throughout their current ranges and, where appropriate, their historic ranges. Identified Wildlife are managed through the establishment of wildlife habitat areas (WHAs) and the implementation of general wildlife measures (GWMs) and wildlife habitat area objectives, or through other management practices specified in strategic or landscape level plans.

## Strategies & Implementation

Western Forest Products follows government process.

## Forecasts

The target is typically met given that the establishment of protected areas is the result of government policies and processes and no change in policy is anticipated.

## Details/ Data Set

The data has stayed consistent since 2014. In 2017 Little Huson Cave Regional Park was added based on a spatial update received from the Regional District of Mount Waddington.

| Processes | Area Name / Landscape Unit<br><br>2020-2024 | Strategy / Status |
|---|---|---|
| Protected Area Strategy | Claude Elliot Creek Ecological Reserve (233 ha)<br>Claude Elliot Lake Provincial Park (328 ha)<br>Lower Nimpkish Provincial Park (238 ha)<br>Mount Elliot Ecological Reserve (330 ha)<br>Nimpkish Lake Provincial Park (3,923 ha)<br>Nimpkish River Ecological Reserve (19 ha)<br>Schoen Lake Provincial Park (8,780 ha)<br>Woss Lake Provincial Park (6,527 ha)<br>Little Huson Cave Regional Park (4.9 ha) | 100% protected |
| **Total Area** | 20,887 ha | 100% protected |

| Processes | Area Name / Landscape Unit 2020 | Area Name / Landscape Unit 2021 | Area Name / Landscape Unit 2022 | Area Name / Landscape Unit 2023 | Area Name / Landscape Unit 2024 | Strategy / Status |
|---|---|---|---|---|---|---|
| Old Growth Management Areas (by LU) | LN-6779<br>UN-9744/8446 ha | LN-6779<br>UN-9744/8446 ha | LN-6779<br>UN-9744/8446 ha | LN-6779<br>UN-9744/8446 ha | | 100% Managed |
| **Total Area** | 16,524/15,226 ha | 16,524/15,226 ha | 16,524/15,226 ha | 16,524/15,226 ha | | 100% Managed |
| Ungulate Winter Ranges (by Order #) | 5965 ha | 5965 ha | 5965 ha | 5965 ha | | 100% protected |
| Designated Wildlife Habitat Areas | Northern Goshawk (2595ha)<br>Marbled Murrelet (1112ha)<br>Keen's Myotis Bat (174ha)<br>Red Legged Frog(15.9ha) | Northern Goshawk (2595ha)<br>Marbled Murrelet (1112ha)<br>Keen's Myotis Bat (174ha)<br>Red Legged Frog(15.9ha) | Northern Goshawk (2595ha)<br>Marbled Murrelet (1112ha)<br>Keen's Myotis Bat (174ha)<br>Red Legged Frog(15.9ha) | Northern Goshawk (2595ha)<br>Marbled Murrelet (1112ha)<br>Keen's Myotis Bat (174ha)<br>Red Legged Frog(15.9ha) | | 100% protected |
| **Total Area** | 3,896.9 ha | 3,896.9 ha | 3,896.9 ha | 3,896.9 ha | | 100% protected |

# Indicator 2.1.1: Reforestation Success

| Element: 2.1 Forest ecosystem resilience<br>*Conserve forest ecosystem productivity and productive capacity by maintaining ecosystem conditions that are capable of supporting naturally occurring species. Reforest promptly and use tree species ecologically suited to the site.* | | | | |
|---|---|---|---|---|
| **Value** | **Objective** | **Indicator** | **Target** | **Variance** |
| Resilient forest ecosystems | Maintain ecosystem processes and ecosystem conditions | Reforestation Success | The area of forest land missing its Free Growing milestone obligation is 0 ha annually | None |

## History

New CSA Core Indicator in 2010 under CSA Z809-16. It incorporates part of old indicator #14. No changes in CSA Z809-16.

## Justification

This indicator provides a measure of success for ensuring that forests are promptly regenerated, enhancing ecosystem recovery, accelerating forest growth, and to maximize carbon sequestration. Following harvesting, WFP is responsible to ensure that stands of trees are promptly re-established with appropriate species selection based on silvicultural characteristics and forest health considerations. The net area to reforest (NAR) describes the amount of area that WFP is committed to reforest following harvesting activities.

Free-growing stands, as defined in the Forest Practices Code of British Columbia Act and the Forest and Range Practices Act, are stands of healthy trees of a commercially valuable species, meeting stocking standards, the growth of which is not impeded by competition from plants, shrubs or other trees.

## Current Status & Interpretation

| Year | FG Area Expiring (ha) | FG Commitments met (ha) | Area not meeting FG Commitment (ha) | Variance from Target (ha) |
|---|---|---|---|---|
| 2024 | 412.8 | 412.8 | 0 | 0 |
| 2023 | 564.0 | 564.0 | 0 | 0 |
| 2022 | 607.3 | 607.3 | 0 | 0 |
| 2021 | 458.2 | 458.2 | 0 | 0 |
| 2020 | 337.1 | 337.1 | 0 | 0 |

This target has been met. All expiring blocks have met the free growing target in 2024.

## Strategies & Implementation

The deadline for a block to reach Free-growing standards is based on the harvest start date. Planting site-appropriate species, managing vegetation through a brushing program, and using silviculture surveys to determine re-stocking needs ensures that all sites at Englewood meet Free-growing standards on time.

WFP Englewood plants every cutblock due to area-specific challenges that require the consistency of planted densities in order to reduce re-entry into block and more costly future treatments of the site. This practice upholds the reforestation agreement made with the 'Namgis band and ensures provincial Free-growing standards are met with efficiency.

## Forecasts

Current silviculture practices and planning ensures that this indicator will continue to be met.

## Details/ Data Set

For FPC cutblocks: This indicator is determined by subtracting the total area meeting FG commitments (on a SU basis) in the reporting year from the total FG area expiring (on a SU basis) during the reporting year. If an amendment has been prepared, the SU can be tallied as meeting requirements. If the Ministry of Forests Lands and Natural Resource Operations determines that an amendment did not constitute having met FPC requirements to establish a free growing stand within the Free Growing Assessment Period (FGAP), the area failing to meet commitments will be reported in the year this becomes known.

- For FSP cutblocks, or FPC cutblocks approved to be brought under FRPA FSP standards, the late free growing date is 20 years.
- FG Area Expiring – a summary of SU area, including all SUs expiring in the reporting year.
- Area meeting FG commitments – a summary of cutblock area, including all blocks whose FG commitments have been completed (all SU's have achieved FG status).

- Data will be tracked via Silviculture Prescriptions or Site Plans within the CENFOR systems. Data will be tracked and compiled at the operation level. Annual summaries will be forwarded to the Annual Report coordinator for reporting purposes.

## Monitoring

This Indicator is monitored through Free to Grow surveys, and Regeneration Performance Assessments. This results and dates of the activities are entered in the CENFOR Database by the Timberlands Operations. The Area Planner will ensure that data is compiled, and performance reported, in the annual SFM Report.

# Indicator 2.1.2: Regeneration of Native Species

This indicator is a duplication of core indicator 1.2.3 (refer to Indicator 1.2.3 for details).

# Indicator 2.1.3: Permanent Access Structures (PAS)

| Element: 2.1 Forest ecosystem productivity<br>*Conserve forest ecosystem productivity and productive capacity by maintaining ecosystem conditions that are capable of supporting naturally occurring species. Reforest promptly and use tree species ecologically suited to the site.* | | | | |
|---|---|---|---|---|
| **Value** | **Objective** | **Indicator** | **Target** | **Variance** |
| Productive Forest Ecosystems | Maintain the productivity of forest ecosystems | Additions and deletions to the forest area | Average percent of annual harvested area converted to permanent access structure should not exceed 7% | +2% of the target. |

## History

This indicator was developed in 2004 and is a Core Indicator. It was previously Indicator #21 in the Z809-02 SFMP. Indicator moved from Element 2.2 to 2.1 under CSA Z809-16 (previously Indicator 2.2.1). It is a core indicator under CSA Z809-16.

## Justification

This indicator is a measure of the area converted to permanent road development from the productive forest land base. The 7% target is consistent with the *Forest and Range Practices Act* (FRPA) and WFP's Forest Stewardship Plan (FSP) for the North Vancouver Island Region (NVIR). The variance is to account for those few instances where the limits are exceeded when no practical alternative exists which is permissible under that Act.

## Current Status & Interpretation

Post-Harvest site degradation surveys were conducted on 5 cutblocks in 2023, 3 WFP blocks, 1 Lemare block, and 1 Holbrook Dyson block. Target was once again within the allowable range. The percent of the TAUP converted to unproductive sites for road development in 2024 is 6.66%, summarized in the table below.

***Indicator results for road development***

| Year | Area in Permanent Access (ha) | TAUP (ha) | % Permanent Access | Variance from Target |
|---|---|---|---|---|
| 2024 | 8.13 | 122.0 | 6.66 | **-0.34** |
| 2023 | 6.89 | 119.9 | 5.75 | **-1.65** |
| 2022 | 5.08 | 82.5 | 6.16 | **-1.24** |
| 2021 | 3.6 | 57.7 | 6.24 | **-0.76** |
| 2020 | 4.7 | 76.5 | 6.14 | **-0.98** |

## Strategies & Implementation

Planners consider road development targets as they prescribe appropriate harvest systems for each cutblock.

Site degradation surveys are completed annually to ensure actual area meets the planned development targets. Surveyed blocks are chosen to accurately represent all terrain, harvest type (heli, ground based), and company/contractors involved in harvest.

## Forecasts

The Forest Planning and Practices Regulation does allow permanent access structures to exceed 7% of the total cutblock area if there is no other option having regard to size, topography, and engineering constraints. It is anticipated that the average permanent access structure will range between 5-7% in future years.

## Details/ Data Set

The percent of the cutblocks area converted to unproductive permanent access structures (PAS) is calculated as follows:

| ***Calculation*** | **% PAS = HA ROAD / HA TAUP** |
|---|---|
| ***Variables*** | % PAS Percentage of the cutblocks TAUP1 area that is converted to permanent access structures (i.e. permanent roads) and based on cutblocks that have had post-harvest road measurement surveys conducted within each calendar year.<br>HA ROAD Sum of permanent road area for every cutblock that has had a post-harvest road measurement survey conducted for a given calendar year.<br>HA TAUP Sum of TAUP area for every cutblock that has had a post-harvest road measurement survey conducted for a given calendar year. |
| ***Notes*** | *1. TAUP is an acronym for Total Area Under Prescription and includes: net area to be reforested, road area, reserves etc.* |

## Monitoring

The Area Planner will ensure that data is compiled from CENFOR and site degradation surveys and performance is reported in the SFM Plan Annual Report.

# Indicator 2.1.3a: Forest Fire Reduction and Control

| Element: 2.1 Forest ecosystem condition and productivity<br>*Conserve forest ecosystem productivity and productive capacity by maintaining ecosystem conditions that are capable of supporting naturally occurring species. Reforest promptly and use tree species ecologically suited to the site.* | | | | |
|---|---|---|---|---|
| **Value** | **Objective** | **Indicator** | **Target** | **Variance** |
| Conservation of forest ecosystem productive capacity | Minimize the impact of uncontrolled fire on forest resources | Percent consistency of time required to control a forest fire | Zero operationally caused fires annually | Operationally caused fire ≥0.1 ha that is controlled within 24 hours of the fire being reported. |

## History

Existing indicator # 20 in the Z809-02 SFMP, this indicator has been revised several times since 2004. Not a Core Indicator in the CSA Z908-16 Standard the previous number was 2.1.2. It has been renumbered to 2.1.3a.

## Justification

Forest productivity is dependant on the conservation of an intact forest, protected from operational and naturally ignited fires. For this indicator, operationally caused fires are those that are initiated by forest management activities. Resource management related fires (e.g., Slash burning) are covered by a Resource Management Burn Plan, such fires are not considered operational fires unless they escape beyond the cut block boundaries into standing timber or reforested areas.

Effective fire control measures ensure that site productivity and forest values are maintained. WFP investigates all operationally caused forest fires. The variance is to allow for very small operational fires that are detected and extinguished before any damage occurs.

## Current Status & Interpretation

| Year | Area of Operationally Caused Fires (ha) | Area of Lightning Caused Fires (ha) | Area of Fires With Other Causes (ha) | Total (ha) |
|---|---|---|---|---|
| 2024 | ~0 | 0 | 0 | ~0 |
| 2023 | 0 | 30.0 | 7.9 | 37.9 |
| 2022 | <0.1 | 20.58 | 0 | 20.59 |
| 2021 | 0.1 | 0 | 0 | 0.1 |
| 2020 | 0 | 0 | 0 | 0 |

This target was met. In 2024, there was one operational caused fire, that burned only within the stump of one tree. The fire started within the stump of a cypress when the tree was being hand-felled and was extinguished before the fire was able to spread beyond the single tree (roughly 1m by 1m area).

No other fires occurred in 2024.

## Strategies & Implementation

The target set for the Englewood Forest Operation is to have zero fires caused by forest operations. The variance was created to allow for unforeseen circumstances that may occur considering the vast variation of fire weather indices throughout the seasons. The variance allows 24 hours for control of the fire after reporting.

The Englewood Forest Operation works diligently in creating a proactive fire response within the fire season, with all employees undergoing wildfire fighting training (S100) annually.

## Forecasts

The optimistic forecast is for zero operationally caused fires greater than 0.1 hectares as the Englewood Forest Operation has proactive fire / operational management with regards to forest protection within the DFA. This target can be met through conservative operational judgement and through diligent tracking of fire weather indices through the fire season.

WFP Englewood is committed to ensuring fire preparedness throughout the DFA by ensuring crew training (SP100), awareness of fire weather indices, availability of appropriate equipment to crews (fire tools, location of fire trucks, water sources etc.).

## Details/ Data Set

For the purpose of this indicator, fires are classified by ignition source. Ignition sources include operational, lightning, and other (including recreation and unknown sources), all are to be reported in the Annual Report. Details regarding the size and type of fires are to be included in the Annual Report results. Operationally caused fires <0.1 ha in size will not be counted towards the variance but will be included in the annual report of total hectares burned by type.

## Monitoring

The Area Planner will ensure that data is compiled from the CENFOR database (Environmental Management System- Incident Tracking System and Fire Event Report Forms), and performance reported, in the annual SFM Report.

# Indicator 2.1.4: Proportion of the LTHL That is Actually Harvested

| Element: 2.1 Forest Ecosystem Condition and Productivity<br>*Conserve forest ecosystem productivity and productive capacity by maintaining ecosystem conditions that are capable of supporting naturally occurring species. Reforest promptly and use tree species ecologically suited to the site.* | | | | |
|---|---|---|---|---|
| **Value** | **Objective** | **Indicator** | **Target** | **Variance** |
| The harvest level on the DFA | The harvest level of the DFA is sustainably regulated | Proportion of the calculated long-term sustainable harvest level that is actually harvested | 1) The volume harvested does not exceed the total Annual Allowable Cut authorized for the 5-year cut control period.<br>2) Report out of results of waste and residue surveys by old growth/ second growth billable sawlogs and billable pulp logs | Target 1)<br>+10% to the target.<br>Target 2)<br>No variance report out. |

## Target 1: Volume harvested does not exceed authorized Annual Allowable Cut (AAC)

### History

This indicator was developed in 2004 and is a Core Indicator. It was previously Indicator #32 in the Z809-02 SFMP. Target 2 was added in 2013 originating from a Public Advisory Group request for information. Core Indicator under CSA Z809-16. Indicator number is revised from 2.2.2 to 2.1.4.

### Justification

A sustainable supply of timber must balance the overall rate at which the forest is harvested with the rate at which it can regenerate. Every five years the provincial Chief Forester considers an array of timber and non-timber objectives in the determination of the AAC for TFL 37. Ensuring that the rate of harvest over the five-year period does not exceed the AAC limits indicates that the harvest levels are within the long-term productive capacity of the landbase. A variance of +10% of the AAC for the cut control period is allowed and matches the limit permitted under the Forest Act.

## Current Status & Interpretation

This target is met. The volume harvested in 2024 did not exceed the total for the cut control period; the current Cut Control period spans from 2023-2028. In 2024, Englewood Forest Operations harvested 72% of its Annual Allowable Cut.

***Indicator results* for harvesting the AAC**

| Year | Harvested Timber - Billed ($m^3$) | Harvested Timber - Unbilled ($m^3$) | Submitted Waste ($m^3$) | AAC ($m^3$/yr) | Current Average % Performance |
|---|---|---|---|---|---|
| 2024 | 537,692 | 31,809 | 10,016 | 801,438 | |
| 2023 | 321,738 | 34,069 | 22,337 | 801,348 | |
| 2022 | 349,729 | 5,748 | 45,561 | 801,348 | **72%** |
| 2021 | 455,715 | 5,459 | 94,129 | 801,348 | |
| 2020 | 404,128 | 2,720 | 40,799 | 801,348 | |

*5-year cut control period effective January 1, 2023 through 2028.*

*1. Does not include First Nations Volume through joint venture or BCTS AAC*

*2. Volume Harvested includes waste and residue.*

## Strategies & Implementation

WFP harvests timber according to the TFL agreement and the AAC determined by the provincial Chief Forester. The actual annual harvest is also influenced by, among other factors, legislated penalties that regulate the 5-year cut control period. The *Forest Act* stipulates that the actual harvest level must not exceed 110% of the allowable annual cut.

Harvest levels are regulated by the Forest Act (Part 4 Division 3.1) and the Cut Control Regulation and Policy, which is adhered to by the tenure holder. Achievement of this target will be realized through meeting the requirements set out in legislation. Specifically, the license holder must not exceed the sum of the Annual Allowable Cuts in the Cut Control Period (5years) by 110%. Any excess volume of timber (overcut) must be treated as being harvested during the next cut control period and counts toward that period's cut control. There is no minimum volume of timber that must be harvested in any period; however, any timber volume that is not harvested from the allowable cut in the cut control period (undercut) may be reallocated to another party (BC Timber Sales). Corporately, with regards to social and economic return, harvesting the full AAC maximizes the potential of the THLB while mitigating long term fiber procurement impact in the case of an undercut situation and potential AAC reallocation.

Within WFP the Management Plan sets the harvest profile and reflects current management under the Forest Stewardship Plan consistent with the Forest Range and Practices Act. The harvest strategy within WFP is to optimize the landbase for long term value.

The WFP Strategic Planning approach is the following:

1. To understand the forest inventory- through use of LIDAR and computer modelling;
2. Harvest at a Sustainable Level- goal to have even distribution across the age classes and manage to an optimal rotation;
3. Optimize the Strategic Plan and Long Term Value;
4. Ensure there is mill capitalization- investment in WFP's mills to ensure that upgrades and efficiencies are realized;
5. Tactically schedule- align mills with long term optimized plan; and coordinate
6. Operations in the alignment of operational and strategic plans

WFP is working to harvest the profile sustainably (ensuring the entire profile is harvested) to ensure that it survives through the market cycle. It is also making significant investments in its six manufacturing facilities. The Operations are becoming more aligned with the mills and timber (logs) are being directed to their best use.

## Forecasts

The current Cut Control period spans from 2023-2028. The operation is making best efforts to increase harvest levels within 100% of its Annual Allowable Cut.

In accordance with the TFL agreement, WFP prepares a timber supply analysis every five years that presents a series of short- and long-term timber supply forecasts. This typically involves a detailed review of the existing inventories, operability, growth and yield and forest cover constraints. Sensitivity analyses are done to further explore uncertainties regarding the applied assumptions and to understand their potential impacts.

How the economic cycle for the forest industry overlaps with the cut control period is a major factor influencing performance in regards to this target. Although it is not possible to forecast the actual results for this target, it is expected that the Western's policy will remain to harvest 100% of its AAC within each cut control period. Of note, the Ministry of Forests, Lands and Natural Resource

Operations (MFLNRO) has further maintained a policy to allocate undercut volumes to First Nations or make it available through Timber Sales which also provide for economic activity.

## Details/ Data Set

The indicator and target are based on WFP's portion of the AAC determined for TFL 37. Total volume harvested relative to the AAC is determined through an annual summary of WFP's scaling records and/or the Ministry's Harvest Billing System, as follows:

| | |
|---|---|
| ***Calculation*** | **% PERFORM $_{HARVEST}$ = VOL $_{HARVEST}$ / VOL $_{AAC}$** |
| ***Variables*** | % PERFORM $_{HARVEST}$ — Percentage of total volume of timber harvested relative to the AAC authorized over the cut control period.<br>VOL $_{HARVEST}$ — Total volume of timber harvested[1] over the cut control period.<br>VOL $_{AAC}$ — Total AAC authorized over the cut control period. |
| ***Notes*** | *1.* |

## Monitoring

Both WFP and the MFLNRO track timber volumes as it is scaled. These scaled volumes are used to generate stumpage billings and to monitor WFP's consistency with its allocated cut. The Strategic Analysis Forester provides data to the Timberlands Area Planner to ensure that performance with cut control is reported in the annual SFM report.

