

Woodlot W1475

Block Planning Summary and Analysis

Block 18-01 and 18-02

April 12, 2018

Erik Holbek, RPF

Econ Consulting

Introduction

Two new blocks, 18-01 and 18-02, have been planned for harvest in woodlot W1475. This report is for discussion purposes and is intended to summarize the block design considerations with respect to reserve areas, recreation resource management, ecosystem representation and in-block retention..

Block boundaries have not been flagged in the field or traversed and are based on pre-layout fieldwork. Block and reserve areas included in this summary should be considered close estimates and, exclusive of potential adjustments made based on further feedback, minor changes should be expected with final block engineering.

Performance and practice requirements such as soil disturbance and permanent access structure limits required under the approved woodlot licence plan and the Woodlot Licence Planning and Practice Regulation will be adhered to and addressed in the final pre-harvest prescriptions for these blocks.

The total area and volume of blocks 18-01 and 18-02 are estimated at 4.2 ha / 2,600 m³ and 3.0 ha / 1,000 m³. Combined this equates to 3.6 years of the allowable cut for W1475.

Physically or Operationally Isolated Areas

The area to the south of Block 18-01 has been designated as an operationally isolated reserve due to wet soils. This area contains scattered coniferous and deciduous trees and, during wetter times of the year, flows into the NCD reach of Stream 4.

Steep terrain to the south of Block 18-02 and adjacent to the upper reach of Hardy Creek has also been designated as a reserve area.

The current and proposed isolated/reserve area by block is summarized in the Table 1.

Table 1: Isolated/Inoperable or Designated Reserve Area By Block

Block	Block Area (ha)	Designated Reserve/WTP (ha)	Isolated Reserve Area (ha)	Isolated Reserve Percentage	Designated Reserve Percentage
10-01	4.0	0.0	0.2*	5%	0%
10-02	4.6	0.5	0.5	0%	11%
12-01	2.9	0.0	0.0	0%	0%
12-02	3.2	0.0	0.0	0%	0%
12-04	2.8	0.0	1.4	50%	0%
12-05	1.8	0.0	0.4	22%	0%
13-01	1.9	0.0	0.4	21%	0%
15-01	1.3	0.0	0.1	7.7%	0%
18-01	4.2	0.0	0.6	14.3%	0%
18-02	3.0	0.0	0.3	10.0%	0%
Total	30.2	0.5	3.9	12.9%	2.2%

* This reserve area was designated but is also operationally isolated.

Ecological Representation

Table 2 shows the representation of woodlot ecosystems within current and planned designated reserve areas based on the TEM mapping from the 1996 Triton Report (Triton Environmental Consultants Ltd., 1996). Past analysis indicated that future reserve designation should consider CDF mm 01, 02 and 06 and CWH xm 01 and 05 as higher priority for inclusion in reserves. The CWH xm 07 and 13 site series are likely well represented in the 'Riparian' polygons identified in the Triton Report, which does not identify the site series in these areas.

Proposed reserve area associated with Block 18-01 contributes to meeting the 15% ecological representation for the CDF 01 and 06 while 18-02 adds to the already significant representation of the CWH 03 and "Riparian" areas.

Table 2: Current Reserve Area by Site Series

BEC Zone	Site Series	Total Area (ha)	Current Reserve Area (ha)	Current Reserve Area (%)	New Reserve Area (ha)	New Total Reserve Area (ha)	New Total Reserve Area (%)
CDF	01	32.49	3.52	10.83%	0.2	3.72	11.45%
CDF	02	0.94	0.05	5.32%			
CDF	04	13.49	3.21	23.80%			
CDF	06	43.04	3.37	7.83%	0.4	3.77	8.76%
CDF	11	0.65	0.14	21.54%			
CWH	01	42.93	2.23	5.19%			
CWH	02	9.93	6.91	69.59%			
CWH	03	56.49	17.96	31.79%	0.15	18.11	32.10%
CWH	04	8.03	3.14	39.10%			
CWH	05	5.81	0.42	7.23%			
CWH	07	0.47	0.00	0.00%			
CWH	13	2.41	0.00	0.00%			
Riparian	N/A	12.40	4.12	33.23%	0.15	4.27	34.44%

