

Annual Report

2025



Project
Forest

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Land Acknowledgement

| Traditional Territories



Elder Rufus Pretty Young Man of Siksika First Nation

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, Values and Purpose

Rewilding Canada, one forest at a time.

A non-profit created to serve the earth, Project Forest partners with conservation groups, First Nations, and funding partners to enrich communities by planting forests. The forests we plant clean air and water, increase biodiversity and contribute to the overall health and well-being of our community.



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

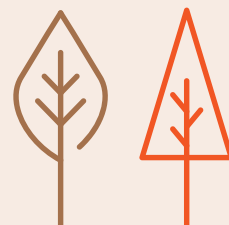
We document, monitor, and share our processes and findings with partners and the public—every step of the way, on every project.

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.

Our Purpose

Inspiring interconnectedness
and hope rooted in
reciprocity and community.



Overview

| Letter from our Executive Director



A Million Trees, Rooted in Community

Project Forest continues to grow, get trees in the ground and improve the lives of the people, companies and communities that make our projects possible. In 2025, we refined our purpose statement: **Inspiring interconnectedness and hope rooted in reciprocity and community.** That purpose took root in restored landscapes, stronger partnerships and communities brought together. For all we have accomplished together, I am deeply grateful.

By the time this report is published, we will have reached a milestone: planting our one-millionth tree at Blackfoot Crossing on Siksika Nation. Behind that tree is five years of hard work, learning, trust and support from the Project Forest community.

Those years have brought growth beyond anything I imagined. Today, Project Forest is stronger than ever and on track to surpass two million seedlings by the end of 2027. None of this would be possible without our dedicated team. We have strengthened our processes, begun transforming our data into an online database and taken steps to scale responsibly alongside our partners.

Looking ahead to 2026, we are excited to break ground at the Keyera Legacy Forest and Sturgeon County Rewilding Project, launch our partnership with Sturgeon Lake Cree Nation and continue our restoration work with the Alberta Conservation Association.

The Alberta Motor Association, one of our Diamond Willow Forest Partners, will complete its commitment to rewild 100 hectares and plant 200,000 trees through its Centennial Forest program: one hectare for every year of service to Alberta families. Our Siksika Nation Community Shelterbelt Project will add another 200,000 seedlings this spring, moving us closer to planting one million seedlings throughout the Nation by 2030.

This momentum belongs to the Project Forest community. On behalf of our team, our Board of Directors and everyone who benefits from this work, I offer my heartfelt gratitude for your trust, generosity and continued support. Thank you for helping us inspire interconnectedness, create hope and build a greener future. One seedling, one partnership and one community at a time.

Mike Toffan

Project Forest Founder & Executive Director



Mike Toffan speaking at the 1 Millionth Tree Planted & Seedling Giveaway

Overview

| 2020 - 2025 Cumulative Review

This is what we've accomplished in five short years—and we're still growing.

16

forests planted

38

species planted

416.6

hectares rewilded

958,295

seedlings planted



77

Funding Partners

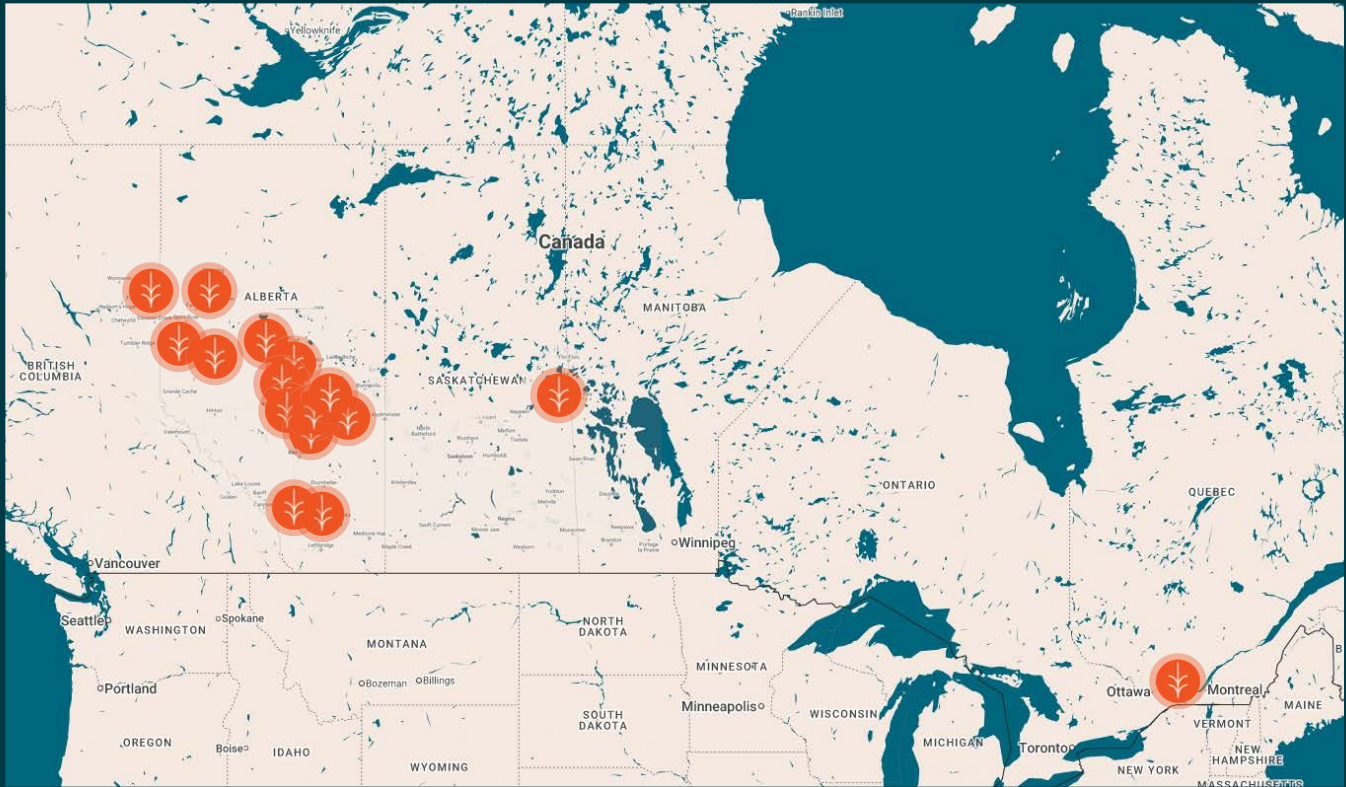
343,629*

metric tonnes of CO₂ projected to be removed

*The 2024 Annual Report cited a cumulative projected CO₂ removal figure of 286,999 metric tonnes; this figure has been corrected following the identification of a calculation error in the prior year's reporting. tCarbon projections for the University of Alberta Research Forest are not included in this total, as the calculations are still being finalized. These metrics will be incorporated into future reporting.

Overview

| 2020 - 2025 Cumulative Review



Project Forest Rewilding map: British Columbia, Alberta, Saskatchewan, and Quebec.

950,000+ seedlings planted since 2020.

On 6 October 2025, Project Forest celebrated five years of rewilding Canada, one forest at a time. Not only was this a momentous occasion for our organization but it marked numerous milestones for each of our land and funding partners who have joined us along the way. The support of our community propelled us towards our mission at a speed that we are truly proud of. For this, we are rooted in gratitude.

Three new forests were established at Leavitt, Pomrenk, and the Wagner Natural Area and the University of Alberta Research Forest planted 11,830 seedlings as part of its second phase of establishment. 10,000 more seedlings were also planted in partnership with the Junior Forest Wardens at the Ann and Sandy Cross Conservation Area, bringing the 2025 planted total to 187,320 seedlings and pushing Project Forest's cumulative tree count to 958,295 seedlings since inception. Looking ahead, 2026 will see our 1,000,000th tree planted, deeper rooted scientific monitoring standards, new reciprocal Indigenous partnerships, and further shared commitments to landscape-level restoration of Canada's forests.

Overview

| 2025 Year in Review

This is what we've accomplished in five short years—and we're still growing.

4

forests planted

14

species planted

75

hectares rewilded

187,320

seedlings planted

54,452*

metric tonnes of CO₂ projected
to be removed over 150 years

*Carbon projections for the University of Alberta Research Forest are not included in this total, as the calculations specific to that site are still being finalized. These metrics will be incorporated into future reporting.

180,000+ seedlings planted in 2025.

Project Forest's field season was defined by its most diverse slate of sites in a single year, formally initiated its first partnership with a provincially protected natural area, and conducted the most comprehensive monitoring season to date. Stocking outcomes were documented across 10 project sites over a combined 302.2 hectares.

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 communities grapple with climate change and biodiversity loss, forests emerge as pivotable 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 measure of progress over time.

In our 2025 Annual Report, we have linked the outcomes of our rewilding and restoration projects with relevant UN SDG targets and indicators, as well as aligned them with corresponding Environment, Social and Governance goals. The 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 Project Forest’s 2025 rewilding and restoration projects.

Purpose



Positive Impact



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 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.

The forests that Project Forest plant are located in regions impacted by agricultural expansion. These areas encompass lands of significant conservation importance where, through planting a forest, we are able to make tangible contributions to their ecological restoration.

Forests Planted in 2025:

Centennial Forest: Leavitt Forest

In September 2025, Project Forest and the ACA planted 29,990 seedlings across 15 hectares at the Leavitt Forest near Butte, AB, in Treaty 7 Territory. The site was formerly dominated by high-competition grass, soil compaction, and very low soil moisture, requiring a planting prescription tailored to restore ecologically appropriate native cover. This, in turn, will progressively improve the site's soil structure, water infiltration, and groundwater recharge capacity.

As the Centennial Forests mature into layered, structurally diverse ecosystems, they will enhance wildlife corridors and publicly accessible green space through the ACA's broader network of conservation sites managed for long-term ecological and community benefit.

Purpose

| UN SDG 15 - Life on Land



Centennial Forest: Pomrenk Forest

In the fall of 2025, 80,720 seedlings were planted across 39 hectares of the Pomrenk Homestead Conservation Site near Ranfurly, AB, in Treaty 6 Territory. This Alberta Conservation Association (ACA) site is co-managed with the Alberta Fish and Game Association (AFGA) and is located in Alberta's Central Parkland. The project is transitioning former agricultural cropland into a functioning mixed-wood forest.

University of Alberta Research Forest

The University of Alberta Research Forest is a 10.7-hectare long-term tree adaptation experiment near Peace River, Alberta, established through a partnership with Dr. Charles Nock's Ecosystem-based Forest Management Lab. 58,380 seedlings were planted in 2024 with an additional 11,830 planted in 2025 across five native boreal species.

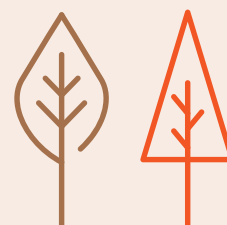
Embedded within the internationally recognized EMEND Project, the site functions as a living laboratory testing more than 20 species combinations to identify which mixtures best support biodiversity, climate resilience, and sustainable forest management across Canada's boreal forest.

Wagner Natural Area

Project Forest and the Wagner Natural Area (WNA) Society formally initiated the rewilding of 20 hectares of degraded hay land within the 251 ha provincially protected area during the fall 2025 planting season. Situated in the Central Parkland natural subregion between Edmonton and Spruce Grove, WNA is a nationally significant ecological site renowned for its rare groundwater-fed fens and exceptional orchid diversity.

39,710 seedlings were planted across eight species and six planting locations. As the sites transitions from field to forest, it is expected to support an increasingly diverse range of wildlife alongside the existing calcareous fens, marl ponds, willow swamps, creek corridors, and communities of carnivorous plants, amphibians, white-tailed deer, and moose.

The [AMA Centennial Forests](#) is a partnership with the Alberta Motor Association (AMA), established to mark AMA's 100th anniversary and reflect their commitment to environmental stewardship and community investment. Through this initiative, AMA committed to funding the restoration of 100 hectares of native forest across Alberta. Pomrenk and Leavitt join Benoit and Flatbush as the four sites rooted under this commitment.



Purpose

| UN SDG 15 - Life on Land



Annual Monitoring Surveys

Surveys are conducted across all project sites to assess the overall health of the forest through monitoring tree growth and mortality, observing volunteer vegetation, and identifying site maintenance requirements. Intensive on-the-ground surveys occur for the first five growing seasons at each project location. The survey data collected is used in the preparation of our Annual Project Reports.

All surveys are completed by Regulated Forestry Professionals (RFP) or under the direct supervision of an RFP. The parameters for success are defined in the monitoring protocols outlined in Appendix C, which establish the stocking thresholds and assessment criteria applied consistently across all Project Forest sites. Where site-specific conditions have required adjustments to these standard protocols, the applicable modifications are documented in the individual site's annual report.

In 2025, a total of 670 plots were sampled across all survey sites with an average total stocking rate (sufficiently restocked + not sufficiently restocked – let it grow) of 87%, the highest Project Forest has ever recorded. This milestone is particularly significant given the scale of the program: achieving this result across 16 active projects, spanning different soil conditions, climate zones, and establishment ages, speaks to the cumulative impact of years of careful site selection, species prescription, and adaptive management.

670

plots sampled in 2025

87%

average stocking rate

Table 1: 2025 Stocking Summary*, Year-to-Year Comparison

Type of Plot	# of Plots 2024	% of Plots 2024	# of Plots 2025	% of Plots 2025
Total Sufficiently Restocked (SR)	433	64.8	509	76
NSR-Let It Grow (NSR-LIG) Stocking	88	13.2	74	11
Not Sufficiently Restocked (NSR)	141	21.1	87	13
Total Stocking (SR + NSR-LIG/Total # of Plots)	521	78.0	583	87

*Survey data for each project location is recorded in a site-specific Afforestation Survey Report and included in that project's individual annual report. Data from all surveyed sites has been compiled into a consolidated [Afforestation Survey Cover Page](#)

Purpose

| UN SDG 15 - Life on Land



Key Outcomes in 2025:

- **Flatbush Forest** saw a more intensive monitoring approach in 2025, identifying an increase of 20% natural ingress. The site recorded the lowest total stocking of monitored projects at 48.3%, with 51.7% of plots classified at NSR. Monitoring results from the next growing season will determine if a fill plant will be scheduled.
- **Golden Ranches**, now in its fourth year, recorded 94.2% total stocking (76.1% SR, 12.3% NSR-LIG) with strong structural establishment. However, noxious weed pressure remains the site's primary management challenge.
- **Strathcona Forest** and **Doig River First Nation Rewilding Project** both recorded 100% total stocking across all plots surveyed. 13.8% of plots at Doig River First Nation have already met the final criteria after only two growing seasons since planting. These sites are exhibiting rich multi-species composition.
- Establishment survey data from the **University of Alberta Research Forest** saw an overall survival rate of 87.9% across 8,686 measured trees with broadly comparable survival across both spacing treatments. 85.4% survival was noted for seedlings inside fences compared to a 59.7% survival of those outside of the fences, likely attributable to ungulate browsing pressure on unprotected seedlings.
- **Wihnemne School Food and Medicine Forest** showed strong establishment in the shelterbelt separating the school from the railway and road. Surveyors noted that the cultural berry line had been mowed by the school, thus removing the area from the assessment and future survey calculations.

SR vs Final Criteria

A plot is classified as sufficiently restocked (SR) when planted seedlings have reached a minimum established threshold. Final Criteria represents a higher bar: the point at which the developing stand has achieved the density and structural maturity that confirms long-term forest establishment success.



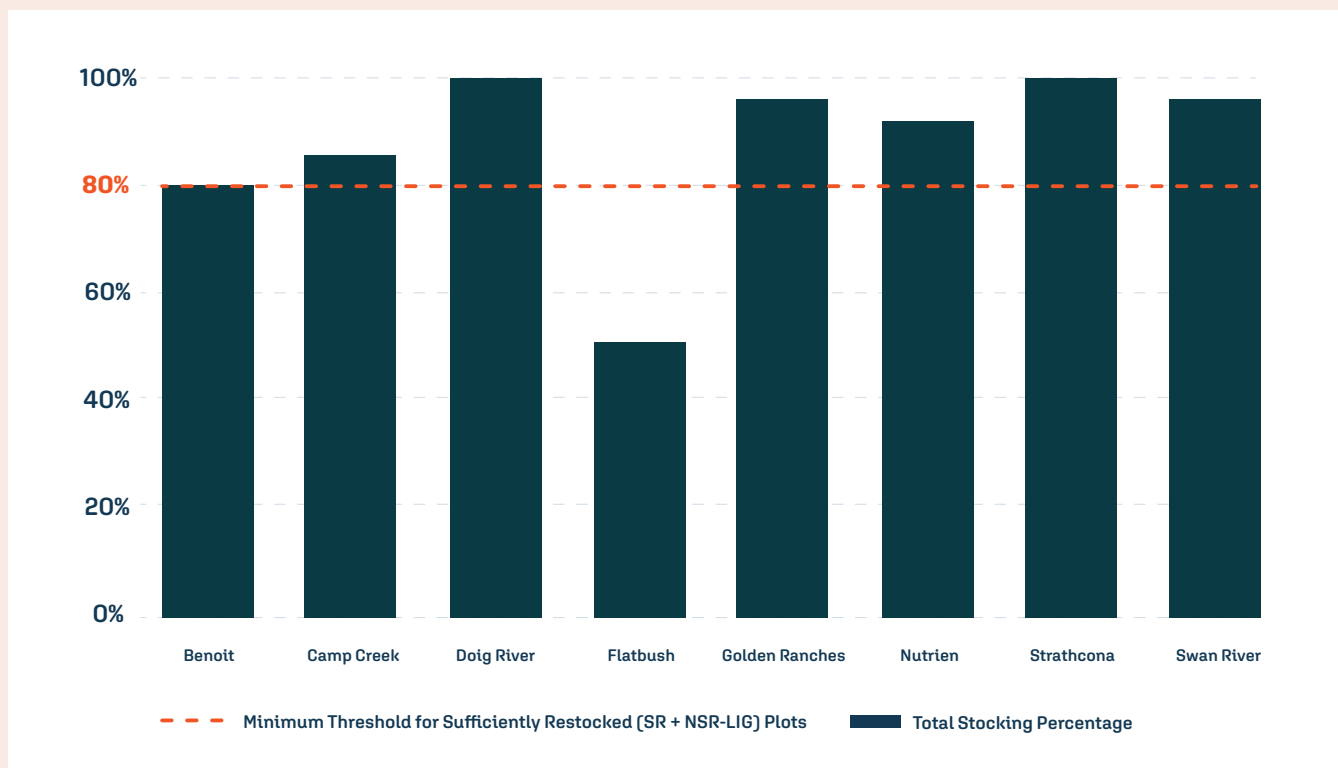
Project Forest planters at Strathcona Forest

Purpose

| UN SDG 15 - Life on Land



Figure 1: Project Forest Total Stocking Percentages in 2025



Note: Assessment surveys from Siksika Nation, Paul First Nation, and the University of Alberta Research Forest use different monitoring protocols. Those numbers are not reflected here.

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, food and medicinal plants that contribute to increasing the overall forested areas in 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 partner with land rights holders who can guarantee that the seedlings we plant today will be protected and remain forests for future generations to enjoy. Our permanence agreement ensures that we are establishing new protected areas and expanding existing ones.

