



**BCTS**  
BC Timber Sales

# Environmental Stewardship and Sustainability Report

Sustainably Managed  
Forests for the Benefit of all  
British Columbians

April 2021



Ministry of  
Forests, Lands, Natural  
Resource Operations  
and Rural Development



*“BCTS’ Sustainable Forest Management (SFM) certification provides assurances to the public and to customers that our timber originates from legal and well-managed sources.”*

# Introduction

**O**ur commitment to environmental stewardship and sustainability can be seen in the successes and innovations we have achieved in our sustainable forest management.

As a self-financing program within the Ministry of Forests, Lands, Natural Resource Operations and Rural Development (the Ministry), BC Timber Sales (BCTS) sustainably manages the harvesting and reforestation of approximately 20% of the timber available for harvest from British Columbia's timber harvesting land base. "Timber harvesting land base" is public land where environmentally sound timber harvesting is allowed and economically feasible.

BCTS is dedicated to sustainable forest management. Sustainable forest management includes maintaining and enhancing the long-term health of forest ecosystems for the benefit of all living things, while providing environmental, economic, social and cultural opportunities for the present and future. For us, this means maintaining a balance between a healthy environment and generating economic sustainability for communities throughout the province from British Columbia's renewable forest resources.

BCTS operates in 12 business areas across British Columbia and employs more than 650 staff in 33 communities. We respond to ever-evolving situations by incorporating scientific advances to better meet public expectations and changing market circumstances. Our forestry research funding and collaborations address climate change impacts, species at risk considerations and other forest management issues such as cumulative effects. Several of BCTS' notable successes and innovations in Forest Certification, Planning, Forest Health, Biodiversity, Harvesting, Reforestation and Climate Change are highlighted within this report. Should you have any questions or comments, please contact any of our headquarters or business area staff. Contact information is provided on page 19.



## BC Timber Sales

### **Vision:**

To be an effective timber marketer generating wealth through sustainable resource management.

### **Mission:**

Committed to pursuing excellence in all aspects of our business, maintaining effective relations and focusing on results, BCTS generates economic prosperity for all British Columbians through the safe, sustainable and reliable development and auction of public timber, and by playing a pivotal role in the Ministry's reforestation strategies.



*“All our operations are certified to an internationally recognized sustainable forest management standard set out by the Sustainable Forestry Initiative (SFI).”*

# Forest Certification



## BCTS Certification

100% of BCTS timber is certified to a sustainable forest management standard.

**S**ustainable forest management is an overarching principle for BCTS and is fundamental to each and every phase of our operations. Our Environmental Management System (EMS) and our Sustainable Forest Management Plan set out clear roles and responsibilities, and provide detailed procedures and guidance for BCTS employees, licensees and contractors.

Independent third-party verification provides First Nations, the public, stakeholders, customers and our employees with the assurance that BCTS is meeting its responsibilities and expectations for sustainable forest management. BCTS has achieved sustainable forest management certification on 100% of our operations.

In addition to third-party and internal monitoring, both the Ministry's Compliance and Enforcement Branch and the B.C. Forest Practices Board provide oversight to ensure BCTS' planning and forest practices comply with the *Forest and Range Practices Act*, the *Wildfire Act* and the *Forest Act*.

### Successes

- ✓ BCTS maintains a continual improvement program for our environmental and sustainable forest management systems. Where necessary, we create and implement annual improvements to our environmental and sustainable forest management procedures and processes.
- ✓ The B.C. Forest Practices Board audits at least two BCTS business areas a year. These audits routinely find BCTS' planning and practices are in compliance with the *Forest and Range Practices Act* and the *Wildfire Act*.
- ✓ BCTS' harvesting operations are well distributed across the full profile of available timber, relative to species, age, slope and haul distance.
- ✓ BCTS provides training on sustainable forest management requirements and practices to over 200 licensees each year.
- ✓ BCTS employees provide an average of over \$200,000 per year of in-kind support for research projects across the province.

