

Cobble Hill Mountain Recreation Area Management Plan

DISCLAIMER OF LIABILITY

While the writers of this report believe the information contained herein to be reliable, the writers of this report in no way assume any liability whatsoever for any of the content, its observations or statements.

Cobble Hill Mountain Recreation Area

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At the Open House held October 28th in Cobble Hill Village, over 100 individuals attended. While the majority was from Cobble Hill and adjoining communities, there were also individuals from Lake Cowichan and from Victoria. This Open House provided much useful input, and was followed by a second meeting on November 4th attended by approximately twenty individuals representing walking, mountain biking and horseback riding activities. We particularly wish to acknowledge the input of those who either presented or submitted detailed information at this meeting. They include, Frank Bonner, local resident, Trevor Bonner, Francis Kelsey School, Neil Bonner, local resident, Jitka Kotler, Cowichan Valley Outdoors Group, Joy Matthews, BC Carriage Driving Society, Zone Six, David Darvill, local resident, Kurt Knock, Cycling Association of BC.

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TABLE OF CONTENTS

Disclaimer of Liability	1
Acknowledgements	2
Table of Contents.....	3
Executive Summary	5
1.0 Introduction	7
1.1 Introduction.....	7
1.2 Background	7
1.3 History of Public Recreation on Cobble Hill Mountain	9
2.0 Methodology	10
3.0 Recreation Area Assessment.....	11
3.1 Land Tenure	11
3.2 Natural Resources - Vegetation.....	13
3.3 Natural Resources - Wildlife	16
3.4 Natural Resources - Aquatic.....	16
3.5 Natural Resources- Other	16
3.6 Historical and Cultural Resources.....	16
3.7 Trails	17
3.8 Public Access/Staging Areas	23
3.9 Existing Recreation Facilities	24
3.10 Existing Use Patterns	25
3.11 Adjacent Parks, Green Spaces and Trail Links	28
3.12 Commercial Recreation Use	28
4.0 Recreation Area Management Plan	30
4.1 Proposed Recreation Management Approach	30
4.2 Proposed Trails in the Recreation Area	31
4.3 Staging Areas/Recreation Area Access Points	35
4.4 Recreation Area Amenities	35
4.5 Environment - Vegetation	36
4.6 Environment – Wildlife	37
4.7 Environment - Aquatic	37
4.8 Culturally Sensitive Areas.....	37
4.9 Proposed Interpretative Infrastructure.....	37
4.10 Community Involvement and Stewardship	37
4.11 Commercial Recreation	38
5.0 Implementation Plan	39
5.1 Higher Priority Elements	39
5.2 Longer Term Elements	39
5.3 Implementation Plan – Estimated Costs	40
APPENDIX I - Methodology	42
Project Scope	42
Project Stages	42
Public Input	43
Appendix ii –Parks in Vicinity	44
Appendix III– Survey Responses	46
Appendix IV– Plant List.....	56
Appendix V– Bird List.....	57

Cobble Hill Mountain Recreation Area

Appendix VI - Trail Recommendation Tables	59
Appendix VII– Trail User Ethics.....	61
APPENDIX VIII- Information Sources.....	62
References.....	62
Appendix IX – Recreation Reserve Management Agreement.....	63

EXECUTIVE SUMMARY



In August 2001 the Cowichan Valley Regional District (CVRD) signed an agreement with Ministry of Forests to manage outdoor recreation within the designated Forest Recreation Reserve on Cobble Hill Mountain, located within Electoral Areas B (Shawnigan Lake) and C (Cobble Hill). The agreement is the result of efforts by CVRD, local parks and recreation commissions and community members who have long envisioned a greater community role in management and stewardship of Cobble Hill Mountain's natural attributes and outdoor recreation. The outcome of this effort is the proposed Cobble Hill Recreation Area Management

Plan covering the Forest Recreation Reserve, CVRD's Quarry Nature Park, two adjoining woodlots and vacant provincial forest covering a total of area of 416 hectares (1003 acres).

The Proposed Cobble Hill Mountain Recreation Area is an area in transition. It has a long history of resource development, (primarily logging and quarrying) combined with informal outdoor recreation use. This plan provides direction for management of outdoor recreation on lands currently under the jurisdiction of the Ministry of Forests and the CVRD. The majority (405 ha of the 416 ha) of the landbase is within the Provincial Forest.

Preparation of the management plan was undertaken from mid-September 2002 through March 2003. The Conceptual Management Plan was presented at an Open House on October 28, 2002 which over 100 people attended, and was followed up by a meeting with interested stakeholders. Meetings and discussions with members of the community, regional planners and provincial government ministry staff and First Nations, combined with extensive review of map information and fieldwork, served to identify the extent of resources and recreation activities, and provide a basis from which to develop the Management Plan. In total, thirty-eight completed surveys, nine letters, five telephone calls, and five Draft Conceptual Plan Maps with annotations were received, in addition to feedback at the open house and meetings.

Many expressed the desirability of keeping the area natural, while others were interested in signs and basic outdoor recreation amenities. There was a range of trail use suggestions, from single use trails for walking only to designating all trails multi-use open to all. The plan attempts to balance the different interests with the resources and capabilities within the proposed recreation area.

There are three main elements to the Cobble Hill Mountain Recreation Area Management Plan. First is an emphasis on protection of the area's natural and outdoor recreation resources and opportunities. Second, the plan assesses trail use, types of trails and trail sections requiring rehabilitation, relocation or closure as a result of terrain, user conflicts, or environmental considerations. Finally, the plan addresses the transition to formal management, through

Cobble Hill Mountain Recreation Area

provision of signs and maps, basic facilities, staging of trail reconstruction and creating new trail links to provide better access and accommodate increased public use, both locally and from across the region.

There are a number of tenures within the proposed recreation area, having a variety of land management objectives, and there are different land managers involved. Therefore, it is recommended that the CVRD assume a lead role in conducting a series of meetings with the agencies involved so as to put forward the management objectives of this management plan, and to raise awareness of the sensitivity of the resources within the proposed recreation area.

Within the proposed recreation area a number of Sensitive Ecosystems, proposed Old Growth Forest Management Areas and red and blue listed invertebrates which have been identified by Provincial Government agencies and recognized local specialists. Where existing trails traverse noted sensitive areas, the plan outlines measures to protect environmental resources, ranging from trail closures to fencing and interpretive signage. A key objective should be to obtain consensus on the protection of these rare and endangered ecosystems within the proposed recreation area.

The current outdoor recreation resources of the area include an extensive network of informal trails and old logging roads. It is particularly important to note that none of the trails, other than the trails within Quarry Nature Park, were developed to any formal standard. The prevalence of the steep terrain and lack of stable trail surfacing material on many of the trails has, in some cases, created challenging and potentially hazardous conditions (such as exposed roots across trails). The plan outlines an approach to assess and improve trail conditions to reduce risks to trail users and minimize future trail management liabilities and maintenance requirements.

Through low key interpretive signs in the proposed recreation area, visitors will be informed of the location of sensitive resources and of compatible activities and recreation practices.

During the consultative process, concern was frequently expressed regarding commercial recreation use, specifically commercial equestrian use. Commercial four-wheel drive tours are also conducted on Cobble Hill Mountain, although these were not mentioned through public input. Currently, there are no formal commercial recreation tenures in the proposed Cobble Hill Mountain Recreation Area and prior agreements with commercial recreation operators have lapsed.

The report recommends the CVRD obtain formal agreement with Land and Water BC Inc. with regards to commercial recreation interests for use of the recreation area. The terms of this agreement should provide CVRD authority over all commercial recreation tenure applications and activities in the proposed recreation area. This would ensure CVRD and community investments made to upgrade and maintain the recreation resources are protected and managed in the best interests of the community.

1.0 INTRODUCTION

1.1 Introduction

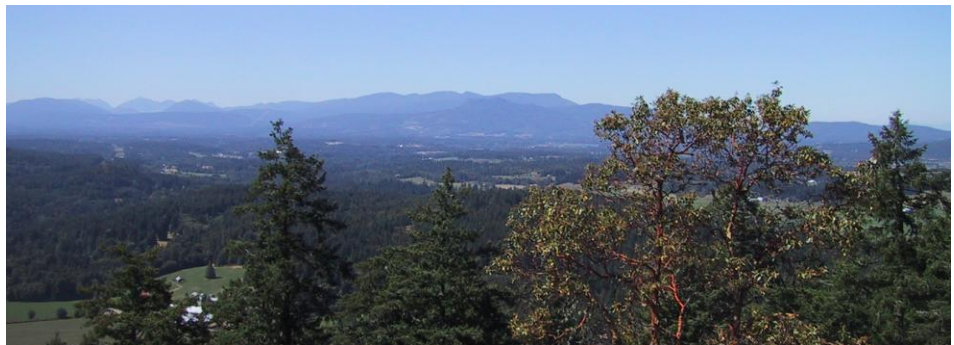
Cobble Hill Mountain is an area in transition, with a long history of resource development (primarily logging and quarrying) and informal outdoor recreation use. In August 2001 the Cowichan Valley Regional District (CVRD) signed an agreement with the Ministry of Forests to manage outdoor recreation within the Forest Recreation Reserve on Cobble Hill Mountain, located within Electoral Areas B (Shawnigan Lake) and C (Cobble Hill). The agreement is the result of efforts by CVRD, local parks and recreation commissions and community members who have long envisioned a greater community role in management and stewardship of Cobble Hill Mountain's natural and outdoor recreation.

1.2 Background

Cobble Hill Mountain Recreation Area Description

Refer to the map in the back of the report and on facing page.

The proposed Cobble Hill Mountain Recreation Area is located just west of the Village of Cobble Hill. It includes Cobble Hill Mountain (elevation 320m), Polara Hill to the



north (elevation 140 m) and surrounding lowlands. The total area covered is 416 hectares or 1,000 acres. The boundaries of the proposed recreation area are generally defined by the E & N Railway corridor to the east, Burma Road to the south, extending west to Thain Road and north to Hillbank Road. The largest portion of the area is within the immediate vicinity of Cobble Hill Mountain itself, including the Main Summit and the three lesser summits (South Summit, Beacon Summit and Little Bluff). A narrow corridor extends northwards connecting this section with Polara Hill.

Regional Context

The Cowichan Valley Regional District (CVRD) is located on Southern Vancouver Island and covers an area of 3,730 sq. km. with a population of approximately 72,000. The CVRD is comprised of four municipalities and nine Electoral Areas and deals with local issues on a region-wide perspective, as well as administering local functions for the unincorporated Electoral Areas directed through locally elected officials supported by citizen-represented Advisory Planning and Recreation Commissions. Cobble Hill Mountain lies in both Electoral Area B (Shawnigan Lake) and Electoral Area C (Cobble Hill), though the area is also used for recreation by residents from nearby Electoral Areas A (Mill Bay) and D (Cowichan Bay) and across the region, as well as visitors from outside the regional district.

Cobble Hill Mountain Recreation Area

CVRD Parks Function

The mandate of the parks function for the Cowichan Valley Regional District includes:

- Protection and management of a wide variety of outstanding parklands which represent the best natural features and diverse wilderness environments of the region.
- Providing opportunities for a diversity of high quality and safe outdoor recreation that is compatible with protecting the natural environment.

Inherent in this mandate is maintaining a balance between CVRD Parks' goals for protection of natural environments and provision of outdoor recreation opportunities for Cowichan Valley residents and visitors.

Land Tenure

There are four different land tenures within the proposed recreation area. The CVRD is currently responsible for recreation in the Community Park and the Recreation Reserve.