10
Land Partners

Purpose

| UN SDG 15 - Life on Land



Our forests are situated in northeastern British Columbia (specifically in the Peace River region), stretching across the [Boreal Forest Natural Region](#) and Central Parkland in northern, central, and west-central Alberta, and in the [Boreal Plain Ecozone](#) in northeastern Saskatchewan. The land is managed, and its long-term protection overseen, by our Indigenous and conservation land partners.



"Embarking on a Rewilding Journey with Project Forest has been both transformative and challenging for the Wagner Natural Area Society. While our agriculturally disturbed landscapes begin to transform into a dominant forest landscape, our Society has already transformed by gaining a new focus. And the challenges help us acquire skills and learn how to share this budding purpose with a wider community."

—**Dave Ealey**, President of Wagner Natural Area Society

Project Forest planted a total of 17 different tree, shrub, and vascular plant species across six projects in 2025. The species planted were chosen based on their appropriateness to the site and adaptability to the changing climate. By continuing to plant locally adapted native or strategic species, Project Forest is contributing to enhancing biodiversity, increasing forested area, and mitigating climate change.

17

species planted



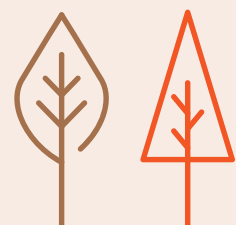
Wild Rose



Purple Aster

Vascular plants

are any plants that have internal tissues (xylem and phloem) for conducting water, nutrients, and sugars throughout its body — including all trees, shrubs, grasses, and flowering plants (Judd et al., 2016).



Purpose

| UN SDG 15 - Life on Land



The data from our 2025 surveys indicate that in addition to the seedlings we planted, our sites are seeing an increase in desirable natural vegetation with meaningful benefits for pollinator communities. The presence of willow, wild rose, goldenrod, aster, fireweed, common yarrow, shrubby cinquefoil, clover, vetch, and wild strawberry (observed across multiple sites) are strong indicators of natural regeneration. These native flowering species are recognized as valuable forage for Alberta's bee populations and nectar sources for monarch butterflies during fall migration (AWES, 2019; WWF, 2025).

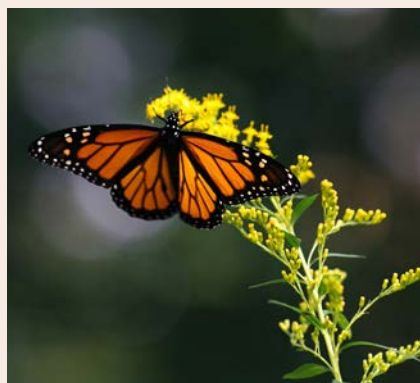
The increase in desirable vegetation is likely due to improved soil and growing conditions created through site preparation prior to planting and the favourable microhabitat created by the emerging forest. The return of these pollinator-supporting species increases overall site biodiversity and contributes to the restoration of functional ecological relationships on formerly agricultural land; a favourable demonstration of what Project Forest calls rewilding.



Pollinator on a strawberry flower



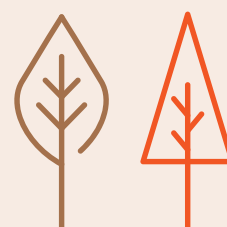
Common yarrow



Monarch butterfly on a goldenrod



Fireweed



Purpose

| UN SDG 15 - Life on Land



Species Planted in 2025

Aspen (<i>Populus tremuloides</i>)	3,120
Balsam poplar (<i>Populus balsamifera</i>)	42,300
Bebb's willow (<i>Salix bebbiana</i>)	13,265
Black spruce (<i>Picea mariana</i>)	2,160
Jack pine (<i>Pinus banksiana</i>)	8,820
Mountain ash (<i>Sorbus decora</i>)	1,800
Pussy willow (<i>Salix discolor</i>)	4,375
Red osier dogwood (<i>Cornus sericea</i>)	14,760
River alder (<i>Alnus incana</i>)	790
Saskatoon (<i>Amelanchier alnifolia</i>)	1,730
Silverberry (<i>Elaeagnus commutata</i>)	1,080
Silver buffaloberry (<i>Shepherdia canadensis</i>)	1,080
Tamarack (<i>Larix laricina</i>)	7,200
White birch (<i>Betula papyrifera</i>)	7,020
White spruce (<i>Picea glauca</i>)	43,020
Wild raspberry (<i>Rubus idaeus</i>)	2,290
Wild rose (<i>Rosa acicularis</i>)	780

The presence of noxious weeds is also recorded in our annual surveys. In 2025, Canada thistle was the most consistently observed noxious weed across surveyed sites, recorded at six project sites. Common tansy, white cockle, sow thistle, and toadflax were also documented at Golden Ranches. Scentless chamomile, yellow toadflax, and kochia were observed at the Nutrien Forest. Notably, no noxious weeds were recorded at Strathcona, reflecting both the maturity and health of the developing stand and the site's relative isolation from agricultural land which limits the introduction of invasive species.

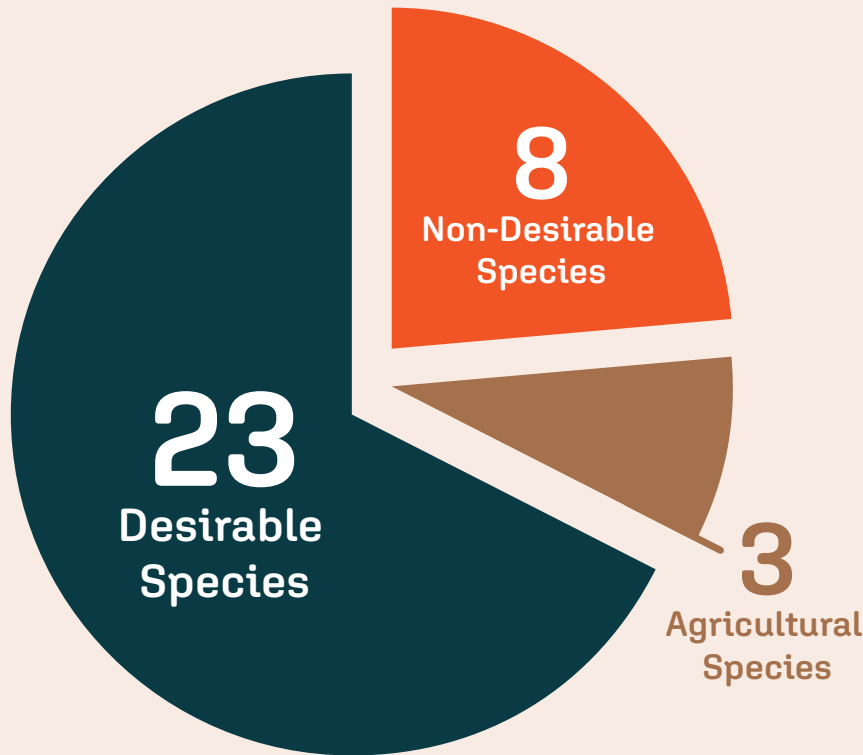
Where there is a significant presence of noxious weeds within a site, Project Forest will work with land partners to identify and implement appropriate vegetation management strategies. Full details on vegetation observations are included in each project's annual report.

Purpose

| UN SDG 15 - Life on Land



Figure 2: Observed Herbaceous and Woody Vegetation Across All Surveyed Sites



Desirable vegetation is abundant across all 2025 monitored sites, with non-desirable vegetation consisting primarily of noxious weed species. The natural ingress of native herbaceous and woody species signals that soil structure is improving alongside microclimates and ecological conditions. The land is actively restoring the relationships between soil, vegetation, and broader ecosystems that were once suppressed, signalling rewilding and restoration success.

Desirable Species (23)

- Aster spp. (*Symphyotrichum* spp.)
- Bearberry (*Arctostaphylos uva-ursi*)
- Bedstraw spp. (*Galium* spp.)
- Blueberry (*Vaccinium myrtilloides*)
- Bunchberry (*Cornus canadensis*)
- Cinquefoil (*Potentilla* spp.)
- Clover (*Trifolium* spp.)
- Common cattail (*Typha latifolia*)
- Common yarrow (*Achillea millefolium*)
- Dandelion (*Taraxacum officinale*)
- Fireweed (*Chamerion angustifolium*)
- Goldenrod (*Solidago canadensis*)
- Graminoid (*Poaceae* / *Cyperaceae* spp.)
- Hemp nettle (*Galeopsis tetrahit*)
- Honeysuckle (*Lonicera* spp.)
- Horsetail (*Equisetum arvense*)
- Lily spp. (*Lilium* spp.)
- Raspberry (*Rubus idaeus*)
- Stinkweed (*Thlaspi arvense*)
- Storkbill (*Erodium cicutarium*)
- Strawberry (*Fragaria virginiana*)
- Vetch (*Vicia* spp.)
- Violet spp. (*Viola* spp.)

Agricultural Species (3)

- Alfalfa (*Medicago sativa*)
- Arrow-leaved coltsfoot (*Petasites sagittatus*)
- Grass spp. (*Poaceae* spp.)

Non-Desirable Species (8)

- Bull thistle (*Cirsium vulgare*)
- Canada thistle (*Cirsium arvense*)
- Common tansy (*Tanacetum vulgare*)
- Knapweed spp. (*Centaurea* spp.)
- Kochia/cypress spp. (*Bassia scoparia*)
- Scentless chamomile (*Tripleurospermum inodorum*)
- Sow thistle (*Sonchus arvensis*)
- Yellow toadflax (*Linaria vulgaris*)



Purpose

| UN SDG 15 - Life on Land



Indicator 15.2.1: Progress towards sustainable forest management.

Project Forest's Rewilding/Restoration Plans and Monitoring Protocols ensure forests maintain their environmental, social, cultural, and economic values over time, through decisions grounded in scientific research, rigorous planning, and community consultation (NRCAN, 2024). This multi-value framework guides every stage of Project Forest's work, integrating ecological monitoring, Indigenous community involvement, and adaptive management to ensure that each site progresses toward a healthy, self-sustaining forest ecosystem.

Scientific verification tools and standardized metrics are used to provide measurable, evidence-based documentation of each site's trajectory toward sustainable forest management. These commitments ensure that the forests established today will continue to benefit surrounding communities and the broader environment for generations to come.

2025 Project Spotlight: University of Alberta Research Forest

The University of Alberta Research Forest functions as a living laboratory where controlled species diversity and density treatments are used to identify which combinations best support resilient forest establishment under changing conditions. Rigorous scientific monitoring documents seedling survival, stem density, height, and root collar diameter, building a long-term dataset that contributes to the broader understanding of how forests can be restored and sustained in a changing climate (Nock, 2026).

The findings generated at this site are designed to be transferable, shaping not only the management of this forest but informing forest policy and reforestation practices across the province for generations to come.



Purpose

| UN SDG 15 - Life on Land



Rewilding & Restoration Plans

Prior to planting, Project Forest develops a site-specific Rewilding or Restoration Plan to identify challenges, optimise conditions for seedling survival, and ensure the approach is tailored to both the ecology and priorities of each community.

A thorough site visit assesses soil conditions, competing vegetation, moisture regimes, and proximity to disturbance agents. From these findings, mitigation strategies are developed for any site-limiting factors, and a recommended species list is produced. This is then refined alongside the land rights holder to finalise the species composition and quantities to be planted. Each completed plan includes detailed planting maps, site preparation prescriptions, vegetation management strategies, and monitoring plans designed to give every forest the strongest possible foundation for long-term success.

Disturbance agents are biotic or abiotic factors (including insects, disease, wildfire, drought, and human activity) that interrupt forest development, alter stand structure, and influence long-term ecosystem trajectories (Haeussler et al., 2002).

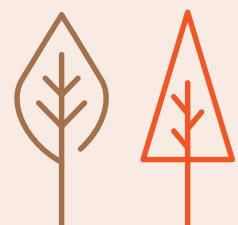
Monitoring Protocols

The Project Forest Monitoring Plan requires that 2.44 plots per hectare are surveyed, and each plot location is permanently marked to ensure consistency across assessments on a micro- and macro-scale. The survey data collected is used to prescribe future monitoring and maintenance events.

A 25% fill plant is budgeted for each project, initiated only when survey data identifies an NSR area meeting the required intervention threshold within the first six years of establishment. These monitoring protocols are critical in ensuring that corrective actions are timely and evidence-based, and each site planted is on a trajectory to becoming a mature, self-sustaining forest.

Silvicultural Strategy

These protocols ensure that forests remain on a positive trajectory toward maturity, maintaining biodiversity, and enhancing ecosystem services. The 2025 Annual Monitoring Surveys indicate that four of the 11 project sites may require silvicultural treatments:



Purpose

| UN SDG 15 - Life on Land



1. Flatbush

Between the 2024 and 2025 surveys, total stocking at Flatbush increased by 20% without fill plant intervention, driven by both planted stock maturing into acceptable height thresholds and natural ingress of desirable woody vegetation. An estimated 20.5 hectares have been identified for potential fill plant (a 17% reduction from the previous year).

Project Forest will review 2026 results before committing to a fill plant decision, with intervention deferred should natural establishment continue to close the stocking gap.

2. Golden Ranches

In 2025, herbicide Restore II was deployed as part of a targeted vegetation management strategy, spraying over 254,838 m². Common tansy was also targeted through a hand-pulling event. This contributed to a measurable decline in tansy density across the site after 830.7 m² of land was treated.

Project Forest and the Nature Conservancy of Canada will continue to collaborate on an intensified vegetation management strategy as Strathcona County has issued a formal weed management warning for the project area.

3. Swan River First Nation

Competing vegetation, including dense grass, white cockle, and Canada thistle, remains a limiting factor in portions of the project area and warrants continued monitoring. However, with 36.7% of plots already meeting final height criteria, the site is on a clear trajectory toward maturity.

This result is particularly meaningful as it was achieved without any fill plant intervention, a testament to the strength of the original planting prescription and the ongoing stewardship of the Nation. As the canopy closes, natural shading is expected to suppress weed pressure without the need for intervention.

Purpose

| UN SDG 15 - Life on Land



4. Wihnemne School Food and Medicine Forest

A communication breakdown with the school's maintenance department resulted in the mowing of the cultural berry line which have since been removed from the assessment area. A fill plant will only proceed if a formal agreement is reached with the school's administration confirming that seedlings will be protected from horses frequenting the grounds and that maintenance responsibilities are clearly established.

Figure 3: Revised Wihnemne School Food and Medicine Forest Planting Site



Purpose

| UN SDG 15 - Life on Land

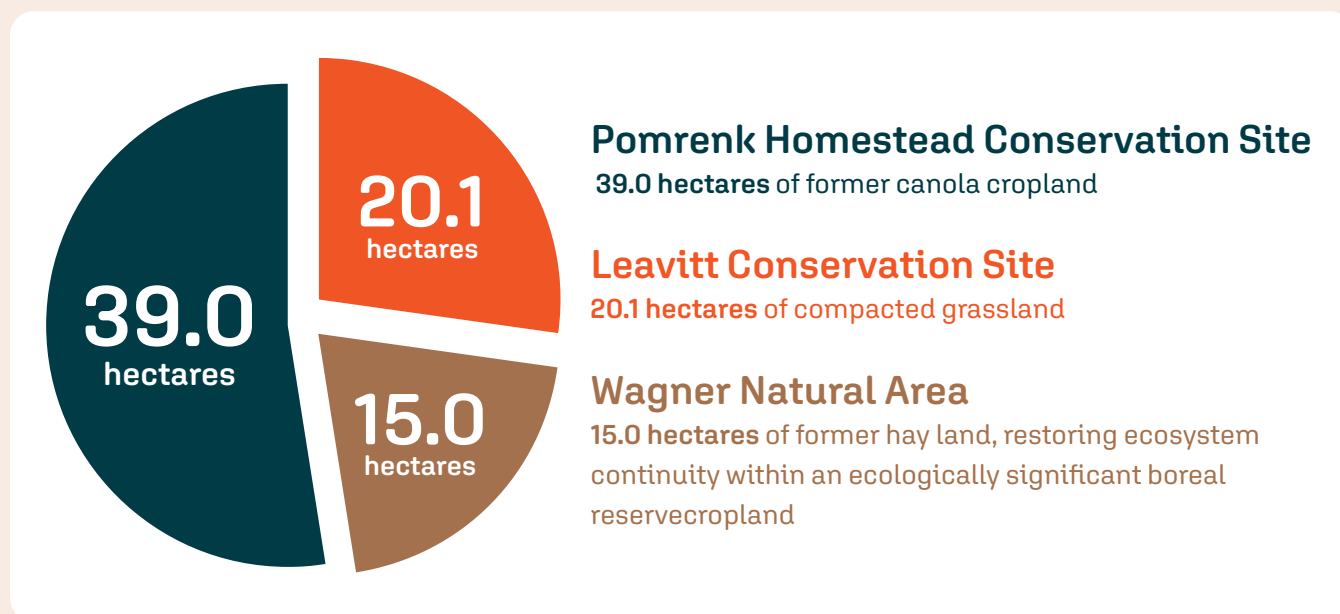


Target 15.3.1: Proportion of land that is degraded over total land area.

Together with First Nations communities across Canada and conservation groups, Project Forest is working to rewild land that is no longer capable of recovering to a functioning forest ecosystem through natural successional processes alone (Haeussler et al., 2002).

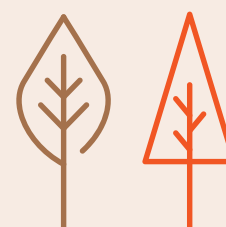
In partnership with the Alberta Conservation Association and Wagner Natural Area, 150,420 seedlings were planted across 74.1 hectares.

Figure 4: Total Hectares of Land Restored



As tree and shrub cover establishes and matures across these sites, biological productivity and ecological integrity are progressively restored, demonstrating measurable, site-level progress toward forest restoration at a landscape scale.

Through active restoration, project sites begin a multi-decade transition away from minimally diverse agricultural soil toward a complex forest soil profile characterized by increasing organic matter, microbial activity and structural resilient (Tiquia & Tam, 2000; Young & Crawford, 2004).



Purpose

| UN SDG 15 - Life on Land



Target 15.5: Take action to reduce degradation of natural habitats, halt biodiversity loss and protect threatened species.

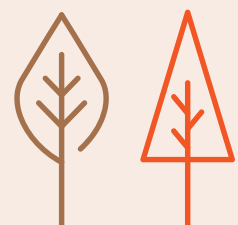
Project Forest prescribes a distinct, site-specific mix of trees and shrubs across all of our projects. By assessing each species for ecological fit, climate resilience, and functional role within the emerging ecosystem, a structural and compositional diversity is developed. The result is a layered landscape of varied canopy heights, understory densities, and species compositions that builds genuine structural complexity. In addition, functional, adaptable habitats are created for wildlife that will continue to self-sustain as conditions change over time.

Project Forest's Trail Camera Project

Project Forest's trail camera initiative is a long-term monitoring program designed to track wildlife activity over time. The primary goal of the Trail Camera Project is to observe and track the return of wildlife and gradual regeneration of functional ecosystems across project sites. Footage captured by motion-activated trail cameras is reviewed annually to assess how nature-based solutions are contributing to improving ecological function.

Trail cameras were installed at Camp Creek, Siksika Nation, Flatbush, and Wagner Natural Area in the fall of 2025. In their first season of operation, the cameras have already captured moose, deer, and coyote activity across the sites, an encouraging indicator that each of these sites are already functioning as part of a broader wildlife corridor in the region.

Baseline data from these cameras will establish a foundation for year-over-year comparisons that will, in time, help tell a compelling and evidence-based story of ecological recovery. Each year going forward, recorded wildlife occurrences will be catalogued by species and year, building a cumulative record of how the landscape continues to evolve as the seedlings grow.