# Target 2: Report out on Waste

## History

This indicator was developed in 2004 and is a Core Indicator. It was previously Indicator #32 in the Z809-02 SFMP. Target 2 was added in 2013 originating from a Public Advisory Group request for information. Core Indicator under CSA Z809-16. Indicator number is revised from 2.2.2 to 2.1.4.

## Justification

Optimizing waste and residue allows for maximum utilization of harvested resource, maximum planting spots for reforestation, and the ecological benefits of decaying woody debris. Waste and residue reporting monitors utilization. There is no variance for this target as it is in the initial reporting years, once monitoring and evaluation can be achieved a variance may be considered.

## Current Status & Interpretation

Billed waste and residue totals are reported out by second and old growth. Reports are generated through waste and residue surveys and do not include residual standing timber.

Information reflects all harvest methods both conventional (cable and ground based) and heli-logging.

The following table illustrates the billable waste and residue for the 2020-2024.

| Year | Billable 2nd Growth (Sawlog) Volume ($m^3$) | Percent of Volume Harvested | Billable OG Volume Sawlog ($m^3$) | Percent of Volume Harvested | Billable Utility (Pulp Logs) ($m^3$) | Percent of AAC | Total Volume Harvested WFP ($m^3$) |
|---|---|---|---|---|---|---|---|
| **5 Year Rolling Average (2020-2024)** | **5,010** | **1.2** | **15,869** | **3.4** | **2,926** | **0.5** | **443,520** |
| 2024 | 4,237 | 0.7 | 4,292 | 0.7 | 944 | 0.1 | 579,517 |
| 2023 | 3,187 | 0.8 | 2,248 | 0.6 | 1,016 | 0.3 | 378,144 |
| 2022 | 8,943 | 2.5 | 7,781 | 2.2 | 808 | 0.1 | 349,729 |
| 2021 | 5,790 | 1.2 | 22,057 | 4.8 | 6,174 | 0.8 | 462,565 |
| 2020 | 2,893 | 0.6 | 42,969 | 9.6 | 5,689 | 1.3 | 447,647 |

This target is met as it is a report out of volume.

## Strategies & Implementation

WFP harvests timber according to the TFL agreement and the AAC determined by the provincial Chief Forester. The actual annual harvest is also influenced by, among other factors, legislated penalties that regulate the 5-year cut control period.

Harvest levels are regulated by the Forest Act (Part 4 Division 3.1) and the Cut Control Regulation and Policy, which is adhered to by the tenure holder.

Within WFP the Management Plan sets the harvest profile and reflects current management under the Forest Stewardship Plan consistent with the Forest Range and Practices Act. WFP is working to harvest the profile sustainably (ensuring the entire profile is harvested) to ensure that it survives through the market cycle. It is also making significant investments in its six manufacturing facilities. The Operations are becoming more aligned with the mills and timber (logs) is being directed to their best use.

This target monitoring waste and residue is designed to build awareness of the percent of waste and residue relative to the actual harvested Annual Allowable Cut.

## Forecasts

The current Cut Control period spans from 2023-2027. The operation is making best efforts to increase harvest levels within 100% of its Annual Allowable Cut. WFP has a continued commitment to minimize waste through quality control and small wood utilization/pulp programs to continue to maximize the return on the forest resource.

## Details/ Data Set

The indicator and target are based on WFP's portion of the AAC determined for TFL 37. Total volume harvested relative to the AAC is determined through an annual summary of WFP's scaling records and/or the Ministry's Harvest Billing System, as follows:

| ***Calculation*** | **% PERFORM $_{HARVEST}$ = VOL $_{HARVEST}$ / VOL $_{AAC}$** |
|---|---|
| ***Variables*** | % PERFORM $_{HARVEST}$ — Percentage of total volume of timber harvested relative to the AAC authorized over the cut control period.<br>VOL $_{HARVEST}$ — Total volume of timber harvested[1] over the cut control period.<br>VOL $_{AAC}$ — Total AAC authorized over the cut control period. |
| ***Notes*** | *2.* |

Waste and residue volume is monitored through waste and residue surveys and is compiled and is reported out by the Strategic Analysis Forester.

## Monitoring

Both WFP and the MFLNRO track timber volumes as it is scaled. These scaled volumes are used to generate stumpage billings and to monitor WFP's consistency with its allocated cut. The information specific to waste and residue is collected through waste and residue surveys and Harvest Billing Systems. It is compiled and reported out by the Strategic Analysis Forester upon request.

# Indicator 3.1.1: Level of Soil Disturbance

| Element: 3.1 Soil Quality and Quantity<br>*Conserve soil resources by maintaining soil quality and quantity* | | | | |
|---|---|---|---|---|
| **Value** | **Objective** | **Indicator** | **Target** | **Variance** |
| Conservation of soil resources | Maintain the productive capacity of forest soils | Level of soil disturbance | Target 1 – The area converted to NP because of landslides induced by forest development activities is 0 ha over any 5 year period.<br><br>Target 2 - All cutblocks harvested over any 5 year period are consistent with management practices to address soil disturbance (monitored through post harvest assessments) | +10 hectares to the target.<br><br>5% of the target |

## Target 1: Landslide NP

### History

Core Indicator that was previously Indicator #24 in the Z809-02 SFMP. Core Indicator under CSA Z809-16 indicator number did not change.

### Justification

Target 1 was created to monitor and mitigate the effect of forest management activities on soil disturbance in the DFA, specifically landslides.

Landslides and other surficial geological soil disturbances occur naturally on the Nimpkish DFA. Tree roots and canopy cover are crucial factors in the stability of steep forested slopes. The risk of landslides increases within 2 years of harvesting, with a maximum loss in root strength in the 4-7 year range before the root strength in the soil and canopy closure start to recover with regeneration.

Accelerated rate of landslides caused by forest development activities can have long-term negative effects of the productive forest landbase. Significant soil erosion from these slide events can also have negative impacts on water quality.

A terrain stability assessment and soil hazard report are mandatory for any cutblocks being harvested by WFP. During these assessments values of concern, potential for landslide occurrence, and sediment delivery potential are evaluated, if the site is determined to be at risk, a registered professional geoscientist will be contracted to create a Terrain Stability Assessment with special recommendations to mitigate slope instability.

## Current Status & Interpretation

In 2024 this target was met with a variance. A total of 2.5 ha of non-productive area has resulted from landslides over the past 5 years, thereby meeting the acceptable target variance for this indicator. Four landslides occurred in the DFA in 2024, and none took place in an active cutblock.

***Indicator results for landslides***

| Year | Cutblocks with Landslides Induced by Forest Development | Non Productive Area Resulting From Landslides (ha) | Total Non-Productive Area for the 5-Year Period (2020-2024) |
|---|---|---|---|
| 2024 | GC022, LG212, ME230, WS140 | 1.7 | 2.5 ha |
| 2023 | NW422 | 0.15 | |
| 2022 | LG129 | 0.08 | |
| 2021 | WP115 | 0.15 | |
| 2020 | CE048,LG130A, NA400, NE048, Back Road, 9.5 Mile RR | 0.4 | |

*Landslides are considered induced by forest development activities if they originated from a road cut/fillslope failure, or any other obvious source that could be attributed to forest development activities.*

## Strategies & Implementation

Terrain assessments are conducted on cutblocks and roads that contain potentially unstable terrain. Recommendations within terrain assessments are based on risk analysis and are incorporated into Road and Harvesting Instructions. All WFP employees are trained in general operating guidelines identified within the Environmental Management System (EMS), with the goal of preventing the incidence of landslides due to poor forestry practices.

## Forecasts

With the implementation of the Terrain Risk Management Strategy and the continued use of terrain specialists it is expected the frequency of landslides will be reduced over time. However, reliable forecast of results for this indicator is not possible given the inherent uncertainty related to the typical root causes: meteorological and geological processes.

## Details/ Data Set

This indicator is assessed through a review of WFP's internal Landslide Reports (an environmental incident within WFP's EMS) completed for all observed landslides. The Landslide Description section in the report describes the size, dimensions, and amount of productive and/or non-productive area remaining. These reports also specify the slides point of origin. Landslides are considered induced by forest development activities if they originated from a road cut/fillslope failure, or any other obvious source that could be attributed to forest

development activities.

## Monitoring

Area Planner is to ensure that data is compiled from Slide reports and the CENFOR database (ITS/EMS), and performance reported, per the indicator in the SFM Plan.

# Target 2: Soil Disturbance

## History

Previously Indicator #25 in the Z809-02 SFMP.

## Justification

Conservation of soils sustains the long-term productivity of the ecosystem. The target and variance are based on legal requirements established in FRPA for protection of the environment (FRPA s46) and objectives/ practice requirements under the Forest Planning and Practices Regulation for soils (sensitive soils 5%, non-sensitive soils have a limit of 10% soil disturbance and roadside areas have a limit of 25%). The EMS and SOPs are designed to ensure that operations are completed consistent with the approved plans.

## Current Status & Interpretation

The 2024 target has been met as soil disturbance in cutblocks with a completed post harvest assessment matched the soil disturbance prescriptions.

According to WFP's Environmental Management System (EMS), Harvest Completion Plans are ideally to be completed within 6 weeks of the "final" block inspection but no longer than 6 months.

| Year | Cutblocks Consistent with Soil Disturbance Prescriptions for Management of Soil Disturbance | Harvest Area Consistent[1] (ha) | Total Harvest Area[2] (ha) | Percent Consistent (%) |
|---|---|---|---|---|
| 2024 | BC111, CE014L, CE041, DA006, DA126, DA309A, KC026, KC163, KH549, KX091, LG059, LG129, ME202, ME219, MKE046, MU313, MU315, MU317, NE121, NS049A, NS074, NS106WF, NS125, NW422, TS016, UN099, UN200, WS121A, WS271 | 503.9 | 503.9 | **100%** |
| 2023 | BC017, BC130, BC207, BC217WF, CE005L, CE049, CE059, DA004, DA019, KH504, LG206, LG321, ME020, ME233, MU363, NA117, NA125, NS017, NS031A, NS072, NW585, TS249, WS138 (23 Blocks) | 226.6 | 226.6 | **100%** |
| 2022 | AT106, AT215A, AT221, AT290C, AT306C, BC205, BC236, BC239WF, CA006L, CE050, KC123, KH019, KH434, LG222, LG301, LG303, ME017A, MU173, MU174, NA024, NA122, NE068, NE123, NS117, TS023, TS250, UN555, WK033L, WS136, WS254A, WS255 (32 Blocks) | 517.2 | 517.2 | **100%** |
| 2021 | BC128, BC129, CE055, DA109, DA115A, DA115B, DA117, DA243, DA307, DA458, KH433, LG063, LG107, LG131, ME025, ME041, MQ357, MQ426, MU196, NA020, NA131, NA227, NE267, TS035A, TS035B, TS037, TS120, TS156A, TS240, TS242, TS551, WP098, WS017A (33 Blocks) | 530.2 | 530.2 | **100%** |
| 2020 | BC070, CE006, CE029, CE033, DA111, DA411, DA447, KC191, KH583, ME007, MQ056, MQ355, MQ359, MQ360, MU163, MU194, NA400, TS117, WS111, WS134 | 397.8 | 397.8 | **100%** |

*1 - If no formal soil disturbance management practices are required then the cutblock is considered consistent.*

*2 Total harvest area based on the cutblock harvesting completion date reported to the MoF for a given year.*

## Strategies & Implementation

Ecologically and economically appropriate harvest systems are prescribed at the site level to ensure soil disturbance objectives are met. Timing forest operations seasonally also helps minimize site disturbance. If site disturbance objectives of the SP are exceeded, corrective actions are taken as required.

This indicator measures the amount of soil disturbance that exceeds planned levels through post-harvest assessments that are completed for each harvested cutblock. Higher disturbance levels both reduce the productive area and increase the risk of environmental impact, particularly sedimentation of streams.

The strategy is to not exceed the soil disturbance limits specified in the Site Level plans and may include:

- Identify sensitive soils in the planning stages through field work (limits are recorded in Site Plans)
- Assign the appropriate harvest method (ground based, cable, aerial) for the soil conditions
- Assign the appropriate equipment to the soil conditions (hoechuck vs. skidder)
- Use woody debris to insulate soil disturbance
- Curtail operations during wet weather
- Complete EMS monitoring Inspections and Post-Harvest Inspections to monitor whether the plan was adhered to and whether soil disturbance targets were achieved
- Prescribe rehabilitation measures where soil disturbance levels exceed the desired levels

## Forecasts

Previous high performance for this indicator shows that the production crews are minimizing soil disturbance. No change is anticipated in the performance of this indicator.

## Details/ Data Set

Soil disturbance is assessed through an ocular estimate at time of post-harvest assessment. The planning department completes the post-harvest assessment at time of harvest completion.

If an area of soil disturbance is identified through a post-harvest, it will trigger a post-harvest soil disturbance survey, if necessary.

Performance for this indicator is calculated as follows:

| | |
|---|---|
| ***Calculation*** | **% HA $_{CONSISTENT}$ = HA $_{CONSISTENT}$ / HA $_{TOTAL}$** |
| ***Variables*** | % HA $_{CONSISTENT}$ Percentage of the total harvest area consistent with soil disturbance management over a 5-year period.<br>HA $_{CONSISTENT}$ Harvest area of cutblocks that are consistent[1] with management practices to address soil disturbance over a 5-year period.<br>HA $_{TOTAL}$ Total harvest area of cutblocks where felling started[2] over a 5-year period. |
| ***Notes*** | *1. If no formal soil disturbance management practices are required then the cutblock is considered consistent.*<br>*2. Use cutblock harvesting completion date reported to MoF.* |

## Monitoring

The Area Planner will ensure that data is compiled from silviculture files and results of post-harvest assessments, for the SFM Annual Report.

# Indicator 3.1.2: Level of Downed Woody Material

| Element: 3.1 Soil quality and quantity<br>*Conserve soil resources by maintaining soil quality and quantity* | | | | |
|---|---|---|---|---|
| **Value** | **Objective** | **Indicator** | **Target** | **Variance** |
| Conservation of soil resources | Maintain the productive capacity of forest soils. | 3.1.2 Level of downed woody material. | The average annual volume of downed woody debris remaining after harvesting is at least 50 $m^3$/ha | Lower Limit = 40 $m^3$/ha<br>No Upper Limit. |

## History

New SFMP 11 indicator to address CSA Z809-08 Core Indicator 3.1.2. Core Indicator under CSA Z809-16. Minor revision in wording.

## Justification

Forest ecosystems and species have evolved alongside natural disturbances. In coastal B.C., downed woody debris plays a fundamental role in ensuring the productivity of a post-harvest site. Downed woody debris provides shade, moisture retention, and microclimates for many insects and other small organisms and ultimately decomposes completely promoting soil health.

The 15$m^3$ target relates to the waste benchmarks in the Provincial Logging Residue and Waste Measurement Procedures Manual. The benchmark is 10$m^3$/ha in immature stands and 35$m^3$/ha in mature coastal stands. The waste benchmark means the volume of avoidable waste that can be left on a harvested area without being subject to a monetary waste assessment. The benchmark ensures sufficient coarse woody debris is left given its importance in nutrient and organic matter dynamics of forest ecosystems.

Furthermore, FPPR Section 68(1) requires a minimum of 4 logs per hectares, each being a minimum of 5m in length and 30cm in diameter at one end, to be retained on a cutblock.

## Current Status & Interpretation

| Year | Volume of Downed Woody Debris from Residue Assessments (m3/ha) |
|---|---|
| 2024 | 61.8 |
| 2023 | 96.5 |
| 2022 | 116.6 |
| 2021 | 64.1 |
| 2020 | 108.5 |

This target was met for 2024. Wherever possible WFP Englewood works with local salvagers and North Island Power Chips to utilize as much waste as possible.

## Strategies & Implementation

Downed Woody Debris (DWD) volumes are dependent on utilization rates, and pre-harvest stand structure. Non merchantable debris is piled (generally at roadside) and burned as per WFP's Fire Hazard Assessment Standard for fire hazard abatement and providing more plantable ground.

In addition to quantity the biological value of DWD increases when it is left dispersed throughout the slash as opposed to being piled at roadside. Through increased Y&L crew awareness and training more pieces will be recognized as waste prior to being yarded to the landing, thereby keeping the pieces of DWD where they are of highest biological value.

## Forecasts

Levels of woody debris fluctuate with market conditions, the proportion of conventional vs heli logging, and the proportion of old growth vs second growth harvesting.

Policy changes can also influence waste and residue levels. The government announced in January 2019 plans to change the waste policy to redirect wood waste on the coast to pulp and paper producers and the bio-products/bioenergy sector. A coastal fibre recovery zone was also established spring 2019, which encompasses the entire DFA. Area within the recovery zone incurs penalties for leaving waste in excess of new, considerably lower, waste benchmarks in harvested areas. These future policy changes may lead to reduced waste levels.

WFP Englewood Forest Operation will be looking to reduce their waste levels in future but is anticipated to still meet the current target of 50$m^3$/ha until the new levels have been established.

## Details/ Data Set

Downed Woody Debris = Measured as $m^3$/ha is the total of the Billable and Non-billable waste measured during the residue and waste assessment on each harvest area.

## Monitoring

The level of downed woody material will be measured through the government waste and residue survey monitoring process. The Planning Department reviews the results of waste and residue surveys and reports on the average volume. The Area Planner will ensure that data is compiled, and performance reported, in the SFM Annual Report.

# Indicator 3.2.1: Proportion of Watershed with Recent Stand-Replacing Disturbance

| Element: 3.2 Water quality and quantity<br>*Conserve water resources by maintaining water quality and quantity* | | | | |
|---|---|---|---|---|
| **Value** | **Objective** | **Indicator** | **Target** | **Variance** |
| Conservation of watersheds | Maintain or enhance water quality and streamflow | 3.2.1 Proportion of watershed or water management areas with recent stand-replacing disturbance | 1) Watershed improvement between reports<br>2) 100% of Cutblock Site Plans are consistent with the Watershed Management Strategies Report and the Terrain Risk Management Strategy. | ➢ 90% of target level. |

## Target 1: Watershed Management Strategy

### History

Indicator 27.5 was an indicator included in SFM Plan 10 and was carried forward to the current SFMP. It is a Core Indicator under the CSA Z809-16 Standard. There are no changes to this indicator.

### Justification

Target 1 was chosen to highlight WFP's overarching Watershed Management Strategy and its continued commitment to reporting on the health of each watershed in which WFP Englewood Forest Operation operates.

However, due to the change in forest practices legislation (i.e. shift from FPC Act to FRPA), watershed assessments are now an issue of due diligence unless Fisheries Sensitive Watersheds (FSWs) are designated. Although there are no designated FSWs in TFL 37, watersheds in the Nimpkish DFA may have experienced detrimental impacts from historic logging practices and natural disturbance events and therefore a current assessment of their status was conducted.

### Current Status & Interpretation

A Watershed Assessment was completed for TFL 37 by G. Horel, P.Eng. (GM Horel Engineering Ltd.) in 2007 and updated in 2020. The report includes recommended indicators and targets, in addition to recording the current status or the watershed in the DFA. The assessment report defined four categories of overall watershed 'health (see table below): A-stable or consistent with natural; B-improving, may have sites that are still disturbed; C-moderately disturbed; and D- severely disturbed. In order to assess the health and suitability of watersheds for industrial logging, previous legislation (i.e. Forest Practices Code of British

Columbia Act), required the District Manager to identify watersheds that required Coastal Watershed Assessment Procedures (CWAPs).

