

Introduction

The Cheakamus Community Forest encompasses more than 33,000 hectares of land surrounding Whistler. It was established in April 2009 when the Lil'wat Nation, Squamish Nation, and the Resort Municipality of Whistler (RMOW) jointly signed a 25-year tenure with the B. C. Ministry of Forests and Range. These three equal partners oversee the management and operations of the forest under the auspices of the Cheakamus Community Forest Society, an independent not-for-profit organization.

Indicators must be:

- *Measurable*
- *Credible*
- *Engaging*

Community forests are different from other tenures because they are managed by the community, for the benefit of the community. The Cheakamus Community Forest actively works with its community members and local stakeholders to develop forest harvesting and management plans that benefit the larger community, such as protecting recreation features, viewscapes, cultural assets, and important habitats.

Indicators Framework and Methodology

The BC Community Forest Association (BCCFA) collaborated with the Ministry of Forests, Lands and Natural Resource Operations to develop an indicator system to measure and track the benefits of community forests. The CCF uses the BCCFA indicator framework plus additional indicators specific to the CCF to collect data that track both the community benefits and contributions of this venture.

Objectives

Eighteen indicators are used to measure progress towards the following **four key objectives**:

- A. Community forests provide economic benefits to their communities and to British Columbia.*
- B. Community forests provide social benefits to their communities and to the province; they promote community involvement and participation, and forest worker safety.*
- C. Community forests promote communication and strengthen relationships between Aboriginal and non-Aboriginal communities and persons.*
- D. Community forest management is consistent with sound principles of environmental stewardship that reflect a broad spectrum of values.*

Community Forest Objectives and Indicators

Objective A: Community forests provide economic benefits to their communities and to the province of British Columbia.

This is measured by:

1. The number of jobs the community forest creates
2. The total economic activity generated by the community forest
3. The cash and in-kind contributions made by the community forest
4. The additional funds leveraged by those contributions
5. The active role the community forests play in the forest sector through harvesting
6. Support for the full spectrum of milling and manufacturing facilities
7. Investments in the future economic return of the forest through intensive silviculture
8. Efforts to diversify the economic activities of the community forest

Objective B: Community forests provide social benefits to their communities and to the province; they promote community involvement and participation, and forest worker safety.

This is measured by:

9. The accountability of the community forest agreement holder to the local community
10. The range and depth of engagement with different sectors of the community
11. Investments in education
12. Investments in forest-based tourism and recreation
13. Proactive efforts to reduce the wildfire hazard to communities
14. Forest worker safety

Objective C: Community forestry promotes communication and strengthens relationships between Aboriginal and non-Aboriginal communities and persons.

This is measured by:

15. The breadth and depth of First Nation involvement in community forests.

Objective D: Community forestry is consistent with sound principles of environmental stewardship that reflect a broad spectrum of values.

This is measured by:

16. The management of sensitive areas
17. Investments in forest stewardship incremental to legal requirements
18. Compliance with environmental standards

Indicator #1: Number of Jobs

Addresses the Economic Objective

Rationale

This indicator will measure both the number of jobs per year and the number of jobs per cubic metre. Employment during shoulder season and diversifying the tourist economy is one of the primary benefits of the CCF. This indicator measures the total direct employment and contract labour generated by the community forest. Further, the number of jobs/m³ shows the value, in terms of employment, of the harvest volume allocated to community forests.

Ref#	Indicator	2022		Notes for 2022	2021	2020
1 (a)	Direct Employment	1532	(hrs/yr)	Forest Manager = 1280 hrs Administrator = 120 hrs Contract Admin /Legal = 50 hrs Contract Field Services = 0hrs Production 0m ³ /0m ³ /day = 0 days or 0 hrs Road Mgmt. 10 hrs Sort/Handling = 0/0m ³ = 0 days or 0 hrs Silviculture = 3 days or 24 hrs Fuel Reduction Total = 48 hrs		
1 (b)	Number of people involved	4	#	Forest Mgmt. 2, Accounting 1, Field & Admin 1.	35	24
1 (ci)	Volume M ³ Harvested	50	M ³	Blackmount Logging road construction	2326	9553
1(cii)	Area of Retention Logging	0	Ha	No retention harvesting, just wildfire fuel thinning projects	0	0
1(ciii)	Area of Fuel Thinning	0	Ha	Cheakamus Lake Road completed in 2021	15.3	41.6
1(civ)	Total Area of Old Forest Logged	0	Ha	CCF Board declared moratorium on old growth harvesting in 2021 and extended it through 2022.	0	
1 (d)	Production / AAC	19.5	%	2019-2023 Cut Control Period	19	17
1 (e)	FTE/1000m ³	0	#	Industry Rate of 1 FTE per 1,000m ³	0	0

Indicator #2: Total Economic Activity

Addresses the Economic Objective

Rationale

As long-term area-based tenures, community forests support long-term community economic development resulting in more self-reliant rural communities. The total annual cost of sales and expenditures is an indicator of the total economic activity generated by the community forest.