Purpose

| UN SDG 15 - Life on Land



Camp Creek Trail Camera deer



Flashbush Trail Camera elk



Wagner Natural Area Trail Camera moose

Table 2: Trail Camera Project – 2025 Wildlife Monitoring

Project Site	Camera Location	Species Identified
Camp Creek	Camera 1	Deer
Flatbush	Camera 1	Deer, Elk, Moose
Siksika Nation	Camera 1 , Camera 2	
Wagner Natural Area	Camera 1	Coyote, Moose, Deer

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, 2024).

With the addition of four new forests in 2025, Project Forest's projected lifetime carbon sequestration has increased by 54,452 metric tonnes of CO₂ from the previous year. Combined across all sites at full maturity, Project Forest's rewilding portfolio is now projected to sequester approximately 343,629 metric tonnes of CO₂, making a substantial contribution to climate change mitigation.

Carbon projections for the University of Alberta Research Forest are not included in this total, as the calculations specific to that site are still being finalized by Dr. Nock. These metrics will be incorporated into future reporting.

Project Forest uses the [Carbon Budget Model of the Canadian Forest Sector \(CBM-CFS3\)](#) modeling 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.

343,629

Metric tonnes of CO₂ projected to be removed over the project's lifetime. The estimated lifetime of a forest is 150 years.

Carbon Budget Model of the Canadian Forest

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

Purpose

| UN SDG 13 - Climate Action



Note: The 2024 Annual Report cited a cumulative projected CO₂ removal figure of 286,999 metric tonnes. Following the identification of a calculation error in the prior year's reporting, this figure has now been corrected.

CO₂ sequestration was not calculated at Cumberland House Cree Nation Food and Medicine Forest or for the shrub species planted at Swan River First Nation Ecological Reconciliation Project. Food-bearing and medicinal plants have a negligible carbon benefit.

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 activities. Experiencing nature in an educational and interactive way enriches knowledge, fosters a connection with the environment, promotes well-being, and encourages responsible environmental behaviour.



Project Forest Team and Corporate Volunteers at the Siksika Seedling Giveaway

Purpose

| UN SDG 13 - Climate Action



2025 Highlights

Building Human Capacity and Raising Awareness

On 18 June, Project Forest and volunteers from six partner organizations distributed 5,170 seedlings of wild raspberry, mountain ash, and silver buffaloberry to Siksika Nation members at Project Forest's Annual Seedling Giveaway. Events like this reinforce the principle that climate action and community building is fostered as much through personal acts of stewardship as through large-scale nature-based solutions (Heller, 2005). Each seedling planted is a small but impactful contribution to local carbon uptake, urban heat reduction, and community-level climate resilience.

5,170

seedlings distributed to community members at our Annual Seedling Giveaway

Community and Corporate Outreach

In 2025, Project Forest's Corporate Planting events engaged 25 partner companies and over 360 employees in hands-on rewilding work at Siksika Nation. 9,000 Colorado blue spruce and ponderosa pine seedlings were planted directly within the community shelterbelt over two weeks in September, while five partner companies contributed to the planting of 3,600 white spruce at Golden Ranches in August. Through direct participation in active ecological restoration, corporate employees gained firsthand exposure to the ecological and cultural dimensions of climate action.

360

Number of corporate volunteers at our 2025 Corporate Planting events



Corporate Planting Volunteers at Golden Ranches

Purpose

| UN SDG 13 - Climate Action



These are a broad scope of the engagement activities Project Forest conducted in 2025:

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.

Media Outreach (podcasts, radio, TV and webinars)

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

Lunch and Learns, Keynote Presentations and Panel Discussions

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

Annual Partner Celebration

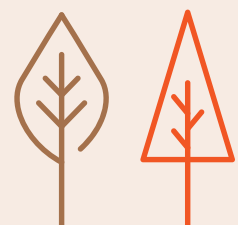
- Presentations featuring a wide range of speakers from the Project Forest community.
- Focus on Indigenous reconciliation through restoration, sustainable business practices, and community investment.

Tree Planting Events

- Educational talks around seedling physiology, forest succession, tree planting technique, tree planting survey methodology, seed collection, plant identification, and traditional plant uses.
- Corporate Events: In-person, hands-on volunteering opportunities for Silver, Gold and Platinum financial partners.
- Community Events: Ground-breaking events are open to community members and partners to come together, engage with the project and share stories over shared food.

Community Engagement

- Seed Kits are built by High School Students and given away throughout the year at conferences and corporate and/or community events.
- An Annual Seedling Giveaway at Siksika Nation raises awareness for projects, share stories behind them, and place stewardship of the land directly into the hands of community members.



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

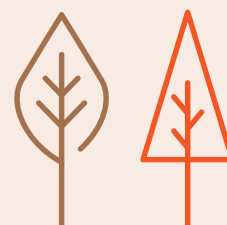
Indicator 11.4: Strengthen efforts to protect and safeguard the world's cultural and natural heritage.

Forests hold immense cultural and spiritual significance for many 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.

Indigenous communities possess deep, intergenerational knowledge of local plant species, knowledge that extends beyond simple identification to include cultivation practices, seasonal rhythms, and traditional uses for food, medicine, and ceremony. By working hand-in-hand with our Indigenous land partners, we not only restore ecosystems but also preserve and activate this traditional wisdom. Forests become living libraries, where Elders share stories, techniques, and cultural teachings, while younger generations learn to tend the land in ways that honour their heritage.

Archaeological Assessments Program

Before any project begins, the landscape beneath it must be understood. As planting forests requires responsible disturbance of the ground, Project Forest takes its cultural stewardship obligations as seriously as its ecological ones.



Purpose

| UN SDG 11 - Sustainable Cities and Communities



Since establishment, archaeological assessments have been completed and advanced across all current and potential Project Forest sites by technical partner Ember Archaeology. Initial in-person site tours are followed by pre-disturbance assessment using high-resolution LiDAR to identify areas of known of high archaeological potential.

Continuing into 2025, no significant finds requiring project redesign or mitigation have yet been identified. The absence confirms that Project Forest's due diligence is functioning as intended, ensuring that every hectare prepared for planting has first been assessed, understood, and cleared.

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.

LiDAR (Light Detection and Ranging) is a remote sensing technology that uses pulsed laser signals to generate high-resolution topographic maps, enabling archaeologists to detect and document subsurface and surface cultural features (such as earthworks, depressions, and historic land use patterns) that are otherwise obscured by vegetation or terrain (Opitz & Cowley, 2013).

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
- Vegetation management
- Survival assessment survey and data collection
- Cover crop deployment
- Construction work

Purpose

| UN SDG 11 - Sustainable Cities and Communities



2025 Project Spotlight: University of Alberta Research Forest

The University of Alberta Research Forest functions as both a scientific hub and a piece of stable, protected green infrastructure for the communities that surround it, attracting students, researchers, and institutional partners whose work supports regional knowledge-economy development. Project Forest's contributions to this site are governed by a permanence framework that ensures planted forests remain protected in the long term, providing lasting green space for the region. Funding partners absorb the costs of rewilding, allowing community and institutional resources to be directed toward education, programming, and services rather than land restoration (Heller, 2005). By supporting research that informs sustainable forestry policy, the project also contributes to balanced territorial development.



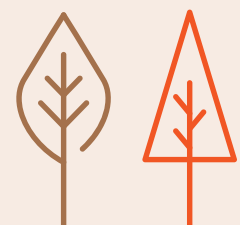
By investing in rewilding, Project Forest funding partners are creating employment opportunities. The income earned by individuals through these jobs can have a positive economic impact and expand local fiscal space.

Project Forest's fourth Annual Partner Celebration (APC) was held at River Cree Resort & Casino on 4 April 2025. Community members from the Nation were engaged for cultural programming, with honoraria provided to performers, Elders, and other contributors totalling approximately \$13,000 directed to Enoch Cree Nation members. By hosting the event on Nation land and prioritizing Nation-owned businesses and community members for services, Project Forest ensured that partner engagement activities generated direct economic returns within the community.

Local watering contractors from Siksika Nation were hired for irrigation services across the community shelterbelts. Between May and August, a combined 390 hours were executed, invoicing over \$98,000 to Project Forest.

For the fifth consecutive year, Project Forest partnered with Indigenous Box to curate promotional items gifted to volunteers at Corporate

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).



Purpose

| UN SDG 11 - Sustainable Cities and Communities



Planting events in August and September 2025. This ongoing relationship supports small Indigenous-owned businesses across Canada while raising awareness among funding partners of the breadth of Indigenous entrepreneurship.

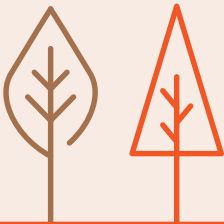
Table 3: 2025 Indigenous and Economic Impact

Employment Opportunity /Indigenous Business Support	Date of Occurrence	Total Economic Impact
 River Cree Resort & Casino Project Forest Annual Partner Celebration	April 2025	\$13,002.35
 Watering Contractors (390 hrs) Siksika Nation Community Shelterbelt	May – August 2025	\$98,074.46
 Indigenous Box Corporate Planting ‘Swag Bag’ Items	June – September 2025	\$19,417.00
2025 Total		\$130,493.81

Project Forest’s partnership model extends beyond rewilding by channelling project spending and engagement opportunities toward Indigenous-owned businesses and community members. These investments generate lasting, measurable economic returns at the local level, strengthening the communities in which Project Forest operates.



Elder Lorraine Makokis at Project Forest's 2025 Annual Partner Celebration

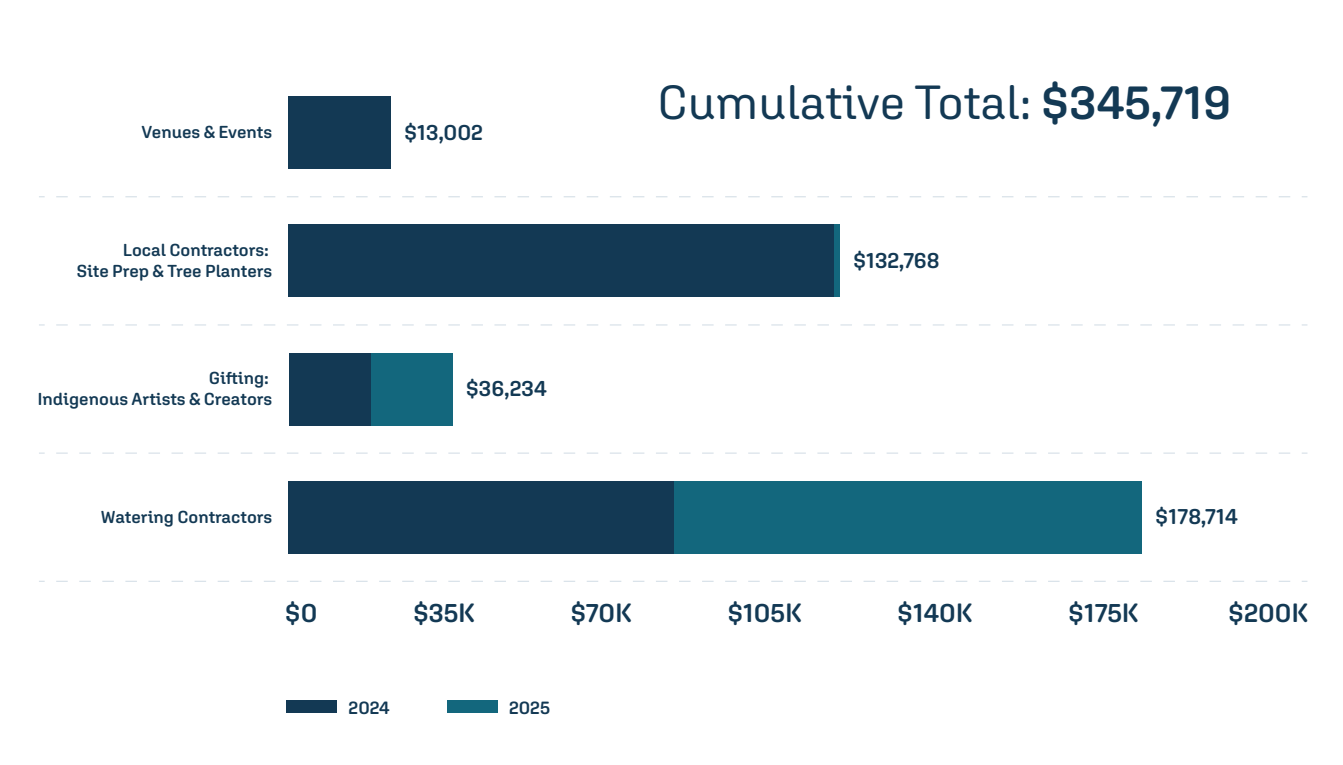


Purpose

| UN SDG 11 - Sustainable Cities and Communities



Figure 5: 2024-2025 Indigenous and Economic Impact

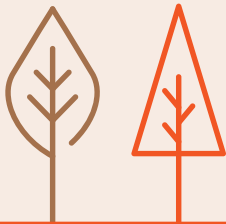


Indicator 11.7: Provide access to safe and universal green and public spaces.

2025 Project Highlights:

Golden Ranches

Golden Ranches sits within the Beaver Hills UNESCO Biosphere Reserve and is publicly accessible via [Connect2Nature.ca](https://connect2nature.ca), situating it within a regionally recognized framework for conservation and community stewardship (UNESCO, 2016). Project Forest's partnership with the Nature Conservancy of Canada works toward a mosaic of forests and open fields that reflects the pre-colonial landscape while strengthening the green corridor connecting the site to neighbouring Elk Island National Park.



Purpose

| UN SDG 11 - Sustainable Cities and Communities



Pomrenk Forest and Leavitt Forest

Pomrenk Forest was designed with inclusive public access as a central purpose, while Leavitt Forest forms part of the Alberta Conservation Association's network of nearly 800 conservation sites available to all outdoor recreationists across the province. As both forests mature, they will offer trails, hunting grounds, and foraging opportunities.

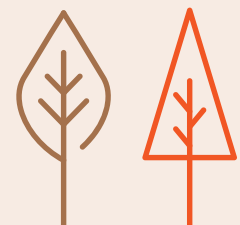
Wagner Natural Area

The Wagner Natural Area provides an accessible green space for communities in one of Canada's most rapidly urbanizing corridors, offering a natural refuge as surrounding development intensifies (Statistics Canada, 2022). Increased forest cover between agricultural fields, industrial development, and the sensitive wetland and fen ecosystems at its core reduces runoff risk and strengthens ecological buffering for surrounding communities. The WNA Board of Directors was actively engaged in the design process, ensuring the project reflects a community-led vision for the long-term stewardship of this shared natural space.



Marl ponds at Wagner Natural Area - Kiera Coleman 2023

Marl ponds are shallow freshwater bodies characterized by soft, pale sediment composed primarily of calcium carbonate, formed through the activity of aquatic plants and organisms living in hard, calcium-rich water (University of Waterloo, 2024).



Positive Impact

| UN SDG 3 - Good Health and Well-Being



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

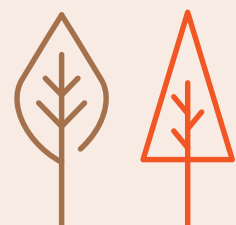
Planting a forest can have several positive impacts on ensuring healthy lives and promoting well-being for all ages.

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

Accessible green spaces are increasingly recognized as essential health infrastructure, delivering measurable benefits to both humans, wildlife, and the ecosystems they depend on. As urban expansion continues to fragment natural landscapes, forests serve as vital refuges for biodiversity while simultaneously protecting communities from pollution and environmental hazards.

By rewilding Canada's forests, Project Forest creates meaningful gathering spaces that foster social connection, community cohesion, and belonging. Beyond these social benefits, exposure to green space is strongly linked to improved mental and physical health, regardless of whether people actively seek it out.

A systematic review and meta-analysis found that proximity to green space is associated with reduced cardiovascular disease, lower cortisol levels, and decreased rates of depression and anxiety (Twohig-Bennett & Jones, 2018). Because these benefits accrue simply through everyday proximity, communities living near restored forest sites stand to gain real improvements to their wellbeing, whether or not they consciously engage with the space at all.



Positive Impact

| UN SDG 3 - Good Health and Well-Being



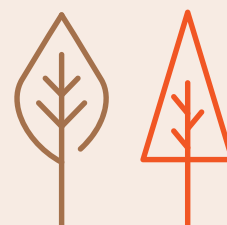
2025 Project Spotlight: Wihnemne School Food and Medicine Forest

The Wihnemne School Food and Medicine Forest at Paul First Nation generates a compounding set of health benefits that deepens with every growing season. As the forest matures, it cleans the air, shades play spaces, and fosters stewardship and connection recognized as protective factors for mental health in children and youth (Chawla, 2015). Teachers and Elders are able to use the living forest as a classroom for traditional ecological knowledge and cultural ceremony, supporting the spiritual dimensions of health inseparable from well-being in Indigenous communities (Greenwood & de Leeuw, 2012). This forest is not a static installation but a health infrastructure that appreciates in value with every new ring of growth.



Mike Toffan speaking to elementary students at Wihnemne School

Forest bathing or shinrin-yoku, is the practice of deliberately and mindfully immersing oneself in a forested environment through slow, sensory engagement. Originating in Japan in the 1980s, it has demonstrated measurable reductions in anxiety, depression, anger, and fatigue, as well as improvements in mood and feelings of vitality (Li, 2010).



Positive Impact

| UN SDG 3 - Good Health and Well-Being



The broad spectrum of health and well-being benefits that forests generate across these interconnected spaces include:

Air Quality and Pollution Reduction

- Trees absorb harmful airborne pollutants, reducing community exposure to toxic gases.
- Leaf surfaces intercept and capture fine particulate matter from urban air.
- Canopy cover reduces ground-level ozone formation during hot weather.
- Green corridors dilute traffic-related nitrogen dioxide concentrations near roadways (Nowak et al., 2006).

Pollution Buffering and Environmental Health

- Forest edges buffer noise pollution, reducing stress and sleep disruption.
- Vegetation filters stormwater runoff, reducing pollutant loads in waterways.
- Tree roots stabilize soils, preventing dust and sediment mobilization.
- Dense plantings reduce windblown agricultural chemicals reaching residential areas.

Biodiversity and Wildlife Health

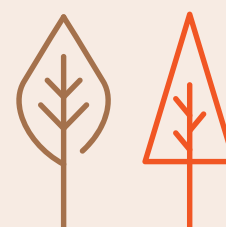
- Plant diversity supports pollinator populations critical to local food systems.
- Connected green corridors allow wildlife movement between fragmented habitat patches.
- Healthy urban biodiversity increases ecosystem resilience against pest and disease outbreaks.
- Diverse understory plantings support soil microbiome health and nutrient cycling.
- Urban forests provide nesting, foraging, and refuge habitat, buffering species against climate-driven displacement.

Temperature Regulation and Heat-Related Health

- Urban tree canopy can reduce surface temperatures by up to 8 degrees Celsius.
- Shade and transpiration cooling lower heat-related illness risk significantly.
- Green spaces reduce urban heat island intensity, protecting vulnerable populations.
- Shelterbelts buffer wind while moderating extreme temperature fluctuations seasonally.
- Cooler microclimates reduce cardiovascular and respiratory strain during heat events.