The Watershed Report was updated in 2020, the results for each watershed are as follows:

## Current Status of Watersheds within TFL 37 (Updated 2020)

| Watershed Trend | Watershed Name | | | |
|---|---|---|---|---|
| (D) Highly Disturbed | Kilpala | Kilpala - Karmutzen | Oktwanch - Waring | Kinman<br>Sutton |
| (C) Moderately Disturbed OR improving, but still of concern | Upper Oktwanch<br>Oktwanch Remainder<br>Nimpkish Rem. - Mid<br>Nimpkish Rem. - Upper | Kaipit<br>Kla'anch<br>Maquilla<br>Surprise | Oktwanch - Holiday<br>Eve<br>Kiyu<br>Tsitika - Elliott | Oktwanch - Alston<br>Gold<br>Noomas |
| (B) Improving, may have sites that are still disturbed. | Lukwa<br>Woss Rem. - Lower | Kaipit - Canon<br>Maquilla - Quilla<br>Tlakwa<br>Kokish - Tsulton | Woss- Clint<br>Tsitika -Christine | Woss - Fiddle<br>West Tsitika |
| (A) Stable OR consistent with natural condition | Atluck<br>Davie<br>Hump<br>Nimpkish Rem. - Lower | Atluck - Wolfe<br>Atluck Rem.<br>Davie -Granite<br>Davie - Schoen North<br>Davie Rem.<br>Steele<br>Woodengle<br>Theimer<br>Upper Tsitika | Woss - Torback | Storey |
| **Fisheries Rank** | **(1) High to V. High capacity. Large or potentially large anadromous runs** | **(2) Moderate anadromous capacity or important resident fishery** | **(3) Small but significant anadromous capacity or some resident fish** | **(4) Limited fish capacity. Few resident or anadromous fish** |

**Watershed Risk Legend:**

| | | | |
|---|---|---|---|
| High Risk | Moderately High | Moderate | Low |

## Strategies & Implementation

A Watershed Indicators Report was completed for TFL 37 by G. Horel (GM Horel Engineering Ltd.) on October 19, 2007 and updated on June 30,2020. The objectives of the report were:

- To propose indicators for tracking the effectiveness of forest management strategies, and indicators for Sustainable Forest Management of watersheds;
- To identify candidate sites for possible riparian, in-stream restoration, remedial work on fans, and road deactivation projects; and
- To characterize physical watershed conditions as the basis for developing forest management strategies (management strategies were not part of this project.)

## Forecasts

It is anticipated that new watershed management strategies will result from changing legislation and the results of the 2020 Watershed Report update.

## Details/ Data Set

Current watershed conditions, changes to watershed conditions over time (watershed trends) and watershed risk ratings etc. continue to be reported on by Glynnis Horel P.Eng for all watersheds units in Tree Farm Licence 37 (Nimpkish DFA) that are a primary watershed or a major basin of the Nimpkish, Tsitika or Oktwanch watersheds that are larger than 1,000 ha. The results are summarized in a watershed strategy report provides detailed watershed management strategies for each of the identified watersheds and is the basis of the target for this indicator.

Adoption of this indicator and associated target will ensure that the Watershed Management Strategies Report and the Terrain Risk Management Strategy are implemented as part of the operational planning process for cutblocks. Forestry and Engineering staff will review the “key management concerns”, “identified sensitive areas” and the “watershed management strategies” for each watershed, and then design cutblock site plans to be consistent with the Watershed Management Strategies report. Identification of sensitive areas and stream channel types are facilitated by GIS inventory mapping. The Terrain Risk Management Strategy and the Watershed Management Strategy are directly linked and therefore both strategies are adopted as part of this indicator.

## Monitoring

The 2020 Watershed Management Strategy suggests another watershed condition review in 2030. It is anticipated that another report will be made available at that time.

# Target 2: Consistency with Watershed Management Strategy

## History

Indicator 27.5 was an indicator included in SFM Plan 10 and was carried forward to the current SFMP. It is a Core Indicator under the CSA Z809-16 Standard. There are no changes to this indicator.

## Justification

Target 2 was created to demonstrate forest management practices that maintain consistency with the Watershed Indicators Report.

## Current Status & Interpretation

This target is met. In 2024, twenty-five blocks had a post-harvest assessment completed and all were 100% consistent with the Watershed Management Strategies Report and Terrain Risk Management Strategy (TRMS). There is no Community Watershed within the defined forest area.

| Harvesting Year | Site Plans Consistent with the Watershed Management Strategies Report and the Terrain Risk Management Strategy |
|---|---|
| 2024 | 100% |
| 2023 | 100% |
| 2022 | 100% |
| 2021 | 100% |
| 2020 | 100% |

## Strategies & Implementation

To improve the watershed trend for Class C and D watersheds, the following strategies are being implemented:

- Where streams in a watershed unit have been impacted by landslide in postcode blocks, rate of cut limits are applied for harvest on steep terrain.
- The TRMS, windthrow strategy, rainfall shutdown guidelines, and standard practices for road construction are followed throughout TFL 37.
- Terrain stability assessments are completed where required, as recommended by the TRMS.
- The TFL 37 Watershed Indicator Report is reviewed for all blocks during the Hydrological Note to File, and relevant strategies are applied.
- A watershed assessment is required for areas of special consideration: a community watershed, a fisheries sensitive watershed, or a large block (>40ha not greened up) in the Enhanced Forestry Zone. The hydrological assessment identifies and addresses potential sources of hydrological risk.

## Forecasts

It is anticipated that WFP Englewood Forest Operation will continue to implement the 2007 Watershed Management Strategies report and future updates.

## Details/ Data Set

This indicator is assessed based on WFP's conformance with internal plans i.e.: Site plans, terrain risk field assessments, watershed management note to files and watershed assessments for areas of special consideration.

The results of Post-Harvest Assessments are normally used to confirm that harvesting and road building activities were conducted in accordance with the plans.

For annual reporting purposes, the *current status* for this indicator will be reported and calculated as follows:

| ***Calculation*** | **% SP's Consistent = # of SP's Consistent / Total # SP's Signed** | |
|---|---|---|
| ***Variables*** | % SP's Consistent | Percent of Cutblock SP's signed in each calendar year that are consistent with both the Watershed Management Strategies Report and the Terrain Risk Management Strategy. |
| | # of SP's Consistent | The number of Cutblock SP's signed in each calendar year where both terrain and watershed assessments were completed after October 1, 2008, and the SP's were consistent with these assessments. (Consistent means that the Terrain Risk Management Strategy and the Watershed Strategies Report were referenced as addressed). |
| | Total # SP's Signed | The total number of Cutblock SP's signed in each calendar year where both terrain and watershed assessments were completed after October 1, 2008. |

## Monitoring

The Area Planner will ensure that data is compiled from the Cenfor database and/or cutblock files, and performance will be reported in the annual SFM Plan.

# Indicator 3.2.2: Water Features

| Element: 3.2 Water Quality and Quantity<br>*Conserve water resources by maintaining water quality and quantity.* | | | | |
|---|---|---|---|---|
| **Value** | **Objective** | **Indicator** | **Target** | **Variance** |
| Water quality and quantity | Maintain of enhance water quality (clean water) and water quantity (identified riparian features are within natural variations) | Proportion of forest management activities, consistent with prescriptions to protect identified water features | All cutblocks harvested within the year with completed post-harvest activities (ex. piling, deact, rehab) are consistent with management prescriptions to address water features. | Action plan in place or documented rationale for variance from prescription |

## History

New Core Indicator under CSA Z809-16.

## Justification

The target for this indicator was decided upon by the NWAC with the help of a joint meeting with the Vancouver Island North Woodlands Advisory Group. Glynnis Horel P. Eng and watershed specialist gave a special presentation to the groups on October 26, 2017 and recommended to the group that practices around road inspections, implementation and follow up would be a good target as roads are seen as a primary input for sediment. After considerable discussion with the NWAC, it was decided that this was the best indicator to meet the intention of the CSA Standard around water quality and quantity.

Other considerations were brought forward i.e. water sampling, training for grader operators, grading practices (SOP's review), grass seeding, small stream management strategies and tethered harvesting systems.

This indicator is consistent with the intent of FRPA Values section 149(1) and FPPR Section 8. Section 8 is the objective set by government for water fish, wildlife and biodiversity within riparian areas that states without unduly reducing the supply of timber from British Columbia's forests, to conserve, at the landscape level, the water quality, fish habitat, wildlife habitat and biodiversity associated with those riparian areas.

The target is to achieve successful implementation of management prescriptions for all identified water features (as per Harvest and Road Instructions documents ie: streams (S1-S6), NCD's, wetlands, lakes), recognizing that changes to specific prescriptions may be approved from time to time to accommodate site specific situations and where prescriptions are not successfully achieved, mitigative actions will be prescribed and completed to address the issues.

## Current Status & Interpretation

This is a new indicator with reporting beginning in 2018. Reporting will include a measure of conformance with prescriptions, measured through completion of the EMS inspections noted above, in addition to a description of any mitigative measures required and their successful completion.

In 2024, 25 blocks were harvested and had completed harvest completion plans, 25 of 25 blocks were consistent with the streams prescriptions as described in the harvest instructions. With the implementation of harvest completion plans, potential non-compliances are often noted and corrected before harvest is complete.

Non-conformances with SOP's and harvest instructions were noted within the post-harvest inspections for the blocks and action plans are in place and will be implemented in the dry season before the seasonal rain in the fall.

| Year | Harvested Blocks Consistent with prescription | Harvested Blocks not Consistent with prescription | Action Items (in WFPs Incident Tracking System-ITS) | Target Acheived (yes/no) |
|---|---|---|---|---|
| 2024 | 25/25 | 25/25 | N/A | Yes |
| 2023 | 23/23 | 23/23 | N/A | Yes |
| 2022 | 28/32 | 4/32 | AT221:<br>• Deactivation hoe was sent back to clean debris from stream<br>NS117:<br>• Deactivation hoe was sent back to clean debris from streams 2R2, 3A, 3R2<br>TS242 & WK033L:<br>• Trees were falled across streams against harvest prescriptions | No |
| 2021 | 29/33 | 4/33 | LG107:<br>• Deactivation hoe will be sent back to clean debris from stream<br>TS240:<br>• Clean debris out of streams #4,5,6,9 while piling being done<br>• Stream #2R2 – machine-free zone; debris from ditch needs to be clean above and below road – reach in if possible<br>TS242:<br>• Clean streams #9, 10, 11, 7a<br>• Remove pile built on stream | No, but variance has been met |

| | | | | |
|---|---|---|---|---|
| | | | WP098:<br>• Stream 1R2 – channel to be cleaned to redirect water flow<br>• Stream 4 – culvert to be put in across Atluck Main | |
| 2020 | 21/22 | 1/22 | NA400: Stream cleaning / Debris Management | No, but variance has been met |

## Strategies & implementation

It is to be noted that detailed block assessments are performed in advance of block harvest that survey multiple values. These assessments include but are not limited to: Terrain Stability Field Assessments, Riparian Assessments, Windthrow Assessments Cultural/Karst and Visual Assessments. These assessments are completed by experts in their field (P.Eng, P Geo, R.P. Bio) and reviewed by forest professionals when determining where the block boundary is located.

Specific water features may also be identified through the NWAC process and incorporated into this indicator.

WFP has sediment control measures identified in the SOP's for Grade, Hauling, and their associated field cards (field card Grader Operator, field card Hauling, field card Grade). The Grass Seeding Standard and Rainfall Shutdown Standard help support the Environmental Management System in response to erosion and sediment transport and to minimize potential adverse effects to the environments.

As per WFP's Environmental Management System, Road Construction Inspections are completed whenever a formal inspection of new road construction or road modification, reactivation or deactivation is carried out. Inspections are to be carried out at a minimum of once per construction, reactivation or deactivation project upon completion. The EMS Road Inspection Form encompasses the criteria to ensure sedimentation controls identified at the planning stage and WFP's SOP's are implemented.

Post-Harvest Assessments are completed on all cutblocks after completion of the production activities. They are completed by a Forest Professional and are carried out for the purpose of confirming adherence to plans and instructions.

The standard for assessing compliance to harvest instructions changed in 2021, switching from Post-Harvest Assessments (which are typically completed after Harvest Complete date) to Harvest Completion Plans (which are completed during the final phases of harvest). This change has led to a higher number of reported non-compliances in recent years as planners are in the block discovering small issues that would have already been fixed when assessed at the post-harvest stage.

Completion of both the Road Construction and Post-Harvest Assessments will directly correlate positively to maintaining and enhancing water quality and quantity objectives.

The Target result will be a review of road, road maintenance, and post-harvest inspections and will have a variance set to accommodate unanticipated snow levels or unforeseen circumstances that preclude inspections from being completed annually. The results will be reported the following year within the annual report.

The audit process includes periodic review of corrective actions generated to assess any trends in non-conformance and to assess potential opportunities for revisions to the procedures to address any identified negative trends.

## Forecast

It is anticipated that there will be some ongoing water management follow up, but with awareness and education it should provide some good feedback to WFP's production supervisors.

## Monitoring

The area planner will ensure that data is compiled from the Cenfor database and/or cutblock files and performance reported in the annual SFM Plan.

Standard Operating Procedures are updated with new information for managing for water features from identified trends of the results of inspections or from audit results, as applicable.

NWAC may wish to pursue an indicator related to road maintenance/ inspections of older road systems as it relates to water quality in the future. The Forest and Range Evaluation Program (FREP) may also be considered for potential incorporation into a water quality indicator.

# Indicator 4.1.1: Net Carbon Uptake

| Element: 4.1 Carbon uptake & storage<br>*Maintain the processes that take carbon from the atmosphere and store it in forest ecosystems* | | | | |
|---|---|---|---|---|
| **Value** | **Objective** | **Indicator** | **Target** | **Variance** |
| Carbon uptake | Positive net rate of carbon uptake over time | 4.1.1 Net carbon uptake | The net annual carbon uptake on the DFA maintains a positive annual trend | 1 year negative |

## History

Core Indicator in 2010 from CSA Z809-08. It is a core indicator under CSA Z809-16 and there is no change in CSA Z809-16 standard.

## Justification

The basic premise of a sustainable forest management organization is that it should be at least carbon neutral from the onset. In this context carbon neutrality is a demonstration that harvest levels are sustainable. Forest management should be shown to be a positive contributing activity for global ecological cycles over time.

The variance is meant to help account for fluctuation in yearly cut levels due to market conditions and license obligations under provincial legislation.

## Current Status and interpretation:

The results for the 2020-2024 reporting years, the net carbon uptake of the DFA (expressed in $CO^2e$ tonnes) was calculated to be as follows:

| | $CO_2$ (tonnes) (2020) | $CO_2$ (tonnes) (2021) | $CO_2$ (tonnes) (2022) | $CO_2$ (tonnes) (2023) | $CO_2$ (tonnes) (2024) |
|---|---|---|---|---|---|
| Carbon uptake (*from growing stock*) (*TFL 37*) | 500,905 | 481,429 | 470,065 | 496,923 | 452,030 |
| Carbon removed (*to short-lived products*) | -207,470 | -212,660 | -170,749 | -179,381 | -216,144 |
| Fuel consumed (*harvest & transport*) | -7,202 | -7,219 | -4,324 | -4,422 | -7,685 |
| Debris burned (*debris disposal/operational fires*) | -27,381 | -10,712 | -13,057 | -43,254 | -40,817 |
| **NET Carbon Uptake** | **258,852** | **250,832** | **281,934** | **269,867** | **187,385** |

The target was not met for 2024 as the net carbon uptake has trended downwards for two years. The harvest levels in 2024 were increased over previous years because of the increased levels of permit approvals associated with the implementation of the TFL 37 Forest Landscape Plan. Higher harvest levels produce a net down in the carbon uptake due to a higher rate of fuel consumption and a result in fewer trees on the landbase to uptake carbon. Additionally, 2024 was another successful year for pile burning which resulted in over 40,000 tonnes net down.

## Strategies & Implementation

The primary strategy for ensuring a consistent net rate of carbon uptake on the DFA overtime is:

- Prompt and effective reforestation or regeneration of harvested areas that aims to establish free growing stands of healthy trees of mixed species stocked sufficiently and within set time frames.

This is primarily achieved through a combination of natural regeneration and the planting of seedlings shortly after harvest is completed.

In certain circumstances, additional treatments may be required in support of this core strategy

to achieve its goal including:

- Site preparation, which may include spot burns or mechanical debris scattering/removal to ensure appropriate stocking of regeneration throughout the harvested area as per reforestation standards.
- Fertilization at the time of planting to help initial seedling growth and establishment ahead of competing brush.
- Physical protection of seedlings against browsing pressures from deer and/or elk.
- The use of improved seed for planted seedlings that have improved growth performance and/or insect or disease resistance.
- Brushing treatments to relieve young trees of competition.
- Broadcast fertilization of stands to stimulate growth (e.g., SCHIRP)
- Forest fire preparedness & response that encourages fire prevention and prompt control /extinguishment of those that occur.
- Modernizing or upgrading of equipment that result in improved fuel efficiencies.

## Forecasts

Models of different harvest levels indicates that the annual net carbon uptake should remain positive for the DFA at the normal AAC level of harvest, but could turn negative in a year where substantially more than the AAC is harvested to compensate for a year of undercut.

## Details/Data set:

The net carbon uptake on the DFA is simply defined as the difference between the total carbon uptake on the DFA by its growing stock, minus the net carbon removed from the DFA through harvest operations and the total carbon emitted through fuel consumption during forest management operations.

The net volume of carbon removed is a factor of the total volume harvested that accounts for the portion of the harvest that remains sequestered in long-life products such as building lumber and furniture.

Net carbon uptake can be expressed in a simple equation as follows:

**Carbon uptake** (*from growing stock*)

**- Carbon removed** (*to short-lived products*)

**- Fuel consumed** (*harvest & transport*)

**- Debris burned** (*debris disposal/operational fires*)

**= Net carbon uptake**

Carbon uptake is calculated using the current growing stock on the DFA and applying the yield curves or growth estimates from the latest applicable timber supply analysis to the updated timber inventory. Growth is distributed by species according to the species percentages recorded for each stand. The annual growth (in $m^3$) is multiplied by the average carbon density estimates ($kg/m^3$) by species to obtain the carbon uptake in tonnes of carbon.

The carbon removed is calculated based on the log volume production for each species. The annual log production (in $m^3$) is multiplied by the average carbon density estimates (kg/m3) by species to obtain the gross carbon removed. This is then multiplied by a factor of 60% to estimate the tonnes of carbon removed to short-lived products. For simplicity, only stem-wood volume is considered in the calculation which is consistent with the results of yield curves.

The known fuel consumption is matched to the operational log production. When contractors independently purchase fuel, their consumption is assigned the average calculated rate (in $L/m^3$) for the remaining of the operation's log production to estimate the total amount of fuel they consumed. The sum total of fuels consumed (in L) is then multiplied by the average carbon density by fuel types (in t/L) to obtain the tonnes of carbon emitted through fuel consumption.

Finally, the carbon emitted through forest practices such as debris burning or through other operationally caused fires is estimated by multiplying the approximate volume of wood consumed (in $m^3$) by the average carbon density estimates ($kg/m^3$) of all of the entire harvested volume to obtain the carbon uptake in tonnes of carbon.

## Monitoring method

The Operations Forester coordinates calculation of the Net Carbon Uptake using Cengea and the GIS database (assistance may be provided by corporate personnel).

To monitor and calculate performance on this indicator, a number of parameters must be monitored or maintained for the DFA;

- Growing stock inventory over time (adjusted for age and for annual harvested area),
- The volume harvested annually,
- The species profile of the harvested volume,
- The age (i.e., old growth vs. $2^{nd}$ growth) profile of the harvested volume,
- Annual fuel consumption (gasoline, diesel fuel, aircraft fuel) based on a factor applied to the annual harvest in $m^3$,
- Annual area burnt in operationally caused forest fires,
- Annual area burnt in broadcast silviculture fires,
- Total number of debris piles burned annually for silviculture or fire abatement reasons and their average size.

The parameters listed above are entered in a spreadsheet built to calculate the carbon values emitted. It includes conversion factors extracted from recognized and credible international research literature. These factors include:

- Carbon density ($CO_2e$) of wood by species in tonnes/$m^3$.
- Carbon density of various fuel types in tonnes/L.
- Proportion (%) of wood harvested that is stored in short-lived products.

Fuel consumption is calculated based on a factor derived from an average of all 5 WFP CSA DFA's from data gathered for the 2012 – 2016 reporting periods. The factor is applied to the annual $M^3$ of harvest as reported for the CSA reporting period. This includes diesel, gasoline and avgas consumption. This factor will be reviewed and revised every 5 years to account for changes in harvest types, technology and equipment. The current factor is 16.67 kg of carbon per M3 of harvest.

The rationale for using a factor is that fuel accounts for a relatively low portion of the carbon produced; already uses factors for contractors as they do not report fuel consumption; and has not seen significant fluctuations over the time it has been calculated (2009 – 2020).

# Indicator 4.1.2: Reforestation Success

This indicator is a duplication of core indicator 2.1.1 (refer to Indicator 2.1.1 for details).