LAND DESCRIPTION	EXISTING RECREATION TENURE	AREA (Hectares)	AREA (Acres)
Quarry Nature Park	CVRD -Community Park	11 Ha	26 ac
Forest Recreation Reserve #0202	CVRD -under existing agreement with Ministry of Forests	114 Ha	275 ac
Woodlot License WO21	Ministry of Forests	65 Ha	157 ac
Woodlot License WO22	Ministry of Forests	93 Ha	224 ac
Vacant Provincial Forest (North Parcel)	Ministry of Forests	56 Ha	135 ac
Vacant Provincial Forest (South Parcel)	Ministry of Forests	77 Ha	186 ac
Total land area (approx.)		416 Ha	1003 ac

History of the Cobble Hill Area

Prior to the arrival of European settlers, between 1855 and 1870, the Cobble Hill area was inhabited by Coast Salish First Nations. Construction of the E&N Railway in 1886 attracted an influx of people to the area. Cobble Hill village was originally called "Whitehouse Subdivision" and was comprised of the station, rail siding and houses and the large white boarding house for railway workers that gave it its name. Later the name Cobble Hill was adopted, though the origin of the name is uncertain. The Station Hotel was built in 1887 and became the focal point of the community until it burnt down in 1942. The village experienced a boom in commercial activity up to the 1930's with many services and stores being operated. Following the Depression and subsequent decline in rail travel, commercial activity within the community diminished. The Cobblestone Pub was built in 1980 and there has been a slow increase in building and renovating of commercial buildings since that time.

History of Cobble Hill Mountain

There has been a history of industrial logging in the area since it was settled in the 1800's. In the 1960's a large part of the mountain was logged, including the large Douglas fir trees growing on the summits were removed. This created the views now valued by many of today's recreation users.

The Bonner Family operated a lime quarry in what is now Quarry Nature Park from 1953 to 1982. A total of 31,675 metric tons of limestone was mined and milled on site. Norman Bonner sold his land to the CVRD in 1984 for creation of a community park after the mine and mill were closed and dismantled.

1.3 History of Public Recreation on Cobble Hill Mountain

Cobble Hill Mountain has long been a favoured destination for outdoor recreation activities. When access became available (primarily through logging and quarry roads), the area was regularly used for off-road motorized recreation. With increased housing developments on the east and south sides, motorized recreation use increased. Owners of properties bordering the mountain would build trails from their homes to join existing trail systems.

The area also has a long history of equestrian use. Riders originally rode over the logging road from Empress Avenue up to the South Summit and down to the Bamberton Quarry. The equestrian community expanded riding opportunities with intensified trail building in the 1980's and 1990's, primarily by members of the Cobble Hill Riders. The purpose of these trails was to link up with the newly created Quarry Nature Park and to provide users with shorter loops.

Motorized trail bike use was common in past years and limited use continues today. At one time, riders had built a course for competitions; however the Ministry of Forests stopped this. The Ministry also made a concerted effort in the mid 1990's to move trail bike use off the mountain by providing a designated trail bike area on Forestry managed lands south of Shawnigan Lake. Limited forest recreation management of Cobble Hill Mountain's crown forestlands by the Ministry of Forests occurred through the 1990's. Rustic picnic tables were installed on the summit and trail signs were posted.

Commencing in the late 1990's the mountain biking community became active in establishing a separate network of informal bike trails, in addition to using many of the old logging roads and existing trails developed by other groups over the years. Informal commercial outdoor recreation use on the mountain has included donkey treks and llama treks and more recently equestrian trail riding and 4WD tours.

In 1984 the CVRD officially opened Quarry Nature Park which has led to increased use of the nature park as a primary access point to the informal trail network on and around Cobble Hill Mountain.

Cobble Hill Mountain Recreation Area

2.0 METHODOLOGY

There were three components to the project: site assessment, conceptual plan development and the final Proposed Recreation Area Plan development. A summary is below and detailed methodology can be found in Appendix I.

Site Assessment

Objective/description: Initial work included identification of existing significant features and use patterns. RRL contacted the Wood Lot Licensees, Ministry of Forests staff, user groups, Parks and Recreation Commissions, First Nations and adjacent landowners to gather information on current and desired use patterns.

Deliverables: Contact list, background information assembly.

Conceptual Plan Development

Objective/description: Preparation of a Draft Conceptual Plan framework sufficiently detailed for recommending changes to the use patterns of the proposed recreation area and for designating trails for specific uses.

Deliverables: RRL prepared a draft conceptual plan in map format at a scale of 1:7,500 detailing a conceptual management approach. The plan identified areas requiring rehabilitation and recommended trail uses. The conceptual plan map also identified ecologically sensitive areas and recommended Low Impact Recreation Zones for their protection. The plan identified the different tenures in the recreation planning area.

RRL and the CVRD held an Open House in Cobble Hill on October 28th to present the draft plan for public input. Over 100 people attended the Open House. The consultants presented their work on the plan, received comments and answered questions.

At this Open House, background information regarding plant species and 15 copies of the resource inventory map were provided. Eight copies of the Conceptual Plan Map were provided to interested stakeholders. Those receiving the Conceptual Plan Map were requested to return with their input to a second meeting on November 4th. At this meeting (again hosted by RRL and the CVRD), stakeholders presented their information and answered questions regarding recreation activities, trails taken, etc. The consultants facilitated the meeting, and recorded all comments. The meeting was also attended by the CVRD and by a representative of the Cobble Hill Parks Commission.

Final Recreation Area Management Plan

Objective/description: The consultants took the input gathered from the public, user groups, CVRD staff and others and developed a draft and then Final Recreation Plan for the Cobble Hill Mountain Recreation Area.

Deliverables: The consultants met with CVRD staff and then presented the draft Final Recreation Plan to stakeholders on November 20th 2002 in Cobble Hill. Comments from the CVRD were received on January 23rd, 2003 and the final Cobble Hill Mountain Recreation Area Recreation Plan was submitted by the consultant to the CVRD on February 24, 2003.

3.0 RECREATION AREA ASSESSMENT

This section identifies the land tenures within the proposed recreation area and provides a description of the natural, historical and cultural resources in the planning area. This section also provides a description of the approximately 11 km of informal trails and 14 km of road and grade within the planning area

3.1 Land Tenure

Existing recreation use in the proposed recreation area occurs over all tenures regardless of which agency is responsible for managing the lands. All of the lands are public lands, whether administered by the municipal or provincial governments. Many users are unaware of the different land managers involved.

Quarry Nature Park

Quarry Nature Park is managed by the CVRD as one of several local parks funded by Electoral Area C (Cobble Hill) as part of its community parks program. Trails within the community park link to the informal network of trails established on and around Cobble Hill Mountain. The park is owned and managed by the CVRD.

Forest Recreation Reserve #0202

The 114 hectare (275 acre) Forest Recreation Reserve #0202 is administered by the Ministry of Forests as part of the South Island Forest District. Under the “Provincial Forest Act”, a recreation reserve is a map notation which is an MOF administrative label or “flag” that is placed on MOF maps and records (MOF Atlas) to indicate MOF interest in an area within Provincial Forests. In this case the interest is in managing the area primarily for its recreation values. A recreation reserve map notation does not mean other activities are prohibited. It ensures that when other activities are proposed in the area covered by the notation, the holder of the notation has an opportunity to comment on the proposed activity. In the case of map notations, the holder is the District Manager of the South Island Forest District. Harvesting, road building, planting and fire management activities may still occur in the Recreation Reserve, although they will need to be compatible with recreation.

In 2001 the CVRD signed a 30 year agreement with the Ministry of Forests whereby the CVRD assumed primary responsible for management of outdoor recreation activities within Forest Recreation Reserve #0202 (Appendix IX). The terms of the agreement provide CVRD authority to actively manage trail use and provide recreation amenities. The Ministry of Forests will remain the primary authority responsible for enforcement

Woodlot Licence Areas

The two woodlots are managed under separate license agreements between the Ministry of Forests and independent local community forest contractors. The goals of the MoF Woodlot License Program are to:

- ❖ Increase the amount of private forest land under sustained yield management and to improve the productivity of that land
- ❖ improve the productivity of small parcels of Crown forest land,
- ❖ increase the opportunities for private citizens to participate in small-scale forestry,

Cobble Hill Mountain Recreation Area

- ❖ promote local employment opportunities,
- ❖ and promote excellence in forest resource management

Terms of the two existing woodlot license agreements provide for a combined annual allowable timber cut of approximately 240 m³/year for saw logs, firewood and specialty products (posts and rails). Only removal of conifers contribute to the allowable annual cut limit whereas no limits are imposed on removal of deciduous species.

A component of the woodlot program includes provision of community benefits to include, where appropriate, outdoor recreation opportunities for the public. The Woodlot Management and Working Plans prepared under the two Woodlot Licenses within the Cobble Hill Mountain area recognize the value of outdoor recreation use, including hiking and horseback riding on existing trails and roads. The plans require that trails through the two license areas remain intact as appropriate for timber extraction and safe public access. Furthermore, these agreements make provision to allow opportunities for enhancement of recreation access within the woodlot areas.

It should be noted that a woodlot licence does not provide grazing or other non-timber rights on Crown land, so the licensee cannot authorize non-timber uses. These can only be authorized by a provincial ministry or agency.

Vacant Provincial Forest

The two parcels of Vacant Provincial Forest are administered through the Ministry of Forests.

Designated Land Uses, Easements, Use Permits and Other

The Cobble Hill Improvement District has a water tower within the Vacant Provincial Forest (south parcel) close to the Quarry Nature Park. A right-of-way (3225 RW) for the pipeline from this water tower runs east through the park. In addition there is an easement runs that south for 190 m from the right-of-way to the undeveloped Hutchinson Road allowance. The easement is used by the Bonner family who own property adjacent to the park. The easement carries a waterline buried at a depth of approximately one metre.

A conditional water licence (C036935) registered to Paul Randall of 1615 Thain Road is located within or near the proposed recreation area. The license was granted in 1970 and is used for domestic water supply from Tatchell Spring.

The proposed GSX (Georgia Strait Crossing) gas pipeline corridor runs through parts of Woodlots 21 and 22. The location is noted on the map at the back of the report.

Tenure Issues

The CVRD has expressed the desire to be the single agency managing recreation over the entire proposed recreation area. One agency would be able to effectively coordinate recreation use and the development and maintenance of trails and other facilities. Initial correspondence with the South Island Forest District indicates that they would be willing to have a similar agreement with the CVRD on the VPF as they do on the proposed recreation area.

The licensee for Woodlot 22 has expressed an interest in expanding his Woodlot to include some or all of the Vacant Provincial Forest parcels adjoining his existing tenure.

All pieces of unencumbered Crown land are of interest to First Nations for the purpose of settling land claims.

The boundaries of Quarry Nature Park and the Recreation Reserve #0202 join at a point (refer to map in back pocket). This narrow meeting point invites potential trespass onto adjoining private property, as it is not clear to visitors where the tenure/lot boundaries are located.

There is a concentration of informal trails leading west from Quarry Park, through Vacant Provincial Forest to informal trails within the Recreation Reserve. Currently, the CVRD does not have any responsibility for recreation on the Vacant Provincial Forest. However, through this planning process, the Ministry of Forests has been made aware of the presence of these linking trails, and any planned forest development should take into account these trails and the important access they provide for local recreation.

There is limited signage in the proposed recreation area and users are not aware of crossing into different tenures. There is a standard MoF sign for Woodlot 22 along Thain Road and the operator has put signs on his gates. There is no signage for Woodlot 21.

The accurate location of the water licence is not known. If it is close to a trail, then there may be a need to divert the trail if there is potential for contamination of the spring.

The mix of different tenures within the planning area suggest the desirability of coordinating management of recreation opportunities along with other resource development activities. This may be accomplished through allocation of planning responsibility to a single party, such as the CVRD, or through sharing of information so as to maintain current and long term understanding of a range of activities within the proposed recreation area.

Given the different fields of expertise (forestry, recreation, biodiversity, cultural resources, commercial recreation etc.) and the access to different resource management expertise held by different parties, it may be preferable for the CVRD, the Ministry of Forests, or the Ministry of Sustainable Resource Management to host multi-agency meetings in order to establish working relationships and to work toward coordinated management of the resources and resource development opportunities within the proposed recreation area.

3.2 Natural Resources - Vegetation

A plant inventory was not conducted for this project. However, a list of herbaceous and shrubby plants was provided by Helen Reid (Appendix IV) and the Sensitive Ecosystems inventory (SEI) provided the location of specific ecosystems. The Conservation Data Centre provided information additional information on threatened ecosystems and species.