Mental and Physical Well-Being

- Regular green space access lowers cortisol and reduces chronic stress.
- Proximity to urban nature is linked to reduced anxiety and depression.
- Walkable green corridors increase daily physical activity among residents.
- Green schoolyards improve children's attention, mood, and emotional regulation.
- Communal green spaces reduce social isolation and strengthen community cohesion.



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, 2025).

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.

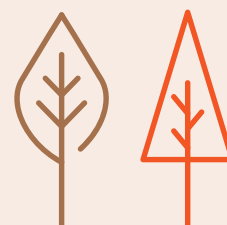
Target 6.6: Protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes

By restoring land into permanently protected forests, Project Forest is using nature-based solutions to ensure clean water access and long-term watershed health for communities across Canada. Through strategic planting and the integration of forested buffers, land is being fully transitioned into rich, biodiverse soil, abundant in vegetation and active microbial communities. The biogeography of these communities is shaped by vegetation cover, meaning that every native species established on a Project Forest site contributes directly to rebuilding the microbial diversity that makes soils function as natural water purification systems (Fierer & Jackson, 2006).

731.2M

Total litres of water accumulated in 2025

Biogeography is the study of geographic distribution of living organisms and the ecological and evolutionary processes that shape those distributions over time (Lomolino et al., 2010).

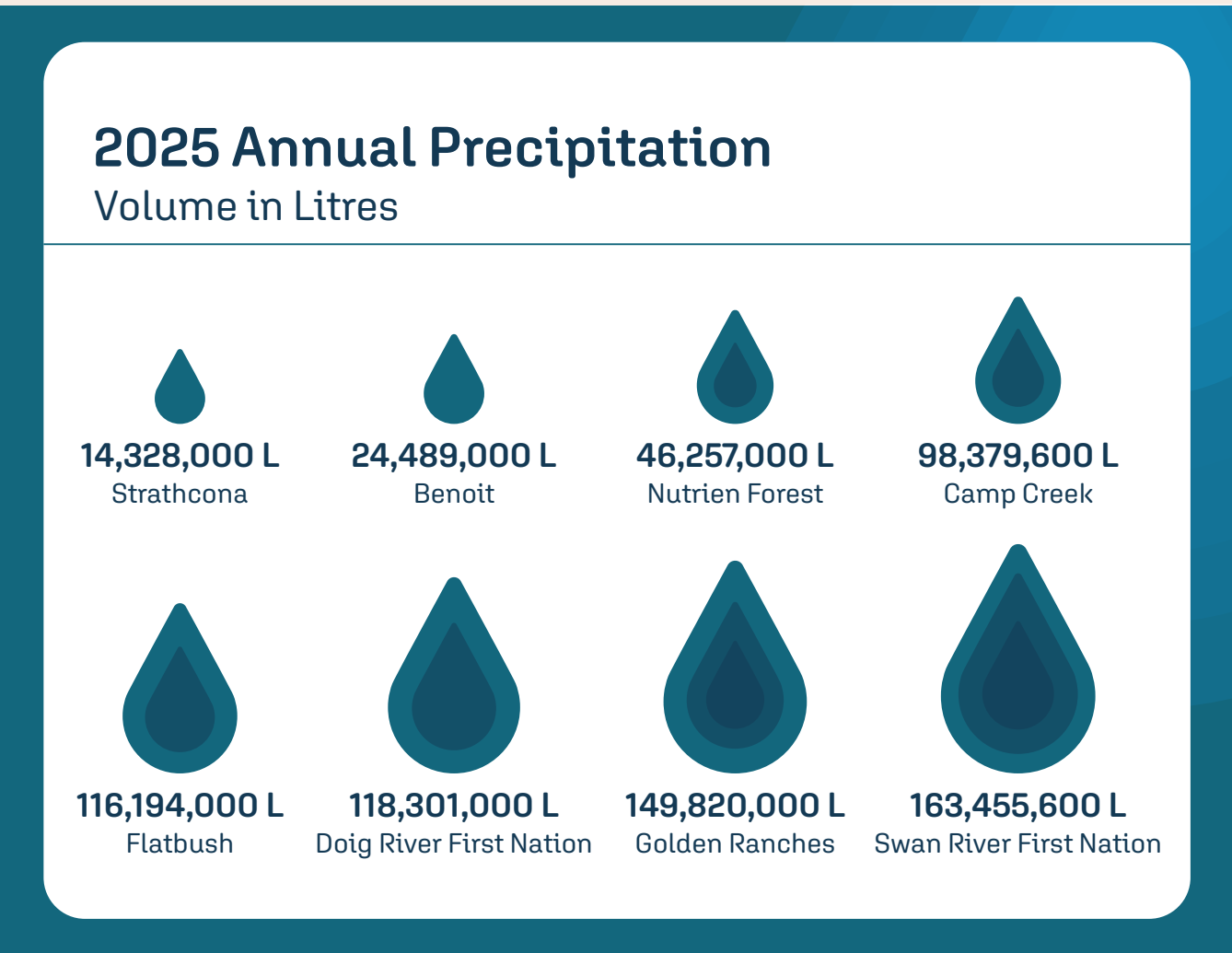


Positive Impact

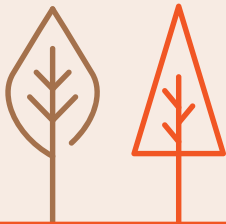
| UN SDG 6 - Clean Water and Sanitation



Figure 6: 2025 Annual Precipitation Across Project Forest Sites



By planting native and ecologically adapted species at scale, healthy, nutrient-stable soils will improve water quality, reduce sedimentation, enhance natural filtration, and increase the resilience of aquatic ecosystems. While planting forests alone cannot solve all water-related challenges, the permanence of Project Forest's protected sites means these hydrological benefits compound over time, making each hectare of restored forest an enduring, self-reinforcing contribution to clean water availability for surrounding communities and ecosystems.



Positive Impact

| UN SDG 6 - Clean Water and Sanitation



As Project Forest does not operate its own weather monitoring stations or gauges, we rely on historical data provided by the Government of Canada. Specifically, we reference the “Past Weather and Climate” database to obtain annual rainfall figures, ideally within a 25km radius of each planting site. Where no station falls within this radius, we reference the nearest available station and include the data for year-over-year comparability, while acknowledging that figures may be less representative of on-site conditions than those recorded closer to the planting area. You can find the data [here](#).

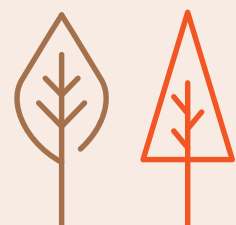
Note: The numbers reflected here are for annual rainfall only. While snowfall does create available soil water, the actual number is impossible to verify due to run off and melting events while ground conditions are frozen and trees aren’t transpiring.

Phytoremediation is the use of living plants and their associated soil microorganisms to remove, degrade, or contain contaminants from soil, water, and air (ITRC, 2009).

2025 Project Spotlight: Nutrien Forest

The Nutrien Forest stands apart as one of Project Forest’s most scientifically distinct sites, where Okanese poplar, a fast-growing hybrid species, serves as living water infrastructure.

Located near the North Saskatchewan River, the site was designed as a nature-based alternative to conventional erosion and water control measures. Research confirmed that during growing season, maturing trees intercept and transpire 100% of on-site precipitation, releasing it back to the atmosphere through their leaves rather than allowing it to migrate toward the river. As crown closure approaches, the stand’s capacity to intercept precipitation is expected to increase further, demonstrating the measurable potential of phytoremediation as a nature-based solution to industrial water management.



Positive Impact

| UN SDG 2 - Zero Hunger

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

2 ZERO HUNGER



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.

Integrating a diverse range of edible and medicinal plants into restoration projects supports local food systems and creates educational opportunities around sustainable harvesting. These efforts provide immediate and long-term benefits, offering communities access to culturally significant foods and medicines while fostering stewardship skills that connect people to the land.

In 2025, Project Forest planted 155,590 food, medicinal, and culturally significant plants across our project sites. A total of 14 different species were planted, with an additional 3 species distributed to Siksika Nation community members to plant around their homes.

The information shared below was not provided to us by Elders or any Nation.

155,590

Food-bearing seedlings
planted in 2025

Balsam Poplar (*Populus balsamifera*)

42,300

- Inner bark is edible and was consumed as a supplementary food, particularly in spring.
- Bud resin contains salicin and populin, compounds with documented anti-inflammatory and analgesic properties.
- Leaf and bud infusions were used to treat fevers, arthritis, and skin inflammation.

Bebb's Willow (*Salix bebbiana*) **13,265** **Pussy Willow** (*Salix discolor*) **4,375**

- Bark contains salicin, (a precursor to aspirin), making it useful for pain relief and fever reduction.
- The diamond willow fungus grows on mature Bebb's willow and is used in cultural activities.
- Flexible stems used in basket weaving and as cordage, with some using twig preparations for wound care.
- Young catkins are edible in early spring and were consumed as a minor food source.

Positive Impact

| UN SDG 2 - Zero Hunger



Black Spruce

2,160

(Picea mariana)

- Gum or leaf decoction was used to treat respiratory infections and kidney problems
- Resin was used as a poultice or salve to promote healing of sores, and mixed with oil for purulent wounds, bad burns, skin rashes, and scabies
- Inner bark, applied as a poultice, was used topically as an anti-inflammatory
- An infusion of root and bark was used to treat stomach pain, trembling, and fits.

Mountain Ash

1,800

(Sorbus decora)

- Inner bark has been used traditionally to treat sore throats, leaves as a remedy for colds, and berries for their potential to provide relief from kidney-related issues.
- Showy mountain ash has been used as a traditional medicine to treat type-2 diabetes, subsequently validated through ethnobotanical research (Eid et al., 2016).
- Demonstrated glucose-mediating activity in vivo and other diabetes-related activity in vitro (Harbilas et al., 2009; Eid et al., 2016).

Saskatoon

1,730

(Amelanchier alnifolia)

- Berries are highly edible, nutritious; eaten fresh, dried, and incorporated into pemmican.
- Bark and root preparations used medicinally to treat stomach complaints, diarrhea, and as a postpartum tonic.
- Berries are rich in iron, manganese, and antioxidants; among the highest-antioxidant native fruits documented in the boreal region.

Jack Pine

8,820

(Pinus banksiana)

- Pine pitch used as a wound sealant, blister treatment, and antiseptic.
- Young needle tea provides vitamin C and was used to prevent and treat scurvy.
- Resin preparations applied topically for skin infections, burns, and to draw out foreign bodies.

Red Osier Dogwood

14,760

(Cornus sericea)

- Dogwood bark is known for its astringent and anti-inflammatory properties as an ailment.
- The inner bark is used in teas for colds and sore throats.
- Bark tea applied as a wash for skin conditions and eye infections.

River Alder

790

(Alnus incana)

- Bark preparations used as a treatment for fever, skin rashes, and as a topical astringent.
- Inner bark and catkins contain tannins with documented antimicrobial and anti-inflammatory properties.
- Bark tea used to treat digestive complaints and as a blood purifier in traditional practice.

Silverberry

1,080

(Elaeagnus commutata)

- Berries were mixed with pemmican and other foods as a caloric supplement.
- Bark and leaf preparations used medicinally to treat fevers and skin ailments.
- Seeds are high in protein and fatty acids; the entire berry was eaten as a complete food during periods of scarcity.

Positive Impact

| UN SDG 2 - Zero Hunger



Silver Buffloberry 1,080 (*Shepherdia argentea*)

- Berries contain high levels of vitamin C, carotenoids, and antioxidant phenolics, consumed fresh, dried for winter storage, or incorporated into pemmican.
- Berries were traditionally eaten fresh, dried, or in jelly, and were used to treat stomach troubles.
- Berries and plant parts served as traditional remedies for stomach complaints, constipation, and fevers, while the high vitamin C and antioxidant content contributes to supporting immunity.

Trembling Aspen 3,120 (*Populus tremuloides*)

- Bark contains salicylates; bark tea used as a pain reliever, fever reducer, and treatment for urinary tract infections.
- Inner bark preparations used to treat digestive complaints and as a general tonic and appetite stimulant.
- Bark used topically as a wound treatment and poultice for skin infections and inflammation.

White Spruce 43,020 (*Picea glauca*)

- Inner bark was chewed, or an infusion drunk, to treat coughs, colds, influenza, and tuberculosis.
- Resin (spruce gum) was valued for antiseptic, healing, and anti-inflammatory properties, applied to wounds, burns, and irritations, or incorporated into ointments.
- Boiled inner bark was used to treat digestive disorders.

Tamarack 7,200 (*Larix laricina*)

- Resin used medicinally as a wound sealant, antiseptic, and drawing agent for splinters and infections.
- Bark tea used to treat coughs, colds, and skin ailments including eczema and psoriasis.
- Arabinogalactan, a polysaccharide extracted from tamarack, is documented in modern research for immune-supporting properties.

White Birch 7,020 (*Betula papyrifera*)

- Bark contains betulin, which has anti-inflammatory and pain-relieving properties. Used to treat skin problems, arthritis, and diabetes-related issues.
- Sap can be used to treat coughs, colds, and fevers.
- Leaves can be used to make a tea for treating digestive issues.

Wild Red Raspberry 2,290 (*Rubus idaeus*)

- Berries are high in antioxidants and rich in vitamins, making them a nutritious food source consumed fresh or prepared in jams, jellies, sauces, and baked goods.
- Traditionally used medicinally to ease menstrual cramps, support healthy pregnancy, and potentially aid in childbirth.
- Leaves are used to prepare medicinal teas associated with uterine and digestive health.

Wild Rose 780 (*Rosa acicularis*)

- Rose petals and hips help reduce inflammation in the body, potentially easing conditions like arthritis and inflammatory bowel disease.
- Rose tea used for bloating and constipation.
- Calms the nerves promoting relaxation, helping with anxiety and depression.
- Rose petals have antibacterial properties, which is useful for wound healing and skin health.

Positive Impact

| UN SDG 17 - Partnerships for the Goals

Goal: Strengthen the means of implementation and revitalize the global partnership for sustainable development.

Matching ESG Goals:

- Coordinating conservation, Indigenous, and business partnerships.
- Directing private capital toward public-good outcomes.
- Strengthening ESG transparency and accountability.

17 PARTNERSHIPS
FOR THE GOALS



Every forest planted by Project Forest is made possible by the coming together of funding partners, Indigenous communities, conservation organizations, and land stewards, each contributing something the others cannot provide alone.

Indicator 17.3.1 Additional financial resources mobilized from multiple sources.

Rewilding and nature-based solutions benefit everyone, yet they rarely have natural funding sources. Project Forest’s funding model is designed to draw resources from multiple sectors, allowing partners to share the full cost of rewilding in a manner that is structured, accountable and scalable. Since 2020, this approach has grown to include 77 funding partners, connecting the Canadian business community to Indigenous territories and conservation sites in a meaningful way.

These projects are made possible through partnerships built on shared values and a collective commitment to long-term rewilding and restoration. This alignment demonstrates how multi-source funding can generate a lasting ecological and community legacy.

Target 17.16: Enhance the Global Partnership for Sustainable Development through multi-stakeholder partnerships.

Our projects are the product of relationships that no single organization could build alone. Conservation groups contribute land and ecological expertise. Indigenous communities contribute land, traditional knowledge, cultural context, and long-term stewardship. Businesses contribute financial resources that make rewilding possible. Post-secondary

6

New funding partners in 2025

77

Total funding partners between 2020 and 2025

Positive Impact

| UN SDG 17 - Partnerships for the Goals

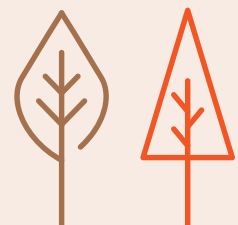


institutions contribute research capacity and scientific rigour that strengthen our understanding of how these forests grow and function over time. When brought together in alignment, Project Forest is able to coordinate their contributions and ensure that the outcomes are documented and shared in a way that keeps all partners accountable and engaged year after year.

This exchange of resources and knowledge deepens over time as relationships with our partners grow stronger each year. The result is not a transactional arrangement, but a growing community of organizations and individuals united around a shared commitment to rewilding Canada, one forest at a time.

Target 17.17: Encourage and promote effective public, public-private, and civil society partnerships.

Permanence agreements with landowners guarantee that forests remain protected in perpetuity. Memoranda of understanding with organizations like the Indian Resource Council, which also holds a seat on Project Forest's Board of Directors, embed Indigenous institutional leadership directly into our governance. First-right-of-refusal commitments to First Nations' economic development corporations ensure that partnership benefits flow back to communities in the form of employment and contracts. These are not informal arrangements; they are documented, enforceable commitments that anchor our partnerships over the long term and model what responsible, accountable public-private and civil society collaboration can look like in a conservation context.



Our Partner

| 2020 - 2025 Funding Partners



Project Forest team with Gabrielle Blatz at the Ma Matow Sakow Healing Forest Community Planting event, August 2025. Full project report will be released in 2026.

Our work is not possible without you.



Our Partners

| Land Partners



Our work is not possible without you.



Our Partners

| Funding Partners

Diamond Willow



KEYERA

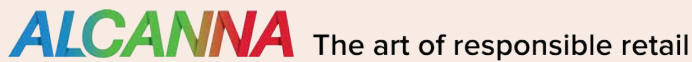


AMA

Our Partners

| Funding Partners

Platinum Forest



| Funding Partners

Gold Woodland



Silver Orchard



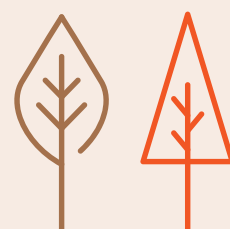
Bronze Grove



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Appendix A - 2025 Afforestation Survey Cover Page

Afforestation Survey Cover Page				
Surveyor 1:	Andrea McRae	Survey Date(s):	Fall 2024/ Spring 2025	
Surveyor 2:	Sienna Vance	Total Plots:	670	
Surveyor 3:				
Surveyor 4:				
Stocking Calculations				
Type of Plot	# of Plots	% of Plots	Meet Final Criteria	% of Plots
SR with Acceptable Conifer trees	177	26.4	5	0.7
SR with Acceptable Deciduous trees	68	10.1	12	1.8
SR Acceptable Shrubs	52	7.8	21	3.1
SR with Acceptable Conifer & Deciduous trees	24	3.6	3	0.4
SR with Acceptable Conifer trees & Shrubs	88	13.1	35	5.2
SR with Acceptable Deciduous trees & Shrubs	37	5.5	12	1.8
SR with Acceptable Conifer & Deciduous trees & shrubs	45	6.7	8	1.2
SR with two additional plots	18	2.7	0	0.0
NSR-LIG with Conifer	29	4.3		
NSR-LIG with Deciduous	5	0.7		
NSR-LIG with Shrub	14	2.1		
NSR-LIG with Conifer & Deciduous	1	0.1		
NSR-LIG with Conifer & Shrubs	8	1.2		
NSR-LIG with Deciduous & Shrubs	2	0.3		
NSR-LIG with Conifer & Deciduous trees & shrubs	6	0.9		
NSR-LIG with two additional plots	9	1.3		
NSR -No Acceptable Woody species present	87	13.0		
Acceptable Stocking Summary				
Plot Stocking Status	# of Plots	% of Plots		
SR	509	76.0		
NSR-LIG	74	11.0		
NSR (excludes NSR-LIG)	87	13.0		
Total Stocking (SR +NSR-LIG)	583	87.0		
Herbaceous Vegetation Observed on Site			Noxious weeds	
alfalfa	Fireweed		Canada thistle	
arrow leafed coltsfoot	goldenrod		Bull thistle	
aster spp.	Honeysuckle		Sow thistle	
Avens	Horsetail		Common tansy	
Bearberry	Lily spp.		Yellow toadflax	
Bedstraw spp.	raspberry		Scentless chamomile	
Blueberry	Stinkweed		Kochia/cypress spp.	
Bunchberry	storkbill		Knapweed spp.	
Cinquefoil	Strawberry			
Clover	Vetch spp.			
Common Cattail	Violet spp.			
Common Yarrow				
Dandelions				
Hemp nettle				
Grass spp.				