# Indicator 4.2.1: Additions and Deletions to the Forest Area

This indicator is a duplication of core indicator 2.1.3 (refer to Indicator 2.1.3 for details).

# Indicator 5.1.1: Forest-related Benefits

| Element: 5.1 Timber and Non-Timber Benefits<br>*Manage the forest sustainably to produce a mix of timber and non-timber benefits. Support a diversity of timber and non-timber forest products and forest-based services.* | | | | |
|---|---|---|---|---|
| **Value** | **Objective** | **Indicator** | **Target** | **Variance** |
| Timber and non timber benefits | Timber and non-timber benefits are supported | Documentation of the diversity of timber and non-timber resources, including products and services produced in the DFA | Target 1 – The area harvested does not exceed the key profile targets for the cut control period | ≤ 10%<br>-1 |
| | | | Target 2 – At least 6 campsites are maintained between June 15 and Sept. 15 each year | none |
| | | | Target 3 – EBITDA is positive at the bottom of the market cycle | 1 year negative EBITDA |
| | | | Target 4 – Number of Elk Tags stays the same or increases within the DFA | ≤10% |
| | | | Target 5 – User stats at Mount Cain stay the same or increase (for active seasons) | ≤25% |

## History

New Core Indicator in SFMP 11. It incorporates pre-existing Indicators # 33, 34, and 39.5 from SFMP 10. Minor revision to indicator in CSA Z809-16 (no material change). Targets 4-5 were added by the NWAC in 2017. Targets 4 and 5 are introduced in response to a recommendation by the internal auditor that use of a broader range of non-timber resources in the DFA (more than recreational campsites) should be included under the indicator, and agreement by public advisory group members that, where information is readily available and being tracked already, the number of targets should be expanded to include use of more non-timber assets in the DFA.

# Target 1: Profile Targets

## Justification

Specific harvest profile targets established for the term of SFM Plan 10 and SFM Plan 11 are given in the table below. WFP organizes its harvest priorities and patterns with consideration to the following:

- Application of ecosystem-based forestry practices,
- Salvage of damaged or diseased timber where economically practical,
- Harvest over-mature stands first,
- Increase the proportion of second growth harvested over the next 25 years, and
- Disperse harvest areas to address spatial constraints and patch-size objectives

***Indicator targets for the TFL 37 harvest profile***

1. Key harvest profile targets are based on those identified through the Management Plan #10 timber supply review.

## Current Status & Interpretation

## RESULTS

Results are forest cover volume-weighted averages for the blocks from which volume was scaled in 2024. These are the metrics consistent with the TSR data and process.

| Metric | Target | Result | Variance and Achievement |
|---|---|---|---|
| **Harvest from conventional land base** | <=91% | 94% | +3% |
| Old growth harvest | >=75% | 58% | -13% |
| Cedar % | 15% | 5% | -10% |
| Cypress % | 11% | 9% | -2% |
| **Fir %** | 10% | 23% | **+13%** |
| HemBal % | 64% | 62% | -2% |

1. *Key harvest profile targets are based on those identified through the 20-year plan analysis for the period 2014 to 2018. Data does not include BCTS.*

2. *NP or NF are areas classified as Non-Productive or Non-Forest.*
3. *The target and acceptable annual range were updated to reflect October 2006 AAC determination which included 37,000 m³/ year of HemBal-Helicopter out of an AAC of 889,415 m³ (excludes BCTS but includes First Nations portion).*

In 2024 the harvest from the conventional landbase was exceeded by 3%, and the Fir harvest was exceeded by 13%. While the conventional land base target is within the variance, the first target is not so this result has not been met.

## Strategies & Implementation

Planners prepare their annual harvest and development plans by first considering the current harvest profile status and associated targets. Western's strategy with regards to its harvest level is to harvest the full extent of its annual allowable cut. In adverse market conditions, production levels have been significantly reduced below the AAC and focus has been on harvesting areas with a positive margin.

## Forecasts

Harvest profile targets are developed through the timber supply analysis process. As new information and changes in management strategies are incorporated into these analyses, harvest profile targets may be adjusted.

## Details/ Data Set

This indicator is assessed based on a spatial exercise, where harvested areas are summarized according to the profiles and assumptions used in the timber supply analysis. Accordingly, the following details apply:

- Harvested areas are spatially intersected against the profiles listed below.
- Areas are summarized for each cutblock.

Harvest profiles for stand type, logging type and economic operability are calculated as follows:

| ***Calculation*** | **% HA $_{PROFILE}$ = HA $_{PROFILE}$ / HA $_{HARVESTED}$** |
|---|---|
| ***Variables*** | % HA $_{PROFILE}$ Percentage of the harvested area[1] of cutblocks corresponding to each harvest profile over a 5-year period.<br>HA $_{PROFILE}$ Total harvested area of each profile over a 5-year period.<br>HA $_{HARVESTED}$ Total harvested area[1] over a 5-year period. |
| ***Notes*** | *1 Harvested area is spatially tracked through cutblock depletion records, where areas are considered to be loaded out.* |

The harvest profile for tree species is calculated as follows:

| ***Calculation*** | **% M3 $_{PROFILE}$ = M3 $_{PROFILE}$ / M3 $_{HARVESTED}$** |
|---|---|
| ***Variables*** | % M3 $_{PROFILE}$ Percentage of the harvested volume[1] of cutblocks corresponding to each harvest profile over a 5-year period.<br>M3 $_{PROFILE}$ Total harvested volume of each profile over a 5-year period.<br>M3 $_{HARVESTED}$ Total volume [1] over a 5-year period. |
| ***Notes*** | *1 Inventory volume is spatially identified through cutblock depletion records, where areas are considered to be loaded out, and summarized based on current volume information derived from the forest cover and used in the timber supply analysis.* |

## Monitoring

Actual harvest profiles are summarized in the SFM annual report through a spatial GIS analysis of areas harvested and the various profile indicators. Operations enter the key production information in CENFOR and LIMS. This information is summarized by Corporate GIS and provided to the Timberlands Area Planner who includes the information within the annual report.

# Target 2: Recreational Opportunity

## Justification

Recreational opportunity is important to north island residents. The Nimpkish DFA includes some very popular recreation areas including: Woss Lake, Atluck Lake, and the Lower Klaklakama Lakes. WFP aims to maintain seven campsites that reside within the DFA annually, to ensure that the recreation assets are not lost or diminished. If there is a requirement for substantial modification or relocation of one or more of the existing campsites due to natural causes or access issues for example, WFP will aid in maintaining or improving the site.

## Current Status & Interpretation

WFP supports recreation opportunities by constructing, maintaining, and monitoring the use of designated recreation sites. WFP's sites are provided free of charge to the public. WFP currently maintains 6 campsites containing 62 designated camper units with overflow capacity available.

The outhouses at Anutz Lake, Atluck Lake, Nimpkish Lake, and Woss Lake were emptied in the summer of 2024 after a member of the public reached out to alert WFP that they were getting quite full.

Danger tree removal was completed at all of the campsites in the spring/early summer of 2024.

## Strategies & Implementation

WFP maintains six campsites containing sixty-two campsite pads. Campsites are supplied with tables, garbage cans, fire rings, and toilet facilities. Garbage collection and site maintenance is funded by WFP. Potential hazards (e.g., danger trees) are removed, and notices of fire hazard are posted as required.

## Forecasts

The timber supply analysis for the Nimpkish DFA removes approximately seventeen hectares from the THLB for recreation sites. Currently, WFP does not foresee a need for additional campsites but does not anticipate reducing the existing target of six campsites.

## Details/ Data Set

A description of the current recreation sites maintained is shown in the table below.

Recreation sites maintained by WFP:

| Recreation Site | Details | Number of camper units, Features |
|---|---|---|
| Nimpkish Lake (Windsurfer Camp) | 4.5 ha | Campsite with room for 15 pads; pebble beach; windsurfing |
| Anutz Lake | 1.6 ha | Group Camping Area-sandy beach, camping up to 6 designated camping spots-; sandy beach; boating; hiking; hunting; RV's possible |
| Atluck Lake | 3.4 ha | Campsite with 6 main campsites pads; sandy pebble beach; boating; hiking; RV and tent accessible |
| Woss Lake | 4.4 ha | Campsite with 27 pads; sandy beach; fishing; boating; walking |
| Lower Klaklakama | 0.7 ha | Campsite with 3-4 pads; rocky beach; fishing; tents or smaller RV's |
| Upper Klaklakama | 2.5 ha | Campsite with 3-4 pads; rocky beach; fishing; good RV camping; trail |
| **TOTALS** | **17.1 ha** | **62 pads** |

## Monitoring

WFP's campsite maintenance activities are summarized annually in the SFM annual report.

# Target 3: EBITDA

## Justification

Forest harvesting activities provide the largest economic benefits for many rural communities in BC and is key to their stability. SFM plans and practices have the potential to substantially impact the economic value of timber products from an area. The success of WFP contributes to the stability in North Island Communities.

As a public company listed on the Toronto Stock Exchange, WFP reports its corporate results annually to its shareholders. WFP is committed to being globally competitive by building a strong and healthy company. The Earnings Before Interest, Taxes, Depreciation and Amortization (EBITDA) are a direct measure of WFP's success in achieving this objective.

Assessing the sustainability of economic benefits to the North Island from WFP's Englewood Forest Operation requires an indicator that reflects the general financial health of the company. Earnings from the Nimpkish DFA contributes towards WFP, which is a large company involving a diverse set of operations. Although there are many approaches for assessing a company's health, Earnings Before Interest, Taxes, Depreciation and Amortization (EBITDA) provides a good overall picture of the company's financial performance. Results for this indicator are reported annually to illustrate the company's health thus WFP's overall global competitiveness.

The target is to show a positive EBITDA year after year. The variance is 1 year of negative EBITDA. Any extended period of negative results would bring in question the sustainability of the business and ultimately engender major restructuring.

## Current Status & Interpretation

The company EBITDA was met for 2023, despite a slow year from unfavourable markets and multiple weeks of weather shutdowns.

## Strategies & Implementation

To address a string of years with negative EBITDA (from 2007-2009), a series of corporate restructuring and reorganization was conducted. A new senior team was put in place and new business directions were put in place. For Timberlands, a new focus was placed on harvesting areas with a positive economic margin.

## Forecasts

Forecasting of future markets and the economy can be found in the financial annual report. There are no long-term forecasts with regards to this indicator. However, Company EBITDA has returned to positive from 2010, with its only downturn occurring during the labour dispute of 2019. It is anticipated that EBITDA will likely remain positive for the foreseeable future.

## Details/ Data Set

Earnings Before Interest, Tax, Depreciation and Amortization (EBITDA) is reported regularly for the whole company in its various public financial reports. The EBITDA reported in annual reports were as follows.

| | 2020 | 2021 | 2022 | 2023 | 2024 |
|---|---|---|---|---|---|
| EBITDA (in mm$) | 2.4 | 302.1 | 136.9 | 29.9 | 8.9 |

This target is met.

## Monitoring

EBITDA is value tracked through the company annual reports. It is an accounting measure created for broad performance evaluation and reporting purposes.

# Target 4: Number of Elk Tags

## Justification

Members of the public advisory group discussed the opportunity for tracking other community and economic activities, and the use of forestry-related infrastructure (like roads within the DFA), and determined that tracking the number of elk tags issued annually within the DFA would be one way of monitoring the level of recreational and subsistence use of elk resources within the DFA. Further, WFP's internal auditor recommended looking at additional non-timber resource use in the Nimpkish Valley.

In addition to providing access and maintain campsites. The Englewood Forest Operation Defined Forest Area is an attractive destination for Elk Hunting. More Roosevelt elk are being noted in various areas within the TFL 37 through elk browse on trees and citing on roads and cutblocks.

## Current Status & Interpretation

This is a new target introduced in 2016 as part of a response to suggested revisions to this indicator in the new CSA Z809-16 standard. Baseline information will be gathered for the 2017 annual report and trends will be measured from that point.

The Defined Forest Area falls within Region 1 Management Unit (MU) 1-11 in Zone A and B and 1-10 in Zone G. In 2018 there were six antlerless elk in Zone A and B (MU 1-11) and fifteen bull elk. In Zone G Management Unit 1-10 there were three antlerless and five bull. The population since then appears to have increased based on sightings.

On Vancouver Island, more than 15,000 applications are submitted annually by resident hunters for approximately 300 hunting opportunities. Based on Koontz and Loomis (2005), resident and non-resident elk hunters spend $440 and $1,800 respectively per trip in local communities. This spending does not include direct license revenue, guide outfitter fees, indirect economic benefits or regional impacts.

WFP supports the hunting industry by protecting ungulate winter ranges and providing good road access to hunters. A recreation map is currently in production and will be updated to the North Island Public Advisory Group website when it is competed.

## Strategies & Implementation

Information on elk tags issued within the DFA is available through the Provincial conservation office. The Area Planner will collect this information from the conservation officer on an annual basis, starting with the number of elk tags issued in 2017. This information will be tracked in a table that will be published in the annual report.

## Forecast

Elk populations in the DFA are currently healthy and growing. The forecast for this target is that it will be met or meet the variance of less than 10% for at least the next five years.

## Details/ Data Set

This target was not met for 2024. While the number of elk tags awarded to residents stayed the same as last year, there were no tags awarded to non residents in 2024. This dropped the number of tags awarded by more than 10%. Conservation authorities did not give reasoning for the lack of tags awarded to non residents. Information for tags specifically given to non-residents was not available for 2020. The resident tags are the total number awarded in the DFA.

| Year | Resident | Non Resident |
|---|---|---|
| 2024 | 29 | 0 |
| 2023 | 29 | 7 |
| 2022 | 32 | 5 |
| 2021 | 33 | 5 |
| 2020 | 31 | N/A |

## Monitoring

The Area Planner will be responsible for acquiring this information from provincial government representative and include it in the annual report for the appropriate years every two years or as the data is made available from the conservation authorities.

# Target 5: Mount Cain User Statistics

## Justification

Members of the public advisory group discussed the opportunity for tracking other community and economic activities, and the use of forestry-related infrastructure like roads within the DFA, and determined that tracking the use of Mount Cain Regional Park (located within the DFA) as a

ski facility, would be an additional way of monitoring the level of recreational use of non-timber resources within the DFA.

The access road to Mount Cain falls within a road use agreement between WFP and the Mount Cain Alpine Park Society (MCAPS). Beyond the road use agreement, the designation for the road falls into a Forest Service Road that is maintained by the Ministry of Forest Lands and Natural Resource Operations and MCAPS. WFP has done some maintenance to the road to allow for access to Mount Cain.

## Current Status & Interpretation

This is a new target introduced in 2016 as part of a response to suggested revisions to this indicator in the new CSA Z809-16 standard. Baseline information will be gathered for the 2017 annual report and trends will be measured from that point.

Mount Cain is a locally run and operated Ski Hill. It is run by a volunteer board called the Mount Cain Alpine Park Society. Mount Cain is open Saturday and Sunday and has school groups that operate from January/February/March until April. The ski hill is open Christmas Break and Spring Break depending on the North Island School schedule.

## Strategies & Implementation

Access to Mount Cain is a joint effort by MCAPS and the Ministry of Forests, Lands and Natural Resource Operation as the road is a Forest Service Road. WFP will continue to support road maintenance for Mount Cain where necessary and operationally possible.

Information on the use of the ski facility at Mount Cain is available through the Mount Cain Alpine Park Society. The Area Planner will collect this information from the society on an annual basis, starting with use of the ski facility in 2017. This information will be tracked in a table that will be published in the annual report.

## Forecasts

One of the greatest factors leading to variability of use of ski facilities on an annual basis are the weather conditions. Poor snow years can reduce use of the facilities considerably and good snow conditions can result in greatly increased use. Hence, the variance for this target has been broadened to account for this variability. It is anticipated that, weather permitting, the variance on this target will, on average, be met on an annual basis over a five-year period.

## Details/ Data Set

| Year | Skier Visits | Skier Visits per day | Days Open | Members | Seasons Passes |
|---|---|---|---|---|---|
| 2024 | 3,264 | 135 | 17 | 1083 | 179 |
| 2023 | 9,842 | 154 | 64 | 2503 | 239 |
| 2022 | 9,181 | 158 | 58 | 3165 | 216 |

| | | | | | |
|---|---|---|---|---|---|
| 2021 | 9,420 | 191 | 45 | 3118 | 151 |
| 2020 | 8,366 | 186 | 38 | 114 | 168 |

## Monitoring

The Area Planner will be responsible for acquiring this information from Mount Cain Alpine Park Society representative and include it in the annual report.

# Indicator 5.1.2: Open and Respectful Communications

| Element: 5.1 Timber and non-timber benefits<br>*Manage the forest sustainably to produce a mix of timber and non-timber benefits. Support a diversity of timber and non-timber forest products and forest-based services.* | | | | |
|---|---|---|---|---|
| **Value** | **Objective** | **Indicator** | **Target** | **Variance** |
| Timber and non-timber benefits | Timber and non-timber benefits are supported | Evidence of open and respectful communications with forest dependent businesses, forest users and local communities to integrate non-timber resources into forest management planning. When significant disagreement occurs, efforts towards conflict resolution are documented. | Target 1: All communications with forest dependent businesses, forest users and local communities, related to integrating non-timber forest uses into forest management planning are recorded and reported out annually and, where disagreement occurs, all efforts of conflict resolution are documented<br>**NEW Z809-16 Target- Not reported until 2019** | None |
| | | | Target 2: senior WFP representatives meet with members of NWAC at least once every two years to discuss community issues | None |

## History

This is a new Core Indicator under the CSA Z809-16 standard.

## Justification

The new CSA Z809-16 standard points out that, during the development of forest management plans, it is important to consider, in addition to the benefits generated through harvesting of timber, a variety of social and ecological benefits that may be produced in the DFA. The uses and benefits considered should include, but not be restricted to, the following timber and non-timber resources:

- outdoor activities;
- timber and forest cover;
- hunting, fishing, and trapping activities;
- ecotourism;
- cultural and heritage resources;
- ecological goods and services, and
- other non-timber forest products.

The new standard contends that evidence that there have been open and respectful communications with forest dependent businesses, forest users and local communities reflects that the tenure holder genuinely supports consideration of a variety of social and ecological benefits within the DFA.

On November 26, 2015, following the amalgamation of Englewood into the Central Island Forest Operation, members of the Nimpkish Woodlands Advisory Committee met with senior WFP staff to discuss their concerns regarding community stability. Both parties agreed to better communicating where their values overlap on this matter. WFP representatives agreed to meet more often with members of NWAC and to continue to listen to their concerns, and NWAC members agreed to more clearly identify their values around community stability.

Target 1:  requires communications to be documented and a summary report provided in the current status for NWAC review of overall efforts to communicate and engage, as well as progress and resolution of disputes and conflicts

Target 2 of this indicator is the result of these discussions.

# Target 1: Evidence of Open and Respectful Communication

## Justification

Evidence of open and respectful communications is difficult to quantify (without first having an idea of what types of communications might be encountered) and so the initial target for this indicator has been established as a reporting out of all written communication, in the form of emails or letters, between the tenure holder and forest dependent businesses, forest users and local communities on an annual basis, regarding integrating non-timber forest uses into forest management planning. This reporting out will include, where there has been disagreement or conflict, the recording of any and all efforts to resolve the differences.

## Current Status & Interpretation

One member of the public reached out to the office to request information about using the airstrip across the river from Woss. He was part of a group of pilots and wanted to clean it up for use. WFP staff directed him to the Ministry of Transportation as they are in charge of managing the airstrip.

Several tourists visited the office asking about how to access the Woss Lake Provincial Park. WFP staff indicated that water transportation of some kind would be required, and that WFP does not provide this.

A biking group reached out to the office to inquire about the road conditions and hauling traffic along Nimpkish Main as they would be doing a long ride along the road during operating hours. WFP staff let them know the general conditions and areas where trucks would be hauling through.

A member of the public sent in a complaint to WFP stating that the outhouses at the Anutz Lake campground were full. Arrangements were made and the outhouses at Atluck, Anutz, Nimpkish, and Woss Lake campsites were emptied out on September 19th. The two Klaklakama campsite outhouses did not get emptied as the pump trucks that were hired to complete the work were full from pumping out the other sites.

A member of the public inquired about good areas to harvest Oregon grapes. A member of WFP staff directed them to an area they had observed Oregon grape plants at earlier in the year.

WFP maintains the Nimpkish Woodlands Advisory Committee as a supplementary means to provide meaningful input into non timber forest uses and values activities in Nimpkish DFA.