The Cobble Hill Mountain area is mostly forested with the lower elevations covered by mature second growth Douglas-fir forest mixed with Oregon grape (*Mahonia nervosa*) and grass (*Festuca occidentalis*). Parts of the forest at the base of the mountain are variably open with arbutus (*Arbutus menziesi*) as a co-dominant and with ocean spray (*Holodiscus discolor*) and snowberry (*Symphoricarpos hesperius*). The northwestern portion on the base of the mountain's slope is wetter and is dominated by western red cedar (*Thuja plicata*) and western hemlock (*Tsuga heterophylla*). The middle slope has open areas with some grasses (*Festuca Roemeri*

Cobble Hill Mountain Recreation Area

and *Koeleria macrantha*). The top of the mountain has stands of arbutus and hairy manzanita (*Arctostaphylos columbiana*).

Forest

The SEI mapped two forest ecosystems within the proposed recreation area; the red-listed (extirpated/destroyed, endangered or threatened) Older Forest and the general biodiversity ecosystem Older Second Growth Forest. Older Forest polygons are shown on the map in the back pocket.

The Older Forest ecosystem is defined as conifer dominated forest with an average tree age of 100 years or greater. The trees are generally large and tall, reaching up to 1.5 m in diameter and over 50 m in height. Older Forests support a rich community of wildlife, plant and invertebrate species which were once common to the landscape. They also serve as specialized habitats for species groups that account for a huge proportion of their biodiversity, and depend on specific habitat conditions.

Influenced by disturbance and succession, Older Forests are dynamic ecosystems that change over time. Thus, they provide valuable research and education resources for studies on second growth forest management, coastal forest biodiversity, and silvicultural genetics.

The Older Second Growth Forest is not rare but is valued for general biodiversity values and connectivity. It is defined as large stands of conifer dominated forest between 60 and 100 years old with either a deciduous component. Older Second Growth Forests are the most common forested ecosystem. They function as both essential habitat areas for many wildlife species, and as primary connections between ecosystems in the highly fragmented landscape of the Georgia Basin. All Second Growth Forests have been disturbed by logging or other human disturbance since the settlement of Vancouver Island and the Gulf Islands began in the middle of the 19th century.

Older Second Growth Forest is considered ecologically important because they are the future older Forests, provide landscape connectivity and can be used as buffers.

Rock Outcrops and Grassland



Main Summit, South Summit and Little Bluff all contain the red-listed Terrestrial Herbaceous ecosystem. Terrestrial Herbaceous ecosystems are open wildflower meadows and grassy hilltops, usually interspersed with moss covered rock outcrops. They typically occur as small openings in forested areas with gentle to moderate slopes not exceeding 30% grades. They are located from outside the salt spray zone near shorelines, to the summits of local hills and mountains.

Terrestrial Herbaceous ecosystems are host to a variety of highly specialized microhabitats

including hummocks, hollows and vernal pools, that meet the requirements of many different plant and animal species some of which are rare and are only known to occur in these ecosystems.

Terrestrial Herbaceous ecosystems are characterized by thin soils which are easily disturbed. Herbaceous plants can be easily trampled or dislodged onto bare rock where they cannot re-establish. Thus they are highly vulnerable to a range of human disturbance factors including residential development and various recreational uses.

A single Garry Oak tree, located in the Main Summit area, was reported during the Open House.

Old Growth Management Areas

The Ministry of Sustainable Resource Management (MSRM) has proposed several Old Growth Management Areas (OGMA's) within the Cobble Hill Mountain area. The approximate coverage of these OGMA's is shown on the map in the back pocket. These areas are managed by the MSRM and Ministry of Forests for old growth forest characteristics. These areas of mature forests have been recommended for management as OGMA's, so that these areas will develop old growth forest attributes over time. The characteristics of an OGMA include:

- ❖ Large diameter live and dead trees that are standing, and provide important habitat for birds, small animals and bears.
- ❖ Dead and decaying trees that are lying on the ground, and provide habitat and food for small animals.
- ❖ A variety of tree ages, sizes and species.

Some forests start to develop these attributes as early as 100 years in age, while others take up to 250 years to start developing "old growth attributes"

Harvesting is typically not allowed within OGMA's, unless it is specifically designed to improve or create old growth forest attributes. Eventually there will be more old growth forest on Cobble Hill Mountain than there is today.

Some of the Old Growth Management Areas coincide with the Older Forest Zone of the SEI . There are interpretation opportunities associated with these OGMA's and the MSRM has resources which may be used to assist in developing interpretative information, such as display panels.

Invasive Plant Species

Within the proposed recreation area invasive plant species are encroaching on the Terrestrial Herbaceous Ecosystem. The dominant species is scotch broom but other foreign species can be introduced through feces or through mud containing seeds carried in on the soles of shoes or in a horse's foot. Horse feces particularly carry seeds of foreign grasses and grains.

Other invasive species are holly and English Ivy.

Damage to vegetation

The forest ecosystems are at risk from forest fires and from damage to roots from improperly located trails and general traffic along trails.

Cobble Hill Mountain Recreation Area

The Terrestrial Herbaceous ecosystem on the summits is the area most sought after by recreation users on the mountain. Visitors stay in these areas for picnics, to enjoy the views, exploring the rock bluffs. Mountain bikers and trail bikers seek the steep rock faces for challenging rides and equestrians tie their horses to trees while they spend time on the summits.

This concentrated use has caused damage such as removal of vegetation and loss of soil. All three occurrences of this ecosystem have some level of damage. The most intact of the three is the southern half of South Summit. On the Main Summit, the soil around the lowest picnic table has been disturbed and most of the vegetation removed. This is probably due to horses being tied up to trees. A number of short mountain bike trails have been created so that riders can go down steep rock outcrops.

3.3 Natural Resources - Wildlife

A wildlife inventory was not conducted for this project. Two bird lists are included in the appendices. The Conservation Data Centre reports occurrences of two rare butterflies – the Dun Skipper and the California Ringlet close to the proposed recreation area. Other than birdwatching, wildlife viewing does not appear to be a common activity.

3.4 Natural Resources - Aquatic

There are no permanent streams or creeks within the Cobble Hill Mountain area. However, several ephemeral (seasonal) watercourses collect runoff from slopes of Cobble Hill Mountain on the south, east and west sides. Due to the seasonal nature of these ephemeral streams and steep terrain it is not expected that fish species would be present at any time within these watercourses. While no fish species are present, the integrity of these watercourses is important to protect as they act as feeder systems to downstream creeks and the Koksilah River which support fish and other aquatic life year round.

3.5 Natural Resources - Other

There are glacial striations on exposed rock on the summits. These are not striking features, but are suitable for interpretation as evidence of glaciation.

3.6 Historical and Cultural Resources

Historical Resources

Historical resources in the proposed recreation area are the quarry and lime mill site in the Quarry Nature Park and the Beacon Summit. Neil Bonner has produced an eight page History of Quarry Nature Park for the CVRD so that information will not be reproduced here. Beacon Summit was the site of a WWII beacon. The old easement is still marked on cadastral maps.

There is good potential for an interpretive trail to be developed around the mill site. With further research, the Beacon Summit could also have some interpretation.

Cultural Resources

There is an old Boy Scouts cairn on the Main Summit. The exact location is not known and there is no description of the cairn. It may be initials scratched into rock or an actual structure. The Boy

Scouts hike the mountain looking for this cairn. At the top of Polara Hill are two abandoned pits and a small old quarry. The Ministry of Energy and Mines mineral occurrence database did not list any mines in that area so they were probably used as a source of rock for road building. Within Quarry Nature Park is the “Hanging Tree.” This is a morbid piece of recent local history that was the site of a suicide.

The interpretive potential of these resources is minor. Publicizing the location of the cairn would defeat the purpose of searching for it and may expose it to vandalism.

First Nations Cultural Resources

The consultants spoke with representatives of the Malahat First Nation and of Cowichan Tribes and provided them with background information. No feedback on the information provided was received from either Cowichan Tribes or Malahat Band. The Archaeological Registry Section, Archaeology and Registry Services Branch, Ministry of Sustainable Resource Management was consulted to determine if any archaeological sites were registered within or with the immediate vicinity of the Proposed recreation area. No heritage or archaeological sites of concern were found. Formerly, a culturally modified tree (CMT) site was recorded in this area (reference number DeRv-155) but this site is now considered "Legacy" and the Archaeological Registry has no further interest in protecting or preserving the site.

Legacy is a term used to refer to sites that used to be on the list of protected sites but after an internal review were removed. They can be removed for a number of reasons, for example: because they are not considered scientifically or culturally significant or they do not meet the criteria to be a protected site under the Heritage Conservation Act (HCA). Under the HCA, CMTs must predate 1846 to be protected under the Act. The CMTs in this case do not predate 1846.

The Ministry of Forests, Small Business Forester indicated that Cowichan Tribes had checked for culturally modified trees in Woodlot 21 and some had been found, resulting in alterations to logging plans. The location of these CMTs is known to the Ministry of Forests and probably corresponds to the Legacy site from the Archaeological Registry.



3.7 Trails

There are approximately 11 km of abandoned and active logging roads and 14 km of informal trail in the proposed recreation area (refer to the map in back pocket and on the facing page). The majority of trails are concentrated on the east and south sides of the mountain within Quarry Nature Park, Forest Recreation Reserve #0202, Woodlot License W022 and the vacant provincial forest parcel. Many of the abandoned roads were purpose built originally for logging access and are now used as trails. A number of these former logging roads have grown in and are not immediately recognizable as such. The trails form a maze built by a variety of users over different time periods.

Cobble Hill Mountain Recreation Area

Existing recreation use within Woodlot W021 and the vacant provincial forest lot to the west is presently limited to a rough, active logging road that circles Polara Hill providing a short loop trail for many users.

The only organised trail building in the area has occurred within Quarry Nature Park where there is a network of short interconnected trails on both sides of a surfaced road. The trails immediately adjacent to the parking lot are surfaced with bark mulch while the others are surfaced with native material.

The existing trails assessment tables on the following pages list all the major trails and groups of trails in the proposed recreation area, describing the trail, its use and general condition. Refer to that table and the map in the back pocket.

Trail Damage

The combined surface area of road and trail (3.36 ha and 1.43 ha respectively) accounts for 4.79 ha or 1.2% of the 416 ha land area within the Cobble Hill Mountain area . As none of the trails (apart from within Quarry Nature Park) were constructed to generally acceptable standards for the intended recreation user group, trail degradation and erosion from ongoing use is not unexpected. The public throughout the community consultation frequently raised ongoing damage and wear to trails as a concern. Wearing of the trails is expected to continue under the existing conditions (rainfall and steep terrain are key element in trail erosion) or until such time road and trail upgrades are undertaken.

Some of the old logging roads were well constructed and are located along natural benches. Others were skidder roads or purpose-built for short term use and are steep or built over rock. Many are located on the west side of the South Summit and three such roads lead up to Little Bluff and Main summit. These steeper roads are deteriorating; seasonal water runoff has carved gullies and exposed additional bedrock and these roads are not considered safe for the current types of recreation activities using these roads. They are difficult to walk or ride on because the exposed bedrock and the loose rock can be slippery or can roll underfoot. Some alternative bypass trails have been built by users to avoid these steep road sections which has led to a concentration of braided trails in the vicinity of Little Bluff and Main Summit. Over time there is a concern that these trails and steep roads will become joined together to form one large disturbed area.

