

2023 Annual Project Report

Cumberland House Cree Nation
Food and Medicine Forest



Project
Forest

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Land Acknowledgement

| Traditional Territories



Members of Cumberland House Cree Nation at the CHCN Food and Medicine Forest

Project Forest acknowledges that our work is conducted on both Treaty and non-Treaty lands. These lands are the traditional territories of First Nations and Indigenous Peoples. We recognize that our work is intertwined with the deep and diverse histories of Indigenous Peoples. We are grateful for the opportunity to work in these territories and are committed to the recognition and respect of those who live or have lived, travelled, and gathered on these lands for time immemorial.

About Us

| Our Mission and Values

Rewilding Canada, one forest at a time.

Project Forest is a non-profit organization working in partnership with conservation groups, Indigenous communities and Canadian businesses to make a positive environmental and social impact in our communities through planting forests. The forests we plant clean the air and water, increase biodiversity and contribute to the overall health and well-being of our communities.



Our work is rooted in our values.

Responsibility

We believe it is our responsibility to use our skills, knowledge, and experience to bring about positive change in the world.

Reciprocity

We recognize that we have benefited from the earth's resources and are committed to giving back through careful and thoughtful solutions.

Humility

We are grateful for the opportunity to learn from nature, to contribute to improving our environment, and to make a positive impact in people's lives.

Transparency

We document, monitor, and share our processes and findings with partners and the public—every step of the way, on every project.

Community

We create spaces where people can connect with nature, and each other. We respect every community we are invited into, and work together to make positive change.

Overview

| United Nations Sustainability Development Goals

Goals to Transform Our World

Planting new forests is critically important in addressing the challenges of our time, particularly when aligned with the United Nations Sustainable Development Goals (UN SDGs). As our communities grapple with climate change and biodiversity loss, forests emerge as pivotal solutions that intersect with multiple UN SDGs including, combating climate change and preserving biodiversity, fostering economic development, ensuring food security, promoting clean water access, and advancing social equity. Aligning the impacts of our forests with the UN SDGs is essential for communicating to stakeholders our dedication to sustainability, transparency, and the measurement of progress over time.

In our 2023 Annual Report, we have linked the outcomes of our rewilding projects with relevant UN SDG targets and indicators, as well as aligned them with corresponding Environment, Social, and Governance goals. This comprehensive approach ensures that our partners have readily accessible information for corporate sustainability reporting, simplifying the process and enhancing transparency.



Purpose & Positive Impact

The following UN SDGs are impacted by the Cumberland House Cree Nation Food and Medicine Forest:

Purpose



Positive Impact



Overview

| Forest Facts

About the forest you funded.

NAME

Project Forest Cumberland House
Cree Nation Food and Medicine Forest

LOCATION

Cumberland House Cree Nation, SK
[53.933884, -102.283214](#)

DATES PLANTED

June 2022, June 2023

SIZE

9 hectares

TOTAL SEEDLINGS PLANTED

18,175

TOTAL SPECIES PLANTED

11

TOTAL CO2 REMOVED FROM THE AIR

CO₂ sequestration is not calculated for the food-bearing and medicinal species as they have a negligible carbon benefit.

SPECIES PLANTED

Planted in June 2022:

Saskatoon (1,051)
Wild Rose (105)
Strawberry (900)
Blueberry (1,080)
Honeysuckle (105)
Raspberry (759)

Planted in June 2023:

White Spruce (4,320)
Bebbs Willow (3,600)
Raspberry (2,000)
White Birch (1,440)
Silver Buffaloberry (1,440)
Saskatoon (790)
Mountain Ash (405)
Lowbush Cranberry (180)



Purpose

| UN SDG 15 - Life on Land

Goal: Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss.

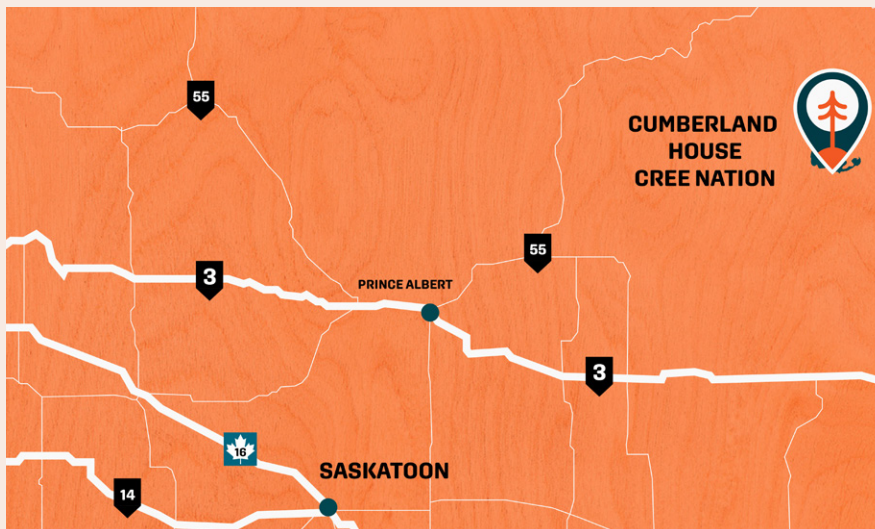
Matching ESG Goals:

- Providing clean air and water
- Improving biodiversity
- Re-establishing traditional landscapes



Project Forest is making a positive impact through restoring degraded land to increase forest cover, enhance biodiversity, and promote the sustainable use of terrestrial ecosystems.

Indicator 15.1.1: Forest area as a proportion of total land area



14,175
Seedlings Planted

Project Forest Cumberland House Cree Nation Food and Medicine Forest is making a positive environmental impact in the ecologically sensitive Saskatchewan River Delta area in northeastern Saskatchewan. By reintroducing culturally significant plants on 7 ha of marginal agricultural land, we are re-establishing traditional landscapes and increasing biodiversity. A total of 18,175 seedlings were planting in two planting events occurring in 2022 and 2023.

Purpose

| UN SDG 15 - Life on Land



The first Afforestation Survey at Cumberland House Cree Nation occurred in Spring 2024. The survey data collected indicated an average total stocking rate (SR + NSR-LIG) of 96% (Figure 1). Data from the project surveys is recorded in an Afforestation Survey Report (Appendix A - Afforestation Survey Report).

There is no remedial action needed at this time. One NSR area was identified however a fill plant is not recommended. Overall the site is growing well and expected to continue to have a positive trajectory to becoming a mature food and medicine forest.

Figure 1: Acceptable Stocking Summary

Type of Plot	# of Plots	% of Plots
Total Sufficiently Restocked (SR)	3	12
NSR-Let It Grow (NSR-LIG) Stocking	21	84
Not Sufficiently Restocked (NSR)	1	4
Total Stocking (SR + NSR-LIG/Total # of Plots)	24	96

96%

Seedling Survival Rate

25

Plots Sampled

NSR-LIG is an abbreviation of “not sufficiently restocked - let it grow”. The NSR-LIG status is applied to plots where under-height trees are left to grow with the expectation that this treatment will be sufficient for them to meet the SR standard at the next annual monitoring survey.