### Innovations

- ✓ As part of the continual improvement program, BCTS is working with FPIInnovations to provide improved guidance resources for our licensees and contractors on topics such as road deactivation.
- ✓ Since 2016, BCTS' Babine Business area (Smithers, Houston and Burns Lake) has been monitoring its biodiversity and stewardship practices consistent with SFI requirements. Summer students conduct the monitoring using approved Ministry protocols, and assessments are performed to determine the effectiveness of riparian area buffers, road screening for wildlife protection and wildlife tree retention areas.

# Planning

**T**he planning of harvest areas begins several years in advance of operations and is an ongoing and interactive process. British Columbia's *Forest and Range Practices Act* and other relevant legislation such as the *Wildfire Act*, the federal *Fisheries Act* and the *Species at Risk Act* are at the core of all our operating plans.

BCTS timber sales managers and program staff are responsible for forest planning and management activities. In addition, contracted resource professionals complete a variety of inventories, surveys and assessments for every BCTS proposed development area. Forest inventories, wildlife habitat assessments, fish stream assessments, terrain stability assessments and cultural heritage surveys are a few examples of the professional inventories, surveys and assessments that are carried out.

Our primary planning documents are our Forest Stewardship Plans. These plans, which are consistent with higher level plans (e.g. land use plans and associated legal orders), are legal documents that identify the areas where road building, forest harvesting and silviculture activities such as planting and brushing may occur. Forest Stewardship Plans describe how BCTS and its timber sale licensees will meet the objectives set by government for managing soil, timber, wildlife, water, fish, biodiversity, visual quality, cultural heritage, recreation, invasive plants and natural range barriers. All our Forest Stewardship Plans, prior to their approval, are subject to consultation with First Nations and to public review and comment.

Guided by an approved Forest Stewardship Plan, local BCTS business area staff identify economically viable harvesting opportunities, while maintaining ecological and environmental values. In addition, best management practice documents and standard operating procedures provide additional guidance to staff and timber sale licensees on how to effectively integrate harvesting and other natural resource values.



*“We regularly assesses our harvesting and silviculture practices across a range of criteria to ensure we meet or exceed stewardship and sustainability requirements.”*



## Successes

- ✓ Working with government, industry, First Nations and stakeholders, BCTS is actively participating and supporting implementation of the Great Bear Rainforest Land Use Order and Ecosystem-Based Management on the Central Coast.
- ✓ BCTS participates in, and is developing, several collaborative landscape planning initiatives throughout the province with both forest licence holders and First Nations. The strategies developed from these initiatives inform us on managing the full range of resource values and are reflected in timber supply reviews.
- ✓ BCTS is a member of the Chief Foresters’ Leadership Team, a group of chief foresters currently operating on B.C.’s public land. The team supports sustainable resource management, while balancing societal, economic, environmental and ecological considerations. Their vision is to “create unified leadership to help shape future forests through management rooted in science to promote healthy, ecologically diverse, resilient forests that will sustain a strong forest sector in B.C.”

## Innovations

- ✓ BCTS first piloted LiDAR (Light Detection and Ranging) technology over 10 years ago and has been rapidly expanding its use across the province. Airborne LiDAR cameras use laser light pulses to take multiple measurements of the tree canopy and the ground beneath the canopy. The data collected is used to produce detailed three-dimensional maps of individual trees and terrain maps accurate within centimetres. This information is invaluable for harvest planning, road planning, mapping streams and watersheds, creating visual simulations and completing wildlife habitat assessments.



*“Our operations are instrumental in creating salvage and reforestation opportunities to address the impacts of wildfire and insect outbreaks.”*

# Forest Health



We promote forest resiliency by ensuring every harvested site is reforested with a range of ecologically suited species.

**F**or the past decade, BCTS operations in the province's Interior have been significantly focused on the salvage and harvest of dead lodgepole pine stands caused by the mountain pine beetle epidemic. As dead stands age, their wood condition and economic viability decreases. BCTS works with the Ministry's Forests for Tomorrow program to facilitate the harvest of these stands.

BCTS' reforestation efforts utilize strategies that increase forest resilience in the face of varying pest and disease impacts that may arise due to a changing climate. The salvage and harvest of affected areas allows for prompt reforestation and accelerated regrowth.