Trails Assessment Tables

Existing Major Trails Assessment						
Trail	Length (m)	Width	Current Use	General Condition	Comments	Tenure
Empress Trail	1400	3 m	Multi-use, motorized	<ul style="list-style-type: none"> Low to moderate gradient. Old logging road Some loose rock and eroded sections 	<ul style="list-style-type: none"> Gated at Empress Road Easiest grade and best trail condition on main mountain 	Recreation Reserve
South Summit Trail	1800	3 m	Multi-use, motorized	<ul style="list-style-type: none"> Moderate to steep gradient. Old logging road Minor blowdown Severe wash out and erosion near south summit, detour trail built 	<ul style="list-style-type: none"> Partially blocked at Bamberton Access with rocks and ditching Mixed tenure Passes through red-listed ecosystem 	Woodlot 21 Recreation Reserve
Perimeter Trail	6000 total	Perimeter Trail does not exist. It is a proposed connection of several existing trails that can be upgraded and made into a main multi-use trail that will circle the mountain. Section descriptions follow.				
Section 1 Turkey Farm Access to Water tower Trail	600	1-3 m	Multi-use	<ul style="list-style-type: none"> Low gradient Stable surface, built on old road Logs across the trail 		Vacant Provincial Forest
Section 2 – by Water tower	250	1-4 m	Multi-use	<ul style="list-style-type: none"> Steep and moderate gradient. Upper section, narrow wet trail Lower section along the service road to the water tower which is wide, eroded and has loose footing 		Vacant Provincial Forest Quarry Park
Section 3 – along Recreation Reserve bdry	800	1 m	Multi-use	<ul style="list-style-type: none"> Narrow, winding trail Exposed roots, some loose rock and dirt, wet sections 	<ul style="list-style-type: none"> Trail may trespass onto neighbouring private property 	Recreation Reserve Quarry Nature Park
Section 4 – Empress Trail					<ul style="list-style-type: none"> Follows Empress- see previous 	
Section 5 - Empress Trail to Andy Place Access	800	1-2 m	Multi-use Woodlot Logging road	<ul style="list-style-type: none"> Low gradient Built along old road Minor detours to avoid blowdown 		Recreation Reserve Woodlot 21
Section 6 – Andy Place to Bamberton Access	700	Variable	Multi-use, motorized	<ul style="list-style-type: none"> First part narrow trail Second part follows Woodlot logging road 	<ul style="list-style-type: none"> Garbage dumping near Bamberton Access 	Woodlot 21

Cobble Hill Mountain Recreation Area

Existing Major Trails Assessment

Trail	Length (m)	Width	Current Use	General Condition	Comments	Tenure
Summit Loop	1250	Variable, <1 m on trail sections, 2-3 m on old roads	Multi-use, motorized on road sections (nearly impassable to 4WDs)	<ul style="list-style-type: none"> Very poor condition on steep lower road section – heavily eroded, washout, loose rock, exposed bedrock. Upper section of road in good condition Trail gradient variable, trail is narrow and twisty, some logs across path, exposed roots, loose rock and dirt, small wet areas 	<ul style="list-style-type: none"> Steep road section unsafe for horses This is the best loop to the Main Summit, the trail portion is scenic and pleasant to traverse. Passes through red-listed ecosystem Leads to key destination 	Recreation Reserve
Bear Trail	900	<1m	Multi-use	<ul style="list-style-type: none"> Moderate gradient and exposed roots in lower section Low gradient and wet area in upper section 	<ul style="list-style-type: none"> Preferred horse route Mixed tenure Has potential to be a main trail 	Recreation Reserve Vacant Provincial Forest
Thain Trail	1800 m	Unknown	Foot and mountain bike?	<ul style="list-style-type: none"> Unknown 	<ul style="list-style-type: none"> Only partly built Field check only of upper section 	Recreation Reserve Vacant Provincial Forest Woodlot 21
Huff + Puff Loop	1200	<1m	Foot, mtn.bike, rarely horse	<ul style="list-style-type: none"> Overall steep gradient Some loose rock 	<ul style="list-style-type: none"> Unsafe for horses The steepest and quickest route to the Main Summit Passes through red-listed ecosystem Short connecting trail is overgrown 	Vacant Provincial Forest Recreation Reserve
Water Tower Trail	500	1-2 m	Multi-use	<ul style="list-style-type: none"> Low to moderate gradient except for very steep section which is eroded, has exposed roots, loose rock and soil 	<ul style="list-style-type: none"> Popular trail Most direct route to Summit 	Recreation Reserve Vacant Provincial Forest
Quarry Road	500	4 m	Multi-use Motorized Service Road	<ul style="list-style-type: none"> Low to moderate gradient Maintained gravel road in excellent condition 	<ul style="list-style-type: none"> Service Road to water tower 	Quarry Park
Rob's Trail	800	<1 m	Dominantly mtn. Biking	<ul style="list-style-type: none"> Moderate to steep gradient. Trail is narrow and twisty, difficult to follow in some locations. Logs along path, wet sections. Condition is poor on rock bluffs especially where multiple routes are used, stripping vegetation off the rock 	<ul style="list-style-type: none"> Impassable/unsafe for horses Mixed tenure Passes through red-listed ecosystem 	Woodlot 21 Recreation Reserve

Management Plan

Existing Major Trails Assessment

Trail	Length (m)	Width	Current Use	General Condition	Comments	Tenure
Polara Loop	2000	2-3 m	Woodlot Logging road Multi-use	<ul style="list-style-type: none"> Variable gradient, overall moderate Steep section near Polara access has loose rock and eroded section 	<ul style="list-style-type: none"> Short loop trail Of interest to carriage drivers Need to travel along Polara Road to close loop 	Vacant Provincial Forest Woodlot 22 Public Road

Existing Trail Clusters Assessment

Trail	Length (m)	Width	Current Use	General Condition	Comments	Tenure
Quarry Park	2000	1-2 m	Multi-use, motorcycles	<ul style="list-style-type: none"> Low to moderate gradient. Some exposed roots 	<ul style="list-style-type: none"> Access portal Old quarry Proposed OGMA Mixed tenure 	Quarry Nature Park Vacant Provincial Forest
Main Summit	1800	<1m	Multi-use	<ul style="list-style-type: none"> Steep gradient Moss removed from rocks around picnic tables Loose dirt and removal of vegetation around lower picnic table Many short trails 	<ul style="list-style-type: none"> Passes through red-listed ecosystem Offers views Key destination 	Recreation Reserve
Little Bluff	2000	<1	Multi-use, minimal horse use	<ul style="list-style-type: none"> Steep Old road in very poor condition – eroded, loose rock Concentration of trails Many short interconnected trails over rocks Severe damage to moss and vegetation through use 	<ul style="list-style-type: none"> Red-listed ecosystem 	Recreation Reserve
Beacon Summit	1100	<1 m	Foot and mountain bike Rarely used by horses	<ul style="list-style-type: none"> Steep gradient Narrow trails 	<ul style="list-style-type: none"> Unsafe for horses 	Recreation Reserve

Cobble Hill Mountain Recreation Area

Existing Trail Clusters Assessment						
Trail	Length (m)	Width	Current Use	General Condition	Comments	Tenure
South Summit	800	<1m	Foot, mountain bike, motorcycle Rarely used by horses	<ul style="list-style-type: none"> Moderate to steep gradient 	<ul style="list-style-type: none"> The largest Red-listed ecosystem in the Proposed recreation area and in the best condition of the three areas. Short, interconnected trails Damage to moss and vegetation Views to Shawnigan Lake 	Woodlot 21

3.8 Public Access/Staging Areas

The main access point to the proposed recreation area is through Quarry Nature Park. This is the only developed access with a parking area and information signage. There are six other informal access points to the area. Refer to the map in back pocket.

Local residents access the area on foot, bicycle or horseback while people from further away typically drive to the site. In addition, as an alternative to travel by car, visitors can reach Cobble Hill by train or transit bus. The train shelter is adjacent to Quarry Nature Park and there is a bus stop in the Village of Cobble Hill.

There are a number of homes on the south and east sides that are close to the mountain, and some private homes actually border the proposed recreation area. Fewer homes are located along Hillbank, Polara, Thain and Doran Roads, but in these more rural areas access to the area by horseback is generally easier due to minimal vehicle traffic on these roads.

1. Sawmill Access is located within the Thain Road right-of-way parallel to the railway tracks. Mainly people walking or cycling to the area from the north of Quarry Nature Park use this access. There is limited parking at this location.

2. Turkey Farm Access is located close to Sawmill Access a short distance up Thain Road from the railway tracks. It shares a small roadside parking area with Sawmill Access. Mainly equestrians who ride to the proposed recreation area use it. The trail from the entry point follows an old logging road. There is a freshwater spring located where the trail meets Thain Road and as a result the first part of the trail is typically muddy.

3. Empress Access is located on Empress Avenue south of the parking lot at Quarry Nature Park. There is roadside parking at this location. There are a number of existing users who prefer the Empress Access, mainly for the easier walking along the old logging road which starts at this entry point. This used to be the main route up the mountain prior to the opening of Quarry Nature Park and was used by 4x4s prior to the gate being installed in July 2001.

4. Andy Place Access is located at the end of Andy Place off Burnham Road. There is limited road shoulder parking along Andy Place. The Andy Place Access receives regular use. There is a gate to block vehicle access but anything smaller than an ATV can still get around the gate (i.e. dirt bikes). There is little evidence of regular motorized use along this trail, but there appears to be steady foot, mountain bike and horse traffic.

5. Bamberton Access is located at the southwest corner of the Cobble Hill Mountain area. There is room for three vehicles to park in a pullout along Thain Road. Fewer trail users access the area through the Bamberton Access. However, it became the preferred access route for motorized vehicles after the Empress Access was gated. In 2002, roadwork blocked part of the Bamberton access with ditches and rocks intended to restrict all vehicle access, but 4x4 vehicles and ATV's are still able to maneuver around this obstacle. In the past a small informal parking area existed in this location but it is also now ditched and blocked with rocks. This access remains important because of its proximity to the Bamberton Quarry on the opposite side of the road. If there is future development in this area this will become the entry point for users on the south and west sides of the mountain.

Cobble Hill Mountain Recreation Area

6. Polara Hill Access is a small informal parking area with space for two vehicles located off Polara Road the public road through Woodlot 21, that links Hillbank and Doran Roads. It receives little use. Many people do not know that this area is public land and are not aware of Polara Road.

Multiple access points are a positive feature in an area with different recreation activities. Although, the management has chosen multi-use trails wherever possible, not all users will be content with this. Multiple accesses will allow users to spread around the whole area and reduce the number of confrontations. Publicizing these alternate accesses may disperse some of the use of Main Summit to South Summit and correspondingly reduce the number of users on the Water Tower Trail. Limited parking areas at the smaller accesses encourages users not to drive to the proposed recreation area.

A second formal access point will be needed on the west side to accommodate increased use from new housing developments on Silvermine Road. This access should have a large parking area to accommodate horse trailers. At present, a larger parking area at the Bamberton Access would reduce the amount of forestland. Future development of the Bamberton Quarry may allow for a parking area within the development.

Minor improvements of some of the access points are needed to allow for easier parking. If a trail is built around the perimeter, a new parking area will be required along Thain Road.

3.9 Existing Recreation Facilities

Other than the recreation facilities in Quarry Nature Park, there are few facilities in the proposed recreation area.

Quarry Nature Park

In Quarry Nature Park there is a developed parking area for 8-10 vehicles, a park information sign, 2 picnic tables, a garbage receptacle, benches, the remains of an old pump used in the lime quarry and the abandoned lime quarry itself. There are signs within the park indicating the park boundary. In 1986-88 the CVRD installed a gate at the original parking lot. The gate was moved to its present location at the end of the parking lot in 1997, to restrict motorized access.



Forest Recreation Reserve #0202

There are three picnic tables located on the Main Summit of Cobble Hill Mountain within Forest Recreation Reserve #0202. Two tables were originally installed by the Ministry of Forests, and were replaced in 2002 by the CVRD. An additional table was installed at the same time. The CVRD installed a gate on Empress Road as part of the agreement with the Ministry of Forests.

Woodlots and Vacant Provincial Forest

There are no recreation facilities in these parcels. The licensee of Woodlot 21 has installed three gates. The CVRD installed a gate at the Bamberton Access to reduce the amount of garbage

dumped, but it was vandalized. The gate was replaced with ditching and large boulders without consulting the woodlot licensee, who now is unable to access his woodlot by vehicle.

Trail and feature names assist visitors in finding their way. Currently there are no/few signs posted at entry points denoting the layout of the existing trail system on and around Cobble Hill Mountain. The extensive network of trails and numerous intersections can create confusion for first-time trail users to the mountain which can lead to people becoming disorientated or ending up on trails which may exceed their personal ability to safely walk, cycle or ride their horse.

A few trail names were provided at the Open House and on returned maps. The keenest “namers” appear to be mountain bikers, but many of the names suggested by this group are pertinent to mountain biking and may not reflect a unique characteristic of the trail or be suitable for a multi-use trail. A suggestion was made to name the summits rather than naming all trails.

3.10 Existing Use Patterns

Existing use patterns were determined from user surveys, interviews, Public Open House feedback, follow-up meetings, and fieldwork.

