Bonanza Creek

Timber Harvest Plan

within the

Dawson Planning Area

FOREST MANAGEMENT BRANCH

ENERGY MINES AND RESOURCES

YUKON GOVERNMENT

Prepared: March 2012

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Director, Forest Management Branch

Date

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Date

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Executive Summary

The objective of the Bonanza Creek Timber Harvest Plan (THP) is to provide Dawson City and the surrounding area with a sustainable supply of economical fuel wood in an integrated and balanced approach to forest management. Under the new *Forest Resources Act*, all commercial harvesting must be conducted under an approved THP. Bonanza Creek has been a traditional harvest area for Dawson's fuel wood. This THP proposes to continue harvesting within the 241 hectares (ha) for a maximum volume of 15,000 m^3. This THP is consistent with both the draft Dawson Forest Resources Management Plan[1] (October, 2009) and direction provided in the *Forest Resource Regulation* of the *Forest Resources Act*.

Photo courtesy EDI.

[1] The Draft Dawson FRMP was released in the summer of 2010 and is subject to final review and approval.

1.0 Introduction

1.1 Background

The Bonanza Creek THP is located 14.6 km south of Dawson along the Bonanza Road, and is located in the Tr'ondëk Hwëch'in Traditional Territory. The area is composed of stands consisting primarily of birch with minor components of black and white spruce present. The estimated volume of birch in this area is 53m³/ha.

1.2 Eco-region and Drainages

This THP area lies within the Upper Yukon watershed. Characteristic terrain features include smooth, un-glaciated, rolling plateau topography with moderate to deeply incised valleys and large structural basins composed of level to undulating glaciated terrain. These stands are on the slopes of ridge features in the Bonanza Creek drainage with grades ranging from 5 to 30%. The forest stands targeted for harvest are made up primarily of birch.

This area falls within the boreal highlands bioclimate zone. Black and white spruce are the dominant trees and equally abundant within the area. Birch is also common, while aspen is infrequent. The zone is characterized by shrubby vegetation on warm south and west aspects while cool north and east aspects are often tree dominated. Riparian and wetlands areas are uncommon covering 2 and 4% respectively of the zone.

1.3 Socio-economic Values

Dawson City is home to approximately 1,300 people. The major economic drivers in the region are tourism and gold mining. The current annual fiber demand in Dawson is approximately 3500m³ for sawlog and 1500m³ for fuel wood. The industry consists primarily of one sawmill and numerous fuel wood operators. The forests in the Dawson region provide significant ecological and aesthetic values, cultural and heritage values, recreational values, and other non-timber values. Dawson's forests can sustain a vibrant, small-scale forest industry that provides timber for local markets, energy, economic opportunity, and employment for the region's residents (Draft SFMP 2009). Many of the residents of Dawson rely on commercial fuel wood harvesting as an economical heating alternative throughout the winter. Milling of green spruce for local lumber use has been an ongoing small scale activity since the gold rush.

2.0 Planning Area Identification

The total area identified is 241 ha with a maximum harvest volume of 13,212 m³.

TABLE 1: Area and Volume Summary

Blocks	Estimated Volume/ Hectare (m^3/ha)	Slope (%)	Aspect	Block Size (ha)	Total Gross Volume (m^3)	*Species Composition (%)	Average Stem Height (m)
BC-3	45.7	15	East	81.8	3,739	$Wb_{50}Sb_{30}At_{20}$	11.3
BC-4A	65.3	29	West	77.5	5,061	$Wb_{70}Sw_{20}At_{10}$	15.1
BC-4B	53.8	30	South West	82	4,412	$Wb_{60}Sb_{20}Sw_{20}$	13.6
				241	13,212		

***Note: Wb= white birch**
Sb= black spruce
Sw= white spruce
At= trembling aspen

2.1 Wildlife

All site plans and operational development must be consistent with current wildlife standards available from Forest Management Branch (FMB). These standards have been developed to ensure well thought-out and balanced planning occurs with respect to wildlife and forest resources. Throughout the preliminary reconnaissance and consultation, no significant wildlife concerns were noted. This area does not conflict with any fish or wildlife management plans.

2.2 Riparian and Water Resources

Forest Resources Regulation and riparian management standards and guidelines are in place to manage and mitigate effects to streams and water resources. The closest stream is Bonanza Creek which is approximately 200 m away from the nearest operating unit.

2.3 Visual Impacts

Visual impacts of this harvesting will be limited. Although much of this area is located on slopes, there are many shrubs and immature trees which will soften the visual effects of harvesting. 25% retention will be targeted where practical which will further reduce visual impacts. Harvest Blocks within the Operating Units will be irregular in design, mimicking the natural landscape and lines of force.

Unit BC-4A is located approximately one km from Bonanza Creek road and above the well-known National Historic Site of dredge #4. The boundary of BC-4A has been located away from the steeper slopes adjacent to and visible from the Bonanza Creek road and the dredge. BC-4A is also located at one kilometer from the Dredge.

2.4 Heritage and Archaeological Sites

No conflicts have been identified in the southern most harvest blocks near Grand Forks on Upper Bonanza Creek including BC-3, BC-4A and BC-4B, nor has use of the ridge road hiking trail is been contemplated for any logging use. If other existing access is not present, new access will be constructed as needed. It has been recommended that wood cutting be limited to areas more than 50 m from the Ridge Road to maintain esthetic quality. BC-3 is the closest harvest block to Ridge Road, which is >500m away. Known heritage sites are located outside of the harvest areas, and therefor are not expected to be impacted.

2.5 Soils Conservation

All harvesting operations must follow current FMB soil conservation standards. These standards will ensure that the soil productivity and hydrologic function of soils is maintained across all sites. Harvesting will only be permitted during dry summer or winter conditions to mitigate any risks to soil. Utilizing existing access in the area will help minimize any soil compaction in the harvest areas. Operations will be closely monitored to ensure that they are within the soil conservations standards set by the FMB.

2.6 Traditional Land Users

The Bonanza Creek THP area is known for traditional hunting and berry picking, and there is on-site evidence that birch bark, and conks are being harvested. Registered trapping concession 53 also lies within the Bonanza Creek THP area. These activities have been taken into account through the planning process and are considered compatible with the intend of this THP.

3.0 Harvesting Section

3.1 Harvesting

Twenty five percent in-block retention will be achieved where practical. Retention requirements for each block consisting of mature trees and snags will be established in the Site Plan.

Retention priority will be put on all large dead white birch with conks, providing available conks and bark for local First Nation use. The retention will also provide structure now and provide coarse woody debris in the future. Retained mature live birch will provide a long term seed source. Harvesting operations shall minimize unnecessary damage to any regeneration. Harvesting the majority of the mature stems is necessary to increase the economic viability of the harvesting and decrease the number of areas needed to be accessed.

Harvesting methods will include both hand and mechanical falling. Harvesting activities are eligible to begin in dry weather conditions and last until break up in the spring of the following year. Harvesting is expected to continue in the area within the seasonal restrictions for approximately 3 years or until the harvesting of the projected volume is completed.

The volume limit for the area is set based on expected demand for that area and is not necessarily an environmental threshold. It may be appropriate to reassess the area to determine if harvesting opportunities still exist within the same area.

3.2 Reforestation

Natural regeneration with preference to birch is the preferred option with artificial regeneration being used to supplement natural regeneration when necessary. Birch coppices and seeds well, and is expected to regenerate these areas naturally. The in-block retention of some mature birch will act as seed trees.

The schedule for a post-harvest establishment survey will be outlined as part of the site plan for each harvest block. The results of this survey, and the Forest Resources Regulation, silviculture standards and guidelines, and the site plan will guide decision-making with respect to regenerating these harvest blocks.

3.3 Site Plans

Site plans will be prepared and approved by the Director prior to issuing a cutting permit and will address the following details; stand management objectives, ecology and site conditions, stand conditions, harvesting method, riparian management soil conservation, forest protection measures, access management and a reforestation plan.

4.0 Access Management Considerations

The primary objective of access management for the area is to minimize the creation of long-term access. New roads will need to be constructed to fully access these blocks and to ensure safe grades for hauling. Any new permanent road development will require a Yukon Environmental and Socio-economic Assessment. In line with the current operations in the area small skid trails will be used to access the timber. Harvesting will occur in dry weather and winter only. Gating may be considered on new road construction.

Mainline access. Photo courtesy EDI.

Photo courtesy EDI.

5.0 References

Dawson Forest Management Planning Team. “Dawson Forest Resources Draft Management Plan.” October, 2009.

Silvatech Group (2008). Bioclimate, Ecodistrict and Ecologically Significant Features Mapping for the Dawson Planning Region, Yukon. Produced for Environment Yukon, Government of Yukon.

6.0 Appendices

Appendix 1: Bonanza Creek Fuelwood Area Map

Appendix 2: Representations

Appendix 1:

Map of Bonanza Creek Fuelwood Timber Harvest Plan

Bonanza Creek
Timber Harvest Plan Area
Dawson

For more timber harvest information
Web: www.emr.gov.yk.ca/forestry
Phone: 1.867.456.3999

Date: March 19, 2012

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1:20,000

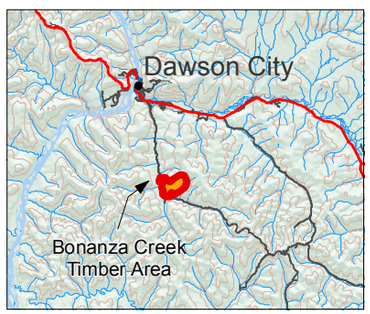
Yukon Albers
NAD 83

Forestry spatial data managed and maintained by the Forest Management Branch, Yukon Government. All other spatial data provided by Geomatics Yukon.

- Permanent Sample Plot
- Existing Access
- Proposed Access
- Operating Units
- THP Area

- Agricultural Land Dispositions
- Land Dispositions
- Land Licenses
- Notations
- Surveyed Easements
- Surveyed Land Parcels

- A: Surface & Subsurface Rights
- B: Surface Rights
- FS: Fee Simple
- Unsurveyed Interim Protected



Yukon
Energy, Mines and Resources
Forest Management Branch

TH R-20A

115O14-010

BC-3

BC-4A

BC-4B

Bonanza Road

115O14-003

Appendix 2: Representations