Indicator 15.1.2: Proportion of important sites for terrestrial and freshwater biodiversity that are covered by protected areas, by ecosystem type

Project Forest partners with Indigenous communities to plant trees, shrubs, and food and medicinal plants that contribute to increasing the overall forested area in Western Canada. By identifying non-forested land that could benefit from rewilding, we are enhancing the coverage of forest ecosystems, which are a critical component of terrestrial biodiversity. We plant forests in areas, and with communities, where we can guarantee the seedlings we plant today will be protected for future generations.

The Project Forest Cumberland House Cree Nation Food and Medicine Forest is located on the Cumberland House Cree Nation reserve in northeastern Saskatchewan in the Mid-Boreal Lowland Ecoregion of the Boreal Plain Ecozone. The land is managed, and its long-term protection overseen, by Cumberland House Cree Nation.

Purpose

| UN SDG 15 - Life on Land



“...The Project Forest Cumberland House Cree Nation Food and Medicine Forest signifies our community’s commitment to restoring and preserving our cultural heritage. By reintroducing these food-bearing and medicinally significant plants and trees, we ensure the well-being of our community and future generations.”

—**Chief Rene Chaboyer**, Cumberland House Cree Nation

The Project Forest Cumberland House Cree Nation Food and Medicine Forest includes plant species that are native to the region and have ecological and cultural importance. By planting and maintaining these species, the community is contributing to their preservation, promoting biodiversity, and restoring the ecosystem. In June 2022, a total of 4,000 culturally significant food and medicinal plants were deployed, bringing plants like wild rose, raspberry and saskatoon back to the land. A second planting event occurred in June 2023 with an additional 14,175 food and medicinal plants, and trees being planted on 7 ha of land adjacent to the first planting location.



Morels, Cumberland House Cree Nation

Since the food and medicine forest was planted, the community has reported to Project Forest that desirable natural vegetation is returning to the site. An abundance of morel mushrooms are present in the area, as well as strawberries, dandelions, and various grasses, all a sign of natural regeneration. Their presence indicates a more suitable habitat has been created from our rewilding plan and overall site biodiversity is likely to increase. No noxious weeds were observed on the site by the surveyors.



**Increase in Desirable
Natural Vegetation**

Purpose

| UN SDG 15 - Life on Land



Indicator 15.2.1: Progress towards sustainable forest management

The Project Forest Rewilding Plans, Monitoring Protocols, and Remediation Actions are designed to ensure the health and success of our forest. *Sustainable forest management* balances the needs of the community with the long-term use of forest resources while preserving the ecological integrity and benefits the forest provides to people and the environment. As part of Project Forest’s commitment to rewild land on behalf of our partners and the wider community, we employ a number of tools and metrics to provide scientific verification that our project sites will become mature forests that will benefit the environment and surrounding communities today, and generations to come.

Sustainable Forest

Management is a way of using and caring for forests to maintain their environmental, social, cultural and economic values and benefits over time (NRCAN, 2024).



Site Preparation at Cumberland House Cree Nation

Rewilding Plans

Prior to planting a forest, Project Forest assesses the land and identifies site limiting factors. A Rewilding Plan is created and site limiting factors are addressed to ensure that the seedlings planted have the best chance of survival (Appendix B - Cumberland House Cree Nation Rewilding Plan).

Site preparation was completed at the Project Forest Cumberland House Cree Nation Food and Medicine Forest in May 2022 and May 2023 by the Nation. In 2022, the planting area was tilled by a tractor in the shape of a circle which was staked to create four quarter sections in which to plant. In 2023, the planting area was disced to turn up the soil.

Purpose

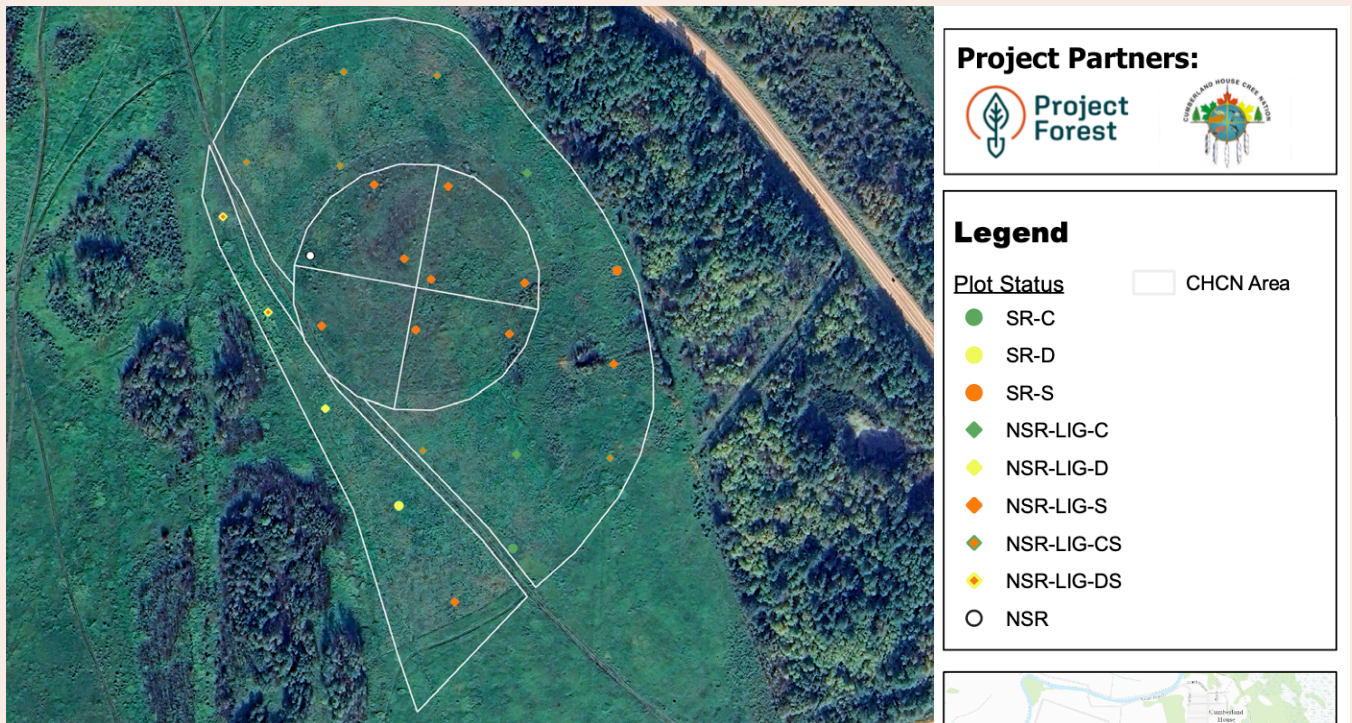
| UN SDG 15 - Life on Land



Monitoring Protocols

The Project Forest Monitoring Plan requires that 2.44 plots per hectare are surveyed and each plot location is permanently marked. This resulted in 25 plots being sampled across the site. The survey data collected is used to prescribe future monitoring and maintenance events. We budget for a 25% fill plant for each project site in the event of significant tree mortality within the first six years. Our monitoring protocol ensures the seedlings planted are on a trajectory to becoming a mature forest through annual monitoring for up to six years post-planting.