Existing Activities

The following activities were listed on the surveys: hiking, walking, dog walking, mountain biking, nature appreciation and study, horseback riding, bird watching, plant identification, horse driving and picnicking. Many people use the mountain for more than one activity. For example they may walk on some visits and horseback ride on others.

Other activities were observed or assumed based on fieldwork. These include: ATV and 4x4 driving, and motorbike riding. Motorized trail bikes were observed in Quarry Nature Park and other users also reported seeing trail bikes in the nature park regularly. Motorbike tracks were seen throughout the proposed recreation area. ATV and 4X4 use is concentrated in the southwest corner and around South Summit, and there is some motorized use around Polara Hill. Both of these areas are accessible to vehicles.

Probable other activities include photography, jogging, drawing/painting and mushroom picking. The rock bluffs are not steep enough to attract rock climbing.

General Frequency of Use

General frequency of use and season of use by visitors was determined from surveys and field observations. Refer to the Survey responses in Appendix III for more details.

During the field visits by RRL staff, foot traffic, dog walkers, mountain bikers, equestrians, motorbike riders and ATV drivers were observed. The most numerous were people on foot, usually with at least one dog. On all visits to the Quarry Nature Park there were at least 2 other vehicles in the parking lot. Few users were encountered during the fieldwork with the exception of a field visit on November 11, 2002 the Remembrance Day holiday, when in the course of a 1.5 hour hike from the Bamberton Access up to the main summit and back, 2 mountain bikers, 1 horse rider and at least 12 walkers (many with dogs) were encountered. An additional group of horse riders were heard but not seen.

In summary, the most regular users are walkers (includes hikers and dog walkers) who visit the proposed recreation area year round as part of a routine. Mountain bikers are also consistent

Cobble Hill Mountain Recreation Area

users and are most likely to go on a weekly basis. Equestrian users visit the mountain most in the drier seasons and are included to visit once a month. Note that the commercial trail riding operator did not supply use numbers or frequency of use statistics.

Use Patterns

Most visitors access the proposed recreation area through the Quarry Nature Park either from the parking area or from Sawmill access. Organized school mountain bike groups cycle to the mountain from local schools, entering at Quarry Nature Park.

Some equestrians ride to the proposed recreation area along local road shoulders but a number of riders, however, transport their horses by trailer to the site. Horse trailers are generally parked between the railway tracks and Cobble Hill Road opposite Cobble Hill School, as the Quarry Nature Park parking lot is too small.

Upon arriving at Quarry Nature Park, most walking visitors seeking to hike to the Main Summit follow the main trail leading directly up the mountain past the water tower to the Main Summit. This Water Tower Trail is the most direct route to the summit and is the easiest to follow. Other trails in this area tend to swing away from the summit.

Equestrians tend to avoid the Water Tower Trail and follow what they call the Bear Trail, which swings to the south of the water tower following a gentler grade. Upon reaching an old logging road, riders either take the steep rocky road directly to the summit or follow a longer, more circuitous route which winds its way up to the summit from the west (Summit Loop).

The commercial trail riding operator approached the area from Turkey Farm access and then followed the Bear Trail and the west part of Summit Loop to reach the lowest picnic table on Main Summit.

Mountain bikers travel the fastest and will often cover much of the area in one visit. They seek a gentler gradient on the way up and a steep, direct trail on the way down. They are inclined to build narrow trails that widen over steep rock outcrops and bluffs where cyclists of different abilities seek alternate routes.

The Polara Hill area receives limited use. Many people do not know that this area is public land and are not aware of Polara Road, the public road through Woodlot 21, that links Hillbank and Doran Roads. No other users were encountered during the field visit to this site but there was evidence of regular equestrian use, probably coming in from the Hillbank side and some motorized use by vehicles and motorbikes.

The main entry point at Quarry Nature Park has concentrated use of the Water Tower Trail and the Summit Loop. Main Summit is the destination of choice. The user information was gathered over a short period of time, and no use trends or specific projections can be made.

Use Issues

There is a range of recreation activities occurring on Cobble Mountain along the same trails. While the majority of people at the Open Houses preferred trails to be open to different users, there were other people who would prefer designated trails for different types of use. There was a tendency for the equestrian and mountain bikers to prefer multi-use trails while walkers were inclined to prefer single use or a designated foot traffic only trail.

Management Plan

A review of recent trail literature indicates that the current trend is towards multi-use trails where possible. If trails are single use it leads to a need for more trails so that each group can have their own trail. In the Proposed recreation area, the destination of choice for most users is the Main Summit. To have a loop trail to the summit for all three users would mean six different trails. Multi-use trails also continue the sharing of space that people are accustomed to on roads. It should also be noted that recreation on Cobble Hill Mountain has not been regulated in the past and that users might not accept strict trail designations.

Forestry development activities in the Woodlots are largely compatible with existing recreation use. Logging roads are used as trails and the gates limit to some extent the amount of motorized use. Recreation use is generally compatible with the small scale forest development activities. Garbage dumping is an issue, and the risk of fire caused by a dropped cigarette or bottle or sparks from a shod horse are potential concerns. Increased recreation use may discourage garbage dumping and with more people in the area there is improved likelihood of a visitor observing and reporting a forest fire.

During the public process, the issue of motorized recreation use was raised. Non-motorized recreation users find motorized vehicles noisy and there is potential for horses to be scared by vehicles and motorbikes. It should be noted that no motorized recreation user clubs were approached during the public process. Woodlot licensees are concerned over motorized vehicles accessing the woodlots to dump garbage and cut down trees. There was also concern over damage to newly planted trees. Motorized vehicles can severely damage the vegetation on the rock bluffs by spinning their wheels. Examples of this were seen during fieldwork on the South Summit.

A minor issue is that Polara Road is narrow and twisty and that to complete the loop people are required to walk on Polara Road for just over 200 m. Visibility along this road is poor, with several short lines-of-sight. Some recreation users identified a possible safety concern over the sudden or unexpected meeting of vehicles and recreation users along this road.

Currently the CVRD does not have any authority to manage outdoor recreation within woodlots or on vacant provincial forestland. This limits the ability of the CVRD to manage or to develop recreation opportunities for the community. As mentioned above, small scale forestry activities are largely compatible, or in some cases complementary (i.e. maintenance of roads) with many recreation activities. The long standing interface between the different tenures and the low key forestry and recreation use patterns that have developed over some forty or more years, appear to suit local residents and recreational users well. Provision of recreation opportunities is part of woodlot management practice, as are forest development plans that require road building, silvicultural, wildlife and other resource management practices be undertaken to established provincial standards. The woodlot holders are of long and respected standing in the community and know the woodlot resources and community well. However, in order to develop and maintain recreation opportunities, a local manager of recreation opportunities such as the CVRD is advised.

The existing woodlot tenures may expand to encompass adjoining Vacant Provincial Forest. This does not raise any particular recreation management issues, other than it being important to share knowledge of recreation resources and opportunities with the licence holder and to coordinate forest development planning across the different tenures. Compliance is enforced primarily through the Ministry of Forests with regards the Cobble Hill Woodlots.

Cobble Hill Mountain Recreation Area

As observed earlier, by identifying (through this plan) recreation issues, such as the trail access into the proposed recreation area from Quarry Park into the Recreation Reserve #0202, the Ministry of Forests will be in receipt of what is formally termed as “known” information, which must then be reflected in any forest development planning.

3.11 Adjacent Parks, Green Spaces and Trail Links

There are several larger Regional Parks and four Provincial Parks in the vicinity of the Cobble Hill Mountain Recreation Area. Green Spaces are areas that are not Parks but are used for outdoor recreation activities. They may be larger pieces of private land, Provincial Forest or private forest. These areas are described in Appendix II.

The proposed recreation area is one of the larger areas and offers recreation activities that are not offered elsewhere. It is most similar to Koksilah Provincial Park in size, trails and use, but a recent Management Plan for that park indicates that mountain bike and equestrian use of that park will be restricted in the future. The other CVRD parks are smaller and are intensively developed.

While the proposed Cobble Hill Mountain Recreation Area is surrounded by private land, there is potential, via the Bamberton Quarry (privately owned) to link with the Trans Canada Trail. Should there be trail development along the E & N Railway, any number of link opportunities would come available.

The Cobble Hill Village Neighborhood Plan envisions links with the proposed recreation area in the form of paths or trails. The community is already linked via roads.

If the Owl Road property were obtained by the CVRD, it could be linked to the proposed Cobble Hill Mountain Recreation Area by roadside trails.

3.12 Commercial Recreation Use

As of February 2003 there are no commercial recreation permits issued for Crown lands within the proposed recreation area. In 2001 a commercial trail riding operator started to use trails on Cobble Hill Mountain. Some members of the public raised concern over commercial operators on the mountain and in response the Ministry of Forests gave direction to the operator to use certain trails. The CVRD had an agreement with a trail riding operator allowing the use and maintenance of specific horseback riding trails for trails rides for the time period June 27, 2002 to September 30, 2002. This agreement also specified certain trails to use.

The other known commercial use is a company operating four-wheel drive tours. They do not have a commercial recreation permit or any agreement with the CVRD but operate mainly in Woodlot 21.

Interest in commercial recreation business opportunities is anticipated for the proposed Cobble Hill Mountain Recreation Area, notably in the short term by private equestrian riding operations and four wheel drive tours, and potentially mountain bike tours as the trail system becomes more formalized.

Land and Water BC Inc.

Jurisdiction for management of commercial recreation on provincially managed lands rests with Land and Water British Columbia Inc, (a corporation of the Province of British Columbia). Responsibility for the tenuring of any commercial recreation use, irrespective of whether it is in provincial forest, generally rests with the Commercial Recreation Section of LWBC. In reviewing commercial recreation tenure applications, referrals are vital in identifying the issues that are important to the various resource agencies and stakeholders involved.

Some land use applications generate significant community interest or controversy. In response, Land and Water British Columbia Inc. can:

- ❖ *call a public meeting;*
- ❖ *co-host a meeting with federal, municipal or regional staff; or*
- ❖ *require the applicant to conduct an open house or public meetings.*

Public meetings provide opportunities for greater public input regarding complex or contentious proposed land uses.

Advisory and Stakeholder groups

Advisory group input is invited in cases where proposed land uses have the potential for significant impact and/or conflict.

Existing advisory groups are used whenever possible, however Land and Water British Columbia Inc. may require the formation of a formal or ad hoc advisory group to review the application(s) and provide input.

Land and Water British Columbia Inc. may also invite the public to general information meetings with advisory groups.

Stakeholder groups, such as recreational or environmental organizations, are consulted on proposals which impact on their interests. These groups can become part of the formal referral process

Government officials, such as Conservation Officers in the Ministry of Environment Land and Parks, Fisheries Officers of the Department of Fisheries and Oceans, to ensure that any environmental impacts from unauthorized use of Crown land are dealt with appropriately.

The Land Act provides the authority to take action against untenured uses of Crown land and also to halt activities which do not comply with an existing tenure. Tenure documents frequently incorporate specific legal terms and conditions in order to protect environment values.

Enforcement actions can be taken if the holder of an existing land tenure fails to comply with any of these terms and conditions

Ref: Land and Water BC Inc. February 2003

4.0 RECREATION AREA MANAGEMENT PLAN

4.1 Proposed Recreation Management Approach

The Cobble Hill Mountain Recreation Area Management Plan proposes an overall stewardship approach to managing the growth of outdoor recreation use and the coordination of active public participation in the management of the area's recreation activities and protection of important natural features. This approach is low key, keeping the areas as natural as possible, with the objective of formalizing the existing network of informal trails within the proposed 416 hectare (1,003 acre) recreation area on and around Cobble Hill Mountain.

The plan emphasises conservation of the area's natural resources so as to ensure capacity to accommodate increased use levels. The area is already well used by Cowichan Valley residents and visitors to the region and use levels are expected to increase. The application of trail design standards and user guidelines are a key element in the plan. The plan recognizes the importance of integrating outdoor recreation activities with other designated land uses, such as the small-scale forestry operations in the established woodlots.

