Yukon
Energy, Mines and Resources
Énergie, Mines et Ressources

Lubbock Valley Timber Harvest Plan
Within
Carcross/Tagish First Nation Traditional Territory

(Draft Version – Not an approved Plan)

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Forest Management Branch
Energy, Mines and Resources
Prepared: September, 2010

Executive Summary

The Lubbock Valley Timber Harvest Plan (THP) has been designed to meet the requirements of the Forest Resources Act (FRA). Timber resource licenses issued under the FRA will be issued consistent with this THP.

All applications for Timber Resource Licenses under the FRA will be considered on a case by case basis with proponents required to submit a project description and site plan as part of the cutting permit application. Each license application will be required to be submitted for a 30 day review by First Nations, stakeholders and the general public.

The principle of sustainable use and the integrated forest resources management will be implemented in the THP. This means timber will be sustainably harvested while protecting all values, including soil, water quality, wildlife, biodiversity, and fish habitat. Non-ecological values including heritage/historic resources, recreation, and aesthetic values will also be protected and managed for integrated use.

The Lubbock Valley THP also considers the forest resources harvesting and management customs of the Carcross Tagish First Nation, as well as their knowledge and experience in forest resources management and use of forest resources.

The Lubbock Valley THP is proposed to create harvesting opportunities to facilitate forestry-based economic opportunities in the Lubbock Valley area which is within the Carcross-Tagish Nation's Traditional Territory. The THP identifies three operating areas where harvesting has occurred historically. The THP area encompasses 110 hectares and identifies the harvesting of approximately 5,050 m^3 of fuelwood and sawlogs.

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Lubbock Valley Timber Harvest Plan

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1.0 Introduction

The Lubbock Valley Timber Harvest Plan (THP) area has been a traditional harvest area for the Lubbock Valley residents and nearby communities for several decades. The creation of the Lubbock Valley THP is very important in maintaining an economic supply of timber for harvesting purposes. The sawlog and fuelwood stands in this THP are identified to help meet the social and economic forest product demands of local operators, while ensuring that environmental and other values are protected.

The *Forest Resources Act (the Act)* received assent in the fall of 2008. Throughout 2009 and 2010, the Forest Management Branch (FMB) of the Department of Energy, Mines and Resources has been working to develop the regulation required to bring the new statute into effect.

Upon approval, the Lubbock Valley THP will be used to develop forest resources in accordance with the new Forest Resources Act and related regulation. This development will occur under the guidance of the Forest Management Branch through the issuance of authorizations allowing the cutting of timber.

A cutting permit will be required as a part of each timber license. As part of a cutting permit submission, a site plan will also be required. The site plan is a specific management plan identifying the specific area and its attributes for harvesting. The site plan will also include the stand management activities, methods and standards for harvesting and the protection of forest resource values, non-timber values and a reforestation plan.

All timber licenses, cutting permits and site plans will be consistent with the most current standards and guidelines as adopted by the Forest Management Branch. These standards have been developed to ensure the protection and conservation of known values in THP areas.

1.1 Planning Area

The Lubbock Valley THP falls within the Carcross Tagish First Nation (CTFN) Traditional Territory. The THP area is located on the southwest corner of Little Atlin Lake and is north of CTFN land selection R19B.

There are three operating areas within the THP, Areas 1, 2 and 3. All three areas are designated for winter harvest only, hence; operations are to be conducted under frozen conditions only.

Appendix A displays a 1:250,000 overview map of the boundaries of the operating area of the Marsh Lake THP area. Appendix B displays a 1:20,000 detailed scale map showing the detailed features.

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1.2 Eco-region

The Lubbock Valley THP is located within the Boreal Cordillera Eco-zone and located in the Yukon Southern Lakes Eco-region. Characteristic terrain features include broad valleys and large lakes. Set within the rain shadow of the Elias Mountains, the climate is dry and cool, with a sporadic discontinuous permafrost zone, where permafrost underlies less than one-quarter of the landscape. Soils tend to be alkaline and wetlands are typically dominated by marl formation. The ecoregion supports the highest mammalian diversity in the Yukon, with 50 to 60 known species.

There are two major stand types; mature white spruce and lodgepole pine with scattered aspen and mature white spruce and lodgepole pine without aspen. Pine is the dominant species as it quickly regenerates in burned areas. White spruce-feathermoss forests are common on active floodplains and in small parcels that have not burned in the last 100 years. These stand types are on a variety of sites, from lowland transitional sites, upland flat to complex upland made up of eskers and moraine features. Black spruce has a limited distribution in this ecoregion. In higher elevation, subalpine fir is common.

1.3 Socio-economic Values

Forests in the Lubbock Valley area provide many significant values namely, ecological, aesthetic, cultural, recreational and other non-timber values. In addition, these forests also help sustain the current small scale forest industry that provides timber for local markets, economic opportunity, and employment for some residents of Tagish and Carcross. Historically the demand for forest products has ranged from 89 m^3 per year from 1985 to 1998 to approximately 221 m^3 this past year (135 m^3 sawlogs and 86 m^3 fuel wood). The industry currently consists primarily of one commercial sawlog operator and two to three fuel wood operators.

2.0 Planning Area Values Identification

The main environmental and social values within the THP are outlined below. During the initial stages in developing the THP, stakeholders were consulted for input on what values were important to them. Local knowledge and scientific data was solicited regarding these values, along with proposed protection and conservation of the values in question.