Appendix B - Sample Rewilding Work Plan



Project Forest – Alberta Conservation Association

SAMPLE Conservation Site Rewilding Work Plan

Date



Prepared by:



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1 Project Overview

Project Forest and Alberta Conservation Association (ACA) have partnered to rewild SAMPLE ha within the SAMPLE Conservation Site. Project Forest has retained Tree Time Services for project planning, project management and field implementation of the Project Forest ACA Rewilding Project.

The ACA has 5 long-term objectives for management of the SAMPLE Conservation Sites. Partnering with Project Forest will achieve 3 of the 5 long-term objectives including:

- Promote and restore native biodiversity,
- Increase ecological connectivity, and
- Increase carbon sequestration.

As per information provided by the ACA, the site does not require mechanical site preparation. Prior to planting, a cover crop will be sown. As part of the rewilding scope of work, the project area has been assessed, seedling and site preparation prescriptions have been developed, and a post implementation monitoring program has been developed.

The project site is about 100 km northeast of Edmonton. See **Error! Reference source not found.** for an **Error! Reference source not found.**

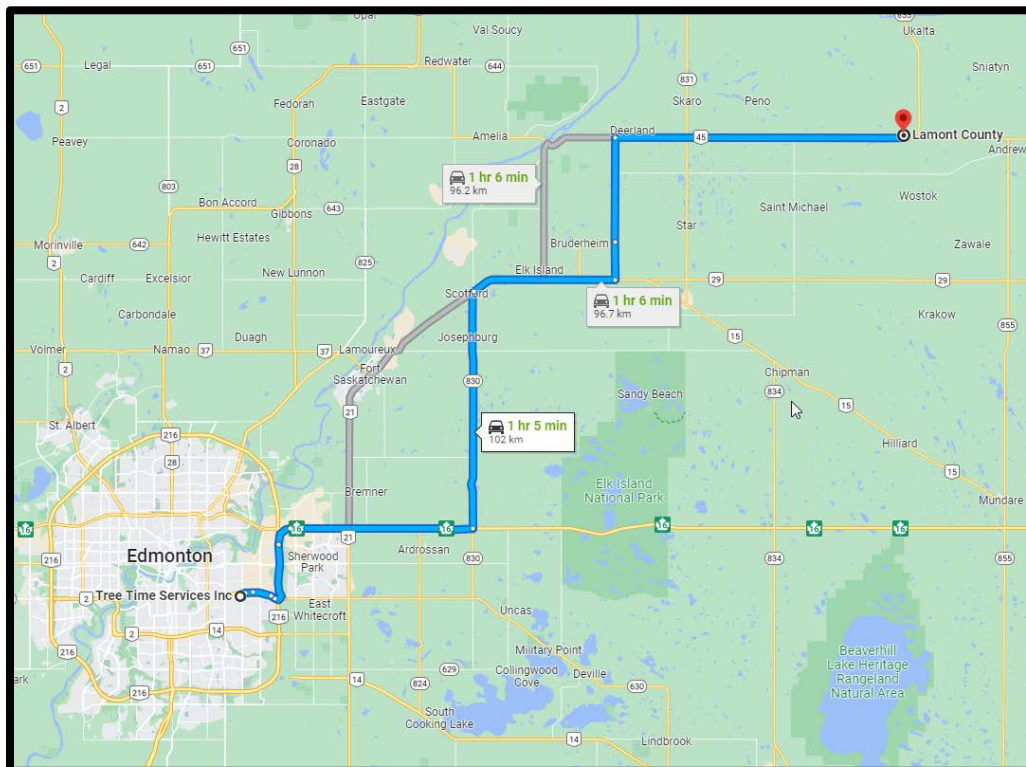


Figure 1. Directions to SAMPLE Conservation Site from Edmonton, AB

2 Site Prescription

The property is located in a transition zone between the Dry Mixedwood Natural Sub-Region of Boreal Forest and the Central Parkland and within the Central Parkland 1.1 seed zone. This site is SAMPLE ha in area and has been divided into 3 areas. Table 1 lists the sections of the project site and their respective areas. See **Error! Reference source not found.** the site prescription map.

Table 1. Project site sections and respective areas

Section	Area (ha)
A	2.5
B	3.0
C	3.7

Based on aerial imagery Section B of the planting area is a continuation of wetland from the lake to the forested section adjacent to the planting site. Both Section A and C are more upland.

2.1 Site Preparation

The area the ACA has identified for tree planting section will not require site preparation. Since the ACA secured the site, the ACA has entered into a Crop Licence Agreement with the neighbouring landowner, with the intent to crop the land until restoration activities can be conducted on the crop field.

Based on this agreement, no further site preparation is required regarding the revegetation of this site.

2.2 Cover Crop

A cover crop will be sown to minimize vegetative competition during the first season of growing. A cover crop using a native seed blend will be deployed at a seeding rate of 15 kg/ ha. The cover crop was developed in consultation with a supplier of native seed mix company. Table 2 lists the grass seed mix for the cover crop.

Table 2. List of grass seed to be deployed

Species	% of Blend by Weight
Rocky Mountain Fescue	16.0
Green Needlegrass	10.0
Slender Wheatgrass	12.0
Northern Wheatgrass	18.0
Diploid Annual Ryegrass	10.0
White Clover	10.0
Nuttall's Alkaligrass	4.0
Canada Wildrye	15.0
Western Wheatgrass	5.0

Two viable options exist for the distribution of seed for the cover crop: seed tilling or drone seeding. An environmental professional will visit the site and determine which of the two options will be used.

2.3 Seedling prescription

Tree planting will occur in May/ June of 2023. The area will be planted on average 2200 stems/ha. Table 3 displays the seedlings ordered for the project area. Sections A & C are prescribed white spruce, lodgepole pine, and white birch. The white birch will be planted in clusters of 10 seedlings, and the white spruce and

lodgepole pine will be uniformly distributed. These species were chosen because of the upland soils, and the surrounding forest composition. Section B was prescribed black spruce based on aerial imagery and is consistent with the transition from the lake to the wetland adjacent to the polygon.

Table 3. Seedlings ordered for project area

Season	Species	Latin Name	Amount	Section
Spring 2023	Lodgepole Pine	<i>Pinus contorta var. latifolia</i>	3780	A, C
Spring 2023	White spruce	<i>Picea glauca</i>	8280	A, C
Spring 2023	White Birch	<i>Betula papyrifera</i>	1980	A, C
Spring 2023	Black Spruce	<i>Picea mariana</i>	5940	B

The average tree planting density for the site was increased due to several reasons:

- The birch will be planted in clusters that equate to ~4,000 stems/ ha,
- The edges of the site adjacent to the road will be planted at a higher density, and
- Higher than expected mortality has been observed at similar sites.

Seedlings will not be evenly distributed across site. It will have more variable spacing between seedlings to develop a more natural distribution.

3 Project Implementation Considerations

3.1 Permit Requirements

No permits are required at this time.

Should permits be required, all processes and procedures will be followed prior to starting work.

3.2 Resource List

See Appendix 3 for resource list. This includes resources required to complete the work, including a 25% fill plant if required.

4 Project Monitoring

A project specific monitoring plan will follow the *Project Forest Monitoring Assessment Standards*. Annual site assessments will be conducted to monitor the project. A Final Assessment will determine if the site is on trajectory to become a mature forest. Currently, the expectation is to have the Final Assessment completed in the fall of 2029.

5 Maintenance

Maintenance recommendations will be based on the latest monitoring assessment. Recommendations may include vegetation management or fill planting and will be discussed with the ACA. Once the Final Assessment is successful, the site will no longer require maintenance.

6 Deliverables and Timeline

Table 4. Project deliverables and timelines

Deliverable	Description	Timelines
Planning	- General consultation, client meetings. - Determining cover crop plan. - Completion of Rewilding Plan. - Finalization of Monitoring Plan. - Additional time for project management.	February - March 2023
Project Seedling Ordered	- Lodgepole Pine: 3780 seedlings - White spruce: 8280 seedlings - White Birch: 1980 seedlings - Black Spruce: 5940 seedlings - Cold storage, transportation, and storage	Deliver Spring 2023
Cover Crop	- Purchase cover crop seed. - Sow cover crop.	May 2023
Planting Phase	All seedlings	May/ June 2023
Monitoring Program	The site will be monitored based on the monitoring protocols developed with the Rewilding Plan.	Start: 2024
Fill Plant	- A fill plant would occur at any point during the annual assessment survey process should data indicate that the site may not meet the rewilding standards of the monitoring plan. - The project budget will include funding for a 25% fill plant.	If required, prior to Final Survey
Final Assessment	Complete final assessment to confirm observations that the site is on a trajectory to becoming a forest.	no later than fall 2029

7 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 Alberta 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.

Appendix C - Monitoring Protocols

PROJECT FOREST

MONITORING ASSESSMENT STANDARDS & PROTOCOLS

Version: 3.0

Date: January 16, 2026



Version Number	Purpose/ Change	Author	Date
1.1	Update Protocols – based on field and reporting feedback	Lindsay Dent, RPF; Tree Time Services Inc	March 28, 2024
2.0	Updated Protocols – based on Land Partner feedback	Lindsay Dent, RPF; Tree Time Services Inc	January 8, 2025
2.1	Updated Protocols -	Andrea McRae Tree Time Services Inc	August 1, 2025
3.0	Updated Protocols	Lindsay Dent, RPF; Tree Time Services Inc	January 16, 2026

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1 About the Project Forest *Monitoring Assessment Standards*

This monitoring program has been designed specifically to assess the progress of Project Forest project areas. The purpose of this document is to establish a standard that can be adjusted to individual Project Forest projects. As part of Project Forest's commitment to their partners, this monitoring program aims to provide a level of scientific verification that planted seedlings are on trajectory towards becoming mature shrubs and trees. The *Monitoring Assessment Standards* will be tailored to the unique field level conditions and goals of each site as Project Forest is committed to monitoring, maintaining, and delivering corrective treatments on each project.

This monitoring program incorporates legislated methods of disturbance assessment for public forested lands in Alberta. Although some of the assessment and survey procedures are unique to this document, the background information, methodology, and rationale for this monitoring program are obtained from the following documents: Reforestation Standard of Alberta, Alberta Regeneration Standards for the Minable Oil Sands, and the 2010 Reclamation Criteria for Wellsites and Associated Facilities for Forested Lands.

1.1 Project Forest Background

Project Forest partners with various organizations to create opportunities to rewild and grow natural infrastructure across Western Canada. By collaborating with conservation groups, Indigenous communities, and other land partners, and connecting them with businesses, we aim to afforest non-productive land and transform it into thriving forests or natural infrastructure that will benefit communities of the land partners. These partnerships allow landowners and First Nations communities to plant their land, which increases biodiversity and other natural benefits, while also allowing businesses to contribute to making a positive environmental change.

Project objectives of all planted areas are:

- To restore habitat loss created from agriculture and industrial disturbance on sites that have no legislated obligations to restore natural habitat.
- To ensure that planted seedlings are on a trajectory to grow into mature shrubs and trees that achieve the project's objectives, e.g. a forest.
- To permanently capture carbon and store it in trees and soils, therefore reducing the amount of atmospheric carbon.
- To assist landowners in achieving their environmental objectives for the land, with the purpose of the project remaining permanently on the landscape.
- To promote and help businesses grow their Environmental, Social, and Governance criteria score and leave a positive legacy.

1.2 Purpose

The procedures for this Monitoring Assessment Standard were designed to be repeatable, robust, simple, unambiguous, technically defensible, and consistent to produce reliable results. The procedures:

- Provide a method to assess the level of project success at establishing natural infrastructure, and
- Enable the assessment of each area to determine the adequacy of stocking, survival, and growth.

This document describes the procedures to collect the field data, determine the regeneration status of each plot, and extrapolate the information over the site. The data collected under these guidelines will be used to develop treatment recommendations after each monitoring event. Or the project sites are on a trajectory to become mature shrubs and trees that achieve the project's objectives.

1.3 Scope and Applicability

Annual monitoring assessments are conducted on all active Project Forest project sites. The monitoring assessments will be completed following the procedures described in this standard, unless otherwise

specified and approved by Project Forest. All Project Forest project areas continue to receive annual monitoring assessments until a final assessment threshold has been met.

1.4 Timelines

Monitoring assessments will be completed annually, ideally at the end of the growing season, in the fall. If they cannot be completed in the fall, the following spring is acceptable. Project Forest sites will be eligible for an assessment after one growing season and will be expected to hit target criteria within 6 growing seasons.

See Table 1 for a generalized timeline of assessments. Note that when 80% of monitoring plots are sufficiently restocked, this triggers the completion of the monitoring program, regardless of year. Thus, Project Forest's commitments to their project partners will have been fulfilled and removes the site liability from Project Forest.

Table 1. Survey Timeline

Year/ Season	Assessment*	Description
After first growing season	Year One Survey	• Establish and complete plots • Determine Stocking % - o If >80% of plots pass, further monitoring not required - o If <80% plots pass, recommend additional silviculture treatment to Project Forest ▪ Project Forest will initiate treatment accordingly
After second - fifth growing season	Respective Annual Survey	• Complete plots • Determine Stocking % - o If >80% of plots pass, further monitoring not required - o If <80% plots pass, recommend additional silviculture treatment to Project Forest ▪ Project Forest will initiate treatment accordingly
After sixth growing season	Year Six Survey	• Complete plots • Determine Stocking % - o If >80% of plots pass, further monitoring not required - o If <80% plots pass, recommend additional silviculture treatment to Project Forest ▪ Project Forest will initiate treatment accordingly Final year for treatments.

If less than 80% of a given site is satisfactorily stocked after 6 surveys, then a final silviculture treatment will be delivered. After this final 6-year treatment, Project Forest will no longer be liable for the trajectory of the site.

1.5 Commitment

Project Forest will monitor projects until the site reaches the desired measurements or for a maximum duration of six years, whichever occurs first. Once sites meet the targets listed in this document, they will be considered on the right trajectory to become a mature site, and Project Forest's commitments to their project partners will have been fulfilled, removing liability from Project Forest. If the site does not meet the identified targets within the 6 year time frame, Project Forest will do one last treatment to guide the trajectory of the site to become a mature and successful project. After this last treatment, Project Forest's commitments to their project partners will have been fulfilled, thus removing afforestation liability from Project Forest.

2 Personnel and Equipment Requirements

The following standards address the qualifications of surveyors and equipment requirements to conduct field surveys and apply to all monitoring assessments completed at Project Forest sites.

2.1 Field Surveyor Qualifications

Surveys shall be completed by, or under the direct supervision of an environmental regulated professional with education and/ or experience in plant identification and vegetation monitoring. This individual needs to be a member of an association such as the Alberta Association of Forest Management Professionals, Forest Professionals British Columbia, Alberta Institute of Agrology, or the Alberta Society of Professional Biologists, etc.

Direct supervision includes:

- Overseeing the surveys as they occur,
- Providing direction and feedback to surveyors in a timely manner, and
- Ensuring surveys being conducted under their direct supervision are complete and accurate.

Companies hired to complete monitoring assessments for Project Forest will list the names (first and last) of qualified surveyors on the monitoring assessments cover page (Appendix 1) and Assessment Summary Sheet (Appendix 2).

2.2 Global Positioning System

The use of a Global Positioning System (GPS) for surveys is required when establishing plot centers. When surveyors choose a GPS for completing the monitoring assessment:

- The minimum accuracy of the GPS receivers should be 10 meters horizontally at a 95% confidence level.
- The GPS receiver should be set to position or record using the North American Datum for 1983 (NAD 83).

GPS best practices include:

- GPS receivers are set to position or record in 3D mode (i.e., simultaneous observations to a minimum of four satellites); and
- During static point-mode surveys, the minimum recording duration at each survey point should be 30 seconds with a minimum of 15 individual position fixes during this period

2.3 Field Equipment Requirements

Successful implementation of the monitoring program requires the use of proper field equipment for both safety and precision of data capture. For accurate data capture, specific tools and equipment are required for execution of the monitoring program field components. This list of equipment can be found in Appendix 3: Required Equipment.

3 Survey Standard

The objectives of the monitoring assessments are:

- To determine and document the growth status of a Project Forest site;
- To assess species composition and distribution of seedlings, suckers, and advanced growth with high potential for survival and future growth;
- To identify areas and conditions within a site where regeneration success has been inhibited or is unlikely to meet the goals of the project in the future; and

- To inform the next steps of further silviculture treatments, including Let It Grow, or release the site as the site met acceptable standards.

The monitoring assessment is to be conducted on the predetermined plots, included in the project work plan approved by Project Forest. The purpose of this survey is to determine if regeneration has been established according to the standards found in this document. If an area has not been planted with seedlings, a monitoring assessment is not required as it is not considered part of the afforestation project area.

Once the final assessment criteria have been met according to the *Monitoring Assessment Standards*, the site is passed, and the plots are deemed sufficiently restocked (SR).

3.1 Regeneration Stocking

A minimum of one woody stem, over a species-specific height, is required to consider a plot Sufficiently Restocked (SR). For the purposes of the Assessment, a plot is defined as a circular 1.78m radius plot having an area of 10 m². A woody plant is a plant that produces wood as its structural tissue. Woody plants are usually either trees or shrubs.

Any woody plant is considered an acceptable species.

3.2 Acceptable Trees and Shrubs

An acceptable woody plant is an individual seedling, sucker, coppice or mature stem that:

- Is alive;
- Is a woody species;
- Is 30 cm or taller if a coniferous tree; and
- Is 60 cm or taller if a deciduous tree or shrub.

In addition to the criteria above:

- 1) White spruce and balsam fir trees shall have a live crown ratio of 0.33 or greater.

3.3 Minimum Total Tree Stocking Percent

If less than 80% of the site's plots are not sufficiently restocked, then a silviculture treatment may be warranted. This could include tree-planting if plots are not sufficiently restocked, or a Let-It-Grow approach if plots are stocked but the seedlings are not of sufficient size. Specific treatments will be prescribed by a regulated professional and approved by Project Forest.

Monitoring assessments can be completed any time after a herbicide treatment, provided that the treatment efficacy is evident, and the surveys are still being conducted annually.

Project Forest will not meet the minimum total tree stocking percent if rounding is required to reach the minimum percent stocking. For example, if the entire area has a stocking percent of 79.6% it will not meet the requirements, it must be equal to or greater than 80.0%.

In addition, if an area that is 1.5 ha or greater is determined to be NSR, the environmentally regulated professional will recommend a fill plant, even if the stocking percent is greater than or equal to 80%.

All coniferous and deciduous trees that meet minimum acceptable height requirements and all woody plants regardless of height will contribute to stem counts. Any woody species can contribute to conditional status if they are located within the assessment plot boundaries. If there is a high density of 11 or more stems per species within a plot, in the plots notes, the surveyor may record 10+ seedlings.

Project Forest may choose Let-It-Grow as an afforestation treatment in cases where information has been collected for conditional seedlings present at the time of a monitoring assessment. For the purposes of total stocking percent calculations, conditional plots will be referred to as Not Sufficiently Restocked

(NSR).