Implementation of the plan should be coordinated by the Cowichan Valley Regional District, which is well positioned to offer long term stewardship of recreation use across the various land tenures within the proposed recreation area through the Regional District's parks program. This approach is supported through the CVRD's current involvement in managing recreation in Forest Recreation Reserve #0202 under agreement with the Ministry of Forests and in CVRD's Quarry Nature Park.

The plan proposes extension of CVRD's existing agreement with Ministry of Forests to include management of recreation use in the two vacant provincial forest parcels and woodlots. Furthermore, a cooperative approach should be developed between CVRD, the woodlot licensees and Ministry of Forests in order to develop trails and recreation amenities in the woodlots as part of the overall trail system proposed for the recreation area.

Low Impact Recreation Zones will be established within the red-listed terrestrial herbaceous ecosystem on parts of Main Summit and South Summit. The Low Impact Recreation Zone are smaller than the mapped ecosystem extent to balance the needs of recreation and the environment. The plan recognizes that users will want to visit them and that some degree of damage has already occurred and may continue to occur.

4.2 Proposed Trails in the Recreation Area

Proposed Trail System

Recognizing the valuable role of small scale forestry and the forest management expertise held by the Ministry of Forests and the Woodlot licence holders, the CVRD would work closely with the Ministry of Forests and the woodlot licencees, to guide recreation developments, such as the proposed perimeter trail, so as to maximize recreation opportunities, while protecting natural resources and while limiting impacts on forest development activities and opportunities.

The management plan proposes a dominantly multi-use trail (i.e. hiking/walking, mountain biking, equestrian) system with multiple access points to disperse use. Where the terrain or ecosystem is not suitable for multi-use trails, foot-only or foot and mountain bike only trails are proposed. Over time there will be a transition to non-motorized outdoor recreation activities only. The mix of motorized and non-motorized recreation activities is not compatible due to the limited capacity to separate these different uses, issues of public safety and liability, excessive wear and damage to trails not designed for motorized recreation use and public support for only non-motorized recreation activities within the proposed recreation area.

The proposed trail system for the proposed Cobble Hill Mountain Recreation Area is shown in detail on the Management Plan map provided the back pocket of this report. A simplified map is shown on the following page. The trail system uses the existing network with upgrading of the main trails, closure of some trails, and construction of a few new trails. The trail system is based on a 6.5 km long loop trail around the base of the mountain (Perimeter Trail). Approximately half of this loop trail is in place and completing the loop requires construction of a new trail along the west and north sides of the mountain's base taking advantage where possible of existing old logging roads to maintain suitable grades. Some improvements to the existing trail sections to improve access are also required. From the Perimeter Trail there will be a main trail up to Main Summit (Bear Trail and Summit Loop) and another main trail from Main Summit west to Thain Road (Thain Trail). Main trails will be multi-use and built to accommodate the most traffic, with a stable surface and low to moderate grades. Between these main trails will be a network of secondary trails which will be narrower, steeper and more difficult.

An existing logging road from the Bamberton Access to Empress Access will be upgraded and maintained as a gated fire access road. A short spur fire access road will lead to the base of the Summit Loop. The fire access roads will also be used as service roads for trail and facility maintenance and in case of emergencies.

The management plan also identifies key trail sections to be closed for safety or environmental reasons. A detailed summary of proposed trail use designations and recommended actions is provided in Appendix VI. Trail references are separated into main trails and trail clusters which are shorter trails and locations of concentrated trail loops.

Trail System Designation

The proposed designation of trail types within the proposed Cobble Hill Mountain Recreation Area emphasizes multi-use trails for hiking/walking, mountain biking and horseback riding. A limited number of trails are not suitable for multi-use and are designated foot and mountain bike or foot only. The approach used to designate trails was based upon protection of sensitive ecosystems, and the suitability of the trail for each type of activity. Although there were valid arguments for both multi-use and single use, the majority of uses preferred to have as many trail options as possible. Mountain bikers, who travel the fastest, were very adamant in wanting access to the

Cobble Hill Mountain Recreation Area

greatest possible length of trail. In addition provincial parks provide a wide range of foot trails and limit or do not allow horseback riding and mountain biking.

Multi-use trails permit a range of different trail users to access and enjoy various parts of the proposed recreation area without the need for parallel or braided trail sections for different users, which would require greater effort to maintain and have a wider impact on the environment. Multi-use trails benefit accessibility for all and provide the opportunity for different users to appreciate and share a common interest in their enjoyment of the outdoor recreation experience.

There is potential for conflict on multi-use trails. To address these potential conflicts there are existing rules of trail conduct that can be applied. The International Mountain Biking Association (IMBA) has developed globally recognized “rules of the trail” for multi-use trails include the maxim “Yield the Trail”. This is a trail courtesy for all trail users which means “slow down, communicate with people you meet, be prepared to stop and pass safely”. Similarly, the Back Country Horsemen Society of British Columbia advocates “Certain etiquette practiced by all trail users is easy to do and contributes to a better outdoor experience for everyone. A simple way to adopt the essential habits is to remember the “3 C’s”:

Common Sense

Communication

Courtesy

The Internet is a valuable source of information on methods to improve cooperation and communication between different user groups on multi-use trails. It is beyond the scope of this report to detail these methods.

There are five km of trail within the proposed recreation area which are suitable for hiking and mountain biking only. The steepness of the terrain and the presence of rock bluffs are the main reason why they are not suitable for horses.

One km of trail within the proposed recreation area is proposed for foot traffic only. These are trails within the Low Impact Recreation Zone and the existing network of trails on the south side of Quarry Road in the Quarry Nature Park. This latter group is popular with walkers and provides some of the easier walking on the mountain. It is close to the parking area and has potential to provide barrier-free access. At this time it is proposed that only this portion of the park be limited to foot traffic only; however there was public support for all of Quarry Park being limited to foot traffic only and this may be needed in the future.

Trail Standards

The majority of existing trails do not meet all criteria of the proposed trail standards for the proposed Cobble Hill Mountain Recreation Area. The trails also may not be in the best location. For the most part, trail tread will be left natural, except where mitigation of hazards or protection of features (exposed roots) is needed. On multi-use trails where natural tread is not sufficient or on lower gradient main trails (Perimeter Loop) a road base type of gravel should be used. Artificial trail surfacing should be avoided whenever possible on the foot and mountain bike trails and in the Low Impact Recreation Zone. However, in the foot-only section of the Quarry Nature park it is recommended that all the trails be gravel to provide a stable, solid walking surface. The fire access road will be suitable for 4WD access so will be suitable for all types of recreation use.

On steeper grades, trail re-routing, cribbing and staging is required (such as on the Water Tower trail). In wet areas, drainage and fill is necessary (such as at the top of the Bear Trail). A more detailed assessment of trail sections will be required with implementation of the management plan for the proposed Cobble Hill Mountain Recreation Area.

Management Plan

Some general standards for trails are included in the table below. The standards may need to be modified for parts of existing trail sections due to a variety of factors related to past construction techniques, limitations of terrain or lack of suitable alternatives to reroute the trail section. On trails with more than one type of use varying the width of the trail will subtly control the speed of bikes and horses and assist in avoiding accidents.

Trail Criteria	Multi-Use Main Trails	Multi-Use Trails	Foot Trails	Foot and Mountain Bike Trails
Trail Width	1.5 to 3 m	Max 3m	0.5 m in Low Impact Recreation Zone 1-2 m in Quarry Park	1-1.5 m
Grade	0-15%	0-30%	0-40%	0-30%
Overhead Clearance	3 m	3m	2m	2.5m
Clearing Width	Max 3 m	Max 3 m	0.5 m in Low Impact Recreation Zone 1.5 –2.5 m in quarry park	1.5 –2 m
Trail bed material	Dominantly gravel Some natural	Dominantly natural Gravel where needed	Natural in Low Impact Recreation Zone Gravel in Quarry Park	Natural
Visibility/Sightline	Min. 10 m	Min 10 m	N/a	Min 5 m

Due to the issue of safety and liability and community consensus on keeping the features within the proposed Recreation Area as natural as possible no mountain bike structures such as ladders, jumps, teeter-totters, etc. will be permitted. On foot and mountain bike trails natural structures such as logs and rocks will be permitted.

Trail Priorities (Improvements, Closures, New Routes)

The following existing trails are proposed as trail priorities for improvement, closures or rerouting based on factors related to existing level of use, trail condition, public safety and environmental concerns (refer to Appendix VI for details):

High

- ❖ Empress Trail – upgrade to fire access road
- ❖ South Summit Trail – upgrade to fire access road
- ❖ Perimeter Trail – upgrade existing trail to main trail
- ❖ Bear Trail – upgrading to main trail
- ❖ Water Tower Trail – rerouting and upgrading, may require temporary closure
- ❖ Summit Loop and trail cluster – upgrading and re-routing to main trail, closure of trails, Low Impact Recreation Zone demarcation
- ❖ Huff and Puff Trail – demarcation of Low Impact Recreation Zone, clear out trail section to detour mountain bikes around Low Impact Recreation Zone
- ❖ South Summit cluster – demarcation of Low Impact Recreation Zone, trail closures

Cobble Hill Mountain Recreation Area

Medium

- ❖ Perimeter Trail – locate and build new section
- ❖ Huff and Puff Loop – minimal improvements
- ❖ Polara Loop – widen parking area
- ❖ Quarry Park foot trails –upgrade, interpretive trail
- ❖ Quarry Park multi-use – upgrade, interpretive trail
- ❖ Little Bluff cluster – closure

Low

- ❖ Thain Trail – upgrade existing section, locate and build new section
- ❖ Rob's Trail – minimal improvements
- ❖ Beacon Summit – minimal improvements
- ❖ South Summit cluster – determine trail pattern, upgrade
- ❖ New trail connecting Perimeter Trail with Woodlot 22

The above trail priority summary provides the basis for developing the proposed recreation area implementation program and budget outlined in detail in Section 5.0

Trail Route Alternatives through Woodlots

When trails are re-routed, upgraded or new trails built through the woodlots, future harvesting and road building activities must be considered. Trails should be located to follow existing and future roads where possible. During active harvesting trails may need to be temporarily closed. Trail planning in woodlots needs to be flexible and expensive construction should be avoided except in areas that will never be disturbed by harvesting. In general the woodlot licensees are accepting of recreation activity within their woodlots and if consulted and kept informed of trail planning will likely be a valuable asset in the development of recreation opportunities in the proposed recreation area.

Woodlot 21

Woodlot 21 has more trails than Woodlot 22 and correspondingly will see more changes. Most of them deal with the Perimeter Trail which currently has one end at the Bamberton Access and the South Summit trail cluster. See the previous section, the tables in Appendix VI and the map for information on these trails.

Woodlot 22

No changes are proposed for the existing trails in Woodlot 22 which are popular for carriage drivers and people seeking a loop trail that is easier than the steeper trails on Cobble Hill Mountain. An access road the woodlot operator intends to construct off the north side of Thain Road opposite the current gated road on the south side will likely attract more recreation use (i.e. equestrians) because the existing trail is narrow and suitable only for foot traffic. A low priority is a trail connecting the Perimeter Trail with this future access road.



Trail Monitoring Approach

Trail use will be controlled through education, signage and the physical properties of the trails themselves. For example, the rock bluffs are not suitable terrain for horses and there will be an alternate route on the Huff + Puff Loop on which mountain bikers will not be required to dismount so they can traverse the Low Impact Recreation Zone.

Trails will need to be monitored for damage due to regular wear and tear, windfalls and excessive erosion. In some cases trails may need to be closed or re-routed, re-surfaced or have drainage structures built.

4.3 Staging Areas/Recreation Area Access Points

There are currently seven access points into the proposed recreation area. As the trail system is improved, more use is expected, but with a range of alternate accesses available users will have more choice and this will assist in dispersing use. None of the access points appear to be located in hazardous locations.

Quarry Nature Park

The Quarry Nature Park access is sufficient for its present use. It is too small for horse trailers, but they use an alternative area nearby. Walkers and hikers are the dominant users and will likely increase.

Bamberton Access

Bamberton Access is seen as the second formal access to the Recreation Area. To meet the current demand the small parking area at the Bamberton Access that was ditched needs to be reopened. Ideally it should be large enough to accommodate horse trailers; however it would require taking land out of the woodlot. An alternative is to construct a small parking area now and when there is a housing development in the Bamberton Quarry the CVRD request the developer construct a staging area as part of their land dedication requirements. This staging area would also serve as a link to the Trans Canada Trail. Refer also to the New Access below.