2.1 Wildlife

2.1.1 Woodland Caribou

A key caribou wintering area was identified by the Department of Environment which is partly included in the THP area. This area is outlined on the detailed map (see Appendix B). Areas 1 and 2 are outside the caribou wintering area,

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however, Area 3 has a northwestern portion of the area (approximately overlapping the caribou wintering area. Stringent measures will be taken to ensure that this area in question is managed so that timber harvesting will have the least impact on the Carcross caribou herd. No operations will be undertaken while caribou are sighted in the harvest area and areas with high percentages of lichen will not be harvested.

2.1.2 Moose

Moose were sighted on several occasions during timber inspections in Area 1 during the winter of 2010. Through observation of the tracks and vegetation disturbance, the moose had been using the area throughout the winter. The moose in question were not displaced by adjacent timber harvesting.

2.1.3 Raptors

No raptor nests were encountered during the winter harvest of 2010 nor during field work conducted during for the development of the THP; however any known raptor nests within the three identified areas for harvesting will be protected with a 5 meter (no disturbance) buffer.

2.2 Riparian, Fish Habitat and Aquatic Resources

Wolverine Creek runs through the plan area, between the northern edge of Area 3 and the southern edges of Area 1 and 2 (see map in Appendix B). No official stream assessments were completed on Wolverine Creek however; management for this creek will be undertaken by FMB as if the presence of fish exists. Protection for Wolverine Creek will be as follows:

- All operations in areas 1, 2 and 3 shall have a riparian buffer (no disturbance) of 100 m from Wolverine Creek;
- For access to Area 1 and Area 2, a snow-fill crossing at Wolverine Creek will be established as per Department of Fisheries and Oceans' operational guidelines for ice bridges and snow-fills at a location where open water is not present;
- Fuel and other contaminants will not be stored within 30 m of any watercourse;
- The operator(s) will utilize existing access routes and trails where possible when conducting activities;
- Skidding to and from areas 1 and 2 will only occur during frozen ground conditions to protect the vegetation and soils.

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- The unnamed lake that runs into Wolverine creek will be buffered 100 metres (no harvest zone).

There are also a couple smaller of ephemeral creeks and two small lakes throughout the plan area. In order to protect these aquatic resources all waterways will be managed as per the operational standards on *Riparian Management on Streams and Lakes*. There will be further assessments at the Timber License and Cutting Permit stage which will protect the integrity of any identified water resources.

2.3 Heritage and Archeological Sites

The Development Assessment Archaeologist employed by the Heritage Resources Unit formulated a Heritage Resources Overview Assessment Report regarding the Lubbock Valley THP (see Appendix C). Areas with elevated potential for the presence of surficial heritage resources are outlined as polygons on the detailed map in Appendix B. Originally a portion of the proposed harvesting in areas 2 was located in the polygons identified for potential surficial heritage resources. However, area 2 was revised to exclude the potential heritage resource. Area one will be assessed for the presence of surficial heritage resources.

All proposed harvesting areas and existing roads are located outside these areas, hence, no roads or blocks are planned to be undertaken in the areas identified as having potential heritage resources.

An old mining shaft and decrepit log cabin was found near Wolverine Creek. According to local knowledge, the shaft and cabin were constructed in the 1920's. The location of the shaft and cabin are not within the harvesting areas, however, these artifacts will be managed according to territorial standards. Photos of the shaft and cabin are attached on the following page:

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1920 Mining Shaft near Wolverine Creek and Lubbock Valley Road

Remnants of 1920's Mining Cabin near Wolverine Creek and Lubbock Valley Road

2.4 Soils Conservation

No new forest access roads will be built in the THP as all stands will be accessed during frozen conditions. Skid trails in areas 1, 2 and 3 will be located on frozen ground during the winter. These provisions will ensure that the integrity of soils is maintained across all areas of the THP.

Any machinery proposed to be used in the project description by the licensee will be assessed to ensure its meets the standards to conserve soil quality. Considerations may include overall machine weight and load distribution, ground pressure; tire and track slip, and bogie verses single axle.

These provisions will ensure that the integrity of soils is maintained across all areas of the THP. A soil analysis will be completed on all blocks as part of the Site Plan. Soil standards that will be incorporated in the THP are as follows:

- Landings will be placed in locations where the risk of compaction, rutting and erosion is minimized;
- The season of operation and soil conditions will be considered during the completion of the Site Plan;
- Operators will be required to minimize equipment traffic on soils susceptible to rutting, compaction and erosion by incorporating specific measures that will be included in the terms and conditions.
- Skidding and forwarding will be scheduled when soil conditions reduce susceptibility to rutting, compaction and erosion (i.e. conservation of soil quality may require operations to be scheduled for summer/fall (dry soils) or winter (frozen soils).

2.5 Traditional Land Users

2.5.1 Trapping

The Lubbock Valley THP falls within Registered Trapping Concession (RTC) # 310. The RTC holder was contacted on March 30, 2010 regarding trapping activity The RTC holder was also contacted previously concerning timber harvesting with respect to the last timber application in the plan area. The RTC holder informed the Forest Management Branch that her trapping occurred from January to March 10, 2010 mostly in the Moose Creek area, near the existing Lubbock Valley Road. The proposed harvesting is not near the RTC's trapping area, thus there are no anticipated conflicts. If trapping does occur near harvesting operations, all harvesting operations in the THP will be conducted so that there will be minimal to no effect on the trapping activities.