Block Retention

In block retention is has not been spatially designated at this time. A further 0.3 ha +/- (6%) of in-block group retention is planned for Block 18-01 to provide structural diversity as well as coarse woody debris and wildlife tree recruitment. Dispersed retention of veteran, non-merchantable, deciduous and understory trees where operationally practicable is also planned. There are no significant in-block ecological features to anchor group retention so the focus will be on capturing a diversity of species and trees with a high potential for future structure and wildlife habitat.

Due to root rot infection (*Phellinus weirii*) in Block 18-02 no group retention is planned. Dispersed retention of veteran, non-merchantable, deciduous and understory trees where

operationally practicable is planned. Dispersed retention will be focused within the riparian management zone of Stream 5 and adjacent to the south boundary.

Protection of Trail Network

Block 18-01 is located adjacent to a trail connecting the transmission line RoW to the Knarston Creek trail and also overlaps a small fork in this trail near the transmission line RoW as well and a trail that runs east from this connector toward Block 15-01. A 10m trail management buffer with 50% +/- basal area retention planned adjacent to the Knarston connector trail. Retention adjacent to the connector trail will be focused on the north side of the trail but will also include small patches on the south side. Non-merchantable and understory trees will be retained adjacent to the trail running towards Block 15-01.

Falling and yarding away from both trails will be implemented where operationally practicable. Where fall and yard across is required the trail surface will be re-established and cleared of any introduced debris.

Where the road crosses the east-west trail the trail will be re-established to allow for easy crossing of the road.

A 10m management zone and 50% basal area retention is also planned adjacent to the trail running along the south boundary of 18-02.

Streams and Wetlands

Stream 4 is located outside of the west boundary of 18-01. A 5-15m buffer between the block boundary and the stream is planned. The reach adjacent to the block is not fish bearing but lower reaches, including Knarston Creek, are.

Stream 5 runs through the middle of 18-02. This stream is not fish bearing within 18-02 but lower reaches have potential fish habitat. 25% basal area retention is planned within the 20m riparian management zone adjacent to this stream and there will be no falling or yarding across the stream.

Hardy Creek is located outside of the south boundary of 18-02. The entire 20m riparian management zone will be retained adjacent to this non-fish bearing reach.

There are no classified wetlands within either of 18-01 or 18-02. A seasonally wet area outside of the south boundary of 18-01 has been designated as a reserve area. The boundary will be located to retain trees with a full live crown adjacent to this area, which will equate to an approximately 5m buffer on average.

Woodlot Reserve Designation

It is proposed that designated reserve area to the west of Knarston Creek and adjacent to the north woodlot boundary be moved to the area between Block 18-01 and the current Knarston Creek reserve as shown on the attached map. This would increase the representation of CDF 04 site series, which is currently at 3.2ha/23.8%, and decrease the current representation of CDF 01 site series, which is currently at 3.5/10.8%, but is considered to have a higher overall conservation value based on species and structural diversity, connectivity, and recreation trails. This area totals 1.6 ha.

