

Operating Area Summary

Overview:

The total area under prescription for the proposed harvest area **GM1** is **13.8ha**. GM1 is bordered along its Southern edge by a private land legal boundary and private managed forest land legal boundary. The West and Northwest boundary follows Jimmy Smith Way and the proposed permit road. The North-eastern lobe is engineered to provide a timber reserve buffer of riparian features associated with the James Creek watershed. The Eastern boundary follows an existing road bed. Please see the attached map of proposed harvest area GM1 for reference.

The information offered in this report is based on preliminary field engineering of the proposed permit area GM1 and access infrastructure, and is designed to be a preliminary overview of for the purpose of consultation. This field engineering is subject to change as new information arises during engineering activities, public consultation and professional consultation.

Land Use:

The proposed harvest area GM1 (Block GM1) is bordered along the southern edge by private land and private managed forest land. An engineered harvest area exists within the adjacent private managed forest land parcel that shares a common boundary with block GM1. The Western boundary borders Jimmy Smith Way, a road that also accesses a rock quarry lease. The existing old road grades which are proposed for use as access to the GM1 area are frequented by hikers and mountain bikers. Bike paths have been maintained along these grades.

Government data shows no registered wells or surface water intakes in the area. There is potential for non-registered gravity fed systems to exist, but no evidence has been discovered thus far.

Constraints:

The GM1 harvest area is constrained by adjacent private land and private managed forest land, riparian features and immature or unmerchantable timber. The main constraining factors are water features associated with James Creek.

Riparian Constraints

James Creek is a perennial S3 stream (fish bearing, 1.5m-5m width) that runs from the wetland WTL1 North of Block GM1 and East of the rock quarry north to Carrington Lagoon. This reach of James Creek is known fish bearing waters with Anadromous access. Fish were observed during engineering activities in most of the deeper pools along this reach of James Creek. The wetland that feeds James Creek is a predominantly wooded wetland with fanned organic channels and pools. The fish access to upper reaches and outflows is undetermined. Fish were not observed during the survey of the wetland, inflow stream and secondary outflow stream, but fish access could not be ruled out. Therefore the connected inflow channel STR1 and connected secondary outflow channel STR2 will be managed as fish bearing waters.

Stream 1 is classified as an S4 stream (fish bearing, <1.5m wide). Fish presence was not determined during the survey. Connectivity to fish bearing James Creek could not be determined within wetland WTL1. STR1 flows from a wetland complex 380m to the East. This is the main input for wetland WTL1 that feeds James Creek.

STR2 is a small watercourse that exist wetland WTL1 at its Westernmost point and flows west through a culvert under Jimmy Smith Way. The stream morphology is flowing wetland to the East of the road crossing and unconfined channel with organic substrate to the west of the crossing. Fish access from James Creek and from its confluence with the Gorge (Marine) is undetermined. No fish were observed during the survey.

Wetland WTL1 is a predominantly wooded swamp with small open water and open vegetated areas in its centre. WTL1 is approximately 2ha in size. It is predominantly fed by STR1, as well as other seepages and non-classified drainages. There is a flowing channel averaging 1.5m wide with organic substrate that disperses into a wooded pool and mound wetland with some open marsh areas. Connectivity to the known fish bearing James Creek is ambiguous, and fish access will be assumed until further sampling is conducted.

There are three small, non-classified wetlands (<0.5ha) within the harvest area of block GM1. These vary between open, wet depressions with various grasses and small pools of standing water with marsh perimeter. They are catchments of local rainwater that are drained by seep or NCD. These non-classified wetlands will be managed with a machine free zone of 10m and a RMA of 20m.

Adjacency Constraints:

An existing engineered cutblock shares a common boundary with the Southern edge of block GM1 on Private Managed Forest Lands to the South. The size of this engineered block and its permit status is unknown.

Access:

There is a network of existing logging roads in the West end of the Green Mountain operating area that originate from existing Jimmy Smith Way, a private road which connects to Whaletown Road to the South. This access will be subject to a road use agreement with the private land owner. Jimmy Smith Way accesses a rock quarry lease on crown land and the road is well maintained and gated at its point of commencement. An existing logging road branches from Jimmy Smith Way approximately 160m north of the legal boundary with private land to the South. This road will require reactivation from its commencement at Jimmy Smith Way to a junction that exists approximately 485m east. This reactivation will consist of a widening of Right-Of-Way of 8m from centreline, the installation of two 400mm (or equivalent) cross drains, a 20m section of re-alignment within the road prism, and two double width landings.

The existing grades beyond the junction will be utilized as skid trails within the harvest area. These old grades will be restored to a road sub-grade condition after completion of harvesting.

Timber:

The permit area Block GM1 is a Fd dominant stand, with Cw, Hw and Dr present to varying degrees based on the site. The topography is broken, low ridges of thin soil over bedrock divided by shallow draws. Much of the higher elevations are dry and well drained with shallow till over bedrock or coarse fracture. These high areas are covered with predominantly Fir second-Growth, well spaced and slow growing, ranging from 275-425m³/ha. The lower lying areas between the ridges contain a mix of mature Fd, Hw and Cw with a range of size and growth vigour. These areas contain volume as high as 600m³/ha. Alder is present along the existing road edges.

The timber profile of block GM1 is diverse, and will produce sufficient large sawlog Fd and Cw for local sales as well as good quality gang Fir logs suited for the Coastland sort. The harvest area contains an estimated 5000m³. The target is to produce approximately 2000m³ with a focus on filling local orders and the remaining volume targeting gang Fir logs for the Coastland Plywood sort. This market for gang Fir logs will continue to be key in marketing logs that are less desirable for local consumers while providing high value for Cortes Island's dominant timber type.

Logging Chance:

Block GM1 will be harvested using a combination of hoe forwarding and skidding. Designated skid and hoe trails will be identified in the field and on operational maps. These trails will be cleared as a right-of-way, with the width dependant on necessity for decking, turning radius and all constraint management concerns. Timber will be harvested using the trails as an

anchor. The intensity of harvest will be “feathered back” from the trails and timber will be hauled forward to the trails to be skidded to a nearby landing at roadside. This method allows for room to operate and timber to be selected in a way that creates only small openings and retention of forest function and forest influence. The trails will be rehabilitated upon completion of the yarding phase in areas where necessary. Room for decking timber will be cleared at roadside where each trail terminates.