2.5.2 Hunting

The area has been used by first nation and resident hunters mainly during the fall of the year. The Department of Environment issues only limited permits for moose in the THP area; hence, the area is not open for big game hunting to the general public. During past harvest operations there were no identified concerns with hunting and there are no anticipated adverse impacts on hunting opportunities upon approval of the THP. During active harvesting operations, hunting opportunities may be restricted in the immediate area for safety reasons. There are no big game hunting permits issued during the scheduled winter months for harvesting (November to March), however, First Nations may exercise their right to hunt during any time of the year.

2.6 Recreation

The planning area is not identified as a major concern for recreation. All existing trails and roads will be managed to facilitate on-going public access

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during timber operations.

2.7 Visual Impacts

Visual resource management aims to reduce the impact of timber harvesting. Timber harvesting can impact the visual quality of landscapes by creating visual contrasts between cut areas and adjacent stands.

Because the silvicultural systems will mostly be selective cutting with some small patch cuts with retention, accompanied by low-lying areas and west-facing hillsides, timber harvesting will not have a significant visual impact from the Altin Highway, nor from Little Atlin Lake.

The following photos show stands selectively harvested, with the standing trees and regeneration left undisturbed.

Harvesting area in Lubbock Valley – April 1, 2010

Skidding trail in Lubbock Valley – April 1, 2010

Harvesting area in Lubbock Valley – April 1, 2010

2.8 Biodiversity

Representative timber types will be maintained in the planning and surrounding areas. In all blocks the following measures will be implemented:

- Maintain coarse woody debris (dead and decayed blowdown will be left on site, as well as tree tops and branches from harvested trees).
- Maintain all regeneration where feasible,
- Consider windthrow in boundary and retention strategies.

3.0 Past Resource-Based Activities

3.1 Historical Forest Harvesting

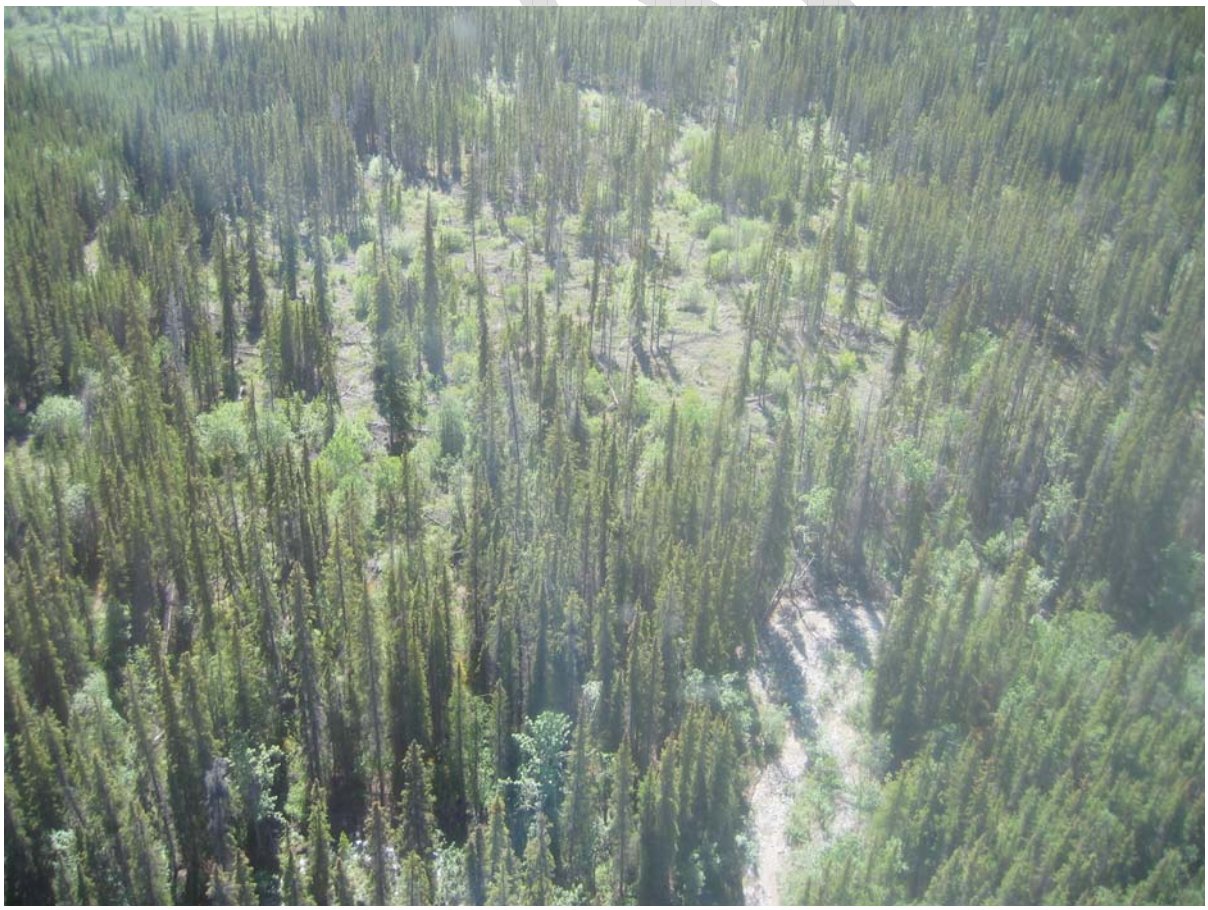
The Lubbock Valley is a traditional fuel wood and round wood harvest area, as local residents have cut green trees for sawlogs and salvaged dead trees for fuel wood for the past few decades. Historical permits coupled with extrapolated volume (based on 85 m^3 per hectare) show there were three blocks cut from the mid 1980's to1998 for a total volume of approximately 1,250 m^3 *(within an area totaling 10.4 hectares - see Table 1 below).