Polara Access

This small pullout would benefit from being enlarged and the garbage removed. It needs to be large enough to accommodate two horse trailers.

New Access

When the new section of the Perimeter Trail is constructed, a new access and parking area will be needed along the west side on Thain Road. If it were not feasible to build the second formal access at the Bamberton Access, then this would be the next choice.

The other access points are sufficient. They are mainly used by people who access the area without a vehicle, and this type of access should be encouraged.

4.4 Recreation Area Amenities

Basic facilities proposed for the Recreation Area include benches at key locations along the Empress Trail. A portable toilet will be installed at the Quarry Nature Park. Consideration will also be given to placement of a portable toilet near the Main Summit. Two hitching rails are proposed, one at the Main Summit and one on South Summit. They will be placed outside the Low Impact Recreation Zone to protect existing trees from further damage by riders tying their leads to branches or trunks. A secure rail or rack for mountain bikes is also proposed adjacent to the Low

Cobble Hill Mountain Recreation Area

Impact Recreation Zone. This will encourage mountain bikers to leave their bikes to explore by foot the sensitive natural features within the Low Impact Recreation Zone. Existing picnic tables will be maintained on the Main Summit and a new picnic table should be installed on the South Summit. Improved amenities on South Summit will assist in dispersing some of the use from Main Summit. Refer to the map in the back pocket for the proposed recreation amenities noted above.

Proposed Signage Program

The plan has suggested a convention that combines geographic (Main Summit), feature (Water Tower Trail), historic (Beacon Summit) and user named (Bear Trail, Rob's Trail) trails to identify locations. Further naming of trails is required.

A park map will be developed for use at key entry points such as Quarry Nature Park and the second formal access on the west side (either Bamberton Access or the new access), showing trail locations, lengths, difficulty and approximate travel times. The map should use a basic symbol theme to differentiate trail types and colours for level of difficulty (i.e. red for difficult, yellow for moderate and green for easy). At each trail intersection small coloured markers may be considered to further denote trail use type and level of difficulty, which could be integrated as part of the trail name sign. The proposed recreation area will require two trail use signs, Foot traffic only (West third of Quarry Park and Low Impact Recreation Zone) and Wheels and Feet only signs (steep trails that are unsuitable for horses, i.e. Rob's Trail, Beacon Summit trails, etc.).

4.5 Environment - Vegetation

Protection of Environmentally Sensitive Areas

Terrestrial Herbaceous

Low Impact Recreation Zones are proposed to limit public access to existing natural areas with noted high environmental sensitivity on Main Summit and South Summit. It is proposed the number of formal trails within these areas be limited in number and that the use be limited to foot traffic only. The Low Impact Recreation Zones will be demarcated with signs and construction of fences as required. While wooden snake-rail or similar fencing is desirable due to its ability to integrate with the natural attributes of the area, other forms of fencing may be more appropriate for vandal resistance (i.e. non-wood). Native plantings could accompany fence installation as a natural buffer. Amenities such as bike posts and hitching posts will be installed outside the Low Impact Recreation Zones to encourage cyclists and equestrians to enjoy the area on foot.

Older Forest and Old Growth Management Areas

Recreation use may not always be compatible with OGMA objectives and consultation with MSRM is recommended to determine the appropriate recreation management approach.

Invasive Weed Management

A number of invasive weeds are located in the planning area, most prominent being scotch broom. A program, ideally involving community groups and individual volunteers, aimed at removal of invasive weeds, should be developed. This program should be sponsored by the CVRD, Ministry of Forests and potentially by local business.

4.6 Environment – Wildlife

There are no recommendations for wildlife management.

4.7 Environment - Aquatic

No special aquatic environments were noted during the project. The upper section of the Bear Trail passes through a wet area and will need to be raised or diverted.

4.8 Culturally Sensitive Areas

If any culturally sensitive features are discovered they will be duly protected and Archaeological Branch and local bands contacted for direction.

4.9 Proposed Interpretative Infrastructure

There are a number of resources in the proposed recreation area that have excellent potential for interpretation. These resources include:

- ❖ Low Impact Recreation Zones and related rare ecosystem
- ❖ Older Forest and Old Growth Management Areas
- ❖ History related to the limestone quarry and to WWII and the light beacon
- ❖ First Nations Cultural History related to Culturally Modified Trees
- ❖ Forest Ecology
- ❖ Geology related to glacial striations on exposed rock and to the limestone deposit
- ❖ Flora and fauna, particularly birds

Development of interpretive material in a number of formats is recommended. These may include interpretive signs, CVRD Internet Web site materials, guided trips by knowledgeable experts, and articles in local journals. Development on an ongoing interpretive program can be expected to have a powerful effect on the stewardship of resources in the proposed recreation area. Informed users tend to respect the resources that enable their activities. Much like advertising or marketing, interpretation can directly affect user behaviours.

Neil Bonner has already developed some initial interpretive material about the Quarry Nature Park for the CVRD. It includes points of interest and a description of the quarrying process.

4.10 Community Involvement and Stewardship

The proposed recreation area has a long standing history of informal recreation use. Individuals and a limited number of small groups have developed informal trails over the years. No other facilities have been constructed.

In some jurisdictions, contractual arrangements for management of a recreation area have been made with a community group (such as the CRD with Hartland Dump and the South Island Mountain Bike Society). Recreational users of the proposed Cobble Hill Mountain Recreation Area are largely individuals, or may be members of a provincial organization, (i.e. BC Horse Council). There are no local incorporated recreation societies and there is no single local group of significant size capable of taking on management of the recreation area.

The CVRD proposes formation of a volunteer stewardship group. Membership may be drawn from those who attended the Open Houses conducted during the preparation of this plan. Under the auspices of the CVRD, the group will take on responsibility for maintenance and development of recreation opportunities in the proposed recreation area. Expected tasks will include

Cobble Hill Mountain Recreation Area

coordination of work parties, and identification of areas requiring rehabilitation, development of interpretive material, and organizing field trips with ecologists, birders and cultural history specialists, etc.

The work of the stewardship group would be confined to Recreation Reserve #0202 and to Quarry Park unless the existing agreement between the CVRD and Ministry of Forests were amended to extend to include other tenures in the proposed recreation area (vacant provincial forest and woodlots). The Ministry of Forests has expressed interest in a formal agreement extending CVRD recreation management to the vacant provincial forestlands, while management jurisdiction would remain with the Ministry of Forests. As for the woodlots, any proposed works there would have to be in agreement with the woodlot holders and could form part of the Woodlot Management Plan.

4.11 Commercial Recreation

During the consultation process, concern was frequently expressed regarding commercial recreation use, specifically commercial equestrian use. Commercial four-wheel drive tours are also conducted on Cobble Hill Mountain, although these were not mentioned through public input. Currently, there are no formal commercial recreation tenures in the proposed Cobble Hill Mountain Recreation Area.

CVRD coordination of the recreation management plan implementation for the proposed Cobble Hill Mountain Recreation Area should include a formal agreement with Land and Water BC Inc. with regards to commercial recreation interests for use of the site. The terms of this agreement should provide CVRD authority over all commercial recreation tenure applications and activities on both the Forest Recreation Reserve and vacant provincial forestlands. This would provide the Regional District the authority to ensure the investment made to upgrade and maintain the recreation resources is protected from over use by all users, including the ability to regulate commercial recreation interests. It is further recommended the CVRD establish a formal policy for considering appropriate commercial recreation uses of the proposed recreation area.

5.0 IMPLEMENTATION PLAN

Implementation of the Cobble Hill Mountain Recreation Area Management Plan will require active participation of the community and recreation interest groups, resources and funds. Some elements of the management plan have higher priority and will be implemented in the first few years. Other components of the plan will be implemented over a longer time period. The Implementation Plan table on the facing page lists priorities and a timeframe for implementing the Recreation Area Management Plan, although this is dependent upon agreement reached with Ministry of Forests on the CVRD's proposed role and degree of community involvement with the management plan implementation.

5.1 Higher Priority Elements

Several elements of the proposed recreation area management plan are considered an important priority to address public safety, environmental and site security issues as covered in Section 4.0 and are therefore proposed for implementation over the next few years.

The proposed actions will address effective gated closure of road access, rehabilitation of heavily used trails, closure or rerouting of trail sections required for public safety, protection of key environmentally sensitive features, improved entry points which favour only non-motorized recreation use access and information for recreation area users, including interpretation of resource values and rule of conduct.

5.2 Longer Term Elements

Some of the longer term elements will include completion of the Perimeter Trail, development of an interpretation information program, and securing of trail links to nearby parks and open spaces



Cobble Hill Mountain Recreation Area

5.3 Implementation Plan – Estimated Costs

Priorities and Costs (\$)*	2003	2004	2005	2006	2007	2008+
Community and Agency Involvement						
Invite formation of a “Cobble Hill Mtn. Partnership Society”**	XXX					
Establish “Working Agreement” with Woodlot Licensees to coordinate Recreation Mgmt Activities	XXX					
Staging Areas						
Quarry Park (toilet facilities and kiosk)	\$1,500					
Bamberton Parking			\$3,000			
Upgrade Polara Loop parking				\$1,500		
Develop Second Formal Staging Area						\$10,000
Main Trails ***						
Bear Trail Upgrade (gravel and culverts)	\$1,000					
Empress Trail Upgrade (fire access road, windfall removal, road grading)	\$5,000					
South Summit Trail Upgrade (fire access road, windfall removal, road grading)				\$5,000 [#]		
Perimeter Trail Upgrade		\$2,500	\$2,500			
Ongoing Trail Improvements					\$3,000	\$3,000
Summit Loop Rerouting (new trail and rehab.)		\$2,500	\$1,000			
Perimeter Trail new section				\$5,000	\$5,000	
Thain Trail					\$3,000	\$3,000
Secondary Trails and Clusters***						
Water Tower Trail Improvements		\$ 3,500				
Huff + Puff bike detour	XXX					
Quarry Nature Park trails			\$1,500	\$2,000		
Minor improvements to secondary trails			\$1,000	\$1,000	\$1,000	\$1,000
Link Perimeter Trail with Woodlot 22						\$1,000
Signage, Information and Amenities						
Directional Signage	\$2,000	\$1,000	\$200	\$200	\$500	\$200
Staging Area Information Signs	\$1,000					\$1,000
Trail Map****		XXX				
Interpretive Signs			\$3,000			\$3,000
Toilet at base of Main Summit			\$2,000			
South Summit Amenities			\$2,000			

Management Plan

Priorities and Costs (\$)*	2003	2004	2005	2006	2007	2008+
Environmental Enhancement						
Establish Low Impact Recreation Zone Area Boundaries****	XXX					
Low Impact Recreation Zone Area Split Rail Fencing	\$2,500		\$1,000			
Equestrian Hitching Posts/Bike Posts	\$ 500					
Blocking and Replanting Braided Trails***	\$1,000	\$1,000	\$1,000	\$1,000		
Removal of Non-native Plant Species****	XXX	XXX	XXX	XXX	XXX	XXX
Fire and Emergency Access Management						
Fire Access Plan	XXX					
Bamberton Access Gate	\$2,500					
TOTALS	\$17,000	\$10,500	\$18,200	\$15,700	\$12,500	\$22,200

* Cost estimates approximate only and source of funds need to be determined based on location, jurisdiction and/or other arrangements.

** CVRD to work with interested outdoor recreation groups and individuals to form non-profit society with specific interest in active involvement in managing Cobble Hill Mountain Recreation Area.

*** Costs shown are for materials only. Volunteers or grant sponsored work crews to provide labour.

**** Volunteers or students.

#does not include washout

Cobble Hill Mountain Recreation Area

APPENDIX I - METHODOLOGY

Project Scope

The main tasks of the Cobble Hill Mountain Recreation Area Management Plan were to:

- ❖ Recommend changes to the use patterns, designate trails for specific uses, specify a signage program;
- ❖ Recommend trail standards for the types of trails identified for this site and outline monitoring and other management procedures;
- ❖ Identify and recommend ecologically sensitive areas to be set aside from recreational use;
- ❖ Identify and recommend culturally sensitive areas to be set aside from recreational use;
- ❖ Recommend trail route alternatives to deal with the ongoing woodlot logging;
- ❖ Identify and make recommendations on security and access issues; and
- ❖ Recommend local resources to monitor and report usage patterns and problems to the CVRD.