Ref#	Indicator	2022		Notes for 2022	2021	2020
2 (a)	Total Volume Sold	37.5	M ³	May include logs harvested in previous year	2905	7982
2 (b)	Total Value of Sales	8,170	\$	Gross value	383,911	766,375
2 (c)	Total Value of Expenditures	117,751	\$	Harvesting operations expenditures, not including forest management & planning	236,252	614,527

2 (d)	Rate of return per cubic metre (net)	(2917)	\$	Average Revenue from Log Sales (net)	50.84	19.02
2(e)	Long term debt	0	\$	Included any amortized capital projects	0	0

Indicator #3: Community Contributions

Addresses the Economic, Social and Environmental Objectives

Rationale

The cash and in-kind contributions made by the community forest are an important indicator of the distribution of economic benefits locally. In many cases, these contributions serve social objectives, in addition to economic ones.

Ref#	Indicator	2022		Notes for 2022	2021	2020
3 (a)	Total \$ contributed by CCF through improvements to the forest	1,214	\$	Road surface improvements on Cheakamus Lake FSR.		
3 (b)	Total \$ contributed in kind	0	\$	Fuel Reduction Program (RMOW and FESBC) 2020: Cheakamus 04 site, 41.9 hectares 2021: Cheakamus 02 site; 15.3 hectares	244,800	670,400

Indicator #4: Funds Leveraged by the Community Forest

Addresses the Economic, Social and Environmental Objectives

Rationale

In many cases, the profits generated and contributions made by community forests are used as seed money to grow larger projects and generate even more local benefits. This indicator will show how CFA funds are used to leverage additional funds for community priorities. As with Indicator #3, often these projects serve social objectives, in addition to economic ones.

Ref#	Indicator	2022 Amount		Notes for 2022	2021	2020
4 (a)	Total \$ from outside sources for local projects, leveraged by CCF.	0	\$		0	0

Indicator #5: Cut Control

Addresses the Economic Objective

Rationale

Community forests play an active role in the forest sector through harvesting. This indicator measures its success at meeting cut control requirements, keeping the supply of logs flowing. The CCF tenure agreement states that the CCF is responsible to cut 21,000 m³ per year. The province measures this in 5 year increments called the cut control period.

Ref#	Indicator	2022 Amount		Notes for 2022	2021	2020
5 (a)	Aggregate volume cut in current cut control period 2019-2023	20,024	M3	Cumulative AAC to year end = 84,000m3 (21,000m3/year*4 years)	19974	17648
5 (b)	AAC current position	23.8	%	CCF has only cut 23.8% of its AAC to date	31.7	42
5 (c)	Year within cut control cycle	4	Year		3	2

Indicator #6: Distribution of Logs and Forest Products

Addresses the Economic Objective

Rationale

Community forests supply wood on the open market to major industry, and also to small and medium sized mills and value-added manufacturers. In doing so, they strive to support the full spectrum of milling and manufacturing facilities. This indicator will provide updated information on the distribution of log sales that can be tracked over time.

Ref#	Indicator	2022 Amount		Notes for 2022 (Est by Species-Grade)	2021	2020
NOTE: All logs are sold through log brokers for both Squamish Forestry and Lilwat Forestry Ventures						
6 (a)	Volume to Composter	0	tonnes	Chips from Cheakamus Lake Road wildfire project C02	769	1996
6 (b)	Volume to small manufacturers	0	M ³	Mill consumption <95k m3		
	Volume to med manufacturers	0	M ³	Mill consumption >95 <295K m3 Cedar gang/cns		
	Volume to large manufacturers	37	M ³	Mill consumption >295,000k m3 Vancouver Log Market	2607	7370
6 (c)	Volume to Poles or Log Homes	0	M3	Log Homes		
6 (d)	Volume to Custom Cut	0	M ³	Lower Mainland		
6 (e)	Volume to Pulp	0	M ³	Logs only – Howe Sound Pulp	29	408
6 (f)	Volume of export	0	M ³	Unmanufactured logs	271	205
6 (g)	Other (i.e. firewood or cultural logs)	0	M ³	Does not include public gathering from roadside materials		