## Strategies & Implementation

All evidence of written communication, in the form of emails and letters, regarding the integration of non-timber forest uses into the forest management plan will be recorded and reported out annually.

Persons wishing to communicate on this matter will be asked to clarify their positions in writing, in the form of a letter or email. Any conflicts that arise, and efforts to resolve these conflicts, will be chronicled by the Area Planner, who is responsible for monitoring this indicator.

Verbal communication will not be included, for purposes of this indicator, as it is difficult to objectively report out on this form of communication.

## Forecasts

As this is a reporting out of information, there will be no variance, and it is anticipated that the target will be met within the first year.

## Details/Data Set

A plan to discuss cutblocks in the vicinity of the ski hill prior to harvest has been developed with MCAPS.

## Monitoring

The Area Planner will monitor communications regarding non-timber forest uses and any conflicts with forest users, and efforts to resolve these.

# Target 2: Meetings with Senior WFP Representatives Regarding Community Issues

## Justification

At the November 26, 2015 meeting with members of NWAC, senior WFP management representatives promised to keep the lines of communication open with members of the public advisory group, and to meet with them more frequently. This target is set to measure that commitment.

## Current Status & Interpretation

This target was met in 2024. Three senior WFP management representatives attended the joint NWAC/VINWAG meeting that took place on March 12th, 2024. Stuart Glen and Clint Cadwallader attended to update the group on the FLP process and provide an operational update, respectively. Jon Flintoft also attended to review the CSA audit results and the PEFC webinar on the Canadian Forest Certification system.

## Strategies & Implementation

The Area Planner will ensure that a representative or representatives of senior WFP management attend at least one NWAC meeting every two years. There is no variance for this target, as it is a measure of the company's commitment to the public advisory process.

## Forecasts

The forecast for this target is that it will be met, with no variance, into the foreseeable future.

## Details/ Data Set

This target will be completed based on the number of public advisory meetings attended by members of WFPs Senior Representatives.

## Monitoring

The public advisory group facilitator will monitor whether senior WFP management representatives meet with members of NWAC every two years and provide this information to the Area Planner.

# Indicator 5.2.1: Supporting the Local Community

| Element: 5.2 Communities & Sustainability<br>*Contribute to the sustainability of communities by providing diverse opportunities to derive benefits from forests and by supporting local community economies* | | | | |
|---|---|---|---|---|
| **Value** | **Objective** | **Indicator** | **Target** | **Variance** |
| Communities and Sustainability | Support community sustainability | Level of participation and support in initiatives that contribute to community sustainability. | Target 1 - Level of capital spending is greater than $2 million annually. | 1 year at $1million |
| | | | Target 2 – Report the annual total value of goods & services spent in North Island communities | None |
| | | | Target 3 Yearly, maintain local access to at least 3 minimum categories of raw material types, when Englewood Operation is operating | -1 material type |
| | | | Target 4 – a minimum of 50% of WFP's Community Initiatives Fund for the Englewood operation is invested in communities in the DFA annually | No variance |

## History

New Core Indicator in 2010 with SFMP 11. Core Indicator with CSA Z809-16. Minor revision to indicator in CSA Z809-16 (no material change). Indicator 6.3.1 has been moved into target 3 of this indicator as it was no longer part of criterion 6.

Target 4 is being introduced for 2017, following announcement by WFP's CEO of the Community Initiatives Fund at an all-PAG conference held in Port McNeill in September 2016. The fund is available to each division on an annual basis, and is intended to support community initiatives.

# Target 1: Capital Spending

## Justification

Any healthy and viable business in the long term contributes to community stability by providing a steady level of employment and business opportunity to the communities they exist. To remain competitive and viable over time, businesses must re-invest regularly in the equipment, facilities, and infrastructure they use.

This target provides a measure of the health of the company as well as its commitment to sustainability in the community. To account for periods of extreme economic difficulty and market downturns, a variance of 1 year at one million dollars capital investment is allowed.

## Current Status & Interpretation

| Year | Total Capital Spending |
|---|---|
| 2024 | $1,263,165 |
| 2023 | $1,826,722 |
| 2022 | $2,831,999 |
| 2021 | $751,391 |
| 2020 | $820,335 |

This target was not met for 2024, as it was the second year in a row below the target of $2 million. Market downturns restricted cashflow somewhat within the operation. Capital spending is expected to increase to target values in 2025.

## Strategies & Implementation

Because capital spending has taxation implications, Operations follow a strict set of rules and criteria in the identification of capital projects. These procedures have been developed by the company finance department to align with the requirements of taxation laws.

## Forecasts

The target level has been updated in 2016 to two million dollars.  It is thought to be appropriate as the trend in capital spending has been consistently above 1.5 million since 2010 and had a peak in 2013 at over 5 million. Although 2020 and 2021 were outliers for this data due to unforeseen events, it is expected that this target will be met consistently in the future.

## Details/ Data Set

The capital expenditures done at the Englewood Operations in the last 5 years is summarized in the following table:

| Year | Plant & Equipment Spending | Infrastructure Spending | Total Capital Spending |
|---|---|---|---|
| 2024 | $961,180 | $301,985 | $1,263,165 |
| 2023 | $968,340 | $858,382 | $1,826,722 |
| 2022 | $2,256,991 | $575,007 | $2,831,999 |
| 2021 | $522,790 | $228,601 | $751,391 |
| 2020 | $53,176 | $767,168 | $820,335 |

## Monitoring

Annually, the amount spent in these two categories of capital expenditures is reported by the JDE Purchasing Coordinator – Data from the financial system JDE is used for reporting purposes: JDE is short for JD Edwards Enterprise One which is an Oracle accounting program that WFP uses to track their accounting transactions.

- Plants & Equipment – JDE Code 2849
- Capital Roads (include bridges) – Various JDE Codes (in summary report)

# Target 2: Local Spending

## Justification

The value of goods and services WFP purchases from businesses located in the communities in and around the DFA provides support to those businesses that in turn contribute to the diversity of amenities available to all residents. The Nimpkish Woodlands Advisory Committee has identified the communities of Woss, Port McNeill (including Hyde Creek), Alert Bay, Port Hardy, Port Alice, and Sointula as communities that have important links to community stability. The results from Campbell River and outside the DFA are also included but are not seen as communities that have important links to North Island Community Sustainability. Target 2 reports out with respect to the contributions given to those communities along with others outside the DFA.

No variance is proposed as this is a reporting target.

## Current Status & Interpretation

WFP Englewood Forest Operation continues to source north island goods and services where its efficient and economically viable.

## Strategies & Implementation

The primary strategy of Western Forest Products Inc. is to be a successful and viable business in the global market that can sustain itself through the market cycle.

Where possible local products are purchased to maintain the sustainability of the north island communities identified as having important links (Woss, Port McNeill, Alert Bay, Port Hardy, Port Alice, and Sointula) to the North Island.

## Forecasts

The level of local purchases depends on the availability of specific goods and services and the financial state of the company. Englewood remains committed to report on this target and increase local spending whenever it is a viable choice. No variance is proposed as this is a reporting target.

## Details/ Data Set

The approximate distribution of expenditure by community for 2019-2023 is illustrated in the graph below.

| Year | North Island (Port Hardy, Port Alice) | Alert Bay | Sointula | Port McNeill (including Hyde Creek) | Woss | Campbell River | Sayward | Non Local |
|---|---|---|---|---|---|---|---|---|
| 2024 | 1.06% | 2.13% | 0% | 20.92% | 1.80% | 28.32% | 0.02% | 45.76% |
| 2023 | 0.96% | 2.93% | 0% | 32.83% | 1.72% | 21.35% | 0% | 40.21% |
| 2022 | 1.06% | 1.38% | 0% | 27.10% | 1.78% | 22.23% | 0% | 46.46% |
| 2021 | 2.07% | 2.02% | 0% | 32.78% | 2.22% | 15.09% | 0% | 45.82% |
| 2020 | 1.06% | 2.60% | 0% | 42.26% | 3.68% | 23.59% | 0.01% | 26.79% |

The source information is un-audited data from the JDE financial system and is based on invoicing. The amounts used for the analysis include all sales tax (i.e., PST, GST or HST). The distribution is based on the location of the store or dealership the purchases were made from.

## Monitoring

The goods and purchases made by Englewood are all documented through invoices. The invoices are processed and tracked through the JDE financial system. A summary report provides the base un-audited data for the target.

# Target 3: Local Access to Raw Materials

## History

New Core Indicator in 2010 with SFMP 15. It incorporates pre-existing indicator #40.5. Not a core indicator under CSA Z809-16. This indicator was previously 6.3.1 and has been moved into 5.1.1.

## Justification

Local mills that process logs or special products for secondary manufacturing contribute to community stability on North Vancouver Island. In order to support local diversification, there are 3 main types of raw material that is derived historically from the Nimpkish DFA and currently made available for local purchase at fair market prices:

1. Low value/non merchantable logs used for supplying Atli Chips facility in Beaver Cove,
2. Post-harvest salvage material that is manufactured locally into special forest products (such as shingle and shake blocks) and
3. Low value cedar logs (i.e. company log sorts such as Cedar Utility Shingle and/or Cedar Pulp Camp-run) that are sold to various local buyers.

To account for market fluctuations in demand, a variance of 1 material type category is allowed in a given year.

## Current Status & Interpretation

| Year | Amount of Volume Recovered by Atli Chips ($m^3$) | Amount of Volume Recovered by Special Forest Products ($m^3$) | Amount of Log Sales ($m^3$) |
|---|---|---|---|
| 2024 | 21,374 | 0 | 2501 |
| 2023 | 12,160 | 62 | 600 |
| 2022 | 11,980 | 0 | 1,950 |
| 2021 | 34,358 | 4.8 | 3,829 |
| 2020 | 8,822 | 36 | 3,747 |

| Community | Volume Sold Locally in 2020 ($m^3$) | Volume Sold Locally in 2021 ($m^3$) | Volume Sold Locally in 2022 ($m^3$) | Volume Sold Locally in 2023 ($m^3$) | Volume Sold Locally in 2024 ($m^3$) |
|---|---|---|---|---|---|
| Port McNeill | 1,124 | 182 | 86 | - | - |
| Port Hardy | 2,133 | 3,647 | 1,676 | 15 | 414 |
| Sointula | - | - | 144 | - | 190 |
| Woss | 490 | - | - | - | - |
| Telegraph Cove | - | - | - | 9 | - |
| Alert Bay | - | - | - | - | - |
| Holberg | - | - | - | 577 | 1,897 |
| **Total** | 3,747 | 3,829 | 1,950 | 601 | 2,501 |

Target was met with a variance for 2024 as 2 categories of raw materials were recovered from the DFA. No recovery of special forest products was conducted on the DFA in 2024.

## Strategies & Implementation

Following primary harvesting, cutblocks are assessed to determine their suitability for recovering other raw material such as special forest products and chipper salvage material. Typically, the blocks are assessed in detail by either a Northland representative (for chipper salvage material) or other approved contractors (for special forest products). When specific cutblocks are requested by external sources, plans are then formulated by WFP and the blocks are issued for recovery activities. Local Log sales generally occur at Beaver Cove dryland sort when enough demand and volume of lower value logs exist.

## Forecasts

Local demand for raw material is beyond WFP's control and there are no effective forecasting tools to predict future market demand. Nonetheless, there is no expectation that current long standing company policies to make available material to other users will change.

## Details/ Data Set

Low value/non merchantable logs destined for Northland Power's Chip facility are made available when primary harvesting has been completed in cutblocks, upon request by a Northland representative. A target volume is not appropriate for this product due to ever changing variables such as Northland's supply needs, availability of WFP cutblocks and the

economics of pulling logs from those cutblocks.

Post-harvest salvage material is made available to local salvagers upon request on an individual cutblock basis. Cutblocks are not made available for special forest products (sfp) salvage recovery until after the residue and waste surveys have been completed. Rates are based on market conditions. A target volume is not appropriate for this product due to the highly variable nature of its supply.

WFP's ability to distribute logs into the local market is largely determined by company sawmilling requirements, trade agreements and market conditions. Lower value logs (i.e. such as shingle grade) however, are sold to local buyers based on the inter-relationship of three factors: (1) availability of product (2) demand by local buyers and (3) agreement upon fair market price. WFP recognizes the importance of supplying this type of product to support the local economy (Regional District of Mount Waddington). Setting an annual target volume for this product is not appropriate due to various factors including supply and market demand. WFP Englewood Operation is committed to filling local requests for the purchase of lower valued logs where possible and based on the above-mentioned factors.

The material that is made available for sfp is primarily a by-product of logging and is dependent upon how much harvesting occurs within any given year and utilization efforts in the primary harvesting phase. Generally, the availability of this product is in short supply on TFL 37.

**Maintaining access to the 3 categories of raw material is assessed as follows:**

| ***Local Access to Raw Material*** | **Assessment Criteria** |
|---|---|
| ***Categories 1 & 2 (Chipper Salvage Wood and Special Forest Products)*** | (1) Pertinent Cutting Permits (CP's) are active<br>(2) Contracts or Agreements are in place and current<br>(3) Cutblocks are issued for chipping and/or salvage activities when requested by external parties (and when deemed appropriate by WFP). |
| ***Category 3 (Local Log Sales)*** | (1) No written complaints are received by NWAC or WFP Management regarding restriction of local access to low value logs. |

## Monitoring

The amount of volume utilized as chipper salvage material is tracked via queries in MFLNRO's Harvest Billing System (HBS) on Northland's designated scale site (796). CP 37/94 is a salvage permit that is setup to track volume for chipper salvage for North Island Chipping. CP 37/097 is designated as a minor salvage or special forest products within TFL 37.

In 2024 volume was salvaged concurrent with harvest, under the relevant block hammers, therefore no volume was salvaged under 37/94 or 37/097. **The total volume salvaged in 2024 is 21,374 $m^3$.**

For SFMP information purposes, volume recovered under SFP salvage permit will be reported annually.

The volume of local log sales is tracked via corporate log supply databases such as LIMS. LIMS (Log Inventory and Management System) is software developed by 3Log Systems Inc. LIMS is used to track the harvested volume from our tenures. It allows us to track the location of the volume in our supply chain, through to delivery of the logs (to mills, sales, transfers). Contracts for different phases of logging are also managed in LIMS. LIMS is used to generate our submissions to the Governments Harvest Billing System (HBS).

It is also tracked through the Harvest Billing System (HBS) by Timber License. The information is collected by the scale specialist and reported out by the Timberlands Area Planner in the SFMP annual report out.

## Target 4: Community Initiatives Fund

### Justification

Members of the public advisory group have indicated that they would like to see more investment, and a way to measure that investment, in the local community. WFP's recently established Community Initiatives Fund (CIF) was set up to support initiatives that sustain communities in the DFA, setting a target of investing 50% of the CIF annually.

### Current Status & Interpretation

This target was introduced in 2016, and has been included in the annual report since 2017. Each year Englewood has exceeded the 50% investment both through the donation of equipment and employee time, and monetary donations.

### Strategies & Implementation

WFP selects community projects that will impact the greatest number of individuals possible. WFP donates to non-profits that align with their Community Investment Objectives which:

- focuses on healthy living, culture, or forestry education in local communities
- promotes the sustainable use of wood building materials
- enhances public-use of the working forest or promotes understanding of forest management
- benefits local communities or promotes the value of mutually beneficial partnerships in local communities.

The CIF will be distributed annually, by WFP division, for employees to support community initiatives where they live. It is expected that a minimum of 50% of the funds will be distributed to communities within the DFA, through employees.

The Operations Planner will monitor funds and convey that information to divisional employees.

## Forecasts

This target is likely to be met in the future as the Englewood operation is very close to the communities in the DFA and have been able to exceed expectations for community involvement since this indicator began to be monitored in 2017.

## Details/ Data Set

| | 2020 | 2021 | 2022 | 2023 | 2024 |
|---|---|---|---|---|---|
| 1. 50% of CIF of $2,500 | Yes (See 2020 report for list) | Yes (See 2021 report for list) | Yes (See 2022 report for list) | Yes (See 2023 report for list) | Yes (See list below) |

This target was met, and once again exceeded. In 2023, the Englewood Forest Operation donated to the following:

- Kokish Hatchery, Beaver Cove – Contribution towards operating expenses to support volunteer-run operation ($3,813)
- North Island Concert Society – Monetary contribution to support the final live music performances of the season ($500)
- FiLoMi Days, Port Hardy – Support annual community event that commemorates the fishing, logging, and mining industries that shaped the North Island ($666)
- Nimpkish Knotweed Project – Monetary contribution towards joint project between ‘Namgis First Nation, Western Forest Products, and the MOF ($15,000)
- North Island Secondary School – Scholarship supporting a graduate enrolled in post-secondary education, with preference given to those pursuing studies related to forestry ($500)
- Vancouver Island University, Fundamentals of Forest Harvest Practices Program – In-kind support for two 12-week, 12-student training programs, held in spring and fall in Woss (e.g. WFP guest speakers, site and field tours, equipment use and supervision) ($70,000)
- Sunset Elementary School, Port McNeill – Helped to fund holiday food baskets, as well as nutritious “top ups” for regular breakfast and lunch programs
- Loaves and Fishes North Island Community Food Bank – Supporting holiday food program that serves community members from across Northern Vancouver Island: Woss, Alert Bay, Coal Harbour, Holberg, Port Alice, Port McNeill, Port Hardy, and Sointula ($1,666)

## Monitoring

Monitoring of this figure will be carried out by the Operations Administrator and reported annually.

# Indicator 5.2.2: Community Workforce Investment

| Element: 5.2 Communities & Sustainability<br>*Contribute to the sustainability of communities by providing diverse opportunities to derive benefits from forests and by supporting local community economies* | | | | |
|---|---|---|---|---|
| **Value** | **Objective** | **Indicator** | **Target** | **Variance** |
| Communities and sustainability | Provide diverse opportunities to derive benefits from forests | Level of participation and support in training and skills development. | Target 1 - Annually, 100% of WFP employees participate in defined training (EMS and other) | ≤ 15% for employee training |
| | | | Target 2- Report out on Contractor training (EMS, Safety and others) annually | No variance (report out) |
| | | | Target 3 – Report annual investment in apprenticeship program. | None |

## Target 1 and 2: Employee and Contractor Training

### History

New Core Indicators in 2010 for SFMP 11. Core Indicator with CSA Z809-16, no material change.

### Justification

**Target 1:** This target addresses employee training required to ensure all roles are performed in line with WFPs Sustainable Forest Management System and required Health and Safety regulations. Training is specific to an employee's roles and responsibilities, for example: safe work procedures and standard operating procedures. In light of the Forest and Range Practices Act and the Association of BC Forest Professionals, continual training and education is necessary to maintain employee expertise. The 15% variance for the WFP employees completing to the defined training is to account for exceptional circumstances (e.g., sickness, leave of absence) that may prevent employees from attending training sessions.

**Target 2:** Within the Nimpkish Woodlands Advisory Committee membership there are two Bill 13 contractors. This target addresses the training completed by WFP contractors to ensure all portions of the operation are being run to expected standards, as suggested by Bill 13 contractors in 2017.

## Current Status & Interpretation

The results for 2020-2024 for WFP Employees are as follows:

| Year | Personnel (Staff + Employees) Requiring Training | Training Missed | Percent Trained (%) |
|---|---|---|---|
| 2024 | 90 | 0 | 100% |
| 2023 | 96 | 15 | 85% |
| 2022 | 98 | 0 | 100% |
| 2021 | 102 | 0 | 100% |
| 2020 | 105 | 0 | 100% |

This target was met as all WFP employees received the required training.

The results for 2020-2024 for WFP Contract Employees are as follows:

| Year | Number of Contractors Working for WFP Englewood | Personnel (Staff + Employees) Requiring Training | Percent Trained (%) |
|---|---|---|---|
| 2024 | 10 | 75 | 100% |
| 2023 | 12 | 78 | 100% |
| 2022 | 11 | 75 | 100% |
| 2021 | 13 | 102 | 100% |
| 2020 | 50 | 105 | 100% |

## Strategies & Implementation

**Target 1:** This target is intended to measure the training completed annually by WFP Employees to further their understanding of environmental, professional, and safety standards.

WFP provides training and skill development opportunities for employees and contractors under the existing Environmental Management System, Safety System and the Sustainable Forest

Management Plan. Additional legally required training courses such as Transportation of Dangerous Goods, Blasting, Crew Boat Operator, First Aid, etc. are included in this measure.