Figure 2: Afforestation Survey Map



2023 Survey Map (Appendix A)

Remediation Activities

In the event of substantial tree mortality prior to the site passing the standard set out in our monitoring protocols, Project Forest will conduct a fill plant. A fill plant will occur when a 'Not Sufficiently Restocked (NSR)' area is identified. The 2023 survey indicated one NSR area, however no remediation activities are recommended (Figure 2).

Purpose

| UN SDG 15 - Life on Land



Indicator 15.3.1: Proportion of land that is degraded over total land area.

Together with First Nations communities across Western Canada, Project Forest is rewilding degraded land that has been disturbed and has not recovered through normal ecological processes.

The Project Forest Cumberland House Cree Nation Food and Medicine Forest site used to be the community's lagoon. It was decommissioned a number of years ago and the site has since been used intermittently for agriculture activities. Most recently, the site has been sitting stagnant.

Ecosystem degradation

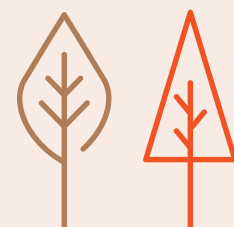
is defined as, “an event or process that reduces the productivity or value of an ecosystem, or that delays or prevents an ecosystem from recovering from disturbance through normal successional processes.” (Haeussler et al., 2002)



Community Planting Event on Cumberland House Cree Nation

Rewilding degraded ecosystems has several positive effects including, an improvement to soil health, increased biodiversity, habitat for birds and animals, ground water filtration and improved air quality.

Bringing forests back on Indigenous land can empower communities to preserve their cultural heritage, achieve environmental sustainability and ensure the continuation of their knowledge and traditions for generations to come.



Purpose

| UN SDG 13 - Climate Action

Goal: Take urgent action to combat climate change and its impacts.

Matching ESG Goals:

- Reducing GHG emissions
- Experiencing nature in an educational and interactive way



The forests we plant can have a significant impact on mitigating climate change.

Target 13.3: Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning

Project Forest provides our partners and the wider community with the opportunity to participate in educational activities through our Community and Corporate Outreach Program. Experiencing nature in an educational and interactive way enriches knowledge, fosters a connection with the environment, promotes well-being, and encourages responsible environmental behaviour. These are some of the engagement activities we conducted in 2023:

Lunch and Learns, Keynote Presentations and Panel Discussions

- Overview of the rewilding process, our projects, and stories of community impact
- Stakeholder project impacts and opportunity to engage with the Project Forest team

Corporate Tree Planting Events

- In-person, hands-on volunteering opportunities for Silver, Gold and Platinum financial partners
- Educational talks around seedling physiology, forest succession, tree planting technique, tree planting survey methodology, seed collection, plant identification, and traditional plant uses

Indigenous Engagement

- Opportunity to learn from Indigenous Knowledge Keepers and Elders in various capacities from presentations, interviews and talks, to one-on-one exchanges at our Corporate Planting Events and Annual Partner Celebration

5
Funding Partners

Purpose

| UN SDG 13 - Climate Action



Podcast, radio, tv and webinar interview

- Overview of the rewilding process for general audiences
- Discussions of more in-depth topics such as working with Indigenous communities, operating a non-profit, and sustainable forest practices

Annual Partner Celebration

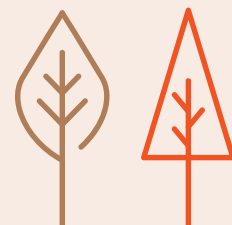
- Presentations featuring a wide range of speakers from the Project Forest community
- Focus on Indigenous reconciliation through rewilding, sustainable business practices, and community investment

Seedling and Seed Kit giveaway events throughout the year

- Opportunity to interact with the Project Forest team
- Celebrate the impact your organization is making
- Engage with the Project Forest community



KPMG Corporate Planting Event



Purpose

| UN SDG 11 - Sustainable Cities and Communities

Goal: Make cities and human settlements inclusive, safe, resilient and sustainable



Matching ESG Goals:

- Generating social & economic growth
- Advancing health & wellbeing
- Developing deeply ingrained Indigenous relationships

Restoring degraded land can have a positive impact on communities through creating safe, resilient, and sustainable natural spaces.

Target 11.4: Strengthen efforts to protect and safeguard the world's cultural and natural heritage



Cumberland House Cree Nation community members laying brush mats



Forests hold immense cultural and spiritual significance for Indigenous Peoples. Through planting forests in Indigenous communities, we provide opportunities to preserve cultural heritage, traditional knowledge, and spiritual connections to the land. Forests provide a space for traditional land-use activities including ceremonies, hunting, and gathering food and medicinal plants.

Purpose

| UN SDG 11 - Sustainable Cities and Communities



Planting native species can re-establish the natural heritage of the landscape. Project Forest learns from our Indigenous land partners which plants are significant to their culture and diet, and which plants once grew on the land that are no longer present. We plant species that prioritize the community's goals for the land, the site conditions, and the natural region. Project Forest works closely with Registered Professional Foresters and environmental professionals to ensure we are planting the right tree in the right place for the right reason.

At the Project Forest Cumberland House Cree Nation Food and Medicine Forest, we have re-introduced a total of eleven native plants species, each with cultural significance to the Nation. In June 2023, Project Forest returned to Cumberland House Cree Nation for a second planting event at the Cumberland House Cree Nation Food and Medicine Forest. Eight native plants with cultural significance to the Nation were planted: white spruce, Bebb's willow, raspberry, white birch, silver buffaloberry, saskatoon, mountain ash, and lowbush cranberry.

Indigenous communities have extensive knowledge about local plant species, their cultivation, and their traditional uses. By planting food and medicine forests, traditional knowledge is preserved and utilized, fostering cultural identity and strengthening community resilience. The sharing of intergenerational knowledge, as Elders share their experience and the youth learn traditional practices, preserves both our cultural and natural heritage.

8

Species Planted in 2023

Purpose

| UN SDG 11 - Sustainable Cities and Communities



Indicator 11.a.1: Number of countries that have national urban policies or regional development plans that (a) respond to population dynamics; (b) ensure balanced territorial development; and (c) increase local fiscal space

The forests we plant provide areas for recreation and traditional land use within the community. Our funding partners finance the rewilding costs including seedlings, planting, and labour, allowing communities to allocate more funds to services and infrastructure.

