



Village of Fraser Lake Tree Plan

PURPOSE

Council has directed staff through their updated strategic plan to pursue Beautification, Sustainability & Livability, and Infrastructure as core pillars of the Village's future. One way to implement these goals is the appropriate planning and management of trees within the Village on municipal, other public, and private properties.

There is a grant available through the Federation of Canadian Municipalities that covers 50% of costs, and the rest can be covered with the Local Government Climate Action Program (LGCAP) reserve or through other potential Village funds. This grant requires a Tree Bylaw in place, as well as planting and maintenance plans to be in place or in development.

BACKGROUND

There are numerous benefits to well-managed and planned trees:

- **Infrastructure**
 - Prolong the life of pavement and buildings by shading and reducing surface temperature fluctuations and pavement expansion from the sun
 - Control dust, erosion, and sedimentation
 - Reduce stormwater management costs by intercepting and absorbing rainfall
 - Moderate the effects of wind and buffer damage from windstorms
- **Community**
 - Promote community spirit and civic pride
 - Encourage more people to visit
- **Economic and environmental**
 - Reduce energy bills for summer cooling and winter heating
 - Reduce noise
 - Absorb pollutants
 - Support biodiversity by providing food and shelter for wildlife
 - FireSmart planning and planting to prevent the spread of fires
- **Health benefits**
 - Improve air and water quality
 - Reduce stress
 - Support sustainable transportation options by making them safer and more enjoyable
 - Limit the creation of heat islands during heat waves
 - Provide shaded outdoor areas for public use

The overarching principles of the Tree Plan are as follows:



1. Beautification

The Village should be aesthetically pleasing to both residents and visitors

The Village should look cared for and planned to indicate a sophisticated and thoughtful local government, welcoming businesses, and residents who take pride in their community.

2. Health and Safety

Trees should be planted and managed according to FireSmart principles on **all** properties to prevent the spread of a local fire or wildfire, as the case may be.

Trees should be planted and managed to reduce and mitigate the impacts of climate change on people.

Trees and roots should be planted and managed to prevent any injury to people.

Trees should be planted to provide adequate protection from the elements, including the sun, wind, and rain.

3. Environmental Management and Planning

Invasive species should be removed, except where they act as major landmarks or gifts from other jurisdictions and can be properly isolated and maintained.

Assisted migration should be planned so that any trees planted now survive into the future.

Trees should be planted to prevent the spread of pests and diseases.

Trees should be planted and managed in ways that prevent damage to waterways or the erosion of slopes.

Trees should be planned to encourage urban biodiversity without exacerbating human-wildlife conflicts.

4. Infrastructure Protection and Maintenance

Trees should be planted and managed in ways that reduce potential damage to and reduce the cost of maintaining and operating buildings and infrastructure on both public and private lands.

5. Accountability

The Village and its residents should be accountable for their actions regarding the planting, removal, maintenance, and replanting of trees in accordance with these principles.

6. Finance



REPORT TO COUNCIL

Sophisticated planning for tree planting, maintenance, removal, and replanting should limit costs to the Village and create further opportunities for accessing grant funding available from other levels of government.

DISCUSSION & COMMENTS

The Tree Plan will require several steps and ongoing maintenance and management. Phases include:

1. Tree Bylaw

A Tree Bylaw will be written by staff and implemented by Council to ensure proper management and accountability on the part of the Village, residents, and businesses, as well as educate the community on effective tree and other vegetation management. The Tree Bylaw will follow, as effectively as possible, the principles laid out earlier in this report.

Other bylaws may need to be updated, amended, and/or created for the Tree Bylaw to take full effect.

2. Tree Planting Program

Staff will apply for a grant to finance the cost of implementing this plan. A planting program will follow the recommendations in the study to the extent that grant funding permits or other funding is allocated. These will be primarily focused on Village property but may extend to other properties if warranted.

Staff recommend covering the remainder of the cost not covered by BC Hydro Regreening and Tree Canada Treemendous Communities grant, should the Village be successful in its grant application, through the LGCAP reserve.

3. Tree Management Plan

Staff will create a Tree Management Plan that is fully costed to ensure the proper maintenance and survival of any work done through the Tree Planting Program. Some maintenance funding is available through the same grant program as the planting, but it lasts for a maximum of two years.

Finances

The grants available through BC Hydro Regreening and Tree Canada Treemendous Communities cover up to \$20,000 of the costs of tree planting. The budget is:

Trees	60 trees and 40 shrubs	\$21,000
Planting/Maintenance Year 1	Student worker at \$20.00/hour	\$25,000
Equipment	Tools, fuel, watering bags, etc.	\$8,000
Maintenance Year 2	Student worker at \$20.00/hour	\$25,000



REPORT TO COUNCIL

Maintenance Year 3	Student worker at \$20.00/hour	\$25,000*
TOTAL		\$104,000

2024 – 2027 STRATEGIC PLAN

This plan addresses three of the four pillars of the 2024 Strategic Plan – Beautification, Sustainability & Livability, and Infrastructure.



2024

VILLAGE OF FRASER LAKE TREE PLANTING PLAN



Mayor & Council
Village of Fraser Lake
11/15/2024

Planting zones

White Swan Park



Goals

- Beautification
- Tree cover near buildings and structures to provide shade in summer
- Tree cover near road and parking to provide shade

Mitigation requirements

- Prevent damage to buildings and paved surfaces from branches and roots
- Prevent damage to existing irrigation systems
- Maintain open spaces for lake views and stage
- Maintain spacing to prevent wildfire spread

Quantity and Species

- 4 Bur oak (*Quercus macrocarpa*)
- 4 Brandon elm (*Ulmus americana*)
- 4 Hawthorn (*Crataegus x mordenensis*)
- 4 Flowering crabapple (*Malus Baccata*)

Spacing

Oak and elm 3 m from buildings, structures and playground

Hawthorns and crabapples in open areas for colour and shade

Municipal Office

Goals

- Beautification
- Shade

Mitigation Requirements

- Prevent damage to buildings and surfaces from branches and roots

Quantity and Species

- 1 Bur Oak
- 1 Brandon Elm
- 1 Hawthorn
- 1 Flowering Crabapple

Spacing

- Hawthorn and Crabapple

Highway 16 Western Entrance

Goals

- Beautification
- Colour throughout seasons

Mitigation Requirements

- Maintain space from power lines
- Maintain views of signage
- Prevent wildfire spread to adjacent forest

Quantity and Species

- 12 Flowering crabapple (*Malus Baccata*)
- 12 Purple lilac (*Syringa Vulgaris*)
- 12 Red maple (*Aver x freemanii*)

Spacing

Evenly spaced, alternating between three species every 15 meters



Highway 16 Carrier Cres. – Chowsunket St.

Goals

- Beautification
- Tree cover near buildings structures, and path to provide shade
- Tree cover to minimize highway noise

Mitigation requirements

- Maintain distance from power lines & highway
- Maintain open spaces for views of signage

Quantity and Species

- 20 Columnar Swedish Aspen (*Populus tremula erecta*)
- 20 Tower Poplar (*Populus x canadensis*)

Spacing

Alternating species every 25 meters



Budget

Species	Caliper	Cost/unit	Number	Total
Bur Oak	#10	200	5	\$1,000
Brandon Elm	#10	200	5	1,000
Hawthorn	#10	200	5	1,000
Flowering Crabapple	#10	200	13	2,600
Spruce	#10	200	15	3,000
Purple Lilac	#5	100	8	800
Red Maple	#10	200	8	1,600
Swedish Aspen	#10	200	20	4,000
Tower Poplar	#10	200	20	4,000
			SUBTOTAL	\$19,000
			PST	1,330
			TOTAL	\$20,330