

THE CO-OPERATIVE APPROACH

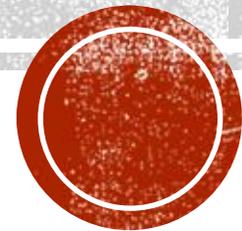
WEKWEETI FIRESMART PROGRAM FALL 2025

Year One – Wekweeti Cultural Camp and Airport

Arctic Bioenergy Summit – January 28, 2026

Presenter: Reg Renner – Renner Consulting Ltd

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THE COOPERATIVE APPROACH

- No one person or community has all the answers, therefore a cooperative approach is essential for learning quickly
- Wekweeti Chief and Council and leadership team have been key supporters and facilitators of the first-year program
- Working with Tlicho Government to expand FireSmart knowledge and lower project risk by working together and sharing information and challenges
- An example is sharing experiences and networking in a conference setting such as the Arctic Bioenergy Summit.
- Currently working with silviculturists, resource experts, FireSmart program directors, SAO's, funders, equipment suppliers, biomass operators, tree planters, and research scientists.
- The proposed Fall 2026 demo project for Behchoko will demonstrate potential harvesting, forwarding, and chipping equipment, suitable for northern, remote forests
- Wood chips created will be then tested in Tlicho owned biomass boilers for Winter 2026 heating season.



BENEFITS OF THE FIRESMART PROGRAM



- Lower wildfire risk in community
- Healthy forests with less competition
- Ability to protect critical infrastructure
- Provide additional two months of employment in Year One of announced Three-year program
- Additional convenient source for sawlogs + firewood
- Opportunity to gain biomass harvesting experience while being funded to complete critical FireSmart process
- Reduces risk regarding the economic benefits of the proposed wood chip District Heating Network
- Creates a path towards energy sovereignty and reduced reliance on fossil fuels for thermal heating.



WEKWEETI YEAR ONE FIRESMART AREA

UNITS 1-5
65 HECTARES
NOVEMBER 2025
CULTURAL CAMP





FALL 2025 FIRESMART PROCESSES

- Trained six Wekweeti residents to complete the first year of the FireSmart program, focused on the Cultural Camp and Airport
- Used Leave Tree Selection Guide, resulting in 400 mature conifer trees per hectare or 1 mature conifer tree / 5 x 5-meter square.
- Pile all forest floor fuels, smaller trees and branches over 1 m in length in piles for eventual transport to roadside for chipping into truck
- Minimize hand dragging of biomass material by creating multiple piles
- Collect labor, area, and volume data for further analysis
- Hand piled material will air-dry over summer and then chipped for Fall 2026 heating fuel
- Completed over 65 hectares in one month





LEAVE TREE SELECTION GUIDELINES

- Leave only one mature, healthy coniferous tree per 25-meter square area. (5 m by 5 m)
- Mature conifers are considered 3 meters or taller
- Healthy conifers are single stem, no disease, undamaged bark, with single vigorous top.
- Remove all remaining trees except for four other healthy trees.
- Those four trees can be either immature spruce or mature/immature deciduous trees. Maintain at least 2 m spacing between all five remaining trees in 5 m square plot





LESSONS LEARNED

- There is more biomass suitable for heating wood chips than anticipated
- The project is creating sawlogs, firewood, and wood chip fuel material
- Crew learned quickly, embracing the process, and the overarching goal of a healthy, managed forest
- We are using Avenza mapping software to measure area treated, trees remaining, and biomass volumes recovered
- Now have actual data pertaining to manhours, timelines, volumes obtained, costs/hectare, and cost per Air Dried Tonne (20%MC)
- Additional equipment is required to streamline the FireSmart process and create economical sawlogs, firewood, and wood chip fuels
- Working to implement a demonstration project in Behchoko area using mechanical equipment



THE COOPERATIVE APPROACH

- Fred Behrens
- Paul Football
- Travis Washie
- Sonny Simpson
- Chief Adele Football
- Nathaniel Tom
- Trent Rabesca
- Bruce Blackwell
- Jeff Fisher
- Monica Nederland
- Push Seth
- Stephanie Behrens
- Alex Packman
- Ken Miller
- David Dubois
- Mac Anderson
- Francis LeClerc
- Anthony Pelletier
- Burkhard Fink
- Mike Westwick
- Tlicho Development Corp
- Stephane Audet
- Anil Arora
- FCM-Green Municipal Fund
- Grand Chief Jackson Lafferty
- Darcy Pederson
- Sherry Renner
- Michelle Leger
- Bruce Elliott
- Vince Barr
- Mathieu Leblanc
- Dominik Roeser
- Chris Henderson
- Crawford Young
- Paul Cressman
- Sheena Adams
- Jamie Stephens