Forest professionals are expected to continue professional development to maintain competency in their areas of practice. To meet the requirements covered in the ABCFP annual self-assessment, employees are encouraged to attend training events or acquire the needed skills through reading, other training, or consulting with peers and specialists, etc.

**Target 2:** Employees within a contactor training environment maintain the same standards as WFP employees. WFP training is available annually prior to start of active operations.

WFP Englewood Forest Operation follows the Forest Safety Councils Company size detail by category as follows:

- Individual owner operator (IOO)- 1 owner and 1 office support
- SEBASE and ISEBASE- 2-19 employees, or 1 employee plus contractors
- BASE- Larger Employer- 20 or more employees

The individual owner operator follows WFP's training model and is supported by WFP to receive annual training. Contractors with a large employee base complete and track their own training program with additional WFP supplemental training.

## Forecasts

**Target 1:** Operation has maintained training within the allowable variance consistently. The target of 100% will continue to be pushed for in the coming years.

**Target 2:** Contractor training is a report out and will likely continue to be met as NWAC consistently maintains efforts in this department.

## Details/ Data Set

**Target 1:** The training requirement for each employee is defined by the operation and tailored to the role of the individual. Personnel are considered trained only when all required courses for the position are completed. Englewood conducts training needs assessments to verify achievement of target.

**Target 2:** Training for the contractors is self-reported and regulated.

## Monitoring

**Target 1:** The Operations are responsible for maintain training records for all their employees to ensure all defined training requirements have been met. The Operations Administrators are responsible for tracking this information.

**Target 2:** Contractors working within Englewood Forest Operations Defined Forest Area are responsible for maintaining training records for all employees. WFP does not track training records for contractors. The operations administrator tracks the number of active contracts within the DFA, the Area Planner tracks the number of contractor employees annually via contractor self-reporting.

# Target 3: Apprenticeship Investments

## History

New Core Indicators in 2010 for SFMP 11.

## Justification

Apprenticeships are in investment in the future of the industry. In 2012 a new program was developed by Western Forest Products (supported by WorkSafeBC and BCFSC) and administered at Englewood Forest Operation to train young workers in fundamental logging skills. Apprenticeships support the development of local talent which will be of long-term benefit to the community. As this is a reporting target, no variance is provided.

## Current Status & Interpretation

The Fundamentals of Forest Harvesting program ran in the spring of 2024, and two students were hired on as apprentices.

The 12-week Fundamentals of Forest Harvesting program that was designed based on the BC Forest Safety Council competencies (developed with WFP assistance). The program transitioned into an accredited university program with VIU in 2018 and has become the basis for several forestry production training programs in BC.

Vancouver Island University (VIU) continues to accept applications for this program and delivers the classes in Woss, BC with the continued support of Western Forest Products.

## Strategies & Implementation

Apprenticeship programs develop local talent to facilitate a steady workforce evolution as demographics change, WFP is directly affected by the future of the workforce on the island and will continue to support initiatives in training. The number of placements varies with anticipated workload, economic outlook, and availability of candidates.

WFP continues to support apprenticeships at the Englewood Operations, and will continue to do so as the opportunities arise.

## Forecasts

It is anticipated that apprentices will remain an important part of the WFP workforce as demographics change company wide.

## Details/ Data Set

The table below shows the number of apprenticeships directly supported by WFP since 2019.

| Year | Apprentice Investments | Specialization |
|---|---|---|
| 2024 | 6 | 4 Mechanic Apprentices, 2 Forest Harvesting Program Apprentices |
| 2023 | 2 | 1 Auto Mechanic, 1 Heavy Duty Mechanic |
| 2022 | 3 | 3 Heavy Duty Mechanic Apprentices |
| 2021 | 3 | 3 Logging Fundamentals Students |
| 2020 | 2 | 2 Heavy Duty Mechanic Apprentices |

## Monitoring

Annually, the Operations Administrator gathers the information on apprenticeship from the Payroll Clerk for inclusion in the SFM Annual Report.

# Indicator 5.2.3: Employment

| Element: 5.2 Communities & Sustainability<br>*Contribute to the sustainability of communities by providing diverse opportunities to derive benefits from forests and by supporting local community economies* | | | | |
|---|---|---|---|---|
| **Value** | **Objective** | **Indicator** | **Target** | **Variance** |
| Full-time jobs on the DFA | There are stable full-time jobs provided from the forest resource on the DFA | Level of direct and indirect employment | Target 1 - The number of full time Company and contractor employees from local communities in the DFA is reported. | None |
| | | | Target 2 - Contractors will harvest at least 50% of the total annual timber volume harvested that is attributed to Schedule B lands. | None |
| | | | Target 3 - Report number of non-forestry businesses associated with the Nimpkish DFA | None |

## History

New Core Indicator in 2010 with CSA Z809-08. It incorporates pre-existing indicators # 41, 42 and 44. Core indicator with CSA Z809-16 with no changes in Z809-16.

## Target 1: Full Time Employment from Local Communities

## Justification

The number of full-time employees supported by the Nimpkish DFA affects the stability of North Island communities. The North Island communities identified by the Nimpkish Woodlands Advisory Committee (NWAC) are Woss, Port McNeill (including Hyde Creek), Alert Bay, and Sointula. Most full-time employees locate their families within the region, creating a demand for diverse amenities and sequential employment. Although WFP is not the sole full-time employer in the region, it is the largest employer operating within the Nimpkish DFA. This indicator allows quantification of the impact of company and government policies on local employment.

WFP's employment levels are a function of its ability to generate income. This is governed primarily by the AAC and global market demand. Specific targets and variances for this indicator are not applicable as WFP can neither significantly influence markets, nor control where

employees and their families must reside.

## Current Status & Interpretation

This target is met for 2024 as it is a report out. In 2024 WFP employed 90 full time employees (both union and salary) and 134 contract employees. Company employees are working exclusively with WFP on the DFA and are tracked through the payroll department.

The distribution of WFP employees and contractor employees by community for the 2020-2024 years is shown in the table below. Over half of the full-time company and contractor employees reside within or adjacent to the Nimpkish DFA.

Total of **Company Employees** and Communities in which they reside 2020-2024:

| Number of Full Time Company Employees | 2020 | 2021 | 2022 | 2023 | 2024 |
|---|---|---|---|---|---|
| North of Port McNeill (Port Hardy, Port Alice, Coal Harbour) | 3 | 2 | 4 | 4 | 4 |
| Port McNeill | 35 | 32 | 30 | 29 | 32 |
| Woss | 42 | 40 | 33 | 30 | 31 |
| Alert Bay/Sointula | 4 | 2 | 2 | 1 | 1 |
| **TOTAL North Island** | **84** | **76** | **69** | **64** | **68** |
| **TOTAL North Island Percent** | **80.7** | **74.5** | **75.0** | **73.5** | **75.5** |
| Sayward | 3 | 3 | 3 | 5 | 2 |
| Campbell River+ Black Creek | 9 | 12 | 11 | 13 | 10 |
| Comox Valley | 7 | 7 | 6 | 4 | 4 |
| South of Comox Valley | 1 | 4 | 3 | 2 | 6 |
| **Total** | **104** | **102** | **92** | **87** | **90** |

NWAC has identified that the communities of the North Island of significance for this report are the communities of Woss, Alert Bay, Sointula, Hyde Creek and Port McNeill.

The boundaries for the Regional District of Mount Waddington geographically reference the communities of Malcolm Island, Winter Harbour (Holberg), Coal Harbour, Hyde Creek, Quatsino, Woss, Alert Bay, Port Alice, Port Hardy, and Port McNeill.

To capture the communities of the North Island WFP has extended the communities of significance to the NWAC to include Port Hardy and Port Alice due to staff residing in these towns.

As depicted by the table above, in 2024 75.5% of WFP staff, both union and salary reside in north island communities.

Between 2020 and 2024 over 70% of full-time WFP employees have resided North Vancouver Island.

Total of **Contract Employees** and Communities in which they reside 2020-2024:

| Communities | 2020 | 2021 | 2022 | 2023 | 2024 |
|---|---|---|---|---|---|
| North of Port McNeill (Port Hardy, Port Alice, Coal Harbour) | 6 | 28 | 28 | 18 | 20 |
| Port McNeill | 27 | 36 | 47 | 55 | 45 |
| Woss | 6 | 4 | 5 | 5 | 5 |
| Alert Bay/Sointula | 1 | - | 1 | 1 | 1 |
| Sayward | 4 | 3 | 4 | 5 | 6 |
| Campbell River + Black Creek | 61 | 31 | 38 | 28 | 52 |
| Comox Valley | 16 | 11 | 11 | 9 | 15 |
| South of Comox Valley | 8 | 14 | 21 | 11 | 28 |
| Gold River | 1 | 1 | 3 | 2 | 3 |
| Total | 130 | 128 | 158 | 134 | 175 |

While WFP Englewood prefers to hire within the North Island Community, it does not have control over where contractors hire their employees or where they reside.

Lemare and Holbrook Dyson Logging, Englewood's largest contractors, hire primarily from Port McNeill and Campbell River from the best available applicants.

## Strategies & Implementation

WFP's employment levels are a function of its annual revenue generating strategies, market fluctuations, the AAC, and government policy changes. As these influences are dynamic, employment levels are determined each fall alongside annual harvest plans and budget. While WFP cannot dictate where employees reside, continuing to track this indicator may help direct recruitment strategies in future.

## Forecasts

WFP Englewood Forest Operation recruits conscientious employees that uphold WFP values, found both within and outside of north island communities. It is believed that we will maintain or increase our local employee count as we continue to recruit and advertise positions in our local communities.

## Details/ Data Set

This indicator is based on information collected from WFP's Human Resources department and the Human Resource departments of our local contractors. Mailing addresses are used to distinguish part time residences from permanent residences.

## Monitoring

This information is summarized in the SFM annual report. The payroll clerk gathers this information for company employees and the Timberlands Area Planner gathers the information for the contractor information, this information is received annually, and may not exactly mirror the employment information for the entire year.

# Target 2: Volume Harvested by Contractors

## Justification

Current legislation and part 10.00 of the license agreement obligates WFP to ensure that each year at least 50% of the annual timber harvested involves independent logging contractors. For the B.C. coast, the annual timber volume can be harvested under any combination of full contracts, each of which provides for a term of at least 5 years, and phase contracts, each of which provides for a term of at least 2 years. No variance applies as this is considered a legal requirement.

## Current Status & Interpretation

Going forward the volume harvested by contractors on Schedule B lands will no longer be tracked as the legislative requirement has changed. Instead the proportion of the total volume harvested by contractors will be tracked to ensure that it is at least 50%.

**In 2024 the total volume contracted was 263,548 m3, which was 50% of the total volume harvested on the DFA**.

## Strategies & Implementation

WFP harvests timber with a combination of company employees and various arrangements with contractors. The specific distribution of company and contractor harvest is established as WFP prepares its annual harvest plans and budget each fall.

## Forecasts

Periodic forecasting of the annual contractor harvest is done internally as annual timber harvesting plans are prepared. Forecasting this indicator over a longer period is considered meaningless because decisions around harvest distribution depends on internal and government policy, which are both unpredictable in the long term.

However, based on past performance and the fact that it is related to a legal requirement, it is anticipated that Englewood will continue to meet this target.

## Details/ Data Set

This indicator is assessed based on procedures outlined in the *Timber Harvesting Contract and Subcontract Regulation* as it relates to the British Columbia *Forest Act*. The total timber volume attributable under contract is the sum of the volume attributable to full and phase contractors. Compliance with the contractor clause is calculated according to the steps shown in the following table:

## Monitoring

As timber is harvested it is scaled and both WFP and the MOFLNRO track the volumes. These scaled volumes are used, among other things, to monitor WFP's consistency with contractor harvest compliance. Results are summarized for each calendar year in the SFM annual report. This information is provided by the Divisional Accountant given to the Area Planner who reports it out in the SMF Annual Report.

# Target 3: Non-Forestry Businesses

## Justification

This target was created to demonstrate the number of non-forestry businesses that are available in the defined forest area of the Englewood Forest Operation. By monitoring Woss' economic growth into non-forestry businesses, we can monitor the overall health and stability of the community in Woss.

Community stability on North Island is achieved through diversification of its economic base by allowing communities to better withstand shocks in one sector of the economy. While the forest industry does not control or even directly influence other sectors of local economies, the sustainability of communities, in terms of amenities, is tied to their ability to provide a diversity of work opportunities. Thus, the ability of the forest industry to attract and keep a skilled workforce is linked to the health of the local economy.

Specific targets and variances are not applicable for this indicator as WFP is not able to directly influence the number of non-forestry related businesses.

## Current Status & Interpretation

| Category | Number of Non-Forestry Businesses (2020) | Number of Non-Forestry Businesses (2021) | Number of Non-Forestry Businesses (2022) | Number of Non-Forestry Businesses (2023) | Number of Non-Forestry Businesses (2024) | Comments |
|---|---|---|---|---|---|---|
| Services/General Amenities (store gas station) | 4 | 3 | 3 | 3 | 3 | Contract Cleaners (2), Woss General Store |
| Accommodation | 1 | 1 | 3 | 6 | 6 | Rice Creek RV Park<br>Rugged Mountain Motel<br>Windy Waters Campground<br>3 Private AirBnBs |
| Restaurant | 0 | 0 | 1 | 1 | 1 | Shot in the Dark |
| Cedar Salvage | 2 | 2 | 2 | 2 | 1 | Dakard and Port McNeill Shake and Shingle |
| Waste wood (chips, Phoenix Sea Soil) | 2 | 2 | 2 | 2 | 2 | North Island Power Chip, Phoenix Sea Soil, |
| Lumber Mill | 1 | 1 | 1 | 1 | 1 | Edge Grain Forest |
| Art | 1 | 1 | 1 | 1 | 1 | Gordon Henschell (artist) |
| Outdoor Recreation | 2 | 2 | 1 | 1 | 1 | Mt. Cain Ski Hill |
| Guiding/ Hunting- owner/operators not actual guides | 2 | 2 | 2 | 2 | 2 | Fishing Charters (Dave Summers); Hunting Guide (Dave Fyfe) |
| Trapping | 3 | 3 | 3 | 3 | 3 | Bill Tatton,<br>Bob Brittain, Jim Bell |
| Product Services – cosmetics | 0 | 0 | 0 | 0 | 0 | - |
| Accounting | 1 | 1 | 1 | 1 | 1 | Accounting Business (Shelly Stockand) |
| Small Engine Repair | 1 | 1 | 1 | 1 | 0 | Small Engine Repair |
| Salal Pickers/ Wreaths and Boughs | 2 | 2 | 2 | 2 | 2 | Norma Benoit, Han (local wreath and boughs) |
| **Total:** | **22** | **21** | **23** | **27** | **25** | |

This target is a report out. The table above details the number of non-forestry businesses

located within the DFA between 2020-2024 and lists the names of those currently in business.

## Strategies & Implementation

Several businesses in our DFA are dependant on WFP since WFP is a major employer in the area. Keeping track on these businesses in the area will give Western an understanding of the local economy in the DFA. While most businesses are well known, some are more niche and may have been overlooked in this report.

WFP Englewood is committed to buying local as often as practical in order to continue to support the local economy.

## Forecasts

While businesses have reduced slightly in the past year, it is believed that they may pick up again in the future as logging continues to bolster the local economy. Predicting this target is not considered appropriate since, aside from the regular employment that WFP provides, WFP has no direct control over the number of local businesses. WFP Englewood will continue to monitor these businesses and support them whenever suitable.

## Details/ Data Set

This indicator is an assessment of known non-forestry businesses operating within the Nimpkish DFA. Specific targets and variances are not applicable for this indicator. It is not appropriate to set targets for this indicator as the external markets dictates the management of WFP expenditure.

## Monitoring

WFP internally tracks these businesses through inquiries to the Port McNeill and Mt. Waddington Regional District Chamber of Commerce, internet, and local knowledge. Results are summarized in the SFM annual report by the Timberlands Area Planner.

# Indicator 6.1.1: Determining NWAC Success

| Element: 6.1 Fair and Effective Decision Making<br>*Demonstrate that the SFM public participation process is designed and functioning to the satisfaction of the participants and that there is general public awareness of the process and its progress* | | | | |
|---|---|---|---|---|
| **Value** | **Objective** | **Indicator** | **Target** | **Variance** |
| SFM public participation process | SFM public participation process works well | Level of participant satisfaction with the public participation process | Overall positive results from an annual NWAC member survey | NWAC member survey completed every 2nd year |

## History

New Core Indicator in 2010 with CSA Z809-08. It incorporates previous indicator 53 from the Z809-08 SFM Plan. Under CSA Z809-16 this indicator has not changed but has been moved from Element 6.4 into 6.1 (Previously Indicator 6.4.1).

## Justification

This target provides a measure of the success of the Public Advisory Group process. The CSA Z809-16 SFM Standard contains a requirement for the Public Advisory Group process to create and maintain a way to measure participants' satisfaction with the participation process.

The results of the survey will identify both areas of strength and improvement. The variance is to allow for the possibility that circumstances may affect timing or appropriateness of a survey in a given year.

## Current Status & Interpretation

The 2024 survey was completed, with 6 respondents. Significant efforts are being made to incorporate feedback from the 2024 survey to improve NWAC going forward. The survey will be sent out again at the end of 2025 to determine the success of the NWAC improvement efforts.

Responses were favourable, with many commenting on the success of the development of the TFL37 FLP.

## Strategies & Implementation

WFP and NWAC have demonstrated a successful, strong, and committed working relationship for more than a decade. Feedback from NWAC is an on-going event, through the regular meetings and field trip processes. This contributes to ensuring this target is met without the need for a formal survey, however, a formal survey is usually conducted to good results.

The objective of a survey is to seek official feedback from NWAC members on their satisfaction with the process, identify areas for improvement and generate action plans to address concerns. Where communication or survey results indicate a less than satisfactory result in any category, WFP and NWAC will work together to resolve the issues.

## Forecasts

The NWAC was formed in 1999 and since has been an effective public input process supported by voluntary participants. WFP reviews the results of the survey annually with members and makes significant efforts to acknowledge and address the concerns. This trend is expected to remain positive over time.

## Monitoring

The Area Planner and NWAC Facilitator will ensure a public satisfaction survey is conducted once a year when appropriate. The NWAC Facilitator will tally and summarize the results of the NWAC member survey and include the results in the SFMP annual report.

# Indicator 6.1.2: NWAC Continued Development

| Element: 6.1 Fair and Effective Decision Making<br>*Demonstrate that the SFM public participation process is designed and functioning to the satisfaction of the participants and that there is general public awareness of the process and its progress.* | | | | |
|---|---|---|---|---|
| **Value** | **Objective** | **Indicator** | **Target** | **Variance** |
| Public capacity to meaningfully participate. | Develop/improve public participation capacity over time. | Evidence of efforts to promote capacity development and meaningful participation in general | Target 1: The list of educational opportunities provided annually to the public is reported. | None |

## History

New Core Indicator in 2010 with CSA Z809-08 SFMP. Core Indicators 6.5.1 and 6.5.2 also support this indicator and target. It is a core indicator under CSA Z809-16. It was previously numbered as 6.4.2 and has been revised to 6.1.2.

## Justification

This indicator provides a measure of efforts to increase public awareness and understanding of forest management and to address public concerns. Occasions for interactive exchange with the public present opportunities to expand public awareness, this awareness will enable educated evaluations and decisions regarding forest resource management issues. As a reporting target, no variance is offered.

## Current Status & Interpretation

Communication with the public advisory group NWAC was maintained throughout 2024. Five meetings were held in 2024.

| Date | Event | Group |
|---|---|---|
| March 12th, 2024 | Joint NWAC/VINWAG Meeting | NWAC/VINWAG |
| April 18th, 2024 | NWAC Meeting | NWAC |
| June 8th, 2024 | NWAC Meeting | NWAC |
| November 7th, 2024 | Joint NWAC/VINWAG Meeting | NWAC/VINWAG |
| December 5th, 2024 | NWAC Meeting | NWAC |

## Strategies & Implementation

Englewood Forest Operation will continue to be a large part of these public advisory meetings and will continue to encourage discussion around the indicators that are presented at these meetings. In the future we hope to see more events and potential for more open communication

between the forest licensee and the public.

## Forecasts

Based on past requests and events, it is anticipated that several opportunities for improving public knowledge and capacity to participate in public input processes will continue to present themselves and to be accommodated by WFP.

## Details/ Data Set

This indicator is determined by tallying the number of expert presentations, community visits and other public education opportunities completed in a calendar year along with a description of what was discussed.