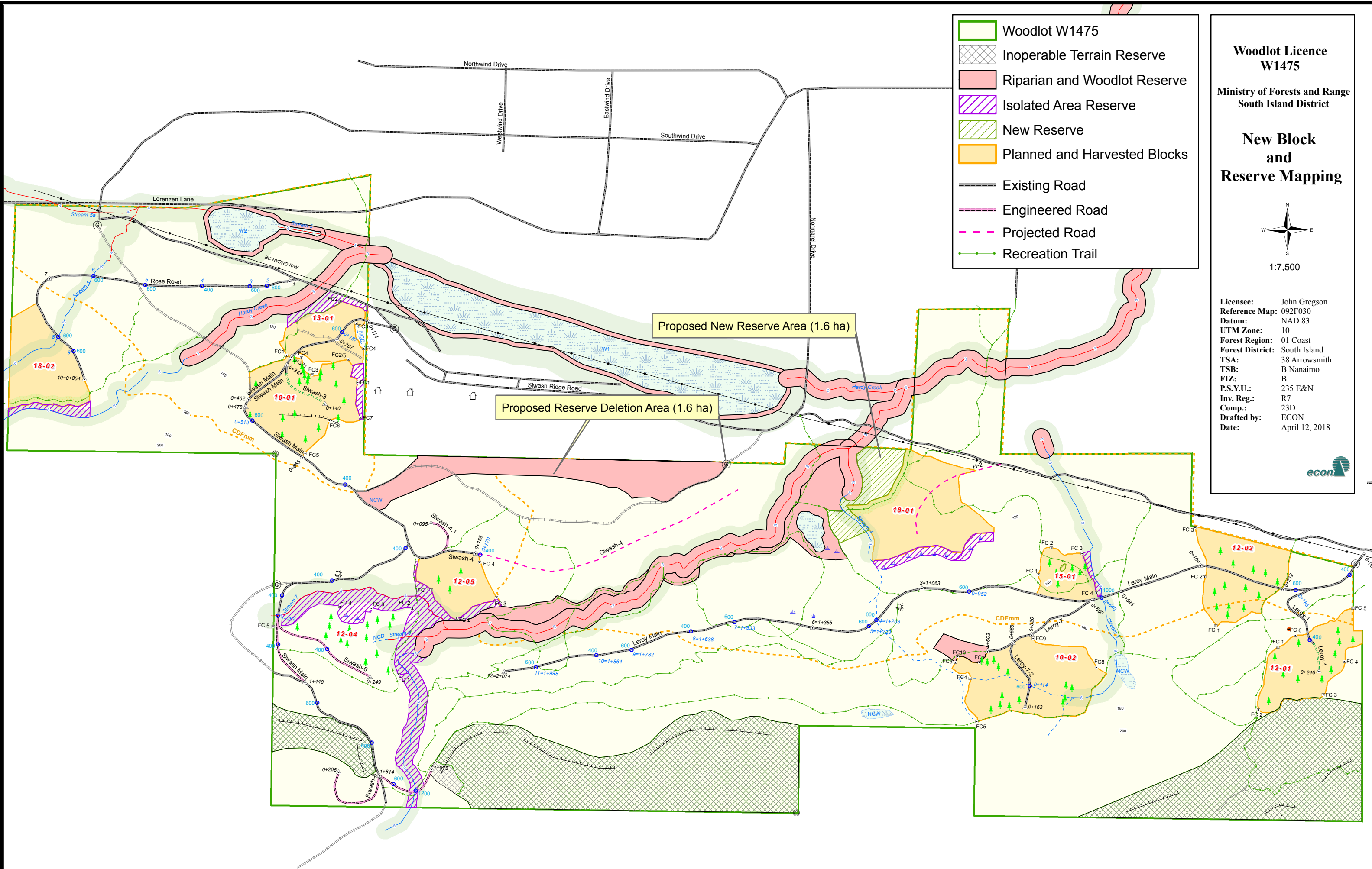
Summary

These proposed block areas are considered to be consistent with past recommendations and commitments made by the licensee and to balance timber and non-timber values within the woodlot.



Erik Holbek, RPF

April 12, 2018



	Woodlot W1475
	Inoperable Terrain Reserve
	Riparian and Woodlot Reserve
	Isolated Area Reserve
	New Reserve
	Planned and Harvested Blocks
	Existing Road
	Engineered Road
	Projected Road
	Recreation Trail

**Woodlot Licence
W1475**
Ministry of Forests and Range
South Island District

**New Block
and
Reserve Mapping**



Licensee: John Gregson
 Reference Map: 092F030
 Datum: NAD 83
 UTM Zone: 10
 Forest Region: 01 Coast
 Forest District: South Island
 TSA: 38 Arrowsmith
 FIZ: B
 P.S.Y.U.: 235 E&N
 Inv. Reg.: R7
 Comp.: 23D
 Drafted by: ECON
 Date: April 12, 2018