3.3.1 Final Height Trees

Planted seedlings will only be deemed to be of acceptable height for sufficiently restocked status when they reach the minimum criteria outlined in Table 2. If less than 80% of plots are sufficiently restocked, further silvicultural treatment is required.

Table 2. Criteria for acceptable height requirements to consider for Final Assessment criteria

Species Name	Latin Name	Category	Sufficiently Restocked Conditions
Conifer trees*	N/A	Conifer Tree	1 m
Deciduous trees	N/A	Deciduous Tree	2 m
Green alder	<i>Alnus crispa</i>	Shrub	1 m
River alder	<i>Alnus incana</i>	Shrub	1 m
Willow spp.	<i>Salix</i> spp.	Shrub	1 m
Red Osier dogwood	<i>Cornus sericea</i>	Shrub	1 m
Saskatoon	<i>Amelanchier alnifolia</i>	Shrub	1 m
Canadian Buffaloberry	<i>Shepherdia canadensis</i>	Shrub	1 m
Raspberry	<i>Rubus idaeus</i>	Shrub	0.75 m
Wild Rose	<i>Rosa</i> spp.	Shrub	0.75 m
Honeysuckle	<i>Lonicera</i> spp.	Shrub	0.9 m
Common Blueberry	<i>Vaccinium myrtilloides</i>	Shrub	Producing berries
Dewberry	<i>Rubus pubescens</i>	Shrub	Producing berries/ runners
Bog Cranberry	<i>Vaccinium vitis-idaea</i>	Shrub	Producing berries

4 Survey Method

4.1 Plot Determination

The assessment locations will be pre-determined by a regulated professional using GIS software after planting events have occurred the first year. The assessment plot centers will be the same each year. When a surveyor is in the field, the surveyor will navigate to the predetermined plot location using a GPS device and then collect specific data present in a 10 m² plot. Once all the plot locations have been determined, the plot information will be saved in a format which will allow it to be uploaded to an appropriate GPS system as per Section 2.2.

Plot Frequency

Area based Project Forest sites will receive at a minimum of 2.77 assessment plot locations per hectare, based on the stratification of the project site. The number of plots will be rounded up. For example, to determine the number of plots required for a project that is 5.1 ha:

$$\begin{aligned}\text{\# of required plots} &= \text{area of site (ha)} \times 2.77 \text{ plots/ ha} \\ &= 5.1 \text{ ha} \times 2.77 \text{ plots/ ha} \\ &= 14.127 \text{ plots} \\ &= 15 \text{ plots}\end{aligned}$$

To determine the spacing between plots based on square spacing grid, use the formula below, along with the continued example from above on how to use the formula.

$$\begin{aligned}\text{Plots spacing (m)} &= \sqrt{\text{Opening Area (ha)} \times 10,000 \text{ m}^2/\text{ha} \div \text{required \# of Plots}} \\ &= \sqrt{(5.1 \times 10,000 \div 15)} \\ &= \sqrt{3,400} \\ &= 58.3 \text{ m}\end{aligned}$$

To determine the spacing between plots based on rectangular spacing grid, use the formula below, along with the continued example from above on how to use the formula.

Each strata identified and planned for will receive a minimum of 3 assessment plots.

Linear based Project Forest sites will receive a minimum of six 5 m long assessment plots per kilometer or a minimum of 3 assessment plots for a project type.

$$\begin{aligned}\text{\# of required plots} &= \text{length of site (km)} \times 5 \text{ plots/ km} \\ &= 0.75 \text{ km} \times 5 \text{ plots / km} \\ &= 3.75 \text{ plots} \\ &= 4 \text{ plots}\end{aligned}$$

To determine the distance between plots, move the first and last plots 10 m in from the linear planting ends. See below to calculate the distance between plots, based on the example above.

$$\begin{aligned}\text{m between plots} &= [\text{length of site (m)} - 10 \text{ m} \times 2 \text{ from linear ends}] / [\text{total plots} - 1] \\ &= [750 \text{ m} - 20 \text{ m}] / [4 \text{ plots} - 1 \text{ plot}] \\ &= 730 \text{ m} / 3 \text{ plot (spaces)} \\ &= 243.33 \text{ m between plots}\end{aligned}$$

The survey intensity is adapted from the Reforestation Standard of Alberta (2024).

4.1.1 Plot Naming and Numbering

A plot number will be assigned to each plot center location. The first plot will be the furthest southeast location along the planting area boundary, and as the plot's numbers increase the plot locations will move from east to west and south to north, following a pattern similar to the Alberta Township numbering system. For example, if there are 56 plots then plot 1 will be the most southeastern plot and plot 56 will be the most northwestern plot. See the example below.

56	55	54	53	52	51	50	49
41	42	43	44	45	46	47	48
40	39	38	37	36	35	34	33
25	26	27	28	29	30	31	32
24	23	22	21	20	19	18	17
9	10	11	12	13	14	15	16
8	7	6	5	4	3	2	1

Figure 1. Example of Plot Numbering

For the purposes of standardization across Project Forest monitoring projects, plot numbers will be named and numbered. Plots will be referred to two a two-letter identifier in front of the plot number. For example, plot 5 at Golden Ranches would be listed as GR-05.

4.2 Field Work - Plot Assessment

Plot center will be marked by pushing a piece of lath into the ground until it is firmly anchored. The surveyor will write the plot number onto the lath using a permanent marker.. This information is required for future data validation purposes. The marking will correspond with Project name and plot number as discussed above. Once marked, the surveyor will attach two pieces of heavy-duty flagging tape/ ribbon to the lath to make it easily identifiable.

This process is primarily intended for the first year of a monitoring program, when assessment plots have yet to be staked out and named. It is possible that over time, stakes may go missing or that markings may be compromised. Therefore, it is the responsibility of qualified surveyors to ensure missing stakes or faded markings are re-established as needed. As such, extra survey lathes should be brought to monitoring programs in subsequent years.

All assessments will occur within the boundaries of a 10 m² plot. The boundaries for the assessment plot are to be determined using the 1.78m plot cord. The presence of acceptable species of coniferous, deciduous, shrub or other will be recorded. Appendix 4: Survey Tally Card lists the information that is required to be collected during the survey.

To determine if a woody stem is inside the plot, measure from the point where the plot center marker enters the ground to the base of the woody stem. If any part of the stem is within 1.78 m of the plot center, then the woody stem is in the plot.

Included in the documentation of the plot assessment will be:

3. Counts of acceptable woody species
4. Herbaceous vegetation. The herbaceous vegetation documentation is not a tally count.
5. Noxious weeds present. The noxious weeds documentation is not a tally count.
6. Additional growth limiting factors. Examples of growth limiting factors include physical damage, disease, competition, and additional comments

All observations that occur within plot boundaries, except for herbaceous vegetation and weeds, will be recorded within the Tally Card comments (Appendix 4: Survey Tally Card). If the surveyor observes a herbaceous or woody species, or other pertinent information that is observed during the Assessment that does not fall within any of the plot boundaries, the surveyor will document the observed vegetation on the Afforestation Survey Cover Page as depicted in Appendix 2: Assessment Summary Sheet.

For Linear projects, such as shelterbelts, the same form will be used. The same form can be used for all

rows within the linear projects; refer to Appendix 2: Assessment Summary Sheet.

For calliper trees, all calliper trees, unless otherwise stated, will receive an assessment. See form in Appendix 5: Caliper Tree Assessment Sheet.

4.3 Plot Data

4.3.1 Tree species

An acceptable tree is an individual seedling, sucker, coppice, or more advanced growth that:

- Is alive;
- Is a woody species;
- Is 30 cm or taller if a coniferous tree;
- Is 60 cm or taller if a deciduous tree or shrub.

4.3.2 Tallest Woody Stem in Plot

Height shall be measured as the tree lies perpendicular (plumb) from upper most live bud to ground for all trees regardless of lean from vertical. Where no acceptable woody stems are present in the plot, record "No" in the appropriate space under the Species field.

4.3.3 Other Factors

These are observations of factors present that are, or may, impact seedling vigour or survival. There are sections in the tally assessment (Appendix 4: Survey Tally Card) to note the presence of damage, disease, competition, noxious weeds, and other comments that the Environmental Professional and Project Forest should be made aware of so impact to the site's success can be mitigated through treatment recommendations.

4.3.4 Weeds/ Undesirable Plants

Weeds are generally defined as undesirable or unwanted plants. The purpose of the survey is to document the success of the establishment of the woody stems on site. During the survey, any noxious, prohibited, or undesirable species identified will be documented along with a general location and distribution of weeds throughout the site.

*Note: This is additional site information, and not a weed survey.

4.3.5 Herbaceous Cover

This section will be completed for every fourth plot. The assessor will list the herbaceous species visible from the plot, which means that species that are visible from the plot but outside the plot should be recorded. This information will inform how biodiversity is progressing as the site matures.

4.3.6 Assessment photos

Several photo types need to be captured during the assessment.

Table 3. Site photos required during data collection

Photo Type	Description & Instructions
Project Photo	A (non-survey) stake will be placed in a spot which can be used as a camera support in an area which will capture a large portion of the site. A landscape photo should be taken and match the monitoring protocols for the site. The purpose of this photo is to demonstrate the growth and change of the site year over year.
General Plot Photo	The purpose is to capture the plot name of the stake and show the general vegetation cover within the plot. The photo should face north for consistency and to capture the change and development of the site over time.
Tallest Woody Species	This will capture and document this information on the tally sheet.
other site observations	This will document the concerns or observations that should be noted in the Tally Cover Page. Examples of this would include damage to seedlings (physical, insect, disease), competition, and noxious weeds.

General Site Photos	This includes insects, birds, animals, natural ingress, or other beautiful photos. These photos will be used by Project Forest Communications Division to share the story of the project's growth.
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4.4 Plot Level Stocking Calculations: Sufficiently Restocked (SR) and Not Sufficiently Restocked (NSR) Status

When the surveyor is assessing the stocking of a plot, the surveyor must meet the minimum plot requirements of 2.77 plots per hectare. If the woody stems in the plot are of acceptable height as per section 3.2 Acceptable Trees and Shrubs, they may count towards the stocking requirement for the plot.

4.4.1 SR and NSR Definitions

A plot will be considered SR if:

- at least one woody stem that meets acceptable height requirements is tallied within the boundaries of a 10 m² plot,

A plot will be eligible for an NSR-LIG code if:

- at least one woody stem within the 10 m² plot, and
- below height requirements to be categorized as SR.

A plot will be considered Not Sufficiently Restocked (NSR) if:

- there are no woody stems within the boundaries of a 10 m² plot; or
- White spruce and balsam fir trees have a live crown ratio less than 0.33.

4.4.2 NSR Protocols

When a plot is eligible for NSR-LIG, it is still considered NSR. However, if eligible for NSR-LIG, the "Let it Grow" status will be considered an afforestation treatment, and no further intervention is required.

During the survey, if a plot is classified NSR and is not eligible for NSR-LIG, the surveyor will conduct:

- a) One plot 25 m north of the NSR plot center; and
- b) One plot 25 m south of the NSR plot center.

After completing the two additional plots, the three-plot area will be considered:

- a) SR if both additional plots meet the SR requirements; or
- b) NSR-LIG if one plot meets SR, and a second plot is eligible for NSR-LIG; or
- c) NSR-LIG if both additional plots are eligible for NSR-LIG.

After completing the two additional plots, the three-plot area will be considered NSR if one or more of the additional plots is considered NSR and not eligible for NSR-LIG.

During the final survey, if additional survey plots both have trees which meet the final height requirements listed in section 3.3.1, they will count towards the final height requirements for the plot area. If one or both of the additional plots do not meet these height requirements, the plot will not qualify for final height.

4.5 Plot Coding

When tallying plots, the surveyor must also total plots based on the composition of each plot, not only its status. For example, a Sufficiently Restocked plot could be stocked with a coniferous tree or a deciduous tree, therefore for greater accuracy, coding information should include a plot status code followed by a

species grouping modifier. A plot that is not sufficiently restocked with both a deciduous tree and a shrub would then be listed as, NSR-LIG- DS. See Table 4 for a full list of codes,.

Table 4. Abbreviations for the various plot types available during assessments

Identified Plot Type	Abbreviation
SR with Acceptable Conifer trees	SR – C
SR with Acceptable Deciduous trees	SR – D
SR Acceptable Shrubs	SR – S
SR with Acceptable Conifer & Deciduous trees	SR – CD
SR with Acceptable Conifer trees & Shrubs	SR – CS
SR with Acceptable Deciduous trees & Shrubs	SR – DS
SR with Acceptable Conifer & Deciduous trees & shrubs	SR – CDS
SR with two additional plots	SR -
NSR-LIG with Conifer	NSR-LIG – C
NSR-LIG with Deciduous	NSR-LIG – D
NSR-LIG with Shrub	NSR-LIG – S
NSR-LIG with Conifer & Deciduous	NSR-LIG – CD
NSR-LIG with Conifer & Shrubs	NSR-LIG – CS
NSR-LIG with Deciduous & Shrubs	NSR-LIG – DS
NSR-LIG with Conifer & Deciduous trees & shrubs	NSR-LIG – CDS
NSR-LIG with two additional plots	NSR-LIG-

4.6 Survey Data Collection

Project Forest will inform the surveyor on the platform to use to collect survey data for the projects.

4.7 Damage and Site Conditions

The extent of damage to acceptable woody plants by insects, disease and animals must be recorded during the Assessment on the Survey Cover Page (Appendix 1: Survey Cover Page). If the source of the damage is not identifiable while in the field, then the surveyor must ensure sufficient photographic evidence is captured to allow investigation later. Space is also provided to record damage due to animals and disease in the comments section of the Tally Card (Appendix 4: Survey Tally Card).

Recording damage and site condition information is very important for determining why a particular area may have failed the stocking standards. If an area is determined to be NSR due to animal or disease damage, that area will be eligible for a re-survey provided that the woody vegetation has only incurred damage and not mortality. The second survey on the damaged area must occur in the next growing season.

It is important to consider that areas damaged by animals or disease may still be eligible for NSR-LIG if they still meet the requirements of an acceptable tree. If an area has been attacked by disease or animal and mortality has occurred at levels that make the area NSR and not eligible for NSR-LIG, then a fill plant activity will be necessary. The density from the Monitoring assessment will be determined and the fill plant will be scheduled at a density that would bring the NSR area(s) up to a density of 1600 woody stems/ha with trees.

Below is an example of a fill plant prescription for an area damaged by disease or animal:

EXAMPLE: If the monitoring assessment tree density (SR and NSR-LIG) is 500 woody stems/ha, the fill plant density would be 1100 woody stems/ha. If the NS area is two hectares, a total of 2,200 seedlings would be planted and an additional survey event is not required that year.

When an area is considered NSR as per Section 4.4.2, then the total NSR area will be calculated as follows:

$$(\# \text{ of NSR Areas}) \times 1.5 = \text{NSR Area (ha)}.$$

Documentation of damages, growth-limiting site factors, and invasive/ noxious weed species is highly important to the success of these sites. Whenever deleterious site conditions or noxious weeds are encountered, they must be recorded on the Establishment Survey Summary Sheet. Furthermore, the distribution and density of noxious weeds will be recorded in as much detail as is reasonably possible. Note a few possible dispersion patterns in Figure 2.

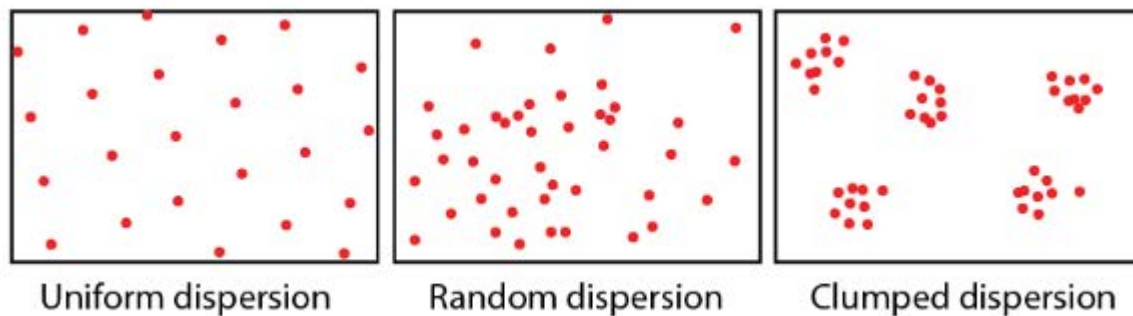


Figure 2. Dispersion patterns

4.7.1 Loss of Afforestation Liability

If any part of the afforestation treatment area encountered during the monitoring assessment is discovered to have been damaged by forest fire or an additional development (regardless of type), Project Forest will no longer be responsible for the impacted area(s), including if the additional development is a Project Forest initiative. All area(s) impacted by forest fire, insects or industrial development will be removed from the afforestation project area and all pre-determined plot numbers in the impacted area(s) will be recorded on the Survey Cover Page (Appendix 1: Survey Cover Page). These plots will be deleted from the monitoring assessment and will not be moved or reassigned to other areas of the site.

If a development area is encountered during the monitoring assessment, the surveyor will document the size and location of the development impacting the project area. This information will then be submitted as part of the Survey Cover Page (Appendix 1: Survey Cover Page) to Project Forest and removed from the project's total area.

4.8 Moving Plots

In the event any portion of the plot falls outside of the defined afforestation area, the surveyor may move the plot up to 20 m in a north, east, south, or west direction to a representative area within the project. If a plot is moved, the surveyor is required to collect a waypoint capturing the latitude and longitude of the new plot location, as well as document and justify the change in plot location in the Comments section of the Tally Card (Appendix 4: Survey Tally Card). The minimum plot spacing will be 25m to provide even coverage throughout the entire area.

4.9 Plots to Delete.

Plots will only be deleted during the Project Forest Monitoring Assessment Program if part of the afforestation project area has been impacted by forest fire or development. Plots may be moved if they meet the plot moving conditions as per Section 4.8.

4.10 Missed Plots

If, for any reason, a survey plot is missed and/or no data has been recorded, the plot will be excluded from the stocking summary and calculations.

4.11 Stocking Status

Based on the results from the assessment stocking status can be SR, NSR-LIG, or NSR. For a plot area to be considered SR, it must meet the minimum stocking (%) requirements as found in Section 3.3. If an area is considered SR, the area will be considered on a trajectory to become a mature forest.

4.11.1 Percent Stocking Calculation

The percent stocking calculation shall be submitted to Project Forest on the Survey Cover Page (Appendix 1: Survey Cover Page). One Afforestation Survey Cover page will be required for the project area and shall include:

- a) Total number of plots to calculate stocking.
- b) Number of SR plots for the area.
- c) Number of under-height plots for the area.
- d) Number of NSR plots for the area.
- e) Number of moved plots with plot name and justification for the plot move.
- f) Total area subtracted from the project area, submitted with a description.

Based on the above values, the Total Stocking (%) shall be calculated as follows for each area:

A plot considered SR will count once towards the Total Tree Stocking (%) of an area, thus Total Tree Stocking (%) shall be calculated by dividing the number of plots considered SR by the total number for plots for the entire area and then multiplying by 100.

If the status of the area is determined to not be SR, the formula will be calculated as follows:

1. Total Potential Stocking = (# of SR plots) + (# of NSR-LIG plots)
2. Total Potential Stocking % = (Total Potential Stocking/ Total number of plots) X 100

If the Total Potential Stocking (%) is less than the minimum stocking (%) requirements, an additional afforestation treatment will be recommended as per Table 1. Survey Timeline in Section 1.4.

