2023 Annual Project Report

Project Forest Camp Creek

Project Forest

Contents

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.

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

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 Project Forest Camp Creek forest:

Purpose

Positive Impact

About the forest you funded.

NAME

Project Forest Camp Creek

DATE PLANTED

Fall 2022

TOTAL SEEDLINGS PLANTED

57,960

TOTAL CO2 REMOVED FROM THE AIR*

28,199 metric tonnes

SPECIES PLANTED

Green Alder (2,520)
White Birch (2,340)
White Spruce (23,040)
Balsam Poplar (7,560)
Willow (7,560)
Lodgepole Pine (14,940)

LOCATION

County of Barrhead, Alberta
54°15'27.2"N 114°43'59.2"W

SIZE

28 hectares

TOTAL SPECIES PLANTED

6

* Metric tonnes of carbon dioxide (CO_2) projected to be removed from the air over 150 years.

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

15 LIFE ON LAND

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

57,960
Seedlings Planted

Project Forest Camp Creek has increased forested area in the County of Barrhead region in northern Alberta by transitioning a 28 ha hayfield back to native mixedwood forest. A total of 57,960 trees were planted in September 2022 on the conservation site owned and maintained by the Alberta Conservation Association (ACA).

Purpose
| UN SDG 15 - Life on Land

Project Forest Camp Creek

80.0%
Seedling Survival Rate

75
Plots Sampled

The first Afforestation Survey at Camp Creek occurred in Fall 2023. The survey data collected indicated an average total stocking rate (SR + NSR-LIG) of 80.0% (Figure 1). Data from the project surveys is recorded in an Afforestation Survey Report (Appendix A - Afforestation Survey Report).

There is a large presence of Canada Thistle within the site that needs to be addressed. Project Forest and the ACA need to discuss vegetation management option approaches for the site. Two NSR areas have been identified that can be considered for a fill plant.

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.

Figure 1: Acceptable Stocking Summary

Type of Plot	# of Plots	% of Plots
Total Sufficiently Restocked (SR)	13	17.3
NSR-Let It Grow (NSR-LIG) Stocking	47	62.7
Not Sufficiently Restocked (NSR)	15	20.0
Total Stocking (SR + NSR-LIG/Total # of Plots)	60	80.0

Purpose
| UN SDG 15 - Life on Land

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

Project Forest works with conservation groups to rewild areas of high conservation value. We transition degraded land owned and managed by conservation groups into species-rich forests that increase biodiversity, create habitat, and clean the air and water.

The Project Forest Camp Creek site is owned and maintained by the Alberta Conservation Association as part of the Camp Creek Conservation Area. It is located within the Central Mixedwood Natural Subregion of the Boreal Forest Natural Region.

"It is a pleasure working with the team at Project Forest. Their re-wilding vision is precisely aligned with Alberta Conservation Association's restoration goals on Camp Creek and other Conservation Sites. Their thoughtful planning, attention to detail, and collaborative strengths will benefit Albertans and wildlife for generations to come."
—**Dan Sturgess**, Biologist at Alberta Conservation Association (ACA)

A total of six different tree species have been planted at the site, they are green alder, white birch, white spruce, balsam poplar, willow and lodgepole pine. The species planted are all native to the site's ecological zone. By planting and maintaining native species, the Project Forest community is contributing to their preservation, promoting biodiversity and restoring the ecosystem.

Mammals expected to be present on this site based on survey data from the Alberta Conservation Association include moose, white-tailed deer, black bear, ruffed grouse and small mammals commonly found in mixedwood boreal forest.

6
Species Planted

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).

Cover Crop Seeding at Camp Creek

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 - Camp Creek Rewilding Plan).

Unlike many of our other planting sites, there was no site preparation needed at Project Forest Camp Creek. Due to continual cultivation and a loamy soil, the existing soil conditions and vegetation were suitable for planting. Prior to tree planting, we seeded the site with an annual rye grass cover crop. This helps to reduce weeds and forage grasses in the bare soil and provides a short-term cover crop as the tree species establish on site. We seeded in the fall to provide the seed the best

Purpose
| UN SDG 15 - Life on Land

chance to germinate the following spring. This decision was made after the germination failure at another site, Project Forest Golden Ranches.