## Successes

- ✓ BCTS is focused on salvaging wildfire and mountain pine beetle impacted areas, in addition to managing new and large-scale spruce and fir bark beetle outbreaks and threats.
- ✓ In order to support adaptation and counteract rust infestations in lodgepole pine throughout the Central Interior, BCTS reforests with a mixture of species and a higher density of seedlings.
- ✓ BCTS promotes climate change education and knowledge to staff by assisting with the organization and delivery of climate change and seed transfer workshops. This includes identifying climate change information and data relevant to our planning and operations, and then incorporating it into our operational guidelines.





*“BCTS creates retention areas to provide habitat or refuge for a variety of species.”*

# Biodiversity



BCTS is exploring alternative harvesting methods to retain trees within cutblocks for the benefit of a variety of values including habitat.

The government of British Columbia protects, conserves and manages the biodiversity of forest ecosystems through a combination of legislation, policy, plans and programs. BCTS' forest management activities work within and complement these directives. Our activities and legal requirements include:

- Planning harvest activities to protect old-growth management areas.
- Establishing ungulate winter ranges to protect large forage or shelter areas for deer, elk, caribou and moose.
- Maintaining fish habitat and stream water quality.
- Leaving wildlife tree retention areas in or adjacent to every cutblock to provide habitat or refuge areas for a variety of species.

## Successes

- ✓ To effectively address multiple values on the land base, BCTS is taking the lead in testing different harvesting systems geared toward increasing stand retention. These alternative harvesting systems can help to mitigate the impact of harvesting activities on wildlife and biodiversity by ensuring the forest remains a suitable habitat for many species.

In some cases, partial harvest can be used to decrease fuel loading and fire hazard, making communities safer. BCTS is also using partial harvest in visually sensitive areas along highways and viewpoints, as well as in areas used for recreation. With a renewed Ministry mandate to expand alternative harvesting systems provincewide, BCTS plays an integral role in the important work needed on policy and implementation strategies.

## Innovations

- ✓ BCTS has restored a large number of marine sites to offset the impacts of marine log dumps. These restored sites include the establishment of eel grass and kelp beds that provide important habitat for fish. We are also examining how eel grass and kelp can assist in sequestering carbon.



*“All harvesting licensed by BCTS is consistent with land use plans, our Forest Stewardship Plans and supports sustainable management of natural resource values.”*



# Harvesting

BCTS' Coastal Legacy Tree policy ensures very large trees with significant aesthetic and ecological value are reserved from harvest.

**S**ustainable timber harvesting is an essential component of BCTS' commitment to environmental stewardship. All our harvesting developments take into consideration the protection of a multitude of resource values unique to each and every site. The harvesting operations of all BCTS licence holders are monitored by our field staff, Ministry Compliance and Enforcement officers, and the Forest Practices Board to ensure the planned protection of those resource values is achieved.

## Successes

- ✓ BCTS performs stand-level field reconnaissance to confirm forest cover types and to identify features that may be of concern or require special management. On average, BCTS' harvested areas on Vancouver Island retain over 11% as wildlife tree retention areas. These areas are identified and mapped to ensure their integrity over time. Wildlife tree retention areas can include special features such as culturally modified trees, animal dens and Legacy Trees.
- ✓ BCTS has voluntarily applied a best management practice (BMP) for the protection of exceptionally large, old-growth trees (aka Legacy Trees) to its coastal operations since 2017. As of February 2021, 200 Legacy Trees have been protected under the BMP.
- ✓ In some second-growth stands, we retain large veteran trees during harvesting. While these trees may not meet the diameter thresholds of Coastal Legacy Trees, they do add old-growth features for third-growth stands.
- ✓ Large cultural cedar refers to cedar required for First Nations cultural use (longhouses, canoes, totem poles). BCTS incorporates the management of large cultural cedar into its Forest Stewardship Plans, and our field staff and contractors collect large cultural cedar data during cutblock development.