Table 1 Year 1985 to 1998

Product	Species	Volume (m^3)
Sawlogs	Sw	207.2
Extrapolated Volume		1,040.8
All Products		1,248.0

The detailed map Appendix B shows the location of the three harvested blocks, one is a patch cut and the other two are patch cuts with retention.

Photo 4 below shows a block that was harvested in the mid 1980's; patch cut (4.1 hectares) with retention.



3.2 Past Mining Activities

There are two placer mining operations within the planning area. One placer operation was mined by Exploration Ltd. on Moose Brook. However, the operation is currently not active. There has been approximately 1 km of Moose Brook mined to date.

4.0 Silvicultural Systems

A silviculture system is defined as one or more planned series of treatments which sees a stand through at least one complete rotation, including harvesting, regeneration and stand-tending. The type of silviculture systems chosen will be based on site conditions and stand management objectives.

In the past, local operators have mainly used selective cutting and patch cuts with retention. This is because both merchantable size sawlogs and standing dead trees (fuelwood) are scattered throughout the THP. The harvesting methods in this THP will be a combination of selective cutting and patch cuts with retention for all blocks in the THP. In blocks that are frequented by wildlife and in areas where other non-timber values are considered critical, only selection cutting will be implemented.

The following guiding principles will be followed when preparing site plans for each block:

- Each block will be assessed to determine the stand characteristics;
- The most appropriate silviculture system will be chosen based on site specifics to meet management objectives;
- Natural regeneration will be the preferred method of regeneration; and
- The site plan will document the stand level objectives, silviculture system, ecological information, soils and harvest method and reforestation plan for each block.

5.0 Harvesting Section

5.1 Merchantable Volume

There are a total of three areas available for harvest, namely, areas 1, 2 and 3. All areas were field checked to gather information on soils, topography, and timber profiles. A portion of one day was spent in flight, analyzing the areas via helicopter. The areas were also photo-interpreted using 2007 black and white aerial photos.

5.2 Block Area and Volume Summary

All blocks in the three areas are proposed for winter harvesting only and are outlined in Appendix B. Stands in Area 3 were cruised to obtain the total volume, while the volume stands in areas 1 and 2 were calculated from previous logging approximations and photo interpretation.

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Area One

This area is subdivided into four different stands (A, B, C, & D) for a total of 90 hectares. A total of 3,800 m^3 is proposed for harvesting from area one. A description of each stand is as follows:

Stand A – This stand is a 12 hectare block that was partially harvested from January to the end of March, 2010. A total of approximately 221 m^3 of sawlogs and fuel wood were harvested. This is a mature stand with a species composition of 90% white spruce and 10% pine. Approximately 10% of the timber is standing dead. The total merchantable timber from this stand is approximately 1,350 m^3. Because of selective harvesting and partial cuts with retention, only half this volume will be will be removed (approximately 700 m^3).

Stand B – This stand is a 21 hectare block that has a majority of mature white spruce mixed with some lodgepole pine. It has a range in height from 14 - 25 m and an average height of 17 m. Approximately 20% of the stand is standing dead. The stand has good sawlog and fuel wood potential. Approximately 1,000 m^3 of sawlogs and fuel wood will be available for harvest from this stand.

Stand C - This is a 16 hectare a wetland that has low to no timber merchantability, thus this stand will be preserved for wildlife and other non-timber uses.

Stand D – This stand is a 42 hectare block that has a majority of mature white spruce mixed with some lodgepole pine. It has a range in height from 14 - 25 m and an average height of 17 m. Approximately 20% of the stand is standing dead. The stand has good sawlog and firewood potential. Approximately 2,100 m^3 of sawlogs and fuel wood will be available for harvest from this stand.

Area Two

A total of 500 m^3 is proposed for harvesting from area two, within an area of 18 hectares. Stand A (the only stand in this area**)** has a majority of mature white spruce mixed with some lodgepole pine. It has a range in height from 14 – 25 m and an average height of 17 m. Approximately 10% of the stand is standing dead. The stand has scattered pockets of good sawlog and fuel wood potential. Approximately 500 m^3 of sawlogs and fuel wood will be available for harvest from this stand.

Area Three

This area is subdivided into two different stands (A and B) for a total of 29.0 hectares. A total of 750 m^3 is proposed for harvesting from area three. Stand A is a four hectare aspen stand and will not be harvested. Stand B is a 25 hectare block that has a majority of lodgepole pine mixed with some white spruce. It has a range in height from 14 - 20 m and an average height of 14 m. Approximately 5% of the stand is standing dead. The stand has scattered pockets of excellent sawlogs and some

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fuel wood potential. Approximately 750 m^3 of sawlogs and fuel wood will be available for harvest from this stand.