When working with Indigenous communities, Project Forest offers the first right of refusal for site preparation and maintenance work to the Nation. Rewilding projects require labour to complete, including but not limited to:

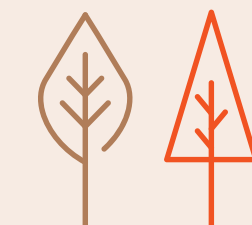
- Mechanical site preparation
- Seed collection
- Tree planting
- Vegetation management
- Survival assessment survey and data collection
- Cover crop deployment
- Construction work

By investing in rewilding, Project Forest funding partners are creating employment opportunities. The income earned by individuals through these jobs can have a positive economic impact, leading to increased tax revenues for the government and expanding **local fiscal space**.

At the Cumberland House Cree Nation Food and Medicine Forest, the Nation was hired to carry out the following jobs over the course of the project:

- Site Design and Project Location
- Mechanical Site Preparation
- Tree Planting
- Project Management
- 2023 afforestation survey and data collection
- 13,995 brush mats installed

A total of 191.5 employment hours were invoiced by Cumberland House Cree Nation to Project Forest in 2022, and 760 employment hours in 2023.



Positive Impact

| UN SDG 2 - Zero Hunger

Goal: End hunger, achieve food security and improved nutrition and promote sustainable agriculture.



Planting a forest can have indirect but important impacts on addressing hunger, achieving food security, improving nutrition, and promoting sustainable agriculture.

Target 2.1: By 2030, end hunger and ensure access by all people, in particular the poor and people in vulnerable situations, including infants, to safe, nutritious and sufficient food all year round.

Indigenous food and medicine forests incorporate a wide variety of plant species, including vascular plants, shrubs, fungus, bushes, and trees. This diverse range of edible and medicinal plants provides a broad selection of food and healing sources for the community year round.

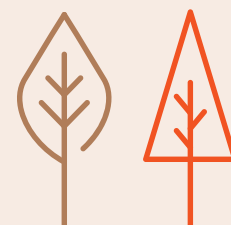
By growing food and medicinal plants, Indigenous communities can reduce their reliance on external sources and commercial markets. This enhances the community's self-sufficiency and food sovereignty.

Target 2.4: By 2030, ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters and that progressively improve land and soil quality.

Indigenous Food and Medicine Forests are designed to be locally appropriate and suited to the specific environmental conditions of the region. By planting native plant species that are well-adapted to the local climate, soil types, and pests, these forests provide a more reliable and sustainable source of food. They require less water and fertilizers, and have reduced vulnerability to pests and diseases.

8,415

Food-bearing, Medicinal, and Cultural Plants and Shrubs



Positive Impact

| UN SDG 3 - Good Health and Well-Being

Goal: Ensure healthy lives and promote well-being for all, at all ages.



Planting a forest can have several positive impacts on ensuring healthy lives and promoting well-being for all ages.

Target 3.9: By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination

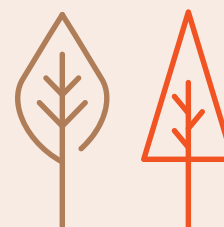
Forests act as natural air filters by absorbing pollutants and particulate matter from the atmosphere. Trees remove harmful gases by absorbing them through their leaf stomata, filtering these chemicals from the air. Particulate matter is intercepted by the tree's surfaces. When it rains, the particles are washed off and carried to the ground. Planting forests can help improve air quality, by reducing the exposure of communities to harmful pollutants (Nowak et al., 2014).

In addition to improving air quality, forests provide opportunities for people to connect with nature, enjoy recreational activities, and experience the positive physical and mental health effects of spending time outdoors. They also provide various ecosystem services that indirectly contribute to our health and well-being.

Some of the important ecological services provided by forests include:

- cleaning water through water filtration
- cleaning air through oxygen production and absorption of pollutants
- rebuilding of soils and restoration of nutrients
- holding back floodwaters and releasing needed water into rivers and streams
- absorbing CO₂ from the atmosphere
- maintaining biodiversity by providing habitat for countless species

These services all indirectly impact human health and well-being.



Positive Impact

| UN SDG 6 - Clean Water and Sanitation

Goal: Ensure availability and sustainable management of water and sanitation for all



The forests we plant can have positive impacts on ensuring the availability and sustainable management of water.

Indicator 6.3.2: Proportion of bodies of water with good ambient water quality.

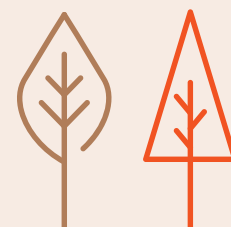
Forests filter, purify and improve the quality of our water. Tree roots help retain soil and reduce the transport of pollutants into water bodies. Planting forests in watershed areas can contribute to protecting water quality, ensuring access to clean water for communities. (NRCAN, 2021)

The Project Forest Cumberland House Cree Nation Food and Medicine Forest is located within the ecologically sensitive Saskatchewan River Delta, North America's largest inland river delta and a substantial underground carbon sink. Cumberland House Cree Nation is working to restore and protect this unique landscape's myriad of ecosystem services.

While planting forests alone cannot solve all our water-related challenges, they do offer nature-based solutions to help achieve sustainable management of our water resources.

Target 6.6: By 2020, protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes

Forests act as natural sponges and filters, absorbing rainfall and gradually releasing it while purifying it as it passes through the ecosystem. By restoring forests, we can enhance water quality, reduce erosion, and promote water retention in the landscape.



Partners

| Funding Partners



Cumberland House Cree Nation Food and Medicine Forest

Our work is not possible without you.

Thank you to the following Project Forest partners for funding the Project Forest Cumberland House Cree Nation Food and Medicine Forest.



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Appendix A - CHCN Afforestation Survey Report

Afforestation Survey Cover Page				
Project Site: Cumberland House Cree Nation				
Survey Date(s)	May 22 & 24, 2024	Total Plots	25	
Stocking Calculations				
Type of Plot	# of Plots	% of Plots	Meet Final Criteria	% of Plots
SR with Acceptable Conifer trees	1	4	0	0
SR with Acceptable Deciduous trees	1	4	0	0
SR Acceptable Shrubs	1	4	0	0
SR with Acceptable Conifer & Deciduous trees	0	0	0	0
SR with Acceptable Conifer trees & Shrubs	0	0	0	0
SR with Acceptable Deciduous trees & Shrubs	0	0	0	0
SR with Acceptable Conifer & Deciduous trees & shrubs	0	0	0	0
NSR-LIG with Conifer	2	8	0	0
NSR-LIG with Deciduous	1	4	0	0
NSR-LIG with Shrub	10	40	0	0
NSR-LIG with Conifer & Deciduous	0	0	0	0
NSR-LIG with Conifer & Shrubs	6	24	0	0
NSR-LIG with Deciduous & Shrubs	2	8	0	0
NSR-LIG with Conifer & Deciduous trees & shrubs	0	0	0	0
NSR -No Acceptable Woody species present	1	4	N/A	N/A
Acceptable Stocking Summary				
Plot Stocking Status	# of Plots	% of Plots		
SR Plots	3	12		
NSR-LIG Stocking	21	84		
NSR (excludes NSR-LIG)	1	4		
Total Stocking (SR + NSR-LIG):	24	96		
Herbaceous Vegetation Observed on Site			Noxious Weeds	
Grass spp.			None observed	
strawberry				
dandelions				
Morel mushrooms				
Project Comments:				
Overall site is growing well and expected to continue to have a positive trajectory to becoming a mature food and medicinal forest.				