## Monitoring

The Area Planner will summarize the number of expert presentations, community visits and other public education opportunities completed in a calendar year along with a description of what was discussed from NWAC minutes and files and report the results in the annual SFM Report.

# Indicator 6.1.3: Publicly Accessible Resources

| Element: 6.1 Fair and Effective Decision Making<br>*Demonstrate that the SFM public participation process is designed and functioning to the satisfaction of the participants and that there is general public awareness of the process and its progress.* | | | | |
|---|---|---|---|---|
| **Value** | **Objective** | **Indicator** | **Target** | **Variance** |
| Relevant information for the public. | Relevant information is provided. | Availability of summary information on issues of concern to the public | 1) SFMP Annual Report will be advertised annually and maintained on website; | None |
| | | | 2) FSP will be advertised annually and maintained on website, and a summary of any non-confidential public comments received from FSP advertising or open houses will be prepared; | None |
| | | | 3) A summary of Corporate Monitoring and Research Projects and Alliances will be maintained annually | 1 year missed |
| | | | 4) At least 25 people are reached annually through educational outreach events. | 1 year < 25 |

## Target 1: SFM Report Availability

### History

New Core Indicator in 2010 with CSA Z809-08. Core indicator under CSA Z809-17. Under CSA Z809-16 this indicator has not changed but has been moved from Element 6.5 into 6.1 (Previously Indicator 6.5.2). Indicator 6.5.1 has been added as Target 3.

### Justification

The annual Sustainable Forest Management (SFM) Report summarizes WFP's performance against the targets established in the Sustainable Forest Management Plan. This is a key source of information for the public on the performance criteria. A variance is not appropriate for this target and none is proposed.

The SFM Report is made available to the North Island Public Advisory Group through email and is posted on their website for public viewing, hard copies are available upon request.

## Current Status & Interpretation

The latest Englewood SFM Report is available online through the public advisory groups portion of the Western Forest Products website. The latest version of the Nimpkish Woodlands SFM plan is available here: https://www.westernforest.com/public-advisory-groups/

This target has been met for 2024.

## Strategies & Implementation

WFP's main communication strategy is to make the SFM Report available to the general public online through their website. Alternatively, electronic copies are available on request.

## Forecasts

Given that the CSA Standard requires this information to be made available to the public, it is expected that the WFP website will continue to be used for this purpose.

## Details/ Data Set

Refer to Current Status for latest data.

## Monitoring

The Area Planner ensures SFM Reports are posted on the appropriate websites as they are made available. The Operation is responsible to prepare the Report on a timely basis under the coordination of the Senior Operations Planner.

# Target 2: FSP Advertising

## History

New Core Indicator in 2010 with CSA Z809-08.

## Justification

The Forest Stewardship Plan (FSP) is a legal document outlining general information on the results and strategies applied to operational plans. Combined with a summary of comments received during the planning process, the FSP provides substantial information on operational issues associated with forest resource development. A variance is not appropriate for this target and none is proposed.

## Current Status & Interpretation

The Central Island Forest Operation FSP incorporates the entire Englewood Operation, it is available from the WFP website at:

https://www.westernforest.com/sustainability/environment/plans/forest-stewardship/central-island-forest-operation/

The FSP was updated in 2017 after a public consultation and first nations review. No comments were received as noted by Paul Kutz on February 21, 2018. The FSP Forest Development Units were changed to include the communities of Campbell River, Sayward, Gold River, Nootka Island, Zeballos, Beaver Cove and Woss. The FSP was approved by the Ministry of Forests, Lands and Natural Resource Operations on May 9, 2017. It has a term of 5 years and will be in effect from May 9, 2017 to May 9, 2022.

A two-year extension to the plan was approved in June 2024. The extension allows the current FSP to remain in place for 2 years less a day and requires no advertisement for comments as no substantial changes were made to the document. A proposed extension has also been submitted to allow the FSP to remain in place until the later of either June 2026 or when the new Forest Landscape Plan (FLP) project is approved and implemented.

## Strategies & Implementation

All Forest Stewardship Plans (FSPs) are posted to the Western Forest Products website for availability to the general public. This practice is voluntary, started in response to concerns that the abolition of Forest Development Plans (FDP) would cause less information to be publicly available. Concerns about new FSPs can be voiced during public consultations and first nations reviews shortly after development.

## Forecasts

It is anticipated that WFP will continue to make available the Englewood Forest Operation Forest Stewardship Plan for public access.

## Details/ Data Set

Data can be found by following the link posted in the section titled “Current Status and Interpretation”.

## Monitoring

The Senior Forest Planner and Senior Timberlands Forester are responsible to ensure the latest applicable Forest Stewardship Plan is available from the WFP website.

# Target 3: Research Summary

## History

New Core Indicator in 2010 with CSA Z809-08.

## Justification

A summary report on WFPs corporate research projects provides specialized information for the public. Many of the research projects covered support the Adaptive Management program of the company’s Western Forest Strategy. A variance is not appropriate for this target and none is proposed.

## Current Status & Interpretation

The Company supports and engages in forest research and monitoring that leads to improved forest management practices. Our objectives include sustaining timber supply and economic values, sustaining ecological values and processes, and sustaining social values. The strategy is to

- Identify knowledge gaps and recommend basic and applied research needs;
- Engage with government, academic, and private agencies that have capacity and mandate to undertake applicable research;
- Support (with letters, in-kind resources, and leverage funding) research funding proposals for projects of strategic or particular interest to WFP tenures;
- Cooperate with research organizations in conducting basic and applied research; and
- Test and develop workable applications and uses of published research that are relevant to Western Forest Products' management goals and responsibilities.

Significant areas of research include

- Forest Ecology – The objectives of the forest ecology research program are to determine the effects of management activities on forest ecosystem functions and components and to improve our ability to predict ecosystem response. Results of this work lead to development and implementation of ecologically sound silviculture prescriptions and practices.
- Silviculture – The silviculture research program focuses on examining silvicultural practices for regeneration and growth. Objectives of this research are to maintain and enhance timber supply where economically viable to do so. Various trials—some being monitored after 30 or more years from establishment—examine species selection, genetic gain for volume and pest tolerance, stock types, mechanical site preparation, vegetation control, and fertilization.
- Forest Growth and Yield & Light Detection and Ranging (LiDAR) – The aim of this program is to quantify forest inventory and growth rates across the range of site conditions on the company's tenures. The company has invested in LiDAR to improve inventory estimates and aid in planning. This investment has been further employed to examine forest ecology knowledge gaps.

Research supported or implemented by the Company occurs across its tenures. In many cases, the findings apply broadly to sites in multiple tenures.

The following is a listing of active and long-term forest management research and monitoring projects in which the company is a lead or major partner; it covers all company tenures and divisions. Those projects which were monitored, measured, or reported on in 2023 are underlined. Funding sources apart from the Company (WFP) may include Natural Science and Engineering Research Council of Canada (NSERC), Land Based Investment Strategy (LBIS), Ministry of Forests (MOF), Natural Resources Canada (NRCan), BC Centre for Clean Energy (CICE) and GenomeBC (and GenomeCanada).

Forest Ecology: Variable Retention Adaptive Management (VRAM)

- Lewis Lake (R885), Moakwa (R1164), Port McNeill (R817), Tsitika (R917), Horseshoe Lake (R949), Goat Island (R1009), Memekay (R1163), Klanawa (R1217) Forest Structure Experimental Sites

- Avian communities, carabid beetles, terrestrial gastropods, small streams
- Retention Monitoring

Forest Ecology: Species at Risk

- Northern goshawk site monitoring
- Bear den monitoring
- Owl population monitoring
- Breeding birds: Population trends and habitat association

## Strategies & Implementation

WFP will make the FSP available to the general public through their website. This is a voluntary practice that is proven to be a cost-effective method of public communication.

## Forecasts

A change in the WFP policy to post the monitoring and research projects report to its website is not anticipated.

## Details/ Data Set

The details of current projects are available upon request.

## Monitoring

The Strategic Planning Biologist updates the Summary report on Monitoring and research projects, it is made available to the public on request.

# Target 4: Educational Outreach

## History

New Core Indicator under CSA Z809-08 (carried forward from 2009 SFM Plan indicator 37).

Not a Core Indicator under the CSA Z809-16 (but has been carried forward from the 2016 SFM Plan and has moved from Element 6.5 to 6.1 to reflect the new standard organisation (previously Indicator 6.5.1)).

The target was revised November 2017 to remove reference to a separate Communications Plan document. All elements of the plan were incorporated into the indicator.

## Justification

This indicator quantifies Englewood's success in public education of natural resource management in the forestry sector. Due to uncertainty of participation, variance allows for 1 year under the target number.

To bridge the gap between forestry activities and public knowledge, Englewood plans to include programs such as forest tours, public education (school visits, presentations), and public communication (public outreach events and NWAC meetings).

## Current Status & Interpretation

During 2024 there were five successful NWAC meetings, including a joint NWAC/VINWAG meeting in March and a second in November.

| Date | Event | Group |
|---|---|---|
| March 12th, 2024 | Joint NWAC/VINWAG Meeting | NWAC/VINWAG |
| April 18th, 2024 | NWAC Meeting | NWAC |
| June 8th, 2024 | NWAC Meeting | NWAC |
| November 7th, 2024 | Joint NWAC/VINWAG Meeting | NWAC/VINWAG |
| December 5th, 2024 | NWAC Meeting | NWAC |

Education opportunities were also offered to the general public in the form of WFP-led backroads safety stations. These stations were set up at the entrance to mainlines that see a lot of public traffic, enabling Western employees to provide resource road safety tips and maps to the public.

The *Fundamentals of Forest Harvesting Practices* program was once again held in Woss in 2024, partnered with WFP.

## Strategies & Implementation

WFP Englewood will continue to communicate the status of indicators to the advisory committee on an annual basis.

Any request for public education through events, tours, job shadowing, etc. will be considered for accommodation by the planning and operational staff at the Englewood Forest Operation.

## Forecasts

It is expected that opportunities to increase public knowledge and understanding of forest management will continue to be accommodated by WFP through the Manager of Regional Initiatives. While this may decrease operational opportunities for outreach, Englewood will continue to be open to accommodating any educational opportunities that may arise.

## Details/ Data Set

Total outreach numbers are based on attendance or sign-up sheets.

## Monitoring

The Area Planner gathers the information through the Englewood Forest Operation planning and production staff involved with the events.

# Indicator 6.2.1: Health & Safety Committee

| Element: 6.2 Safety<br>*Demonstrate that the organization is providing and promoting safe working conditions for its employees and contractors* | | | | |
|---|---|---|---|---|
| **Value** | **Objective** | **Indicator** | **Target** | **Variance** |
| Worker Safety | There is an active worker safety program | Evidence of cooperation with DFA related workers to improve and enhance safety standards, procedures and outcomes in all DFA-related workplaces and affected communities. | Implement & maintain Occupational Health and Safety Committee | None |

## History

This is a new Core Indicator and Target for the Z809-08 SFMP. Core indicator under CSA Z809-16, with a minor change under CSA Z809-16. The Indicator has been moved from Element 6.3 to Element 6.2 (previously Indicator 6.3.2).

## Justification

Safety Programs are required under WorkSafe BC legislation, Occupational Health and Safety Regulation (requirements are dependent on the number of employees). Western Forest Products promotes safety as it's primary concern and enables employees to discern any hazards or hazard potential and resolve them on an operations basis.

## Current Status & Interpretation-

The Englewood Occupational Health and Safety Committees meet once a month when the Operation is operating. Minutes for these meetings are produced and distributed.

| Year | Number of Occupational Health and Safety Committee Minutes (e.g. monthly, if operating). | Goal of Program met (Y/N) |
|---|---|---|
| 2024 | 11 | Yes |
| 2023 | 9 | Yes |
| 2022 | 10 | Yes |
| 2021 | 11 | Yes |
| 2020 | 7 | Yes |

In 2024 a total of 11 meetings were held. Operation was inactive in December for winter shutdown. Safety meetings were held during the remaining 11 months.

## Strategies & Implementation

Safety performance is a key measurable for the Englewood Forest Operation. Improvements in

Safety are supported by the EH&S Team, corporate polices, standards, hazard reports, work procedures etc. Locally, MIFO manages safety utilizing an OHS Program, emergency response procedures and by maintaining a "SAFE" company certification with the BC Forestry Safety Council. Continual improvement is a key component of the WFP Safety System, WorkSafe BC requirements and the Forest Safety Council SAFE Company certification requirements.

Health and Safety Committees are comprised of WFP representatives, contractor representatives and union representatives, meetings are held on a regular basis (typically monthly during operations).

## Forecasts

It is anticipated that the target will be met as the WorkSafe BC requires joint Health and Safety Committees to meet regularly.

## Details/ Data Set

Meeting minutes of OH&S Committee within the Operations health and safety plan.

## Monitoring

The Operations Administrators will maintain monthly Operation's OH&S Committee meeting minutes. WFP Safety Advisory staffs are in place and provide advice and support to the Operation. A company-wide Incident Investigation Process and tracking system (SITRUS) is also in effect to ensure learning from incidents are communicated throughout Timberlands.

# Indicator 6.2.2: Worker Safety

| Element: 6.2 Safety<br>*Demonstrate that the organization is providing and promoting safe working conditions for its employees and contractors.* | | | | |
|---|---|---|---|---|
| **Value** | **Objective** | **Indicator** | **Target** | **Variance** |
| Worker safety | Worker safety improves over time | Evidence that a worker safety program has been implemented and is periodically reviewed and improved | Maintain SAFE Company certification and WFP Safety System | None |

## History

This is a new Core Indicator and Target for the Z809-08 SFM Plan. Core indicator under CSA Z809-16. No changes under CSA Z809-16, but the Indicator h.as been moved from Element 6.3 to 6.2 (previously Indicator 6.3.3).

## Justification

Safety Accord Company Enterprise (SAFE) is a program provided through the BC Forest Safety Council designed to maintain a standard of safety across the industry. WFP requires that all

operations and contractors maintain SAFE certification to ensure worker safety on WFP associated sites. To be SAFE certified the company must successfully pass an annual audit; this audit proves that the operation has implemented an adequate worker safety program that meets industry standards.

WFP has additional employee safety programs that are implemented at the Englewood Operation, examples include: Annual Health and Safety Compliance Training, Hazard Assessment Tools, Western Life Saving Rules, and Standard Operating Procedures.

## Current Status & Interpretation

SAFE Company Certification initiated in 2007 and has been a part of WFP safety policy from its inception. All contractors working for WFP in Timberlands Operations are required to maintain valid SAFE Company Certification and valid registration with WorkSafe BC.

WFP's current Forest Safety Council Certificate number is 9070161 and is currently valid until November 2025.

| Year | SAFE Company Certification | | Target Met (Y/N) |
|---|---|---|---|
| | WFP | Contractors (SAFE Cert Status Current) | |
| 2024 | Yes | Yes | Y |

## Strategies & Implementation

SAFE certification of contractors is confirmed at time contracts are signed (upon receipt of the Orientation Paperwork). In addition, contract administrators also periodically review active contractors to ensure their SAFE certification status is current.

The Englewood Forestry Operation is responsible for its maintenance of SAFE certification and passing of annual audits. Additional safety performance targets congruent with WFP standards is reviewed annually by the operation, and reports are filed with WFP's corporate division. Some of these targets include reports for near misses, hazard assessments, annual training for each employee covering over fifty implemented safety standards, and regular operation/vehicle inspections. These standards comply with the international Occupational Health and Safety standards ISO45001.

## Forecasts

It is anticipated that this target will continue to be met as current corporate policies include support of the BC Forest Safety Council SAFE certification program.

## Details/ Data Set

SAFE Company Certification and audit results can be found at:

https://www.bcforestsafe.org/other/who_is_SAFE/SAFE_Certified_Companies.pdf

WFP administration staff maintains records of all health and safety training, meetings, assessments, audits, and reports at each operation.

## Monitoring

The Englewood planning department and operations administrators will provide evidence of continued certification with the BC Forest Safety Council and other WFP health and safety initiatives.

# Indicator 7.1.1: Evidence of Understanding of Aboriginal Title and Rights

| Element: 7.1 Aboriginal and Treaty Rights<br>*Recognize and respect Aboriginal title and rights, and treaty rights. Understand and comply with current legal requirements related to Aboriginal title and rights and treaty rights* | | | | |
|---|---|---|---|---|
| **Value** | **Objective** | **Indicator** | **Target** | **Variance** |
| Aboriginal title and rights. | Aboriginal title and rights are understood. | Evidence of a good understanding of the nature of Aboriginal title and rights | Information sharing meetings held with each FN at least annually with discussion topics ranging beyond operational plans. | FN missed in a 12-month period because inactive in that territory. |

## History

New Core Indicator in 2010 with CSA Z809-08. Core indicator under CSA Z809-16. Moved from Criterion 6 to Criterion 7 in CSA Z809-16 (previously Indicator 6.1.1).

## Justification

This indicator provides a measure of success at coordinating and managing activities to avoid infringement of Aboriginal rights, and provides a measure of information sharing activity, in support of CSA SFM principles. It is noted that this indicator does not constitute consultation and is not part of a consultation process. Consultation is done Government to Government with each Band, whereas this indicator groups all Bands and is voluntary on behalf of the company.

An important component of this indicator is the wide-ranging topics discussed during Information Sharing meetings. The discussions going beyond those associated with normal operational planning provides the best evidence that WFP staff understand the nature of Aboriginal titles and rights.

The Nimpkish DFA is located almost entirely within the 'Namgis First Nation territory. Additionally, small areas in the south and north central portions are within the Mowachaht/Muchalaht, We Wai Kai and the Tlowitsis First Nations' territories. Often no operation occurs in those small parts for long stretches of time. The variance is meant to allow for a reduced frequency of information sharing meetings for Nations that are not directly affected or involved by Englewood operations.

## Current Status & Interpretation

Ongoing communications occurred with ‘Namgis First Nation, and Western has committed to meeting with them semi-monthly into 2024 to discuss operations on their traditional territory. In 2024 meetings were held roughly biweekly, and these meetings have continued into 2025.

WFP will continue to pursue consultation with each First Nation whose traditional territory overlaps with planned harvest operations.

Englewood has also been involved in the TFL 37 FLP pilot project supported by the Office of the Chief Forester. The FLP project is an opportunity for Englewood to work collaboratively with the 'Namgis to produce a higher-level plan that will serve the interests of both Western Forest Products and the 'Namgis First Nation.

## Strategies & Implementation

The principal strategy for Englewood is to maintain free ranging and open lines of communications with all the First Nations with territory included within the DFA. A main component of this strategy is the information sharing meetings held with each First Nation. There is no set frequency for such meetings. They tend to occur once a year to update each First Nation on WFP’s plans, but they have occurred more frequently, particularly with ‘Namgis when needed and/or requested.

Alternatively, meetings focused on various aspects of WFP’s relationships with each Nation can and have been convened by either party.

## Forecasts

Given the continued focus of the BC Government in reaching settlements with First Nations, it is anticipated that information sharing meetings and other communication meetings between WFP and First Nations will continue to occur. These meetings form the primary means to coordinate efforts and ensure the rights of all parties are understood and respected.

## Details/ Data Set

Meetings minutes are normally created to document discussions held and decisions made and action items to follow up. These minutes are kept on file at the Operations by the Senior Operations Planner and provide the evidence to report on this target.

## Monitoring

There is no special monitoring process for this target. The records of information sharing meetings are collected, reviewed, and summarized annually in the SFM Report. The Timberlands Area Planner gathers this information and summarizes it for the Annual Report.

# Indicator 7.1.2: Open and Respectful Communication with FN

| Element: 7.1 Aboriginal and Treaty Rights<br>*Recognize and respect Aboriginal title and rights, and treaty rights. Understand and comply with current legal requirements related to Aboriginal title and rights and treaty rights.* | | | | |
|---|---|---|---|---|
| **Value** | **Objective** | **Indicator** | **Target** | **Variance** |
| On-going open and respectful communications | On-going open and respectful communications with Aboriginal communities to foster meaningful engagement | Evidence of ongoing open and respectful communications with Aboriginal communities to foster meaningful engagement, and consideration of the information gained about their Aboriginal title and rights through this process.<br>Where there is communicated disagreement regarding the organizations forest management activities, this evidence would include documentation of efforts towards conflict resolution. | i. All operational plans are accessible for review by local First Nations.<br>ii. Report summary of on-going communication (i.e., meetings, call logs, emails) NEW Z809-16 Target<br>iii. Where disagreement occurs and is made known, the disagreement and all efforts of conflict resolution are documented. NEW Z809-16 Target | None. |

## History

New Core Indicator in 2010 with CSA Z809-08. It incorporates pre-existing indicators # 45. Moved from criterion 6 to criterion 7 in CSA Z809-16 (Indicator 6.1.2 is now Indicator 7.1.2), with some significant revisions to focus on ongoing communication rather than a focus on input into plans.