## Innovations

- ✓ BCTS' Forest Professional Oversight and Certification initiative authorizes BCTS timber sales managers to require a timber sale licence holder to have a forest professional prepare and submit a certificate confirming all completed road and harvesting activities are consistent with the Forest Stewardship Plan. Forest professional oversight and certification supports the sharing of accountability and achievement of stewardship commitments between BCTS, who plans the forest activities, and the timber sale licence holder, who carries out the timber harvesting activities on the ground.
- ✓ BCTS is developing a broadleaf management strategy for our coastal operations.

# Reforestation



**B**CTS reforests as soon as possible following harvest activities. This ensures the long-term health and productivity of the forest and maintains a consistent level of viable timber.

Provincial laws require every area harvested to be restored using ecologically appropriate tree species. BCTS recognizes this responsibility as a critical factor in forest sustainability. Wherever possible, BCTS uses select seed to produce seedlings that exhibit the best growth characteristics, resistance to disease and responsiveness to a changing climate.

BCTS' Seedling Services staff manage our inventory of seed and the production, distribution and storage of seedlings for the reforestation of public lands. They also provide quality seedlings to restock forest areas lost to fire, pest damage and other natural disasters.

In addition to growing seedlings for reforestation activities, we work collaboratively with other government reforestation and restoration programs such as the Ministry's Forests for Tomorrow Program and the Forest Carbon Initiative.

Each year, BCTS spends over \$40 million on silviculture activities and grows and plants more than 55 million of our own seedlings. Reforestation doesn't end with planting. Our staff revisit reforested areas to ensure the trees are healthy and growing well. On many sites, brushing is required to remove shrubs and other vegetation that can compete with young trees. Our reforestation obligations end only after a stand has been surveyed by a qualified forestry professional and the trees declared healthy and free of competition from surrounding plants, shrubs or trees. This requirement ensures healthy, sustainable forests for the future.



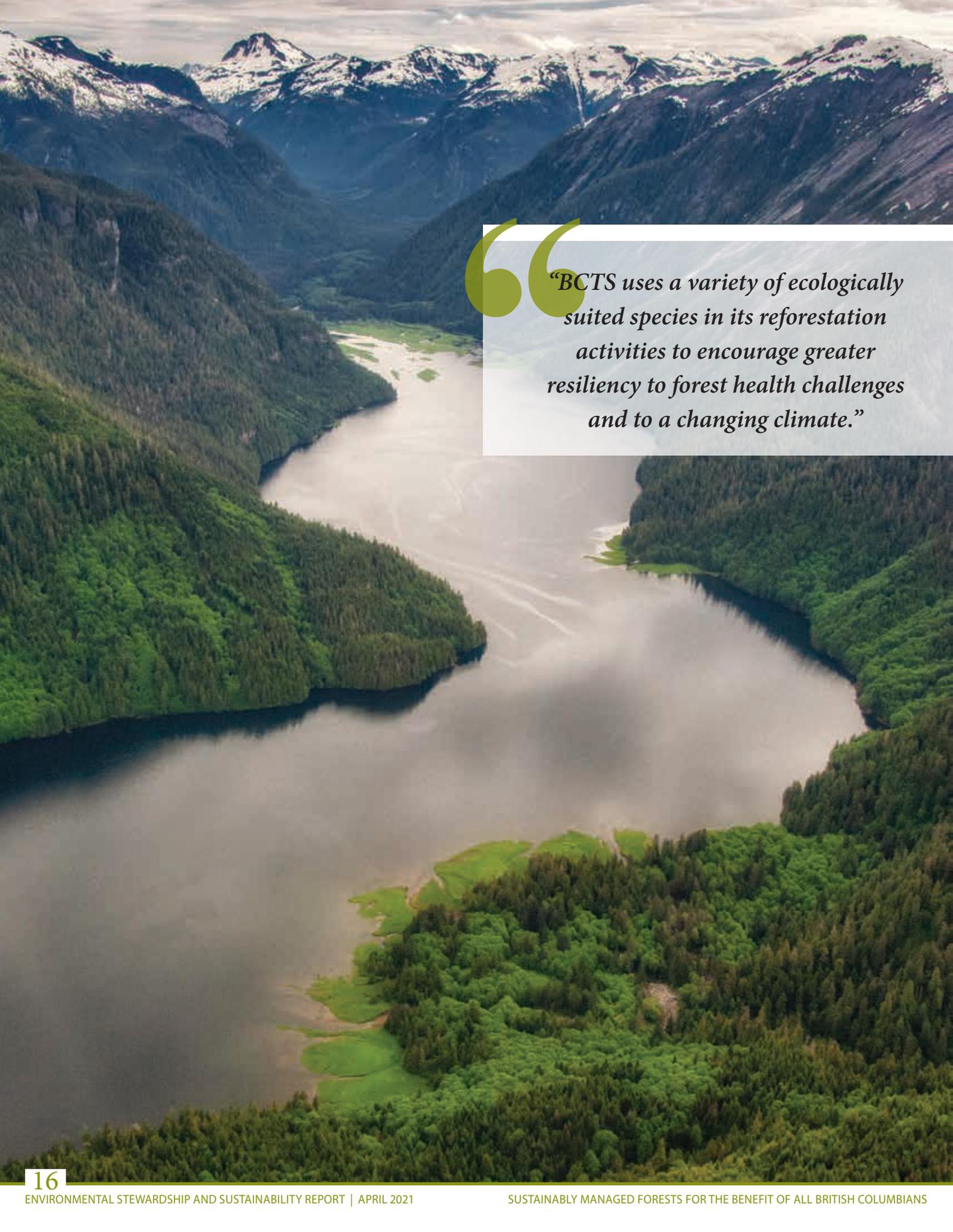
*“BCTS’ Seedling Services group manages the growth and delivery of more than 100 million seedlings annually for the reforestation of areas harvested under BCTS and for other government programs such as Forests for Tomorrow and the Forest Carbon Initiative.”*

## Successes

- ✓ To support ongoing reforestation efforts, BCTS purchases more than 400 kg of select seed, previously known as “A” class seed, per year. Select seed can increase forest productivity, mitigate potential reductions in allowable annual cuts and alleviate short-term timber supply shortages. We continue to acquire select orchard seed with high genetic worth to meet the chief forester’s standards for seed use and the Forest Genetic Council’s objective of using 75% select orchard seed by 2020.
- ✓ Greater than 80% of BCTS’ seedling requests have adopted the Ministry’s new climate-based seed transfer guidelines.
- ✓ On average, we reforest harvested areas within 1.8 years; far sooner than the typical three- and four-year legal requirements.

## Innovations

- ✓ BCTS Seedling Services staff implemented a software solution that moves their paper audit forms to a digital platform, improving data integrity and efficiency. This year, several nurseries used the digital platform with great success, and more will adopt the process in the near future.



*“BCTS uses a variety of ecologically suited species in its reforestation activities to encourage greater resiliency to forest health challenges and to a changing climate.”*

# Climate Change



**S**ustainable forest management includes taking action to contribute to the sustainability of the timber supply and health of forest ecosystems. We know changes in climate have an impact on our operations and the achievement of our obligations. As a forest manager for the Province, we must take proactive action on climate change.

BCTS' Climate Change Action Plan includes actions applicable to all of our operations including road construction, maintenance and deactivation, as well as harvesting and reforestation. We are focused on adapting our reforestation strategies to choose species and planting densities that account for changes in temperature and precipitation levels. The potential for increased wildfire activity due to climate change has led us to improve our monitoring of fire hazard management and to conduct fuel reduction treatments around communities at risk.

BCTS is a leader in climate change reforestation strategies such as increasing lodgepole pine seedling densities during replanting to ensure the stand is more resilient to a changing climate.

## Successes

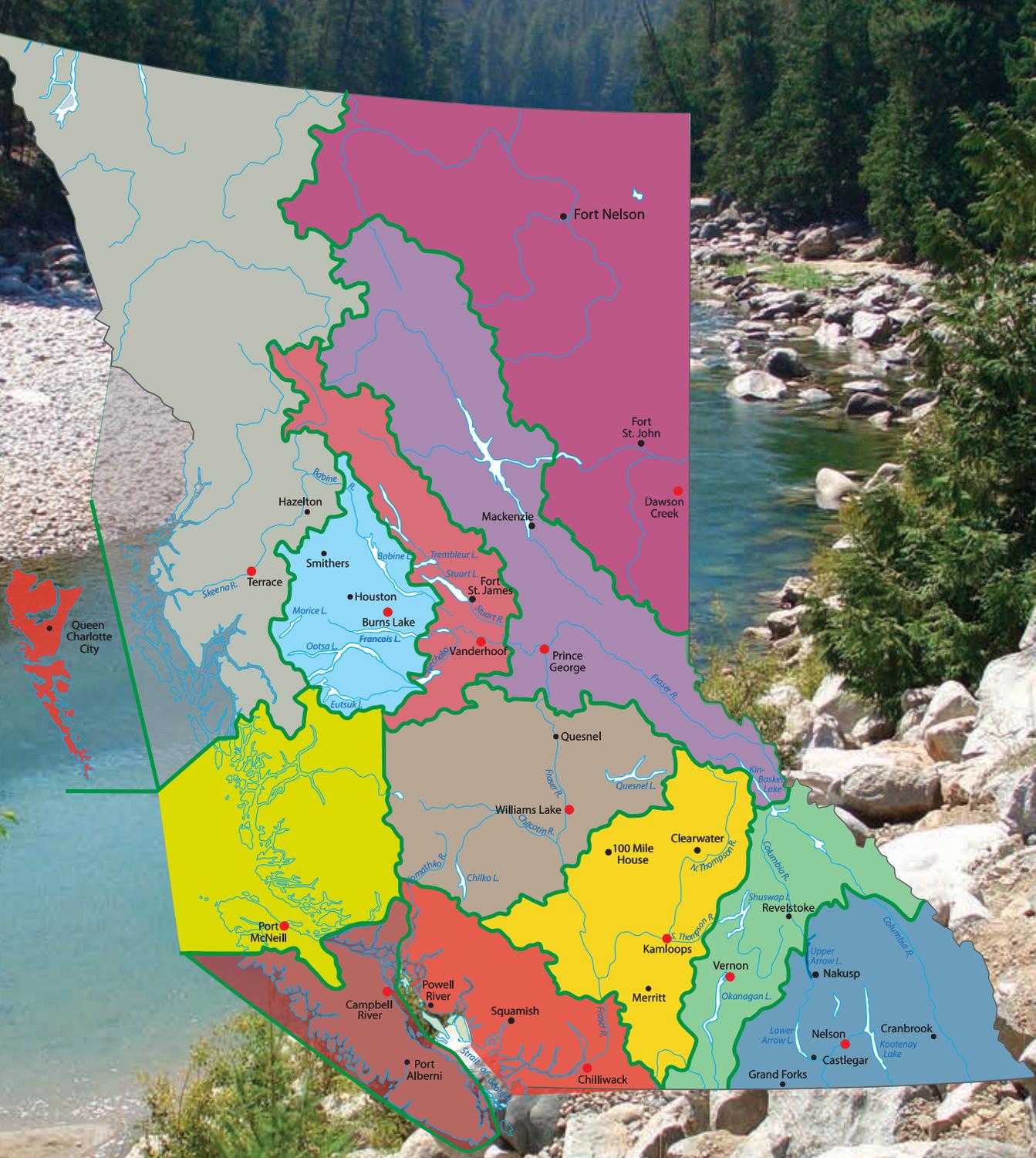
- ✓ Over 80% of BCTS' seedling requests utilize climate-based seed transfer, ensuring our reforestation efforts are better adapted to climate change.
- ✓ BCTS' Climate Change Action Plan has been implemented in all of its 12 business areas.

## Innovations

- ✓ Each year, across the province, BCTS conducts a number of projects to improve fish passage and stream ecosystem restoration to mitigate the impacts of increased stream flow due to climate change.



# BC Timber Sales' Business Areas



- BCTS Boundaries
- BCTS Business Area Office
- BCTS Field Team



Contact us by email or phone at our headquarters office in Victoria or any of our 12 business area timber sales offices across the province.

### BC Timber Sales Headquarters

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