Indicator #7: Investments in Silviculture

Addresses the Economic Objective

Rationale

As long-term, area-based tenures, community forest agreements create strong incentives for investment in the future. Basic Silviculture is the legal obligation to reforest all harvested areas with ecologically suitable native tree species, including the monitoring of plantation performance and maintenance to ensure crop trees are not hindered by brush communities. Another indicator measures the additional investments in the future economic return of the forest. By measuring the investments in intensive Silviculture stand treatments beyond the basic obligations of reforestation and early plantation maintenance, it will demonstrate efforts to increase future yields in the community forest.

Ref#	Indicator	2022 Amount		Notes for 2022	2021	2020
7 (a)	Incremental Silviculture Projects funded by CCF	0	\$		0	0
7 (b)	Incremental Silviculture Projects funded by Gov	0	\$		0	0
7 (c)	Total Ha Treated Incremental to Basic Ref	0	Ha		0	0
7 (d)	Total cumulative Ha of Incremental Treatment	0	Ha		0	0
7.(e)	Total number of planted trees	0	#		500	0
7.(f)	Total Ha Planted /Reforested	0	Ha			
7.(g)	Cumulative Ha Reforested	225	Ha			

Indicator #8: Economic Diversification

Addresses the Economic Objective

Rationale

One of the provincial objectives for the community forest program is to diversify the use of and benefits derived from the community forest agreement area. The CFA tenure is one of only two forest tenures in BC that has the right to develop and manage Non-Timber Forest Resources (NTFRs). Section 43.3 of the Community Forest Legislation through the Forest Act gives rights to harvest and collect fees for NTFRs.

The indicator will show the degree to which community forests are generating revenue from sources other than timber. These include botanical forest products and other prescribed products such as carbon credits as listed in Schedule C of the Community Forest Agreement Licence.

Ref#	Indicator	2022 Amount		Notes for 2022	2021	2020
8 (a)	Value of Non-Timber Forest Products Sold	0	\$	No current regulated NTFP or Firewood		
8 (b)	Value of Annual Carbon Sales	63,346	\$		77,576	598,826

Indicator #9: Community Accountability

Addresses the Social Objective

Rationale

One of the elements of community forests that set them apart from other forest tenures is their accountability to their local communities. This accountability is the cornerstone of local decision-making. In community forestry, management decisions are made by those who have to live with them. Furthermore, when local people have a hand in management of the forests adjacent to their rural communities, they are more likely to be innovative in the integration of multiple values in their decision-making. This indicator measures whether the community forest reports out annually to its community on its progress towards objectives as identified in the Community Forest Agreement Management Plan.

Ref#	Indicator	2022 Amount		Notes for 2022	2021	2020
9 (a)	# of open houses in year	2	#	Held on zoom. Will move back to in person.	1	1
9 (b)	Annual Indicators report to BCCFA	1	#	Combined BCCFA – CCF Annual Report to be posted on website	1	1
9 (c)	Annual Silviculture Report	1	#		1	1

Indicator #10: Public Engagement

Addresses the Social Objective

Rationale

While Indicator #9 focuses on reporting out to the community, this indicator measures the efforts of the community forest to engage with the diversity of community members. Outreach to the full array of forest users and community members leads to an improved awareness of forest management among members of the public, and increases potential to resolve conflicts over timber harvesting in watersheds and other sensitive areas.

Ref#	Indicator	2022 Amount		Notes	2021	2020
10 (a)	# CCF meetings or field trips	4	#	2 FWAC field trips 2 FESBC and PWC Fuel Reduction site visits	3	4
10 (b)	# of stakeholder meetings	10	#	Shared plans 3x with FWAC (includes RMOW, AWARE, WORCA) plus two field trips. Site visits with WORCA re: Wedge sites. Correspondence with TAG, Blackcomb Snowmobile, Wedgewoods, Canadian Adventures	4	6
10(c)	# of public comments received from Annual Plan Open Houses	24	#	FSP written comments: <ul style="list-style-type: none"> • 1 public • 4 FWAC Survey – Open House 2022	14	Not Reported

Indicator #11: Investments in Community Education

Addresses the Social Objective

Rationale

Community forests provide an opportunity to link community members to the forest, and to increase their understanding of forest ecosystems and management. As long-term, area-based tenures, community forests provide enhanced opportunities for education and research. Community forests can be laboratories for testing innovative forest practices. This indicator measures the investments the community forest is making in education and capacity building.

