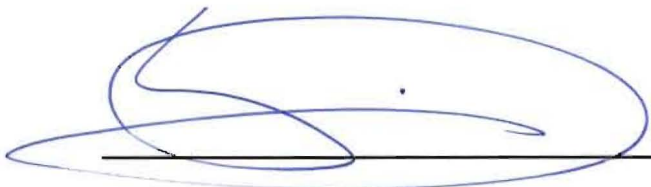


Bonanza Creek Timber Harvest Plan

***within the
Dawson Planning Area***

**FOREST MANAGEMENT BRANCH
ENERGY MINES AND RESOURCES
YUKON GOVERNMENT**

Prepared: December 2012



Approved by

Lyle Dinn

Director, Forest Management Branch

Feb 12, 2013

Date



Submitted by: Mark Pedersen

Prepared by: Neal Allison

Area Forester, Forest Management Branch

Feb 12/2013

Date

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Executive Summary

The objective of the Bonanza Creek Timber Harvest Plan (THP) is to provide Dawson Annual Allowable cut region with a sustainable supply of economical timber 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 timber supply. This THP proposes to continue harvesting within the 241 hectares (ha). This THP is consistent with both the Recommended Dawson Forest Resources Management Plan¹ and direction provided in the *Forest Resource Regulation* of the *Forest Resources Act*.



Photo courtesy EDI.

¹ The Recommended Dawson FRMP was released in the summer of 2012 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 5000m³. The industry consists primarily of one sawmill and numerous smaller scale harvesting 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 (Recommended Dawson FRMP, 2012). Many of the residents of Dawson rely on this commercial timber resource 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 approved wildlife standards available from Forest Management Branch (FMB). These standards were 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. In order to help monitor wildlife health, Tr'ondëk Hwëch'in asks that any unique animal sightings be reported to the Tr'ondëk Hwëch'in Fish and Wildlife Department.

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. The Ridge road hiking trail shall not be used for any logging activities. 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 therefore are not expected to be impacted. Tr'ondëk Hwëch'in requests that any heritage resources located be reported to the Tr'ondëk Hwëch'in Heritage Department.

2.5 Soils Conservation

All harvesting operations must follow approved FMB soil standards. These standards will ensure that the soil productivity and hydrologic function of soils is maintained across all sites. Harvesting activities will be determined in the site plan using the soil standards to assign allowable percent soil disturbance and associated hazards. Utilizing existing access in the area will help minimize any soil compaction in the harvest areas.

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. The Tr'ondëk Hwëch'in have the right to harvest as set out in Chapter 17 of their Final Agreement. Registered trapping concession 53 also lies within the Bonanza Creek THP area. These activities have been taken into account through the planning process (see section 3.1 below for details) and are considered compatible with the intent of this THP.

3.0 Harvesting Section

3.1 Harvesting

Twenty five percent in-block basal area retention will be targeted 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.

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

All proposed harvesting will require site plans approved by FMB, 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. These site plans are signed by the licence.

4.0 Access Management Considerations

The objective 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. 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 THP Area Map

Appendix 2: Representations

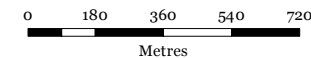
Appendix 1:

Map of Bonanza Creek 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



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

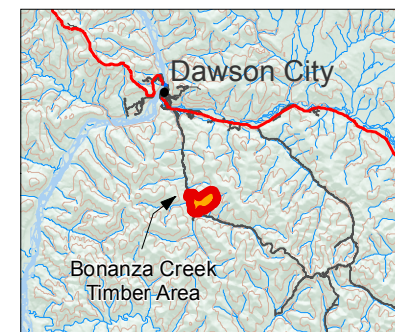
▭ Surveyed Land Parcels

▨ A: Surface & Subsurface Rights

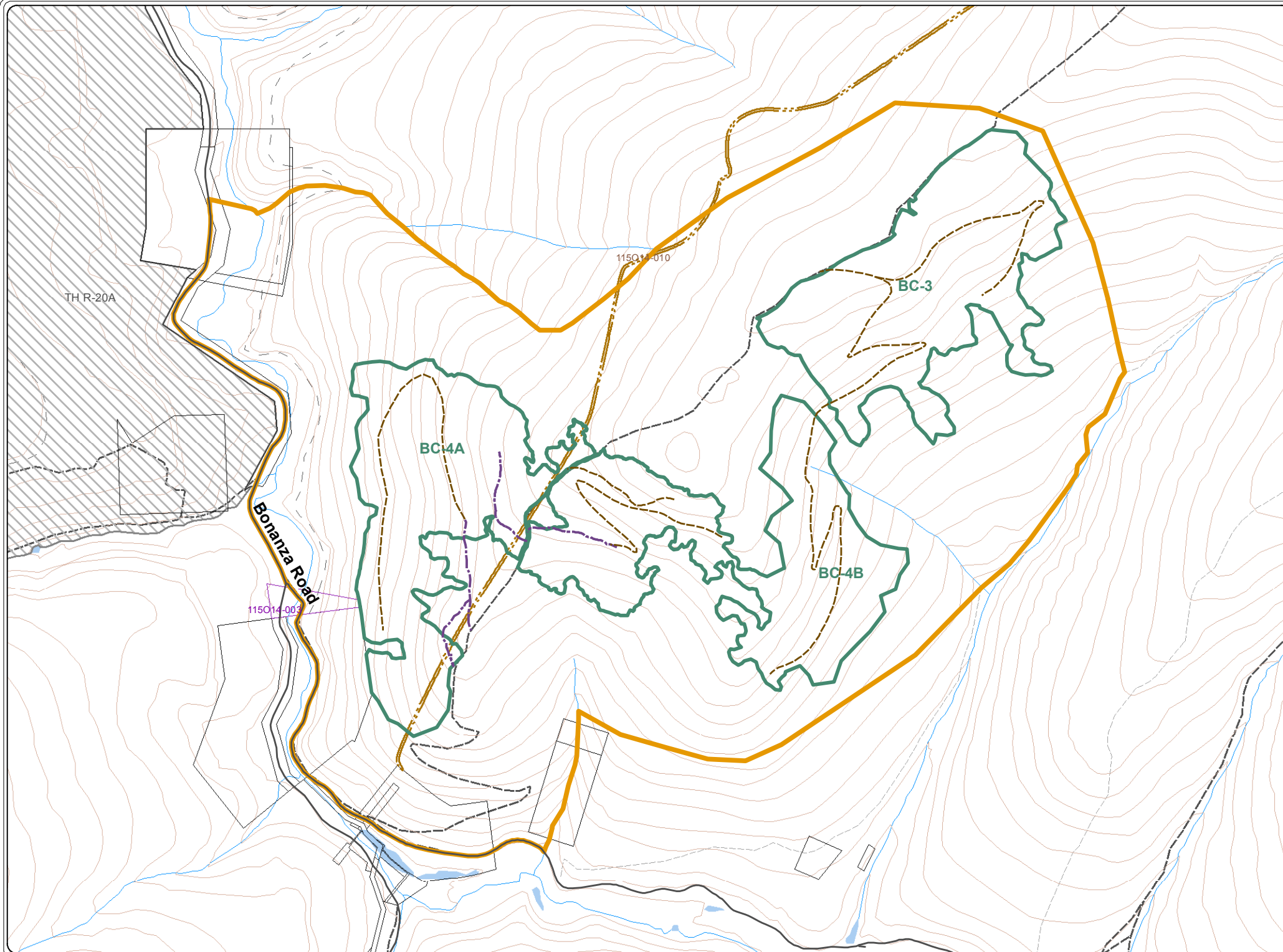
▨ B: Surface Rights

▨ FS: Fee Simple

▨ Unsurveyed Interim Protected



Yukon
Energy, Mines and Resources
Forest Management Branch



Appendix 2: Representations

Bonanza Creek Timber Harvest Plan Prepared: December, 2012

Prepared by: Dawson Area Forester

There were comments received from TH and YTG Cultural Services branch during the notification period on the 2012 Bonanza Creek Timber Harvest Plan held from June 6th to July 6th, 2012. The following table summarizes their comments:

Organisation	Topic	Mitigation
TH	Please add to Traditional Land Users section: The Tr'ondëk Hwëch'in have the right to harvest as set out in Chapter 17 of their Final Agreement.	This has been done; refer to section 2.6.
TH	Please add to Wildlife section: In order to help monitor wildlife health, Tr'ondëk Hwëch'in asks that the timber harvester report any unique animal sightings to the Tr'ondëk Hwëch'in Fish and Wildlife Department.	This has been done; refer to section 2.1. Contact to TH will be managed by FMB.
TH	Please add to Heritage and Archaeological Sites section: Tr'ondëk Hwëch'in requests that any heritage resources located by the timber harvester be reported to the Tr'ondëk Hwëch'in Heritage Department.	This has been done; refer to section 2.4. Contact to TH will be managed by FMB.
Department of Tourism and Culture	Cultural sites exist- ensure harvesting does not occur near these sites	All of the Harvest areas provide suitable buffers on these sites.

Department of Tourism and Culture	The access road continues on to the ridge road trail, which does not allow vehicle access. Ensure harvesting activities do not infringe upon this recreation trail.	Access beyond the harvest areas will not be upgraded to the ridge road.
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