4.11.2 Site Density –Survey

The minimum site density for the project area to be considered SR and on a trajectory to become a mature forest will be 1,600 woody stems/ha. Site density is calculated as follows:

Total woody stems tallied/number of plots x 1000

Example 1:

- Total woody stems tallied is 368
- Total plots is 152
- Site density => $368 \text{ woody stems} / 152 \text{ plots} \times 1000 = 2,421 \text{ woody stems/ha}$
- Site meets minimum density requirement no additional work is required.

Example 2:

- Total woody stems tallied is 151
- Total plots is 152

- Site density => $151/152 \times 1000 = 993$ woody stems/ha
- Site does not meet minimum density requirement; a silviculture treatment is required.

When the minimum site density is not met, an additional silvicultural treatment is required. Should a fill plant be the silviculture treatment, the fill plant must bring up the site density to 1,600 stems/ha.

A fill plant tree number calculation example is below:

- Site density = 993 woody stems/ha
- Site area = 55ha
- Density top up calculation => $1,600 \text{ woody stems/ha} - 993 \text{ woody stems/ha} = 607 \text{ woody stems/ha}$
- Tree order calculation => $607 \text{ woody stems/ha} \times 55 \text{ ha} = 33,385 \text{ woody stems required.}$

4.12 Outcomes of NSR Areas

An additional afforestation treatment will only be required if an area is determined to be NSR. Individual NSR areas will not require an afforestation treatment, they will however be selected as the afforestation treatment areas if the area is determined to be NS. If the stocking status of an area is considered NSR, then an appropriate afforestation treatment for the NSR areas must be prescribed by the managing regulated professional.

As per Section 1.3 an afforestation treatment is defined as any silvicultural technique used to improve the biomass volume. These treatments include, but are not limited to, mechanical site preparation, vegetation management, Not Sufficiently Restocked 'Let-It-Grow' Status and tree planting. A regeneration survey is not considered an afforestation treatment.

4.12.1 Possible Outcomes for areas considered as NSR.

When an area is classified as NSR, Project Forest has the following two options:

1. Re-survey the area classified as NSR with new predetermined plot locations for that area. This additional survey must be completed in the same season as the first survey. If the new survey meets the minimum stocking requirements, then the area will be considered SR and an additional afforestation treatment will not be necessary.
2. Complete a one-time fill plant event of the area classified as NSR. Once the fill plant activity has been completed, the area would then be classified as SR and require no further afforestation treatments or additional Monitoring assessments to confirm stocking status.

If a fill plant is prescribed as the afforestation treatment by the EP, the fill planting density requirements will be followed as per Section 4.11.2.

For example:

Golden Ranches required a total of 54 plots, 14 of which were NSR and 40 were SR. The total stocking for that area was 74% which is considered NSR. If 14 of the plots in the area were considered NSR, then the total NSR area as per Section 4.5 is 21 ha. If the average density of all the NSR areas was 750 woody stems/ha, then according to Section 4.5 the fill plant prescription would be required to bring up the total density to 1,600 woody stems/ha. A fill plant of 850 woody stems/ha would be required, which would equate to 17,850 seedlings.

5 Reporting

Monitoring assessments conducted on any Project Forest Afforestation Project areas shall be reported to Project Forest within 30 days of completing the field work. A complete and validated monitoring assessment summary sheet (Appendix 6: All Project's Summary Sheet) must accompany all reporting of Monitoring assessments to Project Forest for each area surveyed.

Validated work is work that has been prepared by or reviewed and approved by a regulated professional. The regulated professional who validates work must have done the work, contracted the work, or supervised those who did the work. The validating RP is accountable for ensuring the reporting of the Monitoring assessment is complete, accurate and on time.

See Appendix 7: An Example Monitoring Report for an example report.

5.1 Recommendations

Developing recommendations in the reports:

- If the summation of SR and NSR-LIG plots are less than 80% or
- If an area larger than 1.5 ha is identified as NSR, or
- If site density is determined to be less than 1600 stems/ha, a fill plant will be recommended.
- Additionally, if any weed concerns or other site-limiting factors are identified, a management strategy between Project Forest and the land owner will be recommended.

5.2 Submission

The Monitoring assessment submission packages to Project Forest shall include:

- a) Afforestation Survey Reporting Cover Page
- b) Monitoring assessment Finalized Survey Assessment Maps
- c) Monitoring assessment Tally Cards

5.2.1 Map Symbols and Definitions

All maps submitted to Project Forest shall have the applicable information for each area surveyed, as shown in Table 3 and plots shall be illustrated on the map as per Table 5.

Table 5: Depicts symbols to use in final reports submitted to Project Forest

	SR with Acceptable Conifer trees
	SR with Acceptable Deciduous trees
	SR Acceptable Shrubs
	SR with Acceptable Conifer & Deciduous trees
	SR with Acceptable Conifer trees & Shrubs
	SR with Acceptable Deciduous trees & Shrubs
	SR with Acceptable Conifer & Deciduous trees & shrubs
	SR with two additional plots

	NSR-LIG with Conifer
	NSR-LIG with Deciduous
	NSR-LIG with Shrub
	NSR-LIG with Conifer & Deciduous
	NSR-LIG with Conifer & Shrubs
	NSR-LIG with Deciduous & Shrubs
	NSR-LIG with Conifer & Deciduous trees & shrubs
	NSR-LIG with two additional plots
	NSR -No Acceptable Woody species present

6 Survey Quality

Project Forest requires the monitoring assessment information to be complete and accurate. The contractor shall ensure quality control systems are developed and utilized. Quality control systems must include surveyor training, field auditing and data validation and records of the training session and attendees must be available to Project Forest upon request. The surveyors shall receive training specific to the Project Forest Afforestation Monitoring Program to ensure appropriate measurements are made and recorded. All records of the training sessions and attendees will be tracked and made available to Project Forest upon request.

Audits of all areas and/or surveyors shall be conducted using check surveys carried out by qualified surveyors. Audits shall focus on areas where the risk of error is highest. The survey contractor will be required to submit an auditing plan to Project Forest for approval prior to starting the monitoring program field work.

7 Glossary of Terms

Advanced regeneration – a tree that meets all criteria for an acceptable tree, established prior to harvest, will likely be alive at next harvest. (AESRD 2013)

Acceptable tree - An acceptable woody plant is an individual seedling, sucker, coppice, or advanced regeneration that:

- a) Is alive.
- b) Is an acceptable tree or woody plant.
- c) Originated from seed, suckering or coppice.
- d) Achieved the minimum coniferous or deciduous height requirement at time of survey (Table 2 in 3.5).

In addition to the criteria above, coniferous tree species shall have:

- a) A well-defined stem
- b) Two or fewer stems originating at the base of the tree.
- c) White spruce and balsam fir trees shall have a live-crown ratio of 0.33 or greater.

Assessment plot – assessment plots occur within the boundaries of a 10 m² (1.78 m horizontal radius) plot at the predetermined plot location provided to the surveyor. Within this boundary, the presence of acceptable coniferous, deciduous, and woody plants will be recorded on the Monitoring assessment Tally Sheet.

Coppice – a natural regeneration process like suckering where the seedling or sapling regenerates from the cut or damaged stump. Several healthy stems may be observed coming from one stump. Found primarily in birch, but also in other deciduous species. (AESRD 2013)

Coniferous trees – needle-leaved tree species which produces cones (includes larch spp.) (AESRD 2013)

Deciduous trees – broadleaved tree species that lose their leaves in the fall. (AESRD 2013)

Diameter at Breast Height (DBH) – Tree diameter at 1.35 m from the ground

Growing Season - the period between June 20 and August 1 annually

Herbaceous plant – plants that die back to ground level at the end of each season. They have no above ground, persistent woody stem and may be annual, biennial or perennial.

LIG (Let-It-Grow) – an afforestation treatment in cases where information has been collected for under-height trees present at the time of an Monitoring assessment.

Live crown ratio - the proportion of total stem length that is covered by living branches. It is expressed as a percentage or decimal of the total tree height. Live crown ratio is a useful indicator of the status of the tree in relation to vigor, photosynthetic leaf area, and is inversely related to stocking density. It is assumed that live crown ratio must be greater than 0.3 (30%) for the tree to release well.

Natural Infrastructure - nature-based solutions that promote, use, restore or emulate natural ecological processes

NSR (Not Sufficiently Restocked) - A plot will be considered NSR if it fails to meet the criteria set out Section 4.4

NSR Area Calculation - When an area is considered NSR as per Section 4.4, then the total NSR area will be calculated as follows: NSR Area (ha) = (# of NSR Areas) x 1.5

NSR-LIG (Not Sufficiently Restocked – Let-It-Grow) - For the purposes of Total Stocking percent calculations, LIG plots will be referred to as Not Sufficiently Restocked – Let-It-Grow (NSR-LIG). When a plot meets the NSR-LIG requirements it is still considered NSR, however if the stocking percentage of all the NSR-LIG plots increases the overall stocking as per the instructions in Section 4.11.1 of this document then further afforestation treatments are not necessary.

Quality control systems - surveyor training, field auditing and data validation and records of the training session and attendees will be provided to Project Forest.

Regulated Professional- A members of a professional regulatory organization of Alberta. This includes Alberta Institute of Agrology, Alberta Association of Forest Management Professionals, and the Alberta Society of Professional Biologists.

Afforestation technique - defined as any silvicultural technique used to improve the biomass volume. These treatments include, but are not limited to, mechanical site preparation, vegetation management, Not Sufficiently Restocked 'Let-It-Grow' (NSR-LIG) Status and tree planting. A regeneration survey is not considered an afforestation treatment.

Seedling – a tree that meets all criteria for an acceptable tree that established post-harvest. (AESRD 2013)

Shrub – distinguished from a tree by its multiple stems and shorter height, usually under 6 m (20 feet) tall. Some species may grow into either trees or shrubs depending on growing conditions.

Silviculture - the theory and practice of controlling the establishment, growth, composition, health, and quality of forests to meet diverse management objectives, needs and values (UofA 2024)

Stocking % - the sum of all satisfactorily restocked plots on the opening, divided by the total number of valid plots, multiplied by 100 to express term as a percentage. (AESRD 2013)

Sucker – new growth arising from along the root systems of trees and shrubs.

SR (Sufficiently Restocked) – plots will be considered SR if it meets the criteria set out in Table 1 in Section 4.4.1

Tally card – card used during plant surveys to track the number of species of each target species on site.

Under-height trees – a tree that has all the characteristics of an acceptable tree except that the coniferous, deciduous or shrub minimum tree height requirements are not met. The minimum height requirements for under-height trees are 10 cm, if coniferous, 30 cm, if deciduous and 10cm for shrubs. (AESRD 2013)

Woody plants – plants that produce wood as its structural tissue.

8 List of References

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North Carolina State University (NCSCU). Website accessed November 7, 2014. Watersheds – Types of Wetlands and Their Role in the Watershed.

<http://www.water.ncsu.edu/watershedss/info/wetlands/types3.html>

University of Alberta (UofA), Department of Renewable Resources. 2024. Silviculture.

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Appendix 1: Survey Cover Page

Afforestation Survey Cover Page				
Project site:				
Survey Date(s)		Total Plots		
		Planted Area	ha	
Stocking Calculations				
Type of Plot	# of Plots	% of Plots	Meet Final Criteria	% of Plots
SR with Acceptable Conifer trees				
SR with Acceptable Deciduous trees				
SR Acceptable Shrubs				
SR with Acceptable Conifer & Deciduous trees				
SR with Acceptable Conifer trees & Shrubs				
SR with Acceptable Deciduous trees & Shrubs				
SR with Acceptable Conifer & Deciduous trees & shrubs				
NSR-LIG with Conifer				
NSR-LIG with Deciduous				
NSR-LIG with Shrub				
NSR-LIG with Conifer & Deciduous				
NSR-LIG with Conifer & Shrubs				
NSR-LIG with Deciduous & Shrubs				
NSR-LIG with Conifer & Deciduous trees & shrubs				
NSR -No Acceptable Woody species present				
Acceptable Stocking Summary				
Plot Stocking Status	# of Plots		% of Plots	
SR Plots				
NSR-LIG Stocking				
NSR (excludes NSR-LIG)				
Total Stocking (SR + NSR-LIG):				
Herbaceous Vegetation Observed on Site			Noxious Weeds	
Project Comments:				

Appendix 2: Assessment Summary Sheet

Project Forest Monitoring Assessment Summary Sheet

Project Name _____
Applicability _____
Landowner _____
Site Location _____
Year Planted _____
Assessment #: _____

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

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

Summary of Preventive and Corrective Actions:

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 – Benoit Reforestation Monitoring Program, and,
- c) Complies with the requirements for report timing and format.

Validated/Signed by:

Registration #

Date:

1

Print Name:

Company:

Tree Time Services Inc.

Appendix 3: Required Equipment

- Survey lath, spray painted
- Winter ribbon
- Permanent marker
- Tape measure
- GPS
- Field maps
- Camera
- Data collection application
- Plant identification book
- Weed identification book

Appendix 4: Survey Tally Card

[illegible]

Appendix 5: Caliper Tree Assessment Sheet

Tree Health Assessments									
Project Site:									
Surveyor ID 1					Total Trees:				
Surveyor ID 2					Date:				
Tree #		Tree Species				Age:			
DBH:		# of trunks		Height					
Foliage Color				Vigor					
Growth Obstruction:				Major Pests					
Comments									
Tree #		Tree Species				Age:			
DBH:		# of trunks		Height					
Foliage Color				Vigor					
Growth Obstruction:				Major Pests					
Comments									
Tree #		Tree Species				Age:			
DBH:		# of trunks		Height					
Foliage Color				Vigor					
Growth Obstruction:				Major Pests					
Comments									
Tree #		Tree Species				Age:			
DBH:		# of trunks		Height					
Foliage Color				Vigor					
Growth Obstruction:				Major Pests					
Comments									
Tree #		Tree Species				Age:			
DBH:		# of trunks		Height					
Foliage Color				Vigor					
Growth Obstruction:				Major Pests					
Comments									
Tree #		Tree Species				Age:			
DBH:		# of trunks		Height					
Foliage Color				Vigor					
Growth Obstruction:				Major Pests					
Comments									
Additional Comments:									

Appendix 6: All Project's Summary Sheet

Afforestation Survey Cover Page

[illegible]

Appendix 7: An Example Monitoring Report

Project Forest Monitoring Assessment Summary Sheet

Project Name	Golden Ranches
Applicability	Trajectory of re-wilding success
Landowner	NCC
Site Location	53.420853,-112.968777
Year Planted	2021
Assessment #:	4

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

Andrea McRae

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

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 additional disturbances were recorded from adjustments made last year.

In 2024, ATCO line maintenance close the south and east boundaries of the project area. The maps reflect the chance and removal of ATCO line area.

Summary of Preventive and Corrective Actions:

Regarding establishment of woody species, no additional actions are currently recommended.

There is a heavy presence of noxious weeds present on site. It is recommended that Project Forest and NCC discuss next steps on vegetation management requirements.

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:

December 31, 2025

Print Name:

Lindsay Dent

Company:

Tree Time Services Inc.

Afforestation Survey Cover Page				
Project site: Golden Ranches				
Survey Date(s)	September 23-25, 2025	Total Plots	138	
		Planted Area	49.7	
Stocking Calculations				
Type of Plot	# of Plots	% of Plots	Meet Final Criteria	% of Plots
SR with Acceptable Conifer trees	34	24.6	2	1.4
SR with Acceptable Deciduous trees	11	8.0	1	0.7
SR Acceptable Shrubs	14	10.1	1	0.7
SR with Acceptable Conifer & Deciduous trees	2	1.4		
SR with Acceptable Conifer trees & Shrubs	22	15.9	4	2.9
SR with Acceptable Deciduous trees & Shrubs	14	10.1	5	3.6
SR with Acceptable Conifer & Deciduous trees & shrubs	8	5.8		
NSR-LIG with Conifer	6	4.3		
NSR-LIG with Deciduous	8	5.8		
NSR-LIG with Shrub	1	0.7		
NSR-LIG with Conifer & Deciduous	6	4.3		
NSR-LIG with Conifer & Shrubs	0	0.0		
NSR-LIG with Deciduous & Shrubs	1	0.7		
NSR-LIG with Conifer & Deciduous trees & shrubs	1	0.7		
NSR -No Acceptable Woody species present	0	0.0		
Acceptable Stocking Summary				
Plot Stocking Status	# of Plots	% of Plots		
SR Plots	105	76.1		
NSR-LIG Stocking	17	12.3		
NSR (excludes NSR-LIG)	8	5.8		
Total Stocking (SR + NSR-LIG):	130	94.2		
Herbaceous Vegetation Observed on Site			Noxious Weeds	
Grass spp.			Canada Thistle	
Common Yarrow			White Cockle	
Clover			Common Tansy	
Dandelions			Sow Thistle	
Horsetail			Toadflax	
Common Cattail				
Fireweed				
goldenrod				
Project Comments: At the time of surveying, stocking efforts appeared successful as 94.2% of plots were acceptably stocked (SR and NSR-LIG). Competitive vegetation and noxious weed species remain a concern for the project area. Damaged and dead seedlings were observed by the surveyors at numerous plots, mostly due to herbicide and UTV, probably during herbicide application.				