Summary Table

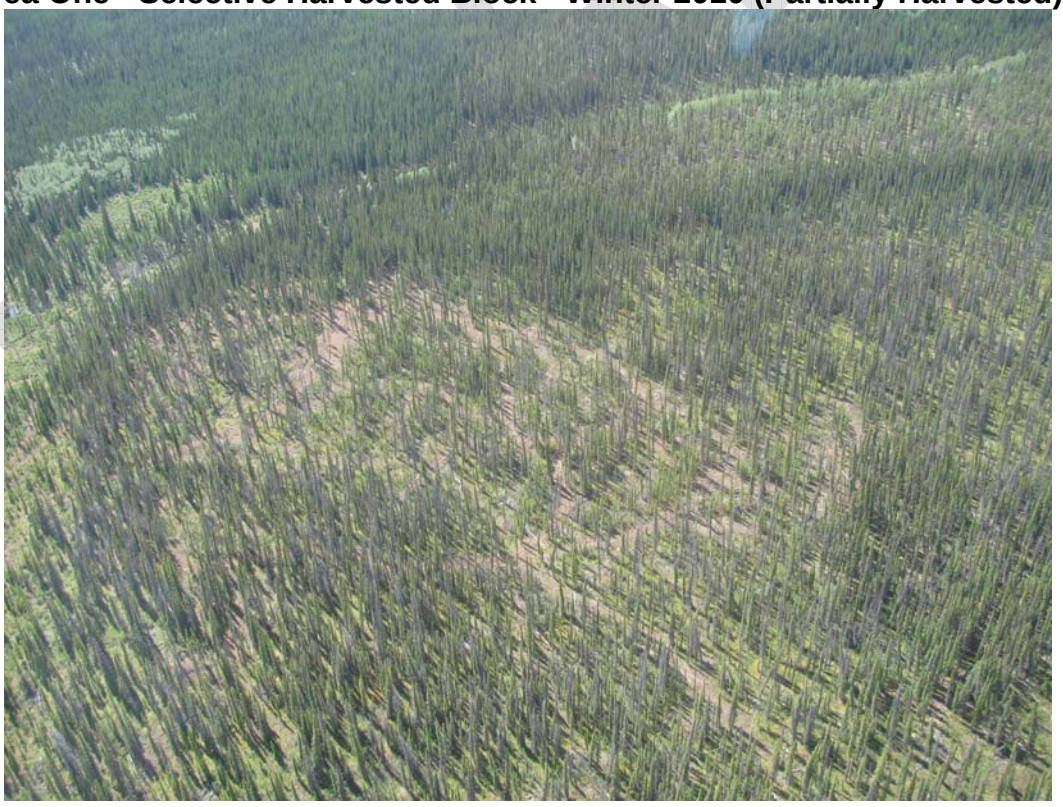
Area #	Harvest Volume Proposed	Total Area (Ha.)
One	3800	90
Two	500	18
Three	750	29
Total	**5050**	**137**

5.3 Photo's of Proposed Areas

Overview Photo of the THP Area

Area One (Stand A – Existing Skid Road and Landing)

Area One - Selective Harvested Block - Winter 2010 (Partially Harvested)



Area Two

Area 3

6.0 Access Management

Only existing forest roads access will be utilized, therefore, no new access roads will be constructed. The existing roads, as outlined on the detailed map – Appendix B, will be integrated with other land users (i.e. hunters, gatherers, hikers and bikers will also be able to use these roads).

Some maintenance (grading) may be conducted on the existing Lubbock Valley road to improve transportation conditions. Existing skid trails in previously harvested areas will also be utilized and used where possible, rather than creating new skid trails.

7.0 Forest Health

The Forest management Branch in conjunction with Natural Resources Canada composed Forest Health reports on the Yukon Forests. The last available report was completed in 2009. Health surveys were completed over different areas of the Yukon

Among the pests encountered during the survey were: spruce beetle, *Dendroctonus rufipennis*, spruce engraver, *Ips perturbatus*, fir-spruce budworm, *Choristoneura orae*, eastern spruce budworm, *C. fumiferana*, pine engraver, *Ips pin,I,* pine needle cast, *Lophodermella concolor,* aspen serpentine leafminer, *Phyllocnistis populiella* and willow blotch miner, *Micrurapteryx salicifoliella*.

Diseases encountered during the survey were Pine needle cast, *Lophodermella concolor,* Spruce broom rust, *Chrysomyxa arctosyaphyli,* Large-spored Spruce – Labrador tea rust, *Chrysomyxa ledicola;* Willow rust (*Melampsora epitea)*

The forests in the Lubbock Valley THP are relatively healthy with no epidemic outbreaks of insects or disease. Although some of the insects and diseases listed above do exist, the population levels are normal (endemic) with normal dieback on individual trees scattered throughout different stands. This has been noted throughout field trips to the THP area over the past few years.

8.0 First Nations Knowledge

The development process of the Lubbock Valley THP has recognized and considered the forest resources harvesting and management customs of the Carcross Tagish First Nation (CTFN), as well as their knowledge and experience in forest resources management and use of forest resources. Input was solicited from the CTFN commencing April 7, 2010 regarding the formation and development of the THP. A meeting was conducted with CTFN on April 29, 2010 and field trips were conducted with CTFN staff to the THP area. Both meetings and field trips were informative and productive, with a good exchange of information. The CTFN also

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expressed their THP concerns in writing. All concerns were taken into consideration and addressed throughout the THP.

9.0 Land Dispositions, Notations, CTFN Settlement Land and Reserves

All land dispositions, notations, CTFN Settlement Land and reserves are outlined on the 1:20,000 detail map located in Appendix B.