Assessment Survey Tally Card

Plot	Tree & Shrub Stocking										Plot Type	Status	Status Plot Type	Tallest in Plot		Other factors	
	Acceptable		Acceptable		Under Height		Under Height		Under Height					Species	Height (cm)	Evidence of: Damage, Disease, Competition,	Noxious Weeds
	Species	Number	Species	Number	Species	Number	Species	Number	Species	Number							
CH-01					Wild Rose	11	Bebbs Willo	1			S	NSR-LIG	NSR-LIG-S	Wild Rose	51	grass moderately competitive same height	
CH-02	White Birch	1			White Birch	5	Buffaloberry	1			D	SR	SR-D	White Birch	60	grass moderately competitive same height	
CH-03					White Birch	5					D	NSR-LIG	NSR-LIG-D	White Birch	46	grass moderately competitive same height	
CH-04					White Birch	4	Buffaloberry	3			DS	NSR-LIG	NSR-LIG-DS	White Spruce	40	grass moderately competitive same height	
CH-05					White Birch	1	Buffaloberry	1	Wild Rose	11	DS	NSR-LIG	NSR-LIG-DS	Wild Rose	42	grass moderately competitive same height	
CH-06	White Spruce	1			Wild Rose	11	Bebbs Willo	3			C	SR	SR-C	Bebbs Willo	45	grass moderately competitive same height	
CH-07					White Spruce	1	Wild Rose	11			CS	NSR-LIG	NSR-LIG-CS	Wild Rose	40	grass moderately competitive same height	
CH-08					White Spruce	4					C	NSR-LIG	NSR-LIG-C	White Spruce	20	grass moderately competitive same height	
CH-09					White Spruce	2	Bebbs Willo	3			CS	NSR-LIG	NSR-LIG-CS	Bebbs Willo	25	grass moderately competitive same height	
CH-10	Willow spp.	11			White Spruce	2					S	NSR-LIG	NSR-LIG-S	Willow spp.	167	grass moderately competitive same height	
CH-11	Willow spp.	11									S	SR	SR-S	Willow spp.	180	grass moderately competitive	
CH-12	White Spruce	1			White Spruce	3					C	NSR-LIG	NSR-LIG-C	White Spruce	32	grass moderately competitive same height	
CH-13					Bebbs Willo	3	White Spruce	2			CS	NSR-LIG	NSR-LIG-CS	Bebbs Willo	33	grass moderately competitive same height	
CH-14					White Spruce	2	Wild Rose	11	Bebbs Willo	1	CS	NSR-LIG	NSR-LIG-CS	Wild Rose	40		
CH-15					White Spruce	4	Bebbs Willo	1	Wild Rose	1	CS	NSR-LIG	NSR-LIG-CS	White Spruce	27		
CH-16					White Spruce	3	Wild Rose	11			CS	NSR-LIG	NSR-LIG-CS	Wild Rose	38	grass moderately competitive same height	
CH-17					Raspberry	2					S	NSR-LIG	NSR-LIG-S	Raspberry	38	grass very competitive	
CH-18					Raspberry	4	Wild Rose	1			S	NSR-LIG	NSR-LIG-S	Wild Rose	40	grass moderately competitive same height	
CH-19					Wild Rose	11	Bebbs Willo	3			S	NSR-LIG	NSR-LIG-S	Wild Rose	53	grass moderately competitive same height	
CH-20												NSR	NSR-			Grass very competitive could not locate any c	
CH-21					Wild Rose	11					S	NSR-LIG	NSR-LIG-S	Wild Rose	38	grass moderately competitive same height	
CH-22	Wild Rose	11	Saskatoon	1	Saskatoon	1					S	NSR-LIG	NSR-LIG-S	Wild Rose	61	grass moderately competitive same height	
CH-23					Wild Rose	11	Saskatoon	2			S	NSR-LIG	NSR-LIG-S	Wild Rose	35	grass moderately competitive same height	
CH-24					Saskatoon	1	Wild Rose	11			S	NSR-LIG	NSR-LIG-S	Wild Rose	45	grass moderately competitive same height	
CH-25					Saskatoon	2	Wild Rose	8			S	NSR-LIG	NSR-LIG-S	Wild Rose	45	grass moderately competitive same height	



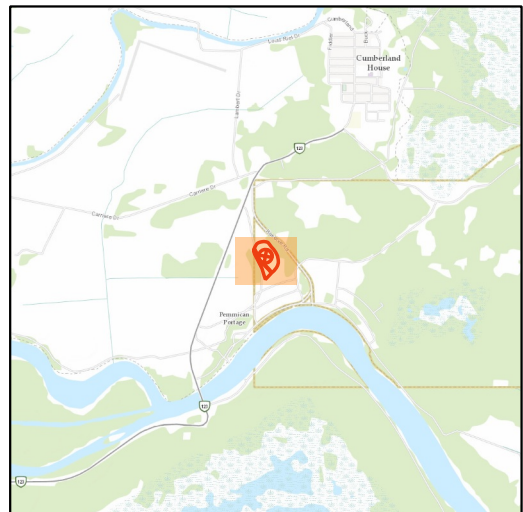
Cumberland Cree Nation Survey Plot Status Spring 2024

Project Partners:



Legend

- Plot Status
- SR-C
 - SR-D
 - SR-S
 - NSR-LIG-C
 - NSR-LIG-D
 - NSR-LIG-S
 - NSR-LIG-CS
 - NSR-LIG-DS
 - NSR
- CHCN Area



Date Created: 2024-07-19
Project CRS: EPSG:3857
Source: Google Satellite
Created By: Tree Time Services Inc.
Scale: 1:3,500

0 50 100 m



Site Photos

Plot CH_04



Plot CH_10



Plot CH_18



Plot CH_22



Project Forest Monitoring Assessment Summary Sheet

Project Name	Cumberland House Cree Nation Food and Medicine Forest
Applicability:	Trajectory of Food and Medicine Forest establishment success
Landowner:	Cumberland House Cree Nation
Site Location:	53.935242, -102.283536
Year Planted:	2022
Assessment #:	1

First and last name of qualified surveyors (or as attached):

Nadina Gardiner

Disturbance Areas and area to be removed from afforestation project area(s):

No areas will be removed from the project area.