A four hectare area of the site was not planted. It will remain as open parkland in an attempt to promote ungulate habitat. This area was seeded with a custom cover crop mix of grasses that are desirable to ungulates.

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 75 plots being sampled across the Camp Creek 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: Recommended Fill Plant Areas
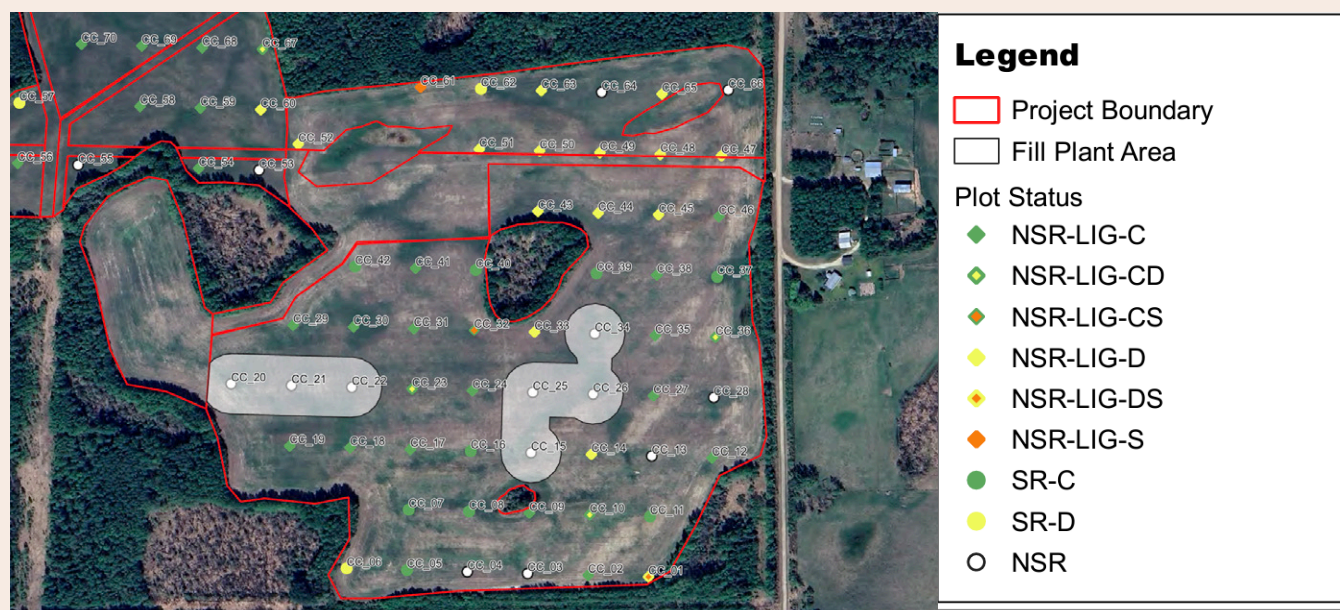
2023 fill plant areas marked in white on the Camp Creek Survey Map (Appendix A)

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 that a number of areas (marked in white) may require remediation activities.

Purpose
| UN SDG 15 - Life on Land

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

Project Forest is rewilding degraded land that has been disturbed and has not recovered through normal ecological processes.

The Project Forest Camp Creek site is located approximately 100 km northwest of the city of Edmonton, in the Camp Creek Conservation Area between Township Road 612 and Range Road 55. At some point in its history, the site was cleared for agricultural purposes. Prior to rewilding, the Camp Creek site was a hay and crop field.

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.

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)
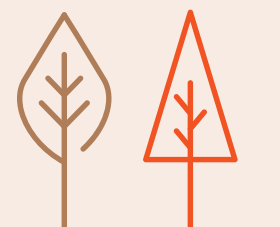
Purpose
| UN SDG 13 - Climate Action

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

13 CLIMATE ACTION

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

Indicator 13.2.2: Total greenhouse gas emissions per year

Forests act as carbon sinks, absorbing carbon dioxide (CO2) from the atmosphere through photosynthesis and storing it in their biomass and soil. By planting forests, we increase the amount of CO2 sequestered, thereby reducing the concentration of greenhouse gases (GHGs) in the atmosphere. This helps mitigate climate change by reducing the amount of CO2 that contributes to global warming (NRCAN, 2022).