Target ii and iii were added as part of the CSA Z809-16 standard.

## Justification

This indicator provides a measure of WFP's efforts at coordinating and managing activities to avoid infringement of Aboriginal rights, and provides a measure of information sharing activity, in support of CSA SFM principles. It is noted that this indicator does not constitute consultation, and is not part of a consultation process. Consultation is done Government to Government with each Band, whereas this indicator groups all Bands and is voluntary on behalf of the company. This indicator is a demonstration of the opportunity given all affected First Nations to review proposed plans and referrals and provide comment.

This indicator is intended to demonstrate WFP's efforts to provide the Aboriginal communities

with the key information concerning its plans in order to gain their acceptance of those plans.

A number of Ministry of Forests, Lands & Natural Resource Operations' policies provide the framework for plan reviews with First Nations. In that context, no variance is provided.

**Target 2 and 3:** Within the CSA Z809-16 Standard under Element 7.1 Aboriginal and treaty rights, there is an additional emphasis around meaningful relationships with Aboriginal Peoples that requires engagement and consultation regarding forest management decisions and incorporation of Aboriginal values into forest management. It is believed through the standard that the foundation for healthy Aboriginal relationships is based on respecting Aboriginal title and rights while promoting a consensus based process for forest management decision making. This in turn leads to a deeper level of consultation over Aboriginal rights that directs us towards consent based decision making.

## Current Status & Interpretation

The Nimpkish DFA is located almost entirely within the 'Namgis First Nation territory. Additionally, small areas in the south and north central portions are within the Mowachaht/Muchalaht and the Tlowitsis First Nations' territories. However, new line work provided by the Ministry of Forests, Lands and Natural Resource Operations (MFLNRO) in 2010 showed that bands represented by the Laich-Kwil-Tach Treaty Society may also have small portions of the DFA within their territorial claims. Additional information was provided in 2012 by MFLNRO, based on new territorial assertion that indicates the Kwakiutl Traditional Territory overlaps portions of the Beaver Cove area of TFL 37.

On an annual basis, or more frequently as required, WFP reviews, shares information with and seeks input on specific cutblocks with all these First Nations

The table below details the opportunities documented for First Nations in 2024 to review operational plans. While no operational plans were reviewed directly with the planning department and either the Kwakiutl or Mowachahat Muchalaht First Nations, the plans for blocks within their territories were made available for review. Additionally, higher level planning took place throughout 2023 with the WFP corporate team and both Nations.

| | Nanwakolas | | | | |
|---|---|---|---|---|---|
| 'Namgis | Wei Wai Kum | Tlowitsis | We Wai Kai | Kwakiutl | Mowachahat Muchalaht |
| 60 | 2 | | | - | - |

***Target 2 and 3: Summary of Ongoing Communication and First Nations Concerns***

Collaboration is anticipated to continue through ongoing planning with First Nations whose traditional territory overlaps with the DFA. Consultations throughout 2023 has resulted in successful planning for forest values of interest to First Nations.

## Strategies & Implementation

The traditional territory determines which First Nations are contacted so that appropriate review and discussion can occur. Referral is conducted for all proposed new development.

WFP seeks active partnerships primarily with the 'Namgis First Nations to build community

relationships and to promote understanding and acceptance of forest MPs. On an annual basis, or more frequently as required, WFP reviews, confers with and seeks input on specific cutblocks with all First Nations.

It is through this consultation that issues are raised that are of concern to the FN. WFP works to maintain the FN relationships through meetings, telephone conversations, emails, letters etc. Through each of these communications, WFP strives to have respectful dialogue and reach meaningful participation. In the event that the communication results in a disagreement, it will be documented along with the attempts of resolution.

## Forecasts

Given the growing influence and profile of Aboriginal communities through the Treaty process, it is expected that efforts foster meaningful engagement will continue and possibly increase at least until final settlement is reached.

WFP seeks to meaningfully engage in it planning processes. It is anticipated that disagreement will occur. However, action plans and follow up will be documented to ensure that both sides have achieved a deeper understanding of each other's viewpoint and that everyone's input is heard and considered.

## Details/ Data Set

This indicator is assessed based on a review of the documented communications with First Nations' reviews of Forest Stewardship Plans (FSP) and amendments, Pesticide Management Plans (PMP), Management Plans (MPs), SFM Plans and Development Referrals (DR). As most plans are in place for 5-year periods and more, annually the opportunities to review plans are more frequently in the nature of Development Referrals than of the legal overarching plans.

## Monitoring

Monitoring of First Nation's consultation is an ongoing process with the Ministry of Forests, Lands & Natural Resource Operations also being a key player in the process. WFP maintains records of communications regarding the review of Plans. This data collection will be extended to include ongoing communications, and documented disagreements. This data is summarized annually in the SFM annual report. This information is collected by the Timberlands Area Planner.

# Indicator 7.2.1: Capacity Development and Participation for Aboriginal Communities

| Element: 7.2 Respect for Aboriginal forest values, knowledge and uses.<br>*Respect traditional Aboriginal forest values, knowledge, and uses as identified through an Aboriginal input process.* | | | | |
|---|---|---|---|---|
| **Value** | **Objective** | **Indicator** | **Target** | **Variance** |
| Aboriginal capacity to meaningfully participate. | Develop/improve aboriginal participation capacity over time | Evidence of efforts to promote capacity development and meaningful participation for Aboriginal individuals, communities, and forest based companies. | Target 1 – The list of efforts to engage the Aboriginal Communities in the SFM Process annually. | None |
| | | | Target 2 – The number of training positions made available to First Nations is at least 1 per year. | 0 for 1 year. |

## Target 1: Efforts to Engage First Nations

### History

New Core Indicator in 2010 with CSA Z809-08. It incorporates parts of pre-existing indicators # 46 from the Z809-02 SFM Plan. Core indicator under CSA Z809-16.

### Justification

In order to effectively incorporate Aboriginal rights and interests into SFM plans, a process should be established to identify, address, and protect Aboriginal rights, uses, cultural resources, and values. Protocol agreements between WFP and First Nations represent the core of such process. In addition, the participation of First Nations in the NWAC process provides an additional opportunity to have meaningful participation. The list of WFP's efforts in these areas provides part of the evidence for this Indicator. As a reporting target, a variance is not proposed.

### Current Status & Interpretation

Biweekly meetings between the planning department and the 'Namgis First Nation continued throughout 2024.

Western Forest Products Englewood Forest Operation continues to have a business arrangement with the 'Namgis First Nation (Danyas) related to harvesting on proposed treaty settlement lands that are within TFL 37. This business arrangement is based on a series of

agreements between WFP, ‘Namgis and the province that were signed in 2015.

WFP continues to communicate with the Nanwakolas Council regularly in respect to the Wei Wai Kum, Wei Wai Kum, and Tlowitsis Nations and their traditional territory.

## Strategies & Implementation

In addition to the regular consultation with First Nations described under indicator 7.1.2, the three local First Nations remain as invited participants of the NWAC with each notification of upcoming NWAC meetings. WFP will make continued efforts to contact and involve Aboriginal forest users and communities in SFM planning.

WFP maintains the Nimpkish Woodlands Advisory Committee as a supplementary means to provide meaningful First Nations input into resource activities in Nimpkish DFA.

## Forecasts

WFP will continue to pursue meaningful consultation and collaboration with First Nations whose traditional territory overlaps with the DFA.

WFP expects to typically host 4 or 6 NWAC meetings a year and will continue to encourage and invite First Nations to participate on the NWAC. Participation since 2012 has declined and is likely to continue to decline. A propose to the target will be important to demonstrate efforts made by WFP to foster meaningful relationships with First Nations.

## Monitoring

The Area Planner will plan for and track this target; this will be completed through meeting minutes from Nimpkish Woodlands Advisory Committee (NWAC) meetings and other NWAC correspondence.

# Target 2: First Nation Training Positions

## History

New Core Indicator in 2010 with CSA Z809-08.

## Justification

An aspect of capacity building is the building of skill set that can facilitate employment within the Forest Industry. As employment level within the aboriginal community is a major concern for First Nations, WFP’s efforts made to further capacity development within their community are valuable. As this is a new target with no history of performance, a variance of one year without a position available is used to help account for the possibility that willing and able candidates cannot be identified and/or that poor market conditions preclude the availability of such position.

## Current Status & Interpretation

This target was met. In 2024 Englewood had one position filled by a First Nation worker. This

consisted of one employee within the Yarding and Loading Department. This number only encompasses the employees who willingly share their status as an Indigenous Person, employees may choose not share this information and are thus not included in the total.

Additionally, a crew of 5 from the 'Namgis First Nation worked with EFO's Silviculture Planner for 4 days. The crew assisted with coning Douglas fir in a block at high risk of elk browse.

## Strategies & Implementation

WFP is committed to maintaining strong and mutually beneficial relationships for the First Nations in which it spatially overlaps and works to hire and train First Nations wherever possible.

## Forecasts

It is expected that First Nations training positions will continue to be made available in the future. WFP is committed to promoting and building capacity with respect to First Nations employment and opportunity.

## Details/ Data Set

| Year | First Nations Employee(s) | Department |
|---|---|---|
| 2024 | 1 | Yarding and Loading |
| 2023 | 2 | Yarding and Loading, Dryland Sort |
| 2022 | 3 | Yarding and Loading (3) |
| 2021 | 3 | Yarding and Loading (3) |
| 2020 | 2 | Yarding and Loading (1), Contract Engineering (1) |

## Monitoring

The Operations Administrator tracks and reports the number of positions made available and filled by First Nations on an annual basis.

# Indicator 7.2.2: Respect for Aboriginal Forest Values

| Element: 7.2 Respect for Aboriginal forest values, knowledge and uses.<br>*Respect traditional Aboriginal forest values, knowledge, and uses as identified through an Aboriginal input process.* | | | | |
|---|---|---|---|---|
| **Value** | **Objective** | **Indicator** | **Target** | **Variance** |
| Aboriginal knowledge | Aboriginal knowledge provided is used and respected | Evidence of understanding and use of Aboriginal knowledge through the engagement of willing Aboriginal communities, using a process that identifies and manages culturally important resources and values | 100% of requested assessments by First Nations are completed prior to harvesting. | None |

## History

This target is newly created in 2010 to support the new Core Indicator in the Z809-08 SFM Plan. This is a Core indicator under CSA Z809-16. It is moved from criterion 6 to criterion 7 in CSA Z809-16 (previously Indicator 6.2.1).

## Justification

This new target is intended to give a measure of success at identifying and managing culturally important resources and values. The provincial Cultural Heritage Act provides guidance on assessing, identifying and managing archaeological sites. Based on Archaeological Overview Assessments (AOA) completed by government, the DFA has been categorized into areas based upon archaeological site potential. By this process, WFP identifies the planned cutblocks for which formal assessments for the presence of Culturally Modified Trees (CMTs) are proposed. A CMT is a tree that has been altered by native people as part of their traditional use of the forest.

During Information Sharing meetings between WFP and affected First Nations within the DFA, First Nations will be asked for input on areas of fishing, hunting, gathering and/or other CHRs (Cultural Heritage Resource-see further definition in the Abbreviations and Definitions section of the report). Through these meeting, the list of proposed CMT assessments is reviewed. In this way, the need for CMT assessment is confirmed. In addition, the specific cutblocks where a more intensive Archaeological Impact Assessment (AIA) might be necessary are identified.

As required, AIA are completed to identify and evaluate archaeological resources within the proposed development area. AIA identify and assess all impacts on archaeological resources that might result from the development, and recommend alternatives for managing unavoidable adverse impacts. AIA require archaeological features known to exist or have a high potential to exist within or adjacent to the proposed development, are completed by an archaeologist and, an Archaeological Impact Assessment report prepared with copies to the Provincial

Archaeology Branch, Western and the First Nation.

No variance is proposed as this follows a recognized process understood and accepted by the First Nations that has a legal basis.

## Current Status & Interpretation

A total of 35 blocks requested a CMT/CHR survey in 2024, 31 had a PFR assessment, 9 had AIAs completed on them to confirm cultural features, and 25 blocks were surveyed for Large Cultural Cedar. All assessments were completed prior to harvesting and retention of those features was/will be confirmed during the Post Harvest Assessment. This target was met.

***Indicator results for cultural features***

| Year | Cutblocks Requiring Assessments | Assessment type | Percent Consistent (%) |
|---|---|---|---|
| 2024 | 35 blocks<br>31 blocks<br>9 blocks<br>25 blocks | CMT/CHR<br>PFR<br>AIA<br>LCC | 100% |
| 2023 | 38 blocks<br>25 blocks<br>8 blocks<br>2 blocks | CMT/CHR<br>PFR<br>AIA<br>LCC | 100% |
| 2022 | 50 blocks<br>23 blocks<br>1 block | CMT/CHR<br>PFR/AIA<br>LCC | 100% |
| 2021 | 43 blocks<br>37 blocks | CMT/CHR<br>PFR/AIA | 100% |
| 2020 | 20 blocks<br>17 blocks | CMT/CHR<br>PFR/AIA | 100% |

## Strategies & Implementation

WFP's strategy is to attempt to identify in advance all development areas (roads and cutblocks) where an assessment for culturally important resources and values is warranted. Through Information Sharing meetings, the need and depth or extent of the assessments is confirmed.

WFP carries out all agreed upon assessments. Normally CMT/CHR assessments are carried out by members of the First Nation involved while a qualified Archeologist will be retained for carrying out an AIA.

Alternatively, when the need and type of assessment cannot be agreed on or when the wood values in an area do not support the cost of a requested AIA, WFP will cancel the specific plan or delay implementation until market conditions improve and make an assessment feasible.

## Forecasts

No change in Government policies and regulation is anticipated in this area. The need for

assessing for Cultural Heritage Resource is expected to continue. WFP expects to continue meeting this target based on its current practice and past performance.

## Details/ Data Set

The requested and/or needed Archaeological Survey and Assessment are recorded and tracked in the individual cutblock planning files.

## Monitoring

A review of the cutblock files provides the information for the Area Planner to report performance in the SFM Plan Annual Report.

# Indicator 7.2.3: Management / Protection of Culturally Important Areas

| Element: 7.2 Respect for Aboriginal forest values, knowledge and uses.<br>*Respect traditional Aboriginal forest values, knowledge, and uses as identified through an Aboriginal input process.* | | | | |
|---|---|---|---|---|
| **Value** | **Objective** | **Indicator** | **Target** | **Variance** |
| Areas where culturally important practices and activities occur | Areas where culturally important practices and activities occur are managed for or protected | Level of management and/or protection of areas where culturally important practices and activities (hunting, fishing, gathering) occur | Identified areas where culturally important practices and activities occur are managed 100% of the time | None |

## History

New Core Indicator in 2010 with CSA Z809-08. It incorporates pre-existing indicators # 47. Core indicator under CSA Z809-16. It has moved from criterion 6 to criterion 7 in CSA Z809-16 (previously Indicator 6.1.3).

## Justification

This new target is intended to demonstrate the input of Aboriginal forest values, knowledge and uses across the Defined Forest Area. The provincial Cultural Heritage Act provides guidance on assessing, identifying and managing archaeological sites. Based on Archaeological Overview Assessments (AOA) completed by government, the DFA has been categorized into areas based upon archaeological site potential. By this process, WFP identifies the planned cutblocks for which formal assessments for the presence of Culturally Modified Trees (CMTs) are proposed. A CMT is a tree that has been altered by native people as part of their traditional use of the forest.

Information Sharing Meetings to review planned cutblock and road development are conducted between WFP and affected First Nations within the DFA. At these meetings, affected First Nations will be asked for input on areas of fishing, hunting, gathering and/or other CHRs (Cultural Heritage Resource). Through these meetings, the list of proposed CMT assessments is reviewed. In this way, the need for CMT assessment is confirmed. In addition, the specific cutblocks where a more intensive Archaeological Impact Assessment (AIA) might be necessary is identified.

As required, AIA are completed to identify and evaluate archaeological resources within the proposed development area. AIA identify and assess all impacts on archaeological resources that might result from the development and recommend alternatives for managing unavoidable adverse impacts. AIA require archaeological features known to exist or have a high potential to exist within or adjacent to the proposed development, are completed by an archaeologist and, an Archaeological Impact Assessment report prepared with copies to the Provincial Archaeology Branch, Western and the First Nation.

## Current Status & Interpretation

This target was met. A total of 12 blocks harvested during 2024 required management for cultural features.

**BC111 –** A PFR was completed with several CMTs recorded. The block was engineered to remove all of the identified features from the harvest area.

**CE041 –** A large cultural cedar survey was completed and 5 LCC's were located. They have been managed consistently with the Nanwakolas LCC protocol.

**DA126 –** A PFR was completed and 11 CMT features were identified. The majority of the features were engineered out of the harvest area – the remaining features were retained and prescribed 5-meter machine-free zones.

**DA309A –** Several recent CMTs and AOPs were found during a PFR. All of the recent CTMs were engineered out of the harvest area, an area of the block was cut to remove an AOP from the harvest area, and another AOP was roped into retention.

**LG059 –** A PFR was completed and several CMTs were found within the cutblock area. Where possible, features were engineered out of the block or into retention. Where this was not possible features were protected with a 5-meter machine-free buffer.

**ME202 –** One CMT feature was found and engineered into retention.

**MKE046 –** There were many recent CMTs found in the block during the layout phase. Eventually the entire northern portion was cut out of the block to preserve the large number concentration of features there. The features that remained in the southern portion of the block were either engineered into retention or buffered with 5-meter machine-free zones.

**NE121** – A PFR was completed and several CMTs were found within the cutblock area. Where possible, features were engineered out of the block or into retention. Where this was not possible features were protected with a 5-meter machine-free buffer.

**NS049A** – Several lithics and CMTs were discovered during a PFR. The area with lithics was engineered out of the block, while the majority of the CMTs were engineered into retention. One CMT was prescribed a 5-meter machine-free buffer.

**NS074** – A PFR was completed and several CMTs were found within the cutblock area. Where possible, features were engineered out of the block or into retention. Where this was not possible features were protected with a 5-meter machine-free buffer.

**NS106WF** – A PFR was completed and several CMTs were found within the cutblock area. The features were engineered out of the block or into retention.

**UN200** – A PFR was completed and several CMTs were found within the cutblock area. Where possible, features were engineered out of the block or into retention. Where this was not

possible features were protected with a 5-meter machine-free buffer.

All 12 blocks have had prescription adherence visually verified through a Harvest Completion Plan.

## Strategies & Implementation

WFP's planners review the location of all proposed cutblocks relative to an archaeological potential map. If the proposed cutblock is located within an area designated with high archaeological potential, or if any observed features are identified during cutblock reconnaissance, an assessment/survey is planned and conducted.

Once the specific areas and/or cultural resource affected are identified, WFP develops management strategies that would best protect the integrity of the site or resource. It is WFP's strategy to do so in dialogue with the First Nation involved to ensure values and rights are respected.

The normal practice is to change cutblock design to provide 100% protection to the resource involved. Occasionally a lesser level of protection is considered subject to the approval/endorsement of the First Nation when protection is not possible. This would occur primarily for the reasons of worker safety. Additional care to ensure features are not damaged is normally taken during the falling and yarding phases of operations.

It is through these processes that areas where culturally important practices and activities (hunting, fishing and gathering) occur or have occurred are identified and best management strategies are developed and agreed upon with the First Nations. No variance is applicable.

## Forecasts

CMTs and other Cultural Heritage Resources are protected through legislation and WFP is committed to continued appropriate management of such features in cooperation with First Nations, therefore no deviation from this target is anticipated.

## Details/ Data Set

The performance against this target is determined by tallying the management strategies developed for all the cutblocks harvested in the year that contained known CMTs or other CHR.

The strategies are recorded in the cutblock files and form part of site plan for each cutblock.

## Monitoring

Cultural/Archaeological Surveys are tracked in a database Cenfor and considered as site plans and harvesting instructions are prepared. Cutblock Site Plans that contained cultural features and prescriptions are reviewed in relation to annual logging activities. The Timberlands Area Planner gathers this information from a query of all harvested blocks, CMT/CHR/AIA surveys completed, and actual features found in the survey. This information is verified through cutblock site plans and harvest instructions. It is followed through and monitored by cutblock and post harvest assessments. The applicable management strategies are collected by the Timberlands Area Planner and summarized in the SFM annual report.