There are two surveyed land dispositions adjacent to the THP area in the south eastern corner of the THP area, namely 84219CLSR-YT and 75386CLSR-YT, YTG for the Marsh Lake Dump.

There is one agriculture application in the THP area namely, AG-APP-703.

There are two notations within the THP, specifically area three. These notations are for Permanent Sample Plots (Growth and Yield Timber Analysis). These plots will have a 100 meter buffer zone to ensure they will not be disturbed by harvesting.

CTFN has two parcels of settlement land near the southern and south eastern corner of the THP, namely, R-19B and R-26B. As outlined on the map in Appendix B, the Lubbock Valley Road separates the THP area and the settlement land. A 100 metre no harvesting buffer will be implemented where Area 3 is adjacent to R-19B.

There is one Agriculture Application within the THP, namely # 703.There will be no harvesting within the application area.

10.0 Monitoring Plan

After the Lubbock Valley THP is approved and environmental assessment is completed, timber licenses and cutting permits will be issued. Regular cutting permit inspections will be conducted to ensure that the licensee is in compliance with all terms and conditions of the permit. These inspections will be conducted up to the time the licenses and permits expire and all terms and conditions are fulfilled.

11.0 References

2005 Whitehorse Planning Assessment, Forest Management Branch

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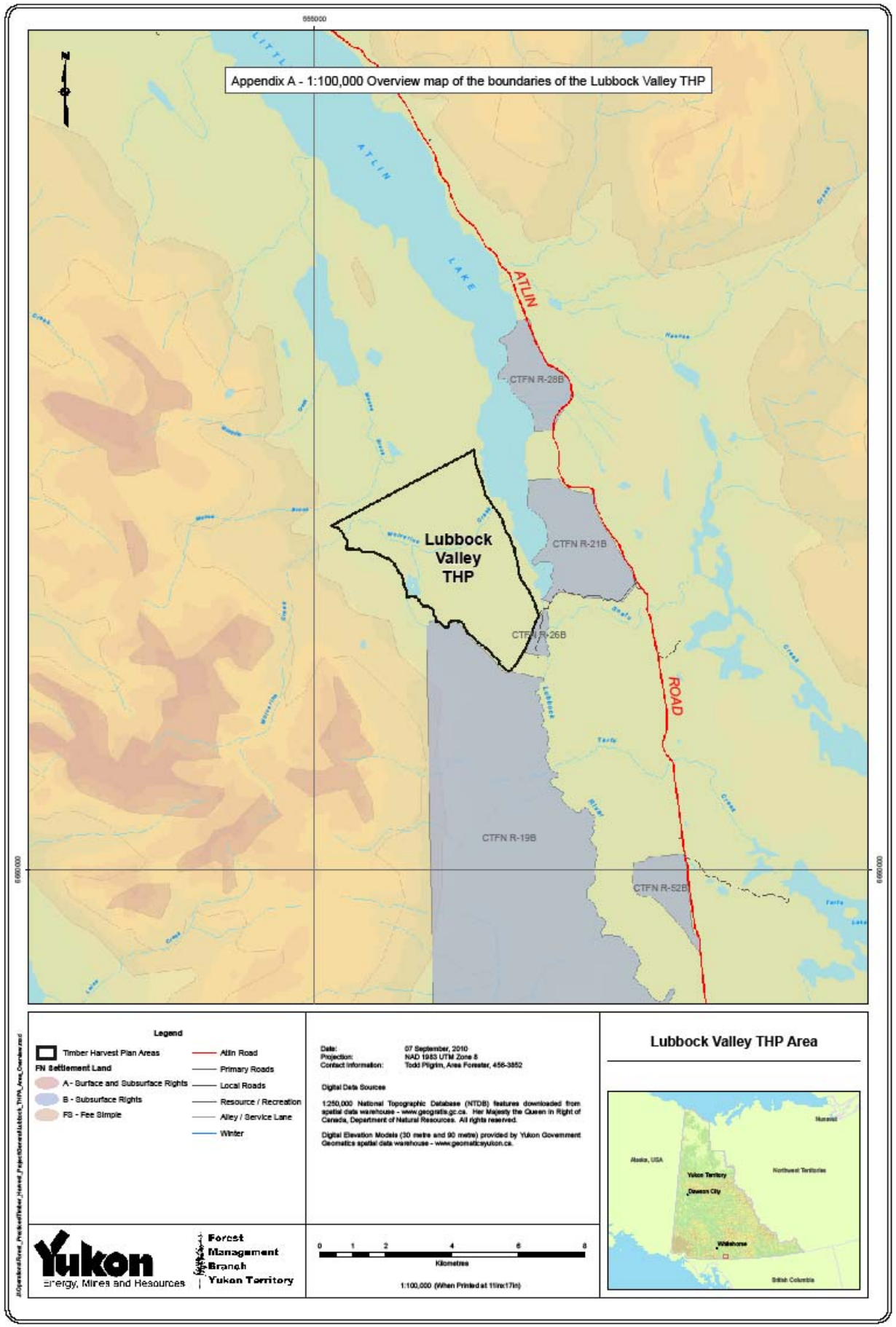
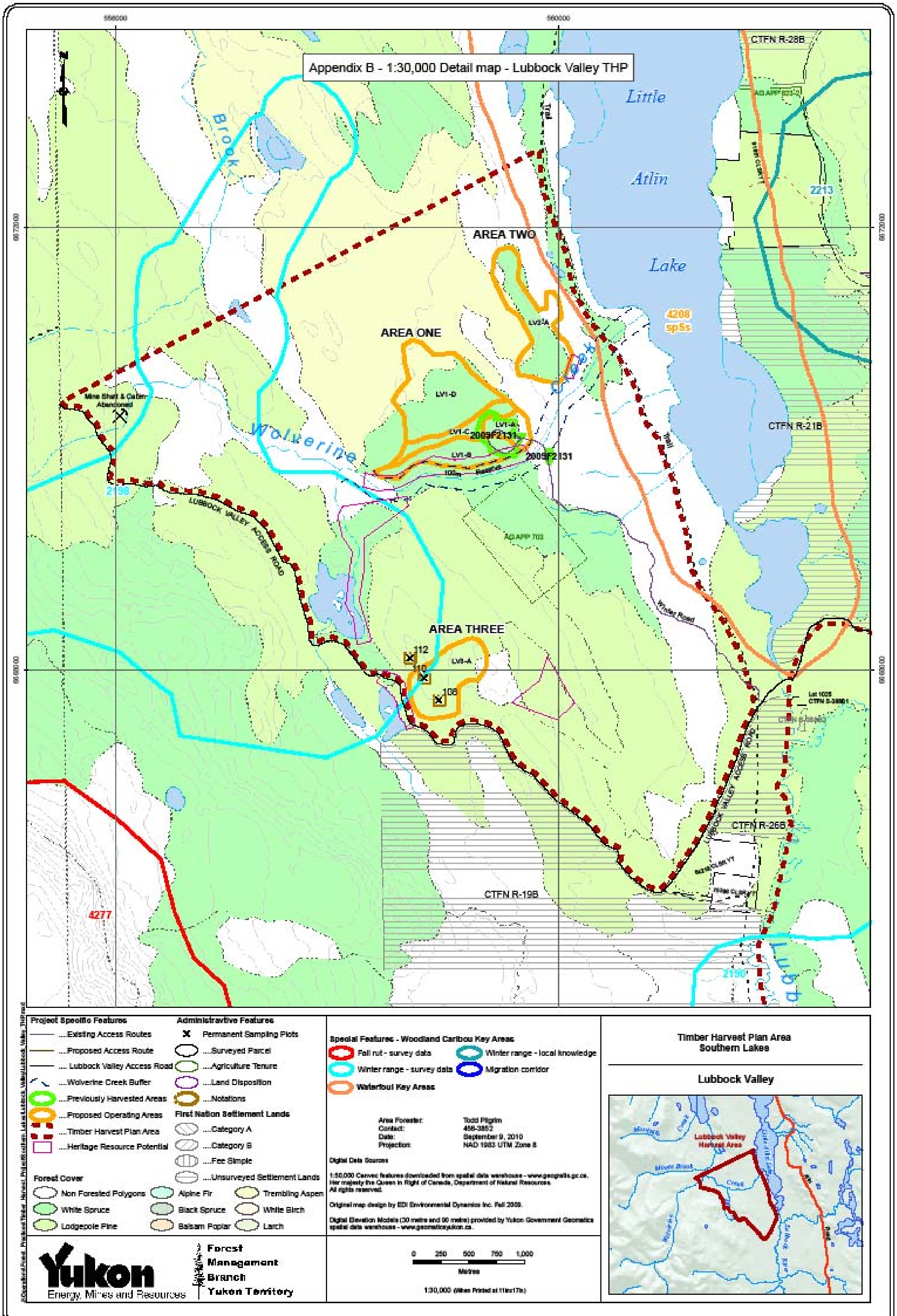