The amount of CO2 projected to be removed from the atmosphere over the lifetime of Project Forest Golden Ranches is 65,315 metric tonnes. The estimated lifetime of a forest is 150 years.

Project Forest uses the Carbon Budget Model of the Canadian Forest Sector (CBM-CFS3) modelling framework developed by Natural Resources Canada to assess the impacts of our forests on carbon. This is the national standard for reporting on forest carbon.

28,199
Metric tonnes of CO2 projected to be removed from the air.

Carbon Budget Model of the Canadian Forest Sector is an aspatial, stand- and landscape-level modelling framework used for international reporting of the forest carbon balance of Canada's managed forest (NRCAN, 2024).

Purpose
| UN SDG 13 - Climate Action

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

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

7
Project Funding Partners
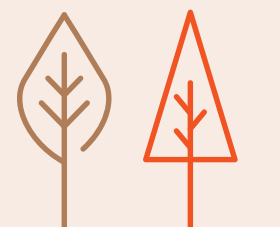
Purpose
| UN SDG 11 - Sustainable Cities and Communities

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

11 SUSTAINABLE CITIES AND COMMUNITIES

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

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 like seedlings, planting and labour, allowing communities to allocate more funds to services and infrastructure.

Project Forest Camp Creek provides an area for recreation and hunting for Albertans in the County of Barrhead region. Visitors to the forest can boost the local economy by increasing revenue from tourism-related activities such as accommodation, transportation and food services. Rewilding projects require labour to complete, including but not limited to:

- Vegetation management
- Cover crop deployment
- Tree planting
- Survival assessment survey and data collection

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**.

Local fiscal space
is defined as the sum of financial resources available to a government for the improved delivery of basic services without any prejudice to the sustainability of a government's financial position (Heller, 2005).
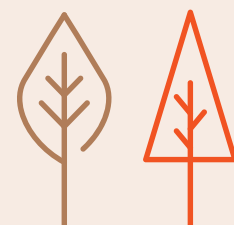
Positive Impact

| UN SDG 3 - Good Health and Well-Being

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 CO_2 from the atmosphere
- maintaining biodiversity by providing habitat for countless species

These services all indirectly impact human health and well-being.
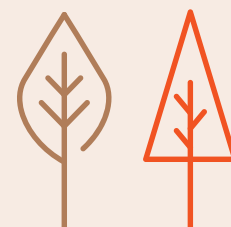
Positive Impact
| UN SDG 6 - Clean Water and Sanitation

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

6 CLEAN WATER AND SANITATION

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)

Project Forest Camp Creek is located in the Pembina River Watershed, one of the highest impacted watersheds in the Athabasca River Watershed. Its headwaters are located in the Eastern Slopes of Alberta's Rocky Mountains before it flows eastward near the communities of Entwistle, Sangudo, Barrhead, and Westlock to join the Athabasca River near Flatbush, Alberta. The Athabasca Watershed Council is actively seeking to increase watershed resilience through riparian habitat assessments, education, restoration and conservation.

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.
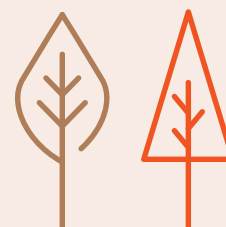
Project Forest Camp Creek

Our work is not possible without you.

Thank you to the Project Forest Camp Creek funding partners!

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Appendix A - Camp Creek Afforestation Survey