Ref#	Indicator	2022 Amount		Notes	2021	2020
11 (a)	Hours of educational or extension activities	25	Hrs	Includes open houses and tours to International or Scholastic Groups (excluding board members)		
11 (b)	Value invested in educational tours in the forest	0	\$	Whistler Interpretive Forest		
11 (c)	Capacity Building for First Nation Forest Workers	0	\$	Training supported by CCF (first aid, faller certification, on-site training, etc.)		

Indicator #12: Investments in Forest-based Tourism and Recreation

Addresses the Social Objective

Rationale

The Sea to Sky corridor's economy is dominated by the tourism industry, and forest-based commercial recreation is a large component along with significant public recreation use. One of the most important benefits for many communities that have community forests are the investments the organization makes in creating, improving and maintaining recreational infrastructure and opportunities. This indicator will measure the value of the cash and in-kind investments in recreation that the CCF has made in the reporting year and over time.

Ref#	Indicator	2022 Amount		Notes for 2022	2021	2020
12 (a)	CCF investments in forest-based tourism & recreation planning in K3V	2,145	\$	Flagging costs to maintain public access along the Cheakamus Lake FSR during the CO2 fuel reduction project.		
12 (b)	Cumulative in-kind investment in forest-based tourism & recreation in K3V	41,700	\$	2011 Runaway Train- \$750 for 0.3km 2013 Ancient Cedars Access \$16,000 2014 Ancient Cedars Trail and Signage \$12,500 2.5km 2015 Ancient Cedars Trail ext 1.5km \$8,500 2016 Road-Based Access Mgt Plan \$3,950		
12 (c)	New or modified recreation trails within the CCF	0	Km		0	0
12 (d)	Total Km of trails in CCF and urban areas of RMOW	645	km	Double Track Trail: 146 km Hiking: 146 km Mountain Biking: 297 km Valley Trail Paved: 40 km (Source RBAMP, 2016)	645	645
12 (d)	Other recreation planning or projects implemented in CCF	1	#	Expansion of the Wedgemount Parking Area - RSTBC	1	0
12 (f)	# of partnerships in forest recreation projects	2	#	Whistler Interpretive Forest – Rotary Club of Whistler Whistler Off Road Cycling Association (trail rehab)	2	4

Indicator #13: Proactive Management of Wildfire Hazard

Addresses the Economic, Social and Environmental Objectives

Rationale

The combined effects of climate change, the mountain pine beetle, past management increasing forest fuels and the province's limited fire suppression capacity are leading to an increase in wildfire incidence and severity. Community forests are situated in the interface between communities and wild forest lands, and are uniquely positioned to serve as a leader in the coordination and management of these areas to reduce the risk of catastrophic wildfire. Efforts to manage the wildfire hazard to communities are primarily driven by social objectives, however depending on the ecosystem type, history and outcome of the treatments; they may also bring economic and environmental benefits. The CCF and RMOW partner to deliver the RMOW's Community Wildfire Resiliency Plan.

Ref#	Indicator	2022 Amount		Notes for 2022	2021	2020
13 (a)	Area of Fuel Reduction Treatments within K3V	0	Ha	Cheakamus Lake Road C02 completed in 2021	15.3	41.6
13. (b)	Value of Fuel Reduction Treatments	0	\$	C02	244,800	670,400
13 (c)	Total cumulative area treated for Wildfire reduction in K3V	314.2	Ha	Callaghan FSR, Cheakamus FSR	164.2	150
13. (d)	Total cumulative value of Fuel Reduction Treatments in CCF.	1,823,132	\$	Combined value of C02, C03 and C04; Callaghan FSR; Wedge site operations (FESBC and RMOW funding)	1,823,132	1,578,332

Indicator #14: Forest Worker Safety

Addresses the Social Objective

Rationale

One of the provincial government's objectives for the community forest program is to advocate forest worker safety.