Appendix A - 1:100,000 Overview map of the boundaries of the Lubbock Valley THP
N
555000
660000
ATLIN
LAKE
ATLIN ROAD
CTFN R-28B
CTFN R-21B
CTFN R-26B
CTFN R-19B
CTFN R-52B
Lubbock Valley THP
Legend
Timber Harvest Plan Areas
FN Settlement Land
A - Surface and Subsurface Rights
B - Subsurface Rights
FS - Fee Simple
Atlin Road
Primary Roads
Local Roads
Resource / Recreation
Alley / Service Lane
Winter
Date: 07 September, 2010
Projection: NAD 1983 UTM Zone 8
Contact Information: Todd Pilgrim, Area Forester, 456-3852
Digital Data Sources
1:250,000 National Topographic Database (NTDB) features downloaded from spatial data warehouse - www.geogratis.gc.ca. Her Majesty the Queen in Right of Canada, Department of Natural Resources. All rights reserved.
Digital Elevation Models (30 metre and 90 metre) provided by Yukon Government Geomatics spatial data warehouse - www.geomaticsyukon.ca.
Lubbock Valley THP Area
Yukon
Energy, Mines and Resources
Forest Management Branch
Yukon Territory
0 1 2 4 6 8
Kilometres
1:100,000 (When Printed at 11inx17in)
Alaska, USA
Yukon Territory
Dawson City
Nunavut
Northwest Territories
Whitehorse
British Columbia