Afforestation Survey Cover Page					
Project Site: ACA – Camp Creek					
Survey Date(s)	September 19-20, 2023		Total Plots		75
Stocking Calculations					
Type of Plot		# of Plots	% of Plots	Meet Final Criteria	% of Plots
SR with Acceptable Conifer trees		9	12.0	0	0
SR with Acceptable Deciduous trees		4	5.3	0	0
SR Acceptable Shrubs		0	0.0	0	0
SR with Acceptable Conifer & Deciduous trees		0	0.0	0	0
SR with Acceptable Conifer trees & Shrubs		0	0.0	0	0
SR with Acceptable Deciduous trees & Shrubs		0	0.0	0	0
SR with Acceptable Conifer & Deciduous trees & shrubs		0	0.0	0	0
NSR-LIG with Conifer		26	34.7	0	0
NSR-LIG with Deciduous		14	18.7	0	0
NSR-LIG with Shrub		1	1.3	0	0
NSR-LIG with Conifer & Deciduous		4	5.3	0	0
NSR-LIG with Conifer & Shrubs		1	1.3	0	0
NSR-LIG with Deciduous & Shrubs		1	1.3	0	0
NSR-LIG with Conifer & Deciduous trees & shrubs		0	0	0	0
NSR -No Acceptable Woody species present		15	20.0	N/A	N/A
Acceptable Stocking Summary					
Plot Stocking Status		# of Plots		% of Plots	
SR Plots		13		17.3	
NSR-LIG Stocking		47		62.7	
NSR (excludes NSR-LIG)		15		20.0	
Total Stocking (SR + NSR-LIG):		60		80.0	

Herbaceous Vegetation Observed on Site			**Noxious Weeds**	
Dandelions	Ryegrass		Canada Thistle	
Strawberry	Oats		Sow Thistle	
Clover	Green foxtail			
Common Yarrow	Grass sp.			
Grass spp.	Alfalfa?			
Horsetail	Strawberry			
Fireweed	Sow thistle			
Lambs quarters	Groundsel			
Hemp nettle	Timothy			
Red clover				

Project Comments:
The project had large dense patches of Canada thistle throughout the southern section of the site.

Assessment Survey Tally Card

| Plot | Tree & Shrub Stocking | | | | | | | | Status | Tallest in Plot | | Risk factors | |
| | 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					
Cc_01			Bw	1	Aw	3	Raspberry	1	NSR-LIG	Aw	41	Blight on Aspen leaves (see photo) & Many Aspen suckers coming up outside the plot	
Cc_02			Sw	1					NSR-LIG	Sw	21		
Cc_03									NSR			Multiple Sw just outside of the plot	
Cc_04									NSR				Half plot is Canada thistle
Cc_05	Sw	1	Sw	1					SR	Sw	31		Canada thistle
Cc_06	Pb	1	Pb	12					SR	Pb	66	Area does not have as much competition along edge	Canada thistle
Cc_07	Sw	1	Sw	1	Bw	1			SR	Sw	30	Browsing on birch. No clover in plot, adjacent to CT patch	
Cc_08	Sw	2	Sw	1					SR	Sw	35		
Cc_09			Sw	1					NSR-LIG	Sw	32	Needle dieback on Sw (maybe due to marshiness of the area)	
Cc_10			Sw	1	Pb	1			NSR-LIG	Sw	21		
Cc_11	Sw	30							SR	Sw	30	Some chlorosis and needle dieback on the spruce	
Cc_12			Sw	1					NSR-LIG	Sw	28		
Cc_13									NSR			High competition from ryegrass and alsike clover, No woody sp. Observed	Canada thistle
Cc_14			Aw	1					NSR-LIG	Aw	42	Heavy grass & thistle competition	
Cc_15									NSR			Heavy grass & clover pressure	
Cc_16	Sw	1							SR	Sw	31	Large Canada thistle patches to the East and west	
Cc_17			Sw	1					NSR-LIG	Sw	25		
Cc_18			Sw	2					NSR-LIG	Sw	24		
Cc_19			Sw	2					NSR-LIG	Sw	26		
Cc_20									NSR			Heavy grass& clover competition	
Cc_21									NSR			Couple spruce just outside plot	
Cc_22									NSR			Heavy thistle competition	
Cc_23			Pb	1	Sw	1			NSR-LIG	Sw	24		
Cc_24			Sw	2					NSR-LIG	Sw	22	High competition	Canada thistle
Cc_25									NSR				
Cc_26									NSR			Heavy grass competition. No woody sp. Observed	
Cc_27			Sw	1					NSR-LIG	Sw	16		
Cc_28									NSR			Spruce & Alder just outside of the plot, see photos	
Cc_29			Sw	2					NSR-LIG	Sw	22		
Cc_30			Sw	3					NSR-LIG	Sw	26	Waterlogged soil	
Cc_31			Sw	1					NSR-LIG	Sw	17		
Cc_32			Sw	1	Bebbs W	1			NSR-LIG	Bebbs W	29		
Cc_33			Pb	1					NSR-LIG	Pb	31	Multiple Poplar and spruce outside of the plot	