As per the Project Forest Monitoring Program, all area(s) impacted by forest fire, insects or industrial development will be removed from the afforestation project area. No such disturbance were recorded.

Summary of Preventive and Corrective Actions:

No preventative or corrective action need to be taken at this time.

A reasonable likelihood exists that a sufficient percentage of NSR-LIG sites will become SR sites within the coming years.

Declaration:

I do hereby declare that this submission:

- a) Adheres to all components of the required Quality Assessment/Quality Control program, and;
- b) Includes only surveys that have been conducted according to the methods detailed in the Project Forest - Golden Ranches Reforestation Monitoring Program, and;
- c) Complies with the requirements for report timing and format.

Validated/Signed by:



Registration #

1838

Date:

January 4, 2023

Print Name:

Lindsay Dent

Company:

Tree Time Services Inc.

Appendix B - Cumberland House Cree Nation Rewilding Plan



Project Forest – Cumberland House Cree Nation

Food & Medicine Forest 2023

August 11, 2023



Prepared by:



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2	Site Prescription	2
2.1	Site Preparation	2
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3	Project Monitoring	4
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5	Deliverables and Timeline	4
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1 Project Overview

Project Forest and Cumberland House Cree Nation (CHCN) have partnered to expand the food and medicine forest that was established in 2022. Approximately 6.5 hectares will be planted in spring 2023. The goal of the project is to re-introduce culturally and medicinally significant plants to their lands. Project Forest has retained Tree Time Services for project planning, seedling provider, and planting services. CHCN is responsible for project management and hiring community members to implement the project.

The Nation is situated within the Saskatchewan River Delta, the largest inland river delta in North America, and a substantial underground CO₂ sink. Cumberland House Cree Nation is working to restore and protect the myriad of ecosystem services provided by this unique landscape. The project site is approximately 310 km northeast of Prince Albert. See Appendix 1 for an Overview Map/Prescription Map.

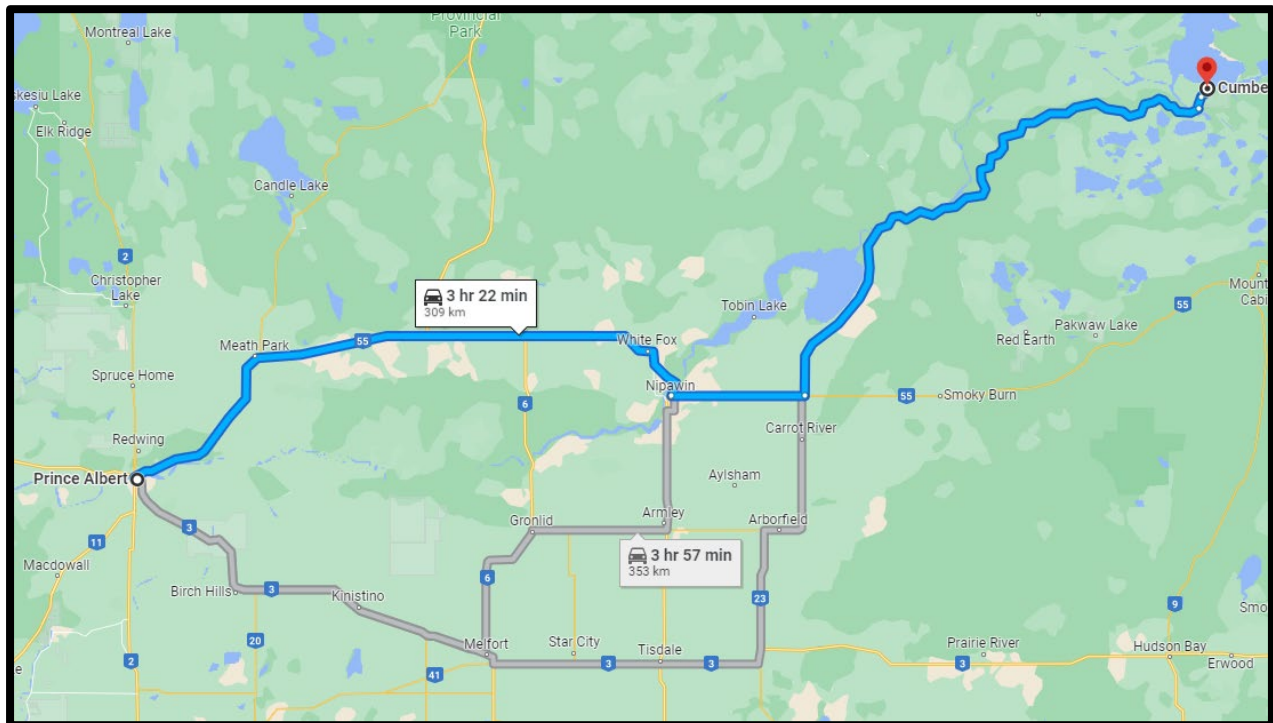


Figure 1. Directions to Cumberland House Cree Nation from Prince Albert, SK

As per information provided by CHCN and Project Forest, the site requires mechanical site preparation and a cover crop. As part of the establishment of the food and medicine forest scope of work, CHCN assessed the project area. This document describes the site prescription, including recommended seedling species and site preparation, and a post-implementation monitoring program requirements.

1.1 Site Background and Assessment

Cumberland House and adjoining Cumberland Cree Nation are the oldest community in Saskatchewan and have a registered population of 2,040 with 991 people living on the reserve (Government of Canada, 2021).

Many of the forests in the area are over mature due to a history of fire suppression. A significant consequence of overmature forests is the inability to re-establish successional species therefore, early successional species like raspberry and rose are not able to re-establish themselves.

The site selected for the Cumberland House First Nation Food and Medicine Forest has a complicated history involving multiple types of land use. It originally served as a lagoon and later as agricultural land, with periods of being left fallow (Nadina Gardiner, email correspondence, July 24, 2023). Due to suppression of early successional species in the area, special importance will be given to reintroducing

these species to the community. CHCN is partnering with Project Forest with the goal of restoring and preserving the community's cultural heritage.

This restoration process was initiated by planting saskatoon, wild rose, strawberry, common blueberry, raspberry, and honeysuckle in 2022, and the 2023 planting will expand on this. The location was specifically chosen despite site-limiting factors because of its proximity to the community members living on the reserve. The establishment of these species will promote living off the land food and medical benefits.

2 Site Prescription

This site is in Saskatchewan's Mid-Boreal Lowland of the Boreal Plain. It is surrounded by boreal mixed coniferous forest, composed of trembling aspen, paper birch, spruce, and several species of willow.

Although many Project Forest rewilding plans are tailored to precisely tie-in to the surrounding vegetation, the CHCN Food and Medicine Forest is instead intended to offset the successional food and medicinal species no longer found in abundance locally. The layout of CHCN Food and Medicine Forest is organized in a circle designed to reflect the medicine wheel as an important cultural symbol. The area being planted is about 6.5 ha to expand on the 2022 Food and Medicine Forest planting. The 2023 planting area will be site-prepped, sown with a cover crop, and then planted. The planting stage will also include brush-matting immediately afterwards to ensure the cover crop does not out-compete the planted seedlings. Table 1 lists the sections of the project site and their respective areas. See Appendix 2 the site prescription map.

Table 1. Project site sections and respective areas

Section*	Area (ha)	Stem Density (stems/ ha)
saskatoon	0.5	3600
raspberry	0.5	4000
white spruce	4.0	2000
white birch	1.5	2200

* Note: Table 1 sections are named after the dominant species in each respective section and is not reflective of the entire composition.

2.1 Site Preparation

CHCN is a herbicide-free nation, and as such, no chemical site-preparation techniques will be used.

The site will be tilled to promote seed germination in the cover crop and to prepare the soil for tree-planting. Additionally, the presence of brush matting will help to reduce the competition on planted seedlings.

2.2 Cover Crop

A cover crop will be sown to decrease the non-desirable vegetative competition during the first growing season. A native seed blend, developed in consultation with a supplier, will be used for the cover crop.

Table 2. Native grass seed mix

Species	% of Blend by Weight
Rocky Mountain Fescue	16.0
Tufted Hairgrass	10.0
Slender Wheatgrass	15.0
Northern Wheatgrass	20.0
Diploid Annual Ryegrass	10.0
White Clover	10.0
Fowl Bluegrass	4.0
Nodding Brome	15.0

2.3 Seedling prescription

Tree planting will occur in spring 2023. The area will have variable planting densities. Table 3 displays the seedlings ordered for the project area.

Table 3. Seedlings ordered for project area.

Season	Species	Latin Name	Amount	Section
Spring 2023	white spruce	<i>Picea glauca</i>	4360	White Spruce
Spring 2023	white birch	<i>Betula papyrifera</i>	1440	White Birch
Spring 2023	showy mountain ash	<i>Sorbus decora</i>	405	White Birch
Spring 2023	silver buffaloberry	<i>Shepherdia argentea</i>	1440	White Birch
Spring 2023	boyne raspberry	<i>Rubus sp. Boyne</i>	1000	Raspberry
Spring 2023	nova raspberry	<i>Rubus x Nova</i>	1000	Raspberry
Spring 2023	lowbush cranberry	<i>Viburnum edule</i>	180	N/A
Spring 2023	Thiessen saskatoon	<i>Amelanchier alnifolia</i> <i>Thiessen</i>	790	Saskatoon
Spring 2023	Bebb's willow	<i>Salix Bebbiana</i>	3600	White Spruce

The saskatoon section will be planted primarily with the Thiessen saskatoon varietal at a density of up to 3,600 stems/ ha because they can be planted as close together as 50-100cm apart. The raspberry section will be planted with a similar density and spacing.

The white spruce section will surround the medicine circle along its northern and eastern edges and will be composed of white spruce and Bebb's willow. This area will add wind protection and shade to community members using the area. The spruce will have a higher proportion planted in the northern section of the polygon, so as not to create excessive shade in later years. In the southern portion of the polygon, Bebb's willow should be planted adjacent to the medicine circle instead of the spruce, so that the circle will receive lots of sunlight throughout the day. Consequently, the two species will have varied distribution within the White Spruce section.

To the west of the access road the white birch dominated section will be planted, and it will be composed of white birch, mountain ash, and silver buffaloberry. The mountain ash and silver buffaloberry will be evenly distributed throughout the polygon and the birch will be planted in clusters of 10 at variable densities ranging from 2400 stem/ ha to 4000 stems/ ha.

3 Project Monitoring

A project specific monitoring plan will follow the *Project Forest Monitoring Assessment Standards*. A detailed monitoring plan will be developed prior to the first monitoring event in the fall 2023/ spring 2024.

The site will be monitored for up to six years. Project Forest will release the site once all criteria outlined in the monitoring plan have been fulfilled, or after the sixth year, whichever is first.

4 Maintenance

Maintenance recommendations will be based on the latest monitoring assessment. Recommendations will be discussed with the CHCN.

5 Deliverables and Timeline

Table 4. Project deliverables and timelines

Deliverable	Description	Timelines
Planning	<ul style="list-style-type: none"> • General consultation, client meetings. • Determining cover crop plan. • Completion of Rewilding Plan. • Finalization of Monitoring Plan. 	2023
Project Seedling Ordered	<ul style="list-style-type: none"> • White Spruce, 4360 seedlings • White Birch, 1440 seedlings • Showy Mountain Ash, 405 seedlings • Silver Buffaloberry, 1440 seedlings • Boyne Raspberry, 1000 seedlings • Nova Raspberry, 1000 seedlings • Lowbush Cranberry, 180 seedlings • Thiessen Saskatoon, 790 seedlings • Bebb's Willow, 3600 seedlings • Cold storage, transportation, and storage 	Delivery of seedlings to site Spring 202
Site Preparation	<ul style="list-style-type: none"> • Discing planting site 	Spring 2023 Prior to Planting
Cover Crop	<ul style="list-style-type: none"> • Purchase cover crop seed. • Sow cover crop. 	Spring 2023 Prior to planting
Planting Phase	<ul style="list-style-type: none"> • All seedlings 	Spring 2023
Brush Matting	<ul style="list-style-type: none"> • Install 13,995 brush mats 	Spring 2023
Monitoring Program	<ul style="list-style-type: none"> • The site will be monitored based on the monitoring protocols developed with the Rewilding Plan. 	Start: Fall 2023
Final Monitoring Assessment	<ul style="list-style-type: none"> • Complete final assessment once Monitoring Assessment Criteria is reached. 	no later than fall 2029

6 Safety

Project Forest expects a high degree of safety from all contractors and people on site. Therefore, Project Forest requires a site-specific safety plan from the main contractor or supervisor on site. This plan needs to include:

- First aid requirements,
- Emergency response plan,
- Safe work permits (if applicable),
- Verification of safety tickets,
- Site orientation,
- Daily tailgates,
- Ongoing Hazard and Risk Assessments, and
- A copy of the contractors Health and Safety Plan

Additionally, Project Forest Contractors will follow their respective health and safety plans as well as Saskatchewan OH&S procedures and guidelines. If there are any conflicts with safety plans or policies, the most stringent plan will take precedence. Any injury, damage or other adverse event must be reported to Project Forest immediately.

7 References

Government of Canada. (2023). Registered Population: Cumberland House Cree Nation. Retrieved from, gc.ca/fnp/Main/Search/FNRegPopulation.aspx?BAND_NUMBER=350&lang=eng

Appendix 1 Overview Map



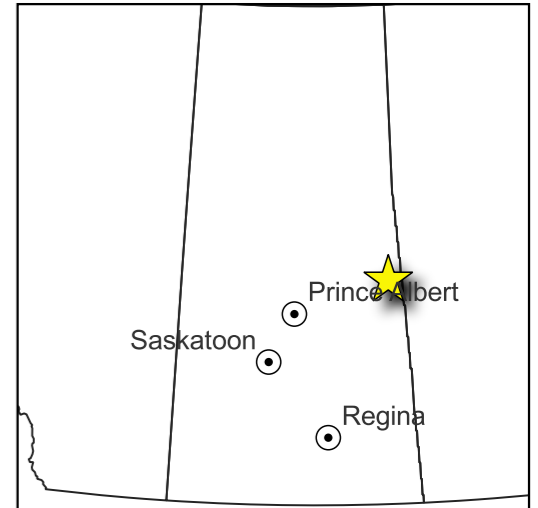
Food & Medicine Forest Overview Map

Project Partners:

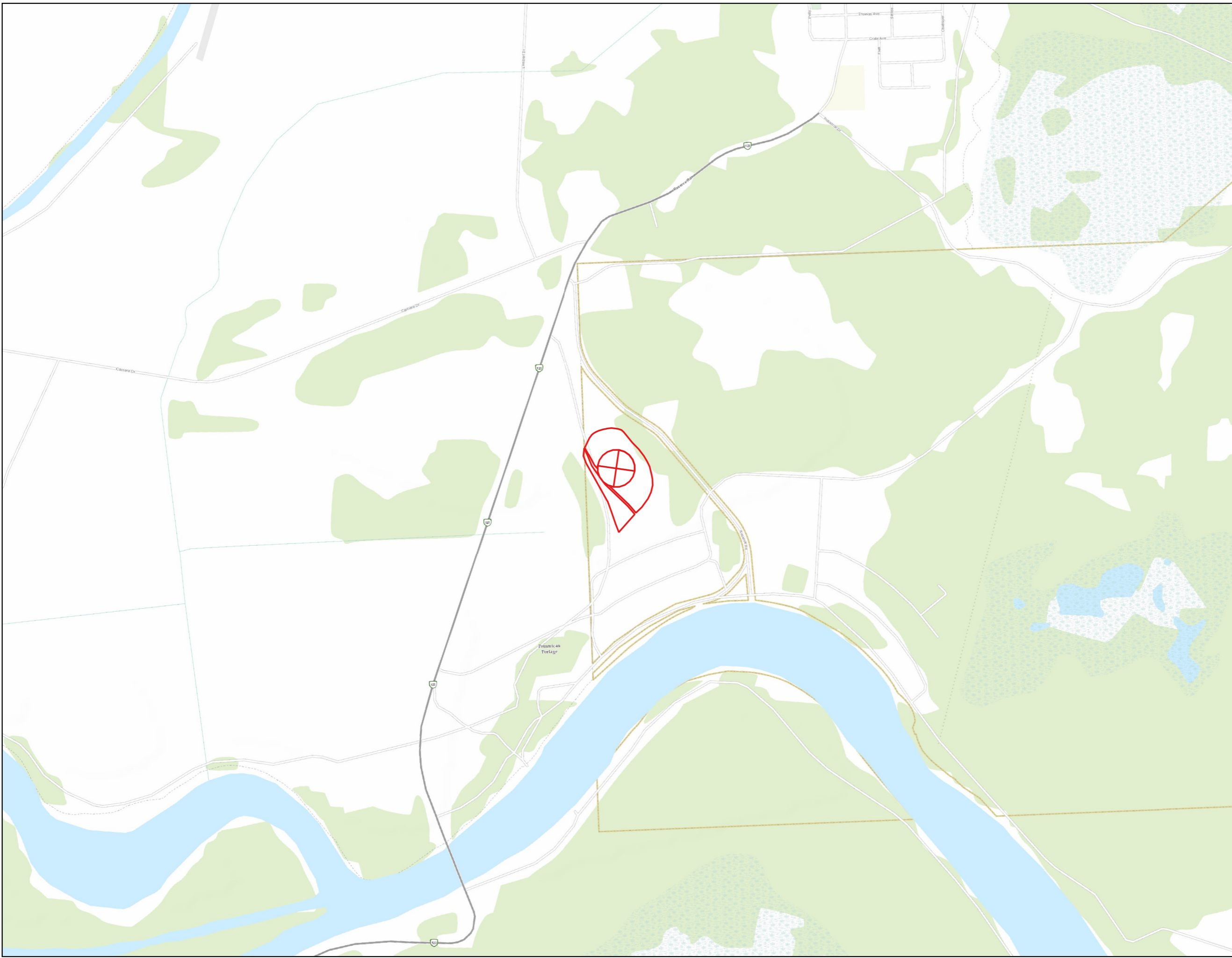
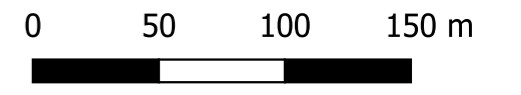


Legend:

Planting Area



Date Created: 2023-08-11
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Created By: Tree Time Services Inc.
Scale:1:15,000



Appendix 2 Prescription Map



Food & Medicine Forest Prescription Map

Project Partners:



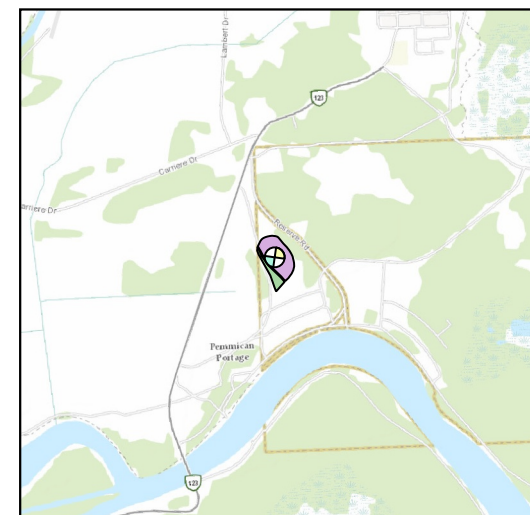
Legend:

Food & Medicine Forest

— Measurement (m)

Planting Areas

- Raspberry - 0.8 ha
- Saskatoon - 0.8 ha
- White Birch - 1.5 ha
- White Spruce - 3.9 ha



Date Created: June 24, 2022
Project CRS: EPSG:26913
Source: Altalis, Bing, GridAtlas
Created By: Tree Time Services Inc.
Scale: 1:2,500

0 50 100 150 m