Assessment Survey Tally Card

Plot	Tree & Shrub Stocking												Status Plot Type	Tallest in Plot		Risk factors		
	Acceptable		Acceptable		Acceptable		Acceptable		Under Height		Under Height			Species	Height (cm)	Damage , Disease & Competition	Noxious Weeds	
	Species	Number	Species	Number	Species	Number	Species	Number	Species	Number	Species	Number						
GR_001	Salix	3	Sw	1									SR-CS	Salix	127	Herbicide damage, UTV damage		
GR_002										Salix	1		NSR-LIG-S	Salix	37	Herbicide damage		
GR_003										Sw	2		NSR-LIG-C	Sw	28	Herbicide damage, UTV damage		
GR_004	Sw	1	BH	2									SR-CS	BH	72	Herbicide damage		
GR_005	Sw	1								Sw	1		SR-C	Sw	44			
GR_006	Salix	1											SR-S	Salix	142	Galls		
GR_007	Salix	1								Salix	1		NSR-LIG-S	Salix	53	Herbicide damage on willows. One has buds set,one dead		
GR_008	Sw	1	Salix	1									SR-CS	Salix	82	Herbicide damage on willow		
GR_009	DO	1								Sw	1		SR-S	DO	60	Spruce dead		
GR_010	Sw	1											SR-C	Sw	30			
GR_011													SR-					
GR_011a	RB	3								RB	7			RB	62			
GR_011b	Pl	3	Salix	4	At	1				RB	8			Salix	127			
GR_012	Sw	2	Salix	2						Sw	1		SR-CS	Salix	94	Herbicide damage, UTV damage		
GR_013	Salix	2	Pl	1									SR-CS	Salix	100	Herbicide damage - 3 dead willows		
GR_014	Sw	1								Sw	1		SR-C	Sw	30	Tall grass		
GR_015	Sw	1											SR-C	Sw	40			
GR_016	Sw	1											SR-C	Sw	38			
GR_017													SR-C			dead, unknown cause		
GR_017a	Sw	2												Sw	54	UTV damage		
GR_017b	Sw	1												Sw	52			
GR_018													SR-	#N/A				
GR_018a	Sw	1												Sw	48	Herbicide damage		
GR_018b	Sw	1												Sw	35	Herbicide damage		
GR_019	Sw	2											SR-C	Sw	39	UTV damage		
GR_020													NSR-	#N/A		Heavy herbicide damage; tall grass		
GR_020a														#N/A		grass		
GR_020b														#N/A		Herbicide damage		
GR_021	Salix	1	Sw	1	BH	5				BH	2		SR-CS	Salix	72			
GR_022	Sw	3								Sw	1	Salix	1	SR-C	Salix	50	Herbicide damage on willow	
GR_023	At	2	RW	1									SR-DS	At	182			
GR_024	Salix	1	Pl	1						Sw	1		SR-CS	Salix	111			
GR_025										Sw	2		NSR-LIG-C	Sw	23			
GR_026													NSR-					
GR_026a																		
GR_026b	Sw	3												Sw	60			
GR_027	Salix	1	At	1						At	1		SR-DS	Salix	90	Herbicide damage		
GR_028										DO	1		NSR-LIG-S	DO	40	Herbicide damage (minor)		
GR_029	Salix	11	Sw	1	At	2	Pb	1					SR-CDS	Salix	149			
GR_030	Salix	4								Salix	2		SR-S	Salix	156			
GR_031													NSR-			Tall grass		
GR_031a	At	2												At	75			
GR_031b																Grass		

Plot	Tree & Shrub Stocking												Status Plot Type	Tallest in Plot		Risk factors	
	Acceptable		Acceptable		Acceptable		Acceptable		Under Height		Under Height			Species	Height (cm)	Damage , Disease & Competition	Noxious Weeds
	Species	Number	Species	Number	Species	Number	Species	Number	Species	Number	Species	Number					
GR_032													NSR-			Grass	
GR_032a																Grass	
GR_032b																Grass	
GR_033										Sw	1		NSR-LIG-C	Sw	28		
GR_034	Sw	2								At	1	Sw	1	SR-C	At	56	
GR_035	Sw	1												SR-C	Sw	56	Dead/ burned tips
GR_036										RW	2			NSR-LIG-S	RW	43	Herbicide damage
GR_037	Sw	2								Sw	4			SR-C	Sw	58	
GR_038	Sw	2								Sw	1			SR-C	Sw	59	Grass
GR_039	Sw	1								amelaln	1			SR-C	Sw	37	
GR_040														SR-			
GR_040a	Salix	1	Pl	1											Salix	121	
GR_040b	Salix	1								At	1				Salix	61	Herbicide damage
GR_041	Salix	2												SR-S	Salix	93	
GR_042	Salix	1	Pl	1										SR-CS	Salix	71	
GR_043														NSR-			Grass
GR_043a	Pl	1								Salix	1				Pl	36	UTV damage
GR_043b																	
GR_044										DO	1	At	1	NSR-LIG-	DO	58	
GR_045														NSR-LIG-			
GR_045a	Salix	1	Sw	1						At	1				Salix	79	Herbicide damage on aspen
GR_045b										Pl	2				Pl	40	Potential herbicide damage - needles are spindly
GR_046										Sw	1	RB	3	NSR-LIG-CS	RB	42	Herbicide damage; grass
GR_047	At	4								amelaln	1			SR-D	At	250	
GR_048														NSR-			Tall grasses
GR_048a																	
GR_048b	Sw	1								RB	12				Sw	77	
GR_049	Salix	1	At	1	Sw	2								SR-CDS	Salix	112	
GR_050														SR-			Grass
GR_050a	Sw	1													Sw	31	Grass
GR_050b	Sw	1													Sw	30	Grass
GR_051										Sw	2			NSR-LIG-C	Sw	23	
GR_052	Bw	1												SR-D	Bw	113	Herbicide damage
GR_053	Salix	2	Bw	1										SR-DS	Salix	145	
GR_054	At	1								amelaln	1	At	1	SR-D	At	89	Herbicide damage
GR_055	Salix	2	Pl	1										SR-CS	Salix	104	
GR_056	Salix	1	Sw	3										SR-CS	Salix	110	
GR_057	Salix	2	At	2										SR-DS	Salix	85	Herbicide damage
GR_058										Pl	1			NSR-LIG-C	Pl	26	Dead pines
GR_059										RB	1			NSR-LIG-S	RB	13	
GR_060	Sw	1												SR-C	Sw	47	Grass
GR_061														SR-			
GR_061a	Bw	1	Sw	1											Bw	107	Herbicide damage - one birch dead

Plot	Tree & Shrub Stocking												Status Plot Type	Tallest in Plot		Risk factors	
	Acceptable		Acceptable		Acceptable		Acceptable		Under Height		Under Height			Species	Height (cm)	Damage , Disease & Competition	Noxious Weeds
	Species	Number	Species	Number	Species	Number	Species	Number	Species	Number	Species	Number					
GR_061b	Sw	2												Sw	87	Herbicide and UTV damage - willow	
GR_062									RB	10	At	2	NSR-LIG-DS	RB	52	Herbicide damage	
GR_063	Salix	1							Salix	1			SR-S	Salix	82		
GR_064									Sw	2			NSR-LIG-C	Sw	26		
GR_065	Sw	1											SR-C	Sw	31	UTV damage	
GR_066	Sw	1											SR-C	Sw	30	Potential herbicide damage -brown tips; tall grass	
GR_067	At	1	Sw	1									SR-CD	At	83		
GR_068	Salix	7	Pb	1									SR-DS	Salix	230		
GR_069	Pl	1											SR-C	Pl	38		
GR_070	Salix	6	Sw	1					Salix	1			SR-CS	Salix	166	Grass	
GR_071	Sw	2											SR-C	Sw	63	Grass	
GR_072	Sw	2											SR-C	Sw	36	Grass	
GR_073	Bw	2											SR-D	Bw	71	Herbicide damage	CT
GR_074	Sw	3											NSR-LIG-C	Sw	23		toadflax, CT
GR_075	At	1											SR-D	At	77		CT, tansy
GR_076													NSR-				tansy, toadflax
GR_076a																	toadflax, CT
GR_076b	Bw	1												Bw	63		CT, toadflax
GR_077	Bw	2											SR-D	Bw	82		toadflax, tansy, CT
GR_078	Bw	3											SR-D	Bw	110		toadflax, tansy, thistle
GR_079	Sw	2											SR-C	Sw	60		toadflax, thistle
GR_080													SR-				tansy, thistle
GR_080a	Pb	1												Pb	72		tansy, thistle
GR_080b	Pb	1												Pb	118		toadflax, tansy
GR_081	Salix	11	Pb	1									SR-DS	Salix	214		CT
GR_082	Sw	3											SR-C	Sw	56		CT
GR_083	Sw	2											SR-C	Sw	40	Grass	CT, sow thistle
GR_084	Sw	1											SR-C	Sw	34	Grass	CT
GR_085	Sw	1							Sw	2			SR-C	Sw	30		CT, tansy
GR_086	Bw	1											SR-D	Bw	93		CT
GR_087	RW	1							RW	1			SR-S	RW	60		CT, tansy
GR_088									amelaln	6			NSR-LIG-S	amelaln	59		CT
GR_089									Sw	1			NSR-LIG-C	Sw	29		CT
GR_090	Salix	20	At	1									SR-DS	Salix	300		CT
GR_091	Salix	12	Sw	3									SR-CS	Salix	243		CT
GR_092	Salix	8	Pb	4									SR-DS	Salix	214		CT, tansy
GR_093	Salix	18	Pb	2									SR-DS	Pb	203	Grass	CT
GR_094	Sw	3											SR-C	Sw	54	Grass	CT
GR_095	Bw	93											SR-D	Bw	93	Grass	CT, tansy
GR_096									Bw	2			NSR-LIG-D	Bw	23		CT, tansy
GR_097	Sw	1							Salix	1			SR-C	Salix	43		CT, tansy
GR_098	Sw	1											SR-C	Sw	35		CT, tansy
GR_099	Salix	8											SR-S	Salix	171		CT, tansy

Plot	Tree & Shrub Stocking												Status Plot Type	Tallest in Plot		Risk factors	
	Acceptable		Acceptable		Acceptable		Acceptable		Under Height		Under Height			Species	Height (cm)	Damage , Disease & Competition	Noxious Weeds
	Species	Number	Species	Number	Species	Number	Species	Number	Species	Number	Species	Number					
GR_100	Salix	6	Sw	2									SR-CS	Salix	253		CT, tansy
GR_101	Lt	1											SR-C	Lt	114		CT
GR_102	Pb	1	Salix	1									SR-DS	Pb	165		CT
GR_103	Sw	1	Pb	1	Salix	2							SR-CDS	Pb	105		CT
GR_104	Pb	3	Salix	3									SR-DS	Pb	91		CT
GR_105													NSR-				CT, tansy
GR_105a																	CT, tansy
GR_105b																	CT, tansy
GR_106	Lt	1	Salix	2									SR-CS	Lt	117	Grass	
GR_107	Sw	1											SR-C	Sw	34	Grass	tansy,CT
GR_108	Pb	1											SR-D	Pb	128		CT, white cockle
GR_109	Salix	7	Sw	3									SR-CS	Salix	180		tansy
GR_110	Salix	10	Pb	2	Lt	2							SR-CDS	Pb	134		CT
GR_111	Salix	11	Pb	3	Sw	1							SR-CDS	Salix	173		CT
GR_112	Salix	7	Lt	1	At	1							SR-CDS	Salix	176		CT
GR_113	Pb	1	Lt	1	Sw	1							SR-CD	Pb	99		CT
GR_114	Salix	4											SR-S	Salix	191		CT, tansy
GR_115	Sw	1											SR-C	Sw	59		CT, tansy
GR_116	Sw	1											SR-C	Sw	60		tansy, thistle
GR_117	Salix	5											SR-S	Salix	138		CT
GR_118	Salix	3	At	1									SR-DS	Salix	179		CT, tansy
GR_119	Salix	8	Pb	2									SR-DS	Pb	120		tansy
GR_120	Salix	9	Pb	1									SR-DS	Salix	189		CT
GR_121	Salix	7											SR-S	Salix	135		
GR_122	Salix	9											SR-S	Salix	229		CT, cockle
GR_123	Salix	1											SR-S	Salix	145		CT, cockle
GR_124	Salix	3											SR-S	Salix	179		white cockle, CT
GR_125	Salix	3	Sw	2									SR-CS	Salix	157		tansy
GR_126	Salix	3	Sw	2									SR-CS	Salix	93		tansy, CT, cockle
GR_127	Salix	3	Pb	1	Sw	1							SR-CDS	Salix	112		white cockle, thistle
GR_128	Salix	2	Lt	3									SR-CS	Lt	103		
GR_129	Salix	3											SR-S	Salix	130		toadflax, white cockle
GR_130	At	2											SR-D	At	133		white cockle
GR_131	Salix	10	Lt	1									SR-CS	Salix	196		CT
GR_132	Salix	1	Sw	2									SR-CS	Salix	173		CT
GR_133	Sw	1											SR-C	Sw	35		CT
GR_134	Salix	1	Sw	1					Salix	1			SR-CS	Salix	74		CT
GR_135	Salix	4	Sw	2	Pb	1							SR-CDS	Salix	140		tansy
GR_136	Lt	4											SR-C	Lt	112		CT
GR_137	Salix	3	Lt	2									SR-CS	Lt	99	Grass	CT
GR_138	Lt	1											SR-C	Lt	99	Grass	



Golden Ranches Survey Plot Status Fall 2025

Project Partners:



Legend

Project Boundary	SR-CDS
Plot Status	SR-
SR-C	NSR-LIG-C
SR-D	NSR-LIG-D
SR-S	NSR-LIG-S
SR-CD	NSR-LIG-
SR-CS	NSR-
SR-DS	



Date Created: 2026-01-07
Project CRS: ESRI:102178
Source: Google Satellite, ESRI Topo
Created By: Tree Time Services Inc.
Scale: 1:3,000

0 100 200 m

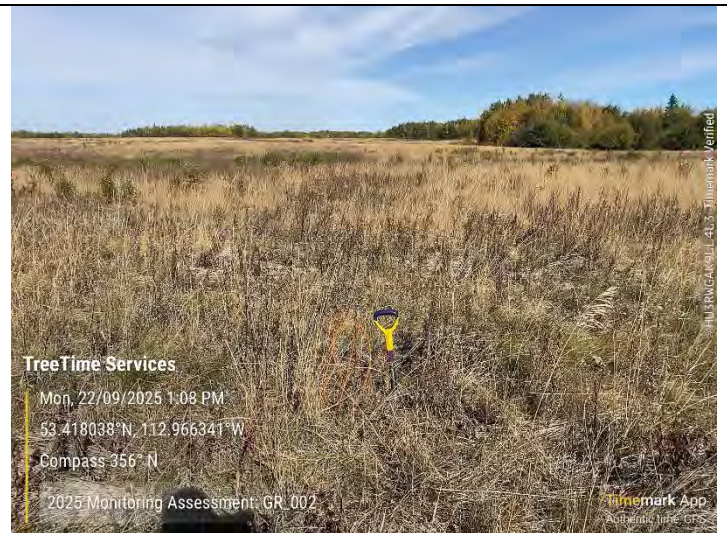
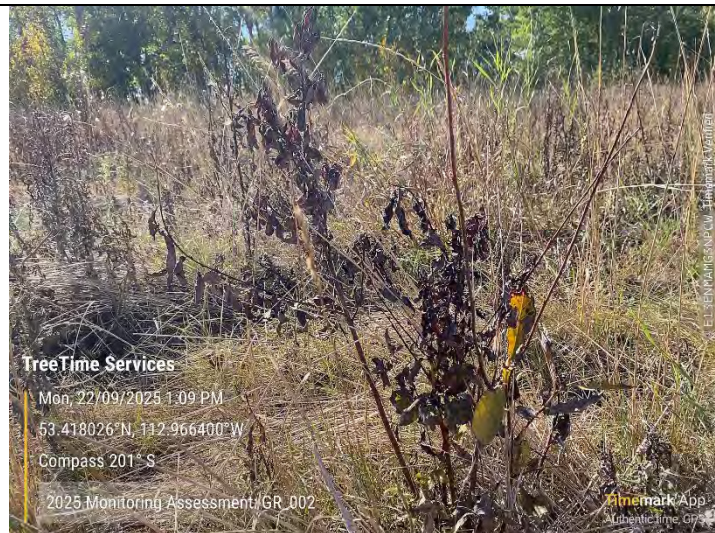


Site Photos

GR_001



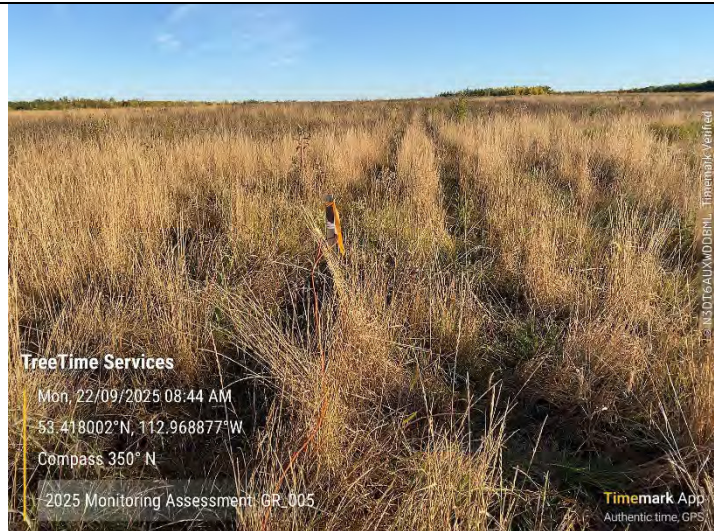
GR_002



GR_003



GR_005



GR_006



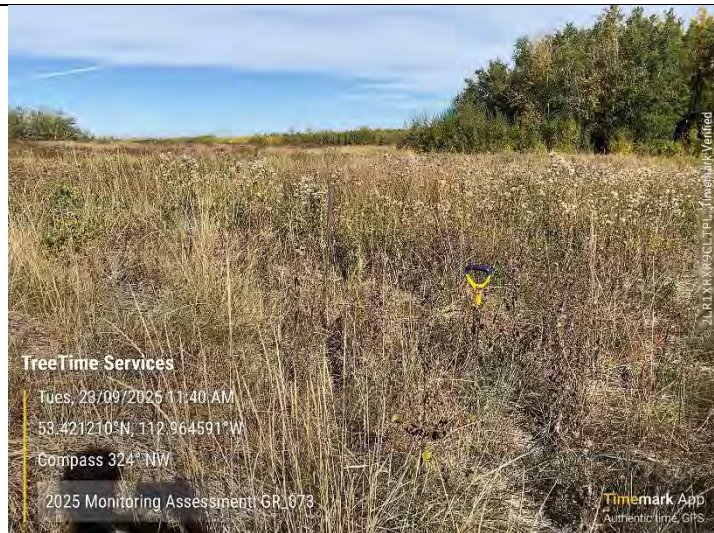
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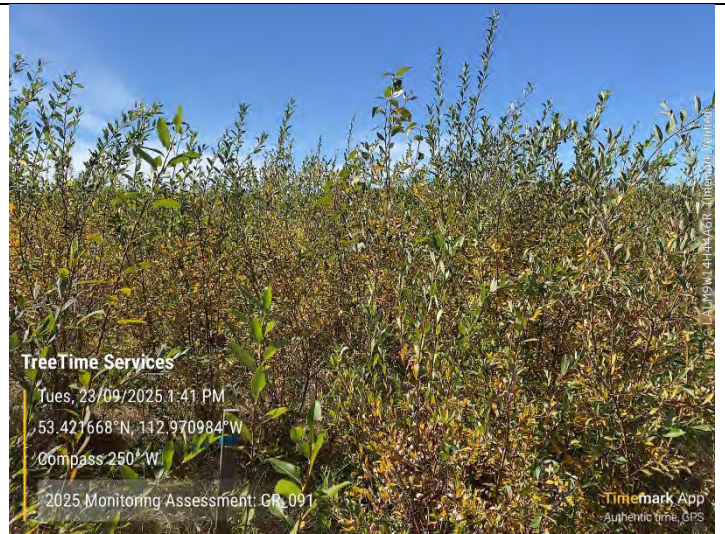
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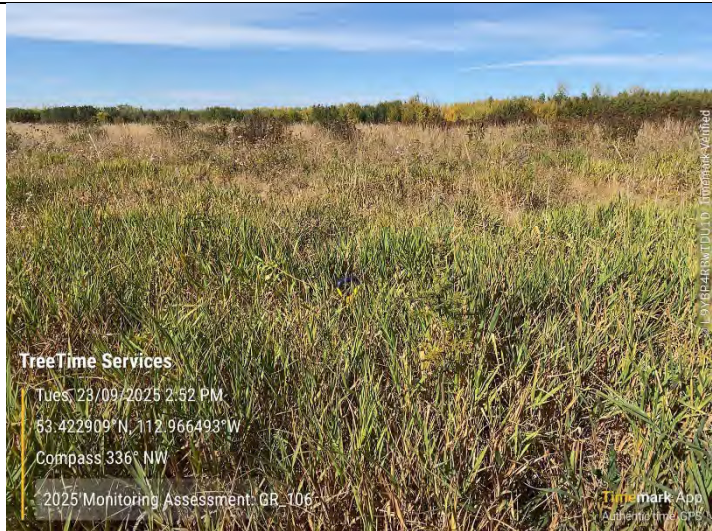
GR_073



GR_091



GR_106



GR_129



GR_132