Ref#	Indicator	2022 Amount		Notes for 2022	2021	2020
14 (a)	# of Safe Certified Projects	2	#	Skytech Logging Ltd / Lilwat Forestry Ventures	2	2
14 (b)	# of recordable loss time incidents	0	#	On CCF Projects	0	0
14 (c)	Avg duration of time loss incidents	0	#	On CCF Projects	0	0

Indicator #15: First Nations Involvement

Addresses the Social Objective

Rationale

The CCF is managed by three equal partners including the Squamish and Lil'wat Nations. This indicator will measure the breadth and depth of First Nations involvement in the community forest. It will serve to demonstrate how effective the CCF is at working with the First Nations within whose territory the community forest is located.

Ref#	Indicator	2022 Amount		Notes for 2022	2021	2020
15 (a)	% of First Nation partners on Board	66	%		66	66
15 (b)	# of First Nation partners	2	#		2	2
15 (c)	# of work days on Cultural Field Assessments	21	#	Field Assessments (Person days)	5	8
15 (d)	% of First Nation owned contractors involved in log production	100%	%		100%	100%

Indicator #16: Management of Sensitive Areas

Addresses the Environmental Objective

Rationale

Community forests, by their design, must integrate the values of the communities that manage them. The CCF operates under a voluntary Ecosystem Based Management (EBM) system which integrates environmental, social and economic values. It must also comply with the tenure regulations and Acts of British Columbia. EBM seeks to balance choices in maintaining and/or enhancing ecological integrity while at the same time maintaining and/or enhancing human well-being. EBM uses science-based decision making, traditional and local knowledge, engagement of community members, ongoing monitoring, and adaptive planning and management, which allows for changing EBM practice and management in response to an evolving knowledge base.

Ref#	Indicator	2022 Amount		Notes for 2022	2021	2020
16 (a)i	Total Ha in CCF	33,018	Ha		33,018	33,018
16 (a)ii	Total Forested Area	29,729	Ha		29,729	29,729
16. b	Total Ha protected by government enactments	33	%	OGMA = 3,165 Ha Wildlands= 6145 Ha Wildlife Habitat Areas = 555 Ha Total Legal Protection = 9865 Ha	33	33
16. b	Total Ha voluntarily protected under EBM	12.5	%	EBM Reserves = 3,713 ha	12.5	12.5
16. c	Ha of special forest areas identified in year	0	Ha		0	0
16. d	Cumulative area harvested in CCF under retention regime	225	Ha	Total area since 2009 as per Annual Plan Map		
16.e	Percentage of CCF that is available for harvesting	54	%	Forest & Range Practices Act Timber Harvesting Land Base (THLB) = 11,024 Ha EBM THLB = 8,056 Ha (does not include Old Growth deferral areas)	54	54
16.f	Area of CCF that is identified as sensitive to First Nation Culture or Commercial Recreation Operations under special resource management	4	%	Special Management Zones were established under the 2015 Integrated Resource Management Plan and total 649 Ha for Commercial Recreation and 392 HA for FN Cultural. Total of 1,041 hectares	4	4

Indicator #17: Investments in Forest Stewardship

Addresses the Social and Environmental Objectives

Rationale

This indicator will demonstrate the investments the community forest is making in enhanced forest stewardship, incremental to legal requirements.

Ref#	Indicator	2022 Amount		Notes for 2022k	2021	2020
17 (a)	Ha of roads or disturbed areas fully rehabilitated and returned to the forested land base in year	0.08	Ha		1.2	0
17 (b)	Ha of riparian enhancement or restoration in year	0	Ha		0	0
17 (c)	Annual area harvested using EBM retention principles	1	Ha	Included mechanical thinning areas under the fuel reduction program.	15.3	41.9
17 (d)	Annual average opening size	4-5	Ha	Retention Logging Areas only	4-5	4-5
17 (e)	Investment made by the CCF in enhanced management for ecological and social reasons.	0	\$	Estimate of 30% increase in harvesting costs due to small opening retention systems. (30% of the total Operating Costs)		

Indicator #18: Compliance with Environmental Standards

Addresses the Environmental Objective

Rationale

This indicator shows that the management of the community forest is in compliance with statutory requirements for resource management.

Ref#	Indicator	2022 Amount		Notes for 2022	2021	2020
18. a	Confirmed Compliance inspections (FLNRO)	0	#		0	0
18. b	Non-compliance items	0	#		0	0
18. c	3 rd party audits or inspections	Yes	Yes/No	Forest Practices Board Audit – burn piles left on site too long. Resolved in fall 2022.	Yes	No