Appendix B - 1:30,000 Detail map - Lubbock Valley THP
Little
Atlin
Lake
Brook
Wolverine
Creek
AREA ONE
AREA TWO
AREA THREE
LV1-D
LV1-C
LV1-A
LV1-B
LV2-A
LV3-A
2009F2131
100m Reserve
4208
spSs
CTFN R-28B
CTFN R-21B
CTFN R-26B
CTFN R-19B
2213
2198
2190
4277
AG APP 703
Mine Shaft & Cabin Abandoned
LUBBOCK VALLEY ACCESS ROAD
Trail
Winter Road
112
110
106
Project Specific Features
....Existing Access Routes
....Proposed Access Route
.... Lubbock Valley Access Road
....Wolverine Creek Buffer
....Previously Harvested Areas
....Proposed Operating Areas
....Timber Harvest Plan Area
....Heritage Resource Potential
Administrative Features
Permanent Sampling Plots
....Surveyed Parcel
....Agriculture Tenure
....Land Disposition
....Notations
First Nation Settlement Lands
....Category A
....Category B
....Fee Simple
....Unsurveyed Settlement Lands
Forest Cover
Non Forested Polygons
White Spruce
Lodgepole Pine
Alpine Fir
Black Spruce
Balsam Poplar
Trembling Aspen
White Birch
Larch
Special Features - Woodland Caribou Key Areas
Fall rut - survey data
Winter range - survey data
Winter range - local knowledge
Migration corridor
Waterfoul Key Areas
Area Forester: Todd Pilgrim
Contact: 456-3852
Date: September 9, 2010
Projection: NAD 1983 UTM Zone 8
Digital Data Sources
1:50,000 Canvec features downloaded from spatial data warehouse - www.geogratis.gc.ca. Her majesty the Queen in Right of Canada, Department of Natural Resources. All rights reserved.
Original map design by EDI Environmental Dynamics Inc. Fall 2009.
Digital Elevation Models (30 metre and 90 metre) provided by Yukon Government Geomatics spatial data warehouse - www.geomaticsyukon.ca.
0 250 500 750 1,000
Metres
1:30,000 (When Printed at 11inx17in)
Timber Harvest Plan Area
Southern Lakes
Lubbock Valley
Lubbock Valley Harvest Area
Yukon
Energy, Mines and Resources
Forest Management Branch Yukon Territory

Appendix C: Heritage Resources Overview

Assessment Report

Management Summary

An overview assessment of the project area has resulted in the determination of moderate heritage resource potential in portions of the project area. Harvest areas LV1-B, LV2-A, LV3-B, LV3-C and LV3-D have potential for the presence of archaeological and historic sites. The remainder of the project area may have potential for the presence of culturally modified trees (CMT). It is recommended that a surface heritage resource inventory be completed in areas considered to have elevated potential for the presence of historic sites. If subsurface ground disturbances are planned in areas with elevated heritage resource potential then an archaeological site inventory is recommended. Otherwise, Forest Management Branch should arrange to locate culturally modified trees in the harvest areas and manage them appropriately.

Archaeological Potential Methodology

Heritage resource potential was determined by identifying site presence indicators using resources including the Yukon Archaeological Sites Database, the Yukon Historic Sites Database, low resolution orthographic images, aerial photographs (A23437: 65-66), and spatial mapping of water courses, water bodies and wetlands. Site databases were used to determine whether or not sites are located within the project areas or to determine if sites are present in areas similar to that of the project. Orthographic images were used to determine locations of prominent topography suitable for the presence of heritage resources. Spatial data on the location of water bodies, watercourses or wetlands is used to define geographic areas or corridors that generally have higher potential for site presence. Heritage resource potential is determined by assessing project development areas that intersect with land that is within 100 m of a heritage resource indicator.

Overview Results

Known Sites: A review of the Archaeological and Historic Sites Databases indicates that no heritage sites are located in the project areas.

Heritage Resource Potential: Elevated potential for the presence of buried archaeological remains and historic structures is located in the southern portions of Harvest Areas LV1-B, LV2-A and northern portion of LV3-C that are within 100 m of Wolverine Creek or the terraces that overlook the drainage (see Figure 1). Elevated potential is also located in portions of Harvest Areas LV3-B, LV3-C and LV3-D that are adjacent to two small ponds as well as an unnamed creek flowing

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north into Wolverine Creek. A fifth high potential site is located just outside the southern boundary of LV3-C. Elevated potential has been determined by the presence of water features and prominent topography overlooking those features. The study area is located where culturally modified trees are common. At present it is difficult to predict the location of CMTs but it is expected that the majority will be located in areas with elevated potential for the presence of other heritage resources such as archaeological and historic sites. However, inventories in other areas of the Yukon (such as Teslin) have resulted in CMT finds in locations with lower potential for the presence of heritage resources.

Previous Disturbances / Exposures: Access roads, pull outs and landings.

Potential Impacts

The project proposes to cut timber within the bounds of Harvest Areas of the identified harvest Areas. Impacts to heritage resources can be characterized as surficial in nature and would negatively impact any resource on or above the ground surface such as historic structures, features or culturally modified trees. Rarely would subsurface resources, such as buried archaeological sites, be impacted by wood cutting. In this instance all cut blocks have some potential for the presence of culturally modified trees while there is elevated potential for the presence of historic structures or features in areas highlighted in Figure 1. If new roads or graded landings are developed in areas of elevated archaeological site potential, those activities could impact subsurface heritage resources.

Recommendations

It is recommended that surface historic feature surveys be completed in areas with elevated potential for the presence of surficial heritage resources in advance of wood cutting. Any features that are located should be subject to appropriate management actions such as avoidance, buffering or salvage. If road or landing construction is planned in areas identified as having elevated archaeological resource potential, then an archaeological site inventory is recommended.

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