Plot	Tree & Shrub Stocking								Status	Tallest in Plot		Risk factors	
	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					
Cc_34									NSR			Heavy thistle competition. No woody sp. Found	Canada thistle
Cc_35			Sw	1					NSR-LIG	Sw	23		Canada thistle
Cc_36			Sw	1	Pb	1			NSR-LIG	Pb	27	Manitoba maple growing just outside the plot	Canada Thistle
Cc_37	Pl	1	Pl	2					SR	Pl	30		
Cc_38			Sw	1					NSR-LIG	Sw	21		
Cc_39	Sw	1	Bw	1					SR	Bw	41	Similar vegetation as other plots. Lots of grassy weeds	
Cc_40	Sw	1	Sw	28					SR	Sw	30		
Cc_41			Sw	3					NSR-LIG	Sw	24		
Cc_42	Sw	1	Sw	1					SR	Sw	33		
Cc_43			Bw	1	Pb	1			NSR-LIG	Bw	12		
Cc_44			Pb	1					NSR-LIG	Pb	22		
Cc_45			Bw	1					NSR-LIG	Bw	40		
Cc_46			Pl	1					NSR-LIG	Pl	19	High competition but not limiting factor yet	
Cc_47			Bw	2					NSR-LIG	Bw	49	Not a limiting factor	
Cc_48			Bw	2					NSR-LIG	Bw	44		
Cc_49			Bw	2					NSR-LIG	Bw	37		
Cc_50			Bw	1					NSR-LIG	Bw	49		
Cc_51			Bw	1					NSR-LIG	Bw	33		
Cc_52			Pb	1					NSR-LIG	Pb	21		
Cc_53									NSR				
Cc_54			Sw	1	Pl	1			NSR-LIG	Sw	20		
Cc_55									NSR				
Cc_56			Pl	1					NSR-LIG	Pl	22		
Cc_57	Pb	10	Pl	1					SR	Pb	130		
Cc_58			Sw	1					NSR-LIG	Sw	28	Competition same throughout section	
Cc_59			Pl	2					NSR-LIG	Pl	18	High but short competition	
Cc_60			Sw	1	Pl	1			NSR-LIG	Sw	25	High (but short) competition	
Cc_61			Wild Rose	1					NSR-LIG	Wild Rose	26	Rose is natural ingress from edge effect of adjacent forest	Canada thistle
Cc_62	Bw	1							SR	Bw	64		Canada thistle
Cc_63			Bw	2					NSR-LIG	Bw	57	Moderate - high comp	Sow and Canada thistle
Cc_64									NSR				Canada thistle
Cc_65			Pb	2					NSR-LIG	Pb	39		
Cc_66									NSR				Canada and sow thistle
Cc_67			Pb	1	Pl	1			NSR-LIG	Pb	38		
Cc_68			Pl	1					NSR-LIG	Pl	21		

| Plot | Tree & Shrub Stocking | | | | | | | | Status | Tallest in Plot | | Risk factors | Noxious Weeds |
| | Acceptable | | Under Height | | Under Height | | Under Height | | | Species | Height (cm) | Evidence of: Damage, Disease, Competition, | |
	Species	Number	Species	Number	Species	Number	Species	Number					
Cc_69			Sw	2	Pl	1			NSR-LIG	Sw	27		
Cc_70			Sw	1	Pl	1			NSR-LIG	Sw	28		
Cc_71	Pb	3	Pb	4	Aw	1			SR	Pb	102	Tallest Pb has browsing on the top	
Cc_72			Sw	1					NSR-LIG	Sw	23		
Cc_73			Pl	1					NSR-LIG	Pl	15		
Cc_74			Pl	2					NSR-LIG	Pl	25		
Cc_75			Sw	1	Pl	1			NSR-LIG	Pl	18		

**Camp Creek
Survey Plot Status
Fall 2023**

Project Partners:

Project Forest
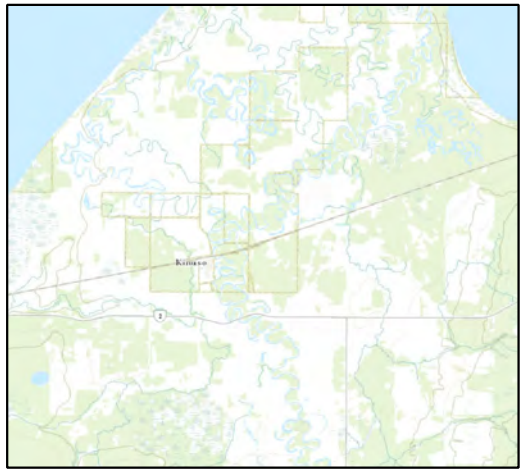
Alberta Conservation Association

Legend

Project Boundary

Plot Status

- ● SR-C
- ● SR-D
- ◆ NSR-LIG-C
- ◆ NSR-LIG-CD
- ◆ NSR-LIG-CS
- ◆ NSR-LIG-D
- ◆ NSR-LIG-DS
- ◆ NSR-LIG-S
- ○ NSR

Date Created: 2024-01-18
Project CRS: EPSG:3400
Source: Google Satellite
Created By: Tree Time Services Inc.
Scale: 1:4,000

0   50   100   150   200 m

**Camp Creek
Survey Plot Status
Fall 2023**

Project Partners:

Project Forest

Alberta Conservation Association
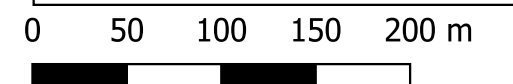
Legend

Project Boundary

Fill Plant Area

Plot Status

◆ NSR-LIG-C
◇ NSR-LIG-CD
◆ NSR-LIG-CS
◆ NSR-LIG-D
◆ NSR-LIG-DS
◆ NSR-LIG-S
● SR-C
● SR-D
○ NSR

Date Created: 2024-01-18
Project CRS: EPSG:3400
Source: Google Satellite
Created By: Tree Time Services Inc.
Scale: 1:4,000

0 50 100 150 200 m

Site Photos

Plot CC_01

Plot CC_09

Plot CC_18

Plot CC_25

Plot CC_36

Plot CC_40

Plot CC_43

Plot CC_66
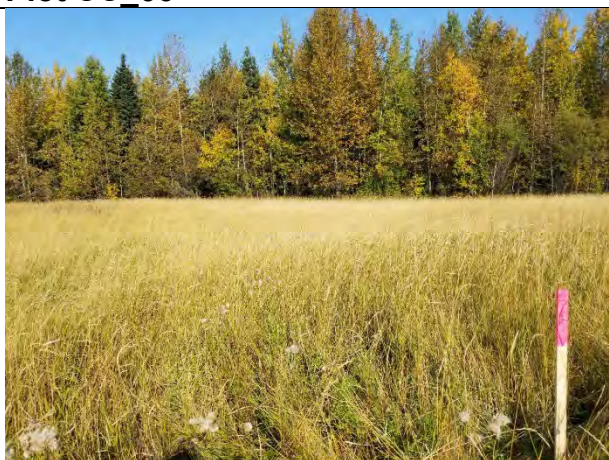
Plot CC_69

Plot CC_74

Project Forest Monitoring Assessment Summary Sheet

Project Name:	Camp Creek
Applicability:	Trajectory of re-wilding success
Landowner:	ACA
Site Location:	54.257915, -114.731563
Year Planted:	2022
Assessment #:	1

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

Maclean Forbes
Lindsay Dent

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:

There is a large presence of Canada Thistle present within the site that needs to be addressed.
Project Forest and the ACA need to discuss vegetation management option approaches for the site.

Two NSR areas have been identified that can be considered for a fill plant.
Project Forest and the ACA need to discuss if the ACA would desire a fill plant.

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 #**	**Date:**
[signature]	1838	January 8, 2023

Print Name:	**Company:**
Lindsay Dent	Tree Time Services Inc.

Appendix B - Camp Creek Rewilding Plan

Project Forest Camp Creek
Restoration Overview

Prepared by Project Forest

Project Forest

This document provides an overview of the restoration plan for Project Forest at the Alberta Conservation Association Camp Creek property at SE 7-61-5-W5M. Timing and exact quantities of seedlings are approximate.