In August 2002, the CVRD issued a Request for Proposals (RFP) in order to select a consultant to deliver a detailed and comprehensive recreation plan that the Parks Division of the Development Services Department will use to guide decisions regarding the management of recreational activities in the Cobble Hill Mountain Recreation Area.

Project Stages

PHASE ONE- Study Start Up, Information Gathering, Site Assessment

September 12 – October 4, 2002

- Initial meetings with CVRD Parks Planning staff.
- Contact Area Directors and Park Commissions.
- Assembly of background information, including digital data from CVRD/MoF/MSRM/CDC, as well as local stakeholder input gathered by the CVRD.
- Draft contact letter to stakeholder groups soliciting their input, CVRD review, circulation (ideally as E-mail group mailing).
- Field trips, viewing of resources throughout the planning study area, accompanied by stakeholders where possible.
- Gathering of site and use pattern information.
- Draft newspaper advertisement of Recreation Plan and upcoming open house, solicitation of input.
- Booked Cobble Hill Youth Hall.
- CVRD review of Open House Notice and placement 1-2 weeks before Open House. Information included RRL contact information, plus Area Director and CVRD Development Services contact information.
- Draft Public Notice, review by CVRD, RRL posted in community one week before Open House.
- Preparation of Recreation Area resources map and database in digital format.

PHASE TWO - Conceptual Management Plan

October 5 – November 4, 2002

- Prepared Conceptual Management Plan using background data supplied, stakeholder input as available and using fieldwork information.
- Developed Open House format with CVRD staff.
- Prepared display panels for Open House including overview maps showing woodlots, park area, known trails, and sensitive areas on contour base. Plots and panels prepared and produced in-house by RRL
- Draft Conceptual Management Plan and accompanying display panels reviewed by CVRD.
- Further field work
- Placement of Notice of Open House in local newspapers 1-2 weeks prior to being held.
- Handouts for Open House prepared by RRL.
- Open House – October 28, 7:30 – 9:30 PM, Cobble Hill Youth Hall, Cobble Hill.
- Stakeholder meeting – November 4, 7:30 – 9:30 PM, Cobble Hill Youth Hall.

PHASE THREE - Final Recreation Area Management Plan

November 5 - November 27, 2002

- Incorporation of all input received into the Draft Final Plan.
- Power Point presentation and discussion of Draft Final Plan November 20th, Cobble Hill Youth Hall, to Area Directors, Park Commission Chairs, Area A and B Park Commission members and CVRD Staff.
- Prepared Final Recreation Plan and produced hard/digital copies final report and accompanying maps and data. Put all to CD.
- Return of digital data loaned from CVRD.

Public Input

Open House #1 Advertising/Articles

- Page size colour notices placed locally in each Electoral Area.
- Notice placed in October 23, 2002 edition of Cowichan Valley Citizen newspaper.
- Notice placed in October 23, 2002 edition of the News Leader newspaper.
- Article by Andrew Costa in the October 27th edition of the News Leader.
- Article by Jennifer Hourihan in the November 3, 2002 edition of The Pictorial.
- Notice of Open House placed on South Island Mountain Bike Society (SIMBS) Web site.

Meetings

- September 20, 2002 meeting of the Horse Council of BC in Cobble Hill. Attended by approximately 50 members of the public.
- October 28, 2002, 7:30 – 9:30 Open House held at Cobble Hill Youth Hall. Attended by approximately 100 members of the public
- November 4, 2002, meeting at the Cobble Hill Youth Hall, with individuals and groups having particular interest in recreation activities in the Cobble Hill Mountain Recreation Area. Attended by approximately 20 members of the public.
- November 20, 2002, meeting at Cobble Hill Youth Hall, attended by Electoral Area Directors, Park Commission Chairs, Commission Members and CVRD staff.

Cobble Hill Mountain Recreation Area

APPENDIX II – PARKS IN VICINITY

CVRD Parks

Name	Location	Activities & Facilities
Kingburne Community Park	End of Kingburne Road	Walking Trails, Scenic Views, Koksilah River Access, Picnic Sites, Park History
Cowichan Valley Trail Regional Park (a part of the Trans Canada Trail)	Abandoned CN Railway grade	Part of the Largest Trail system in the World, Historic Wooden Trestles, Interpretive Information along the Trail, Several Parking Facilities and Nature Viewing. Ideal for Biking, Hiking or Horse-back Riding
Cherry Point Nature Observation Park	Garnett Road	Shorebird Viewing, Beach Walking, Picnicking, Beachcombing
Hecate Park	Cowichan Bay Road	Picnic Area, Ocean Viewing and Swimming, Boat Launch, Bird Viewing
Mill Bay Nature Park	Hollings Road	Walking Trails, Viewing Platform overlooking Mill Bay, Picnic Sites, Beach Walk, Spawning Creek, Nature Viewing
Old Mill Park	Recreation Road	Swimming, Adventure Playground Equipment, Fishing, Picnicking, Wildlife Viewing, Interpretive Program
Bright Angel Regional Park	Koksilah River	Group Camping, Picnicking, Walking Trails, Fishing, Suspension bridge
Manley Creek Park	End of Hutchinson Road	Picnic Area, Walking Trails, Ocean Viewing, Shorebird Viewing, Nature Viewing

Provincial Parks

Name	Location	Size	Activities, Facilities, Comments
Koksilah River Provincial Park	Koksilah River, Burnt Bridge	210 ha	<ul style="list-style-type: none"> ▪ Trails, Camping, Swimming, Fishing, and Koksilah River access, Site of Mountain Bike Competitions and Annual 100 Mile Ride for equestrians. ▪ Largely undeveloped. Woodland park adjacent to the Koksilah River. Little to no facility development or management. Long time use by equestrians, and hikers. Recent trail building by mountain bikers. Used for competitions. ▪ A recent Management Plan indicates that the park will be promoted "... as a destination for low impact recreation activity." "To maintain and improve trails within the park to provide increased hiking and strolling opportunities." ▪ In order to enable revegetation to occur and prevent further damage, mountain biking and cycling in general will be limited initially to certain trails and park roads. In time "Horseback riding will only be allowed on designated trails within the park."
Memory Island Provincial Park	Shawnigan Lake	1 ha	Boating, Picnicking, Nature Study A candidate for transfer to the CVRD. The developed portion of this park is a family-oriented day use area with paved parking, a grassy open space, a beach and a swim area. Few

Management Plan

Name	Location	Size	Activities, Facilities, Comments
			trails. Limited to foot traffic only.
West Shawnigan Lake Provincial park	West Shawnigan Lake Road	9.5 ha	Swimming, Picnicking, Day Use Area
Bamberton Provincial Park	Mill Bay road	28 ha	Camping, Picnic Area, Ocean Viewing and Swimming, Developed Beach front, Walking Trails, Nature Study

Green Spaces and Links

Name	Location	Description
Bamberton Quarry	Between Thain and Silvermine Roads	Privately owned property. Site of the old Bamberton cement quarry. The open pit has been allowed to flood to create a large lake. Has been used for fish farming. Extensively for many types of recreation. Provides the link between Cobble Hill Mountain and Bonanza/Silvermine area.
Bonanza/Silvermine Area	Between Bamberton Quarry and the Koksilah River over to the Kinsol Trestle.	A mixture of Provincial forest and private forest. Accessed of the end of Kingburne Road, Silvermine Road, and the Renfrew Road. Extensively used for many types of recreation. Trail network.
Owl Road	Owl Road off Shawnigan Lake Road	Undeveloped piece of Crown Land. Identified in CVRD South Sector parks Strategy as a future acquisition for the CVRD parks program. Level ground is suitable for active recreation, but engineering constraints may mean it is better as a nature park.

Cobble Hill Mountain Recreation Area

APPENDIX III – SURVEY RESPONSES

The following is a summary of the surveys received. All public input is contained under separate cover titled: Cobble Hill Mountain Recreation Area Recreation Plan. Public Input: November 2002.

General Observations

User Group (if applicable).

Many surveys were received from individuals. The following groups were listed on surveys and maps

- ❖ Francis Kelsey Secondary School Bike Club (Team).
- ❖ Cowichan Outdoors Group.
- ❖ Cowichan Valley Outdoor Club.
- ❖ Horse Council of BC Zone 6.
- ❖ George Bonner Middle School Mountain Bike Club.
- ❖ 1st Cobble Hill Scouts.
- ❖ Peruvian Horse Trail Riders and Friends.
- ❖ South Island Mountain Bike Society.
- ❖ Arbutus Ridge Ramblers.

Comments

These are groups who may be willing to assist in trail maintenance and members for advisory committees.

Type of Use

- ❖ Hiking.
- ❖ Walking.
- ❖ Dog walking.
- ❖ Mountain biking.
- ❖ Nature appreciation and study.
- ❖ Horse Riding.
- ❖ Bird watching.
- ❖ Plant identification.
- ❖ Horse Driving.
- ❖ Picnicking.

Note that some people use the mountain for more than one activity i.e. hiking with dogs and horse riding.

Other known users on the mountain are motorbikes, four wheel drives and ATVs. Possible other existing uses are photography, jogging, and drawing/painting. There appears to be little camping use. Past uses are motorbike trials and competitive trail rides (horseback).

Survey Responses

1. Why do you use Cobble Hill Mountain?

- ❖ Adjacent property/ It is close/ Local/ Easily accessed/Convenient.
- ❖ Exercise.
- ❖ Viewpoints/Views.
- ❖ Explore new trails.
- ❖ Visit old haunts.
- ❖ View/Appreciate nature.
- ❖ Mostly unspoiled/natural setting/natural trails.
- ❖ Non commercial recreation area.
- ❖ Because it is nice up there.
- ❖ For the trails/great trails/variety of trails/nature trails.
- ❖ Excellent location.
- ❖ Good parking.
- ❖ Scenery/country scenery.
- ❖ For the quiet/peaceful/tranquil.
- ❖ It is the best area for biking within riding distance from Bonner Middle School.
- ❖ Elevation change.
- ❖ Enjoying the outdoors in a pollution free space.
- ❖ An alternative to riding on roads/roads are unsafe to ride on.
- ❖ Scouts hike the mountain looking for the historical cairn at the summit.

Some users responded to this question by repeating the answer to type of use. Most of the respondents live close to the mountain so variations on close/convenient/local were common. The trails and views were mentioned repeatedly. Variations on the quiet/unspoiled/natural setting were popular.

2. Please list and locate on the map any special, unique or significant features on Cobble Hill Mountain (views, vegetation, historic features, etc.)

- ❖ Garry Oak tree.
- ❖ Spring flowers on mossy areas.
- ❖ Wildflowers (lady slippers).
- ❖ Excellent views.
- ❖ Natural trails/wilderness trails/ Dirt trails.
- ❖ Water run-off natural.
- ❖ All the trees on the site.
- ❖ Big trees.
- ❖ Red-listed ecosystems (bluffs)
- ❖ Vegetation.
- ❖ Trails suitable for more advanced riding.
- ❖ Hanging tree.
- ❖ The Quarry.
- ❖ Access to Koksilah River.

Views, trails and flowers/vegetation were the most common responses. There is a historical cairn on the summit but its location is not known.

3. Do any of these special features on the mountain need protection?

- ❖ Tiger lily and flowers in general.
- ❖ Garry Oak.
- ❖ Moss on viewpoints.

Cobble Hill Mountain Recreation Area

- ❖ Historic artifacts need to be protected.
- ❖ All eco systems need protection from human destruction through poor stewardship.
- ❖ Trails surfaces need to remain dirt.
- ❖ Prevention of erosion on trails.

What kind of protection?

- ❖ Protection from horses/ Keep horses off the mossy areas (viewpoints).
- ❖ Protection from bikes.
- ❖ Protection from garbage.
- ❖ Ensure there will not be any logging on the mountain.
- ❖ Steep trails need re-enforcing so they don't wash away.
- ❖