Site Restoration Plan

Species and stock types

We will be using the following species and stock types for this planting:

Table 1: Species recommended for planting at Camp Creek site

Species	Stock Type	Stock Size	Number of Seedlings
White spruce	Plug - 1+0	412A	23,040
Balsam poplar	Plug - 1+0	415D	7,560
White birch	Plug - 1+0	415D	2,340
Lodgepole Pine	Plug - 1+0	412A	14,940
Willow spp.*	Plug - 1+0	412A	7,560
Green Alder	Plug - 1+0	415D	2,520

***Note**: Willow spp. refers to a mix of native willow species.

Site preparation and maintenance

Due to continual cultivation and a complex of soil types, including an Orthic Gray Luvisol, an Eluviated Eutric Brunisol, a Dark Gray Luvisol, and an Orthic Dark Gray Chernozem, site preparation is not required for the soil conditions or current vegetation.

To reduce the establishment of weeds and forage grasses in the bare soil, we will establish a cover crop prior to planting.

Portions of Areas 1, 2 and 3 as per Appendix A – Map of Planting Area at Project Forest – Camp Creek will be seeded with a mix of Common No. 1 Diploid Annual Ryegrass at 20kg/ha and Prima Fall Rye Certified No. A at 10 kg/ha.

Common No. 1 Diploid Annual Ryegrass will be seeded at 30kg/ha in portions of Area 1 and Area 3. Please refer to the seeding map in Appendix 1.

There is an area of the site not scheduled for planting. It will remain open parkland in an attempt to promote ungulate habitat. This area will be seeded with a custom native reclamation mix at 30kg/ha (Reference – **Table 2**).

Table 2: Custom Native Reclamation Mix

Species	Percentage of Mix
Slender Wheatgrass	20.0%
Rocky Mountain Fescue	16.0%
Tufted Hairgrass	8.0%
White Clover – low growing (bare)	12.0%
Canada Wild Rye	25.0%
Diploid Annual Ryegrass	19.0%

Maintenance

The only recommended maintenance activity would be for weeds. As weeds establish onsite, a backpack sprayer could be used as necessary. In areas where the conifers will be exclusively planted, more aggressive annual weed spraying may occur.

Planting strategy/techniques

Project Forest – Camp Creek will be stratified into three different areas (Reference **Appendix A**) based on their topography and drainage. These areas would reflect their suitability for different species and their relative planting proportions.

Area 1

The northwest quadrant of the site will be planted with lodgepole pine and white spruce. Not only will this create a pure coniferous stand which will add stand structure to the rewilding plan, but a pure conifer section of the site will also allow for noxious weeds and non-desirable vegetation management if needed with no risk to seedling mortality.

The soil conditions in Area 1 are more compacted than the rest of the site. This is due to the agricultural techniques and the current vegetation on site. Lodgepole pine has a tap root, this rooting system will be an advantage when competing for underground resources with the existing vegetative community.

There is a risk that Area 1 will show signs of extreme vegetative competition after planting. Should that be the case, vegetation management will be scheduled to ensure seedling survival.

Table 3: Recommended Species for Camp Creek Area 1

Species	Proportion	Comments
Lodgepole Pine	80%	Planted evenly across the site targeting the higher well drained areas at 2,000 stems/ha ~ 12,240 seedlings.
White spruce	20%	Planted evenly across the site targeting the lower moderately drained areas at 2,000 stems/ha ~3,060 seedlings

Area 2

This area is the north central portion of the site 3.47ha in area. This area will be planted with a mixture of balsam poplar, white birch and willow spp. These three species will be used to provide adequate species diversity throughout the section of rolling terrain highlighted by two Graminoid mash areas. Willow spp. will be planted nearest to the marsh areas, balsam poplar will be the secondary species planted at an elevated position to the willow and white birch will be planted throughout the rest of Area 2.

Table 4: Recommended Species for Camp Creek Area 2

Species	Proportion	Comments
Willow Spp.	36%	Planted around the perimeter of the Graminoid marsh areas at 2,000 stems/ha ~2,520 seedings
Balsam Poplar	31%	Planted at an elevated position above the willow spp. around the Graminoid mash areas at 2,00 stems/ha ~2,160 seedlings.
White Birch	33%	Planted through the rest of area ~ 2,340 seedlings.

Area 3

Area 3 makes up the the majority of Project Forest Camp Creek's rewilding area. It is a mix of rolling terrain which incorporates well and moderately drained microsite locations.
Area 3 will be managed as a mixed wood forest with a mix of five species.

The lodgepole pine will be planted in the highest best drained portions of Area 3. The white spruce will be planted in the moderately drained sections of Area 3. The balsam poplar and green alder will be planted evenly throughout Area 3 and the willow will be planted in the lowest and poorly drained sections of Area 3.

Table 5: Recommended Species for Camp Creek Area 3

Species	Proportion	Comments
White spruce	56%	Planted in the moderately drained sections at ~19,980 seedlings
Balsam poplar	15%	Planted evenly throughout area ~5,400 seedlings
Lodgepole Pine	8%	Planted in the well drained sections of the area ~ 2,700 seedlings
Willow spp.*	14%	Planted in the poorly drained sections of the area ~ 5,040 seedlings.
Green Alder	7%	Planted evenly throughout area ~2,520 seedlings

Table 6: Area Planting Summary Table

Species	Number of Seedlings*	Area 1	Area 2	Area 3
White spruce	23,040	3060	0	19980
Balsam poplar	7,560	0	2160	5400
White birch	2,340	0	2340	0
Lodgepole Pine	14,940	12240	0	2700
Willow spp.*	7,560	0	2520	5040
Green Alder	2,520	0	0	2520

Actual seedling amounts per species may be different after seedling harvest. Final seedling numbers per species and per area will be reported to the ACA at the end of the project.

Rewilding Success

Project Forest is committed to meet or exceed the expectations of the landowner. In this case, the Alberta Conservation Association planting survival expectations area:

> "A minimum planting success will be considered at 60% survival over 5 years. 1,2,5-year survival/tree health inspections will be done by the planting partner, with reports on these survival inspections sent to ACA. ACA regional staff will also make special note on the general tree health and survival on planted sites in their annual inspections. ACA staff will record those findings in the ACA internal tracking spreadsheet".

Project Forest guarantees our land and financial partners that all project areas will transition into a mature forest. The Project Forest – Camp Creek monitoring plan will ensure annual assessments of the project location occur to monitor rewilding success. At a time of no longer than 6 years after planting, the final rewilding survey will occur. The definition of success at that time will require a site density of 1,600 stems/ha and a stocking percentage of at least 80% across Project Forest – Camp Creek.

Appendix A – Maps of Planting Area at Project Forest – Camp Creek

Camp Creek Afforestation Map
SE 7-61-5-W5M

Legend:
- Site Boundary
- Native Grass Open Area
- No Treatment Open Area
- Tree Planting in Crop Field
- Tree Planting in Hay Field

Source: Spatial data provided by Alberta Government
Coordinate System: NAD 1983 UTM Zone 12N
Imagery Used: ESRI World Imagery

0 0.03 0.06   0.12   0.18   0.24
Kilometers

Alberta Conservation Association

Date:
8/5/2022

Scale:
1:4,000

Map labels: 0.3Ha, 2.7Ha, Area 1, 1.12Ha, 1.91Ha, 0.34Ha, 0.15Ha, 0.27Ha, 0.48Ha, Area 2, 3.47Ha, 2Ha, 2Ha, Area 3, 17.15Ha

Source: Esri, Maxar, Earthstar Geographics, and the GIS User Commun

Camp Creek Afforestation Map
SE 7-61-5-W5M

Legend:
- Site Boundary
- Native Grass Open Area
- No Treatment Open Area
- Tree Planting in Crop Field
- Tree Planting in Hay Field

Source: Spatial data provided by Alberta Government
Coordinate System: NAD 1983 UTM Zone 12N
Imagery Used: ESRI World Imagery

0 0.03 0.06   0.12   0.18   0.24
Kilometers

Date: 8/5/2022
Scale: 1:4,000

Alberta Conservation Association

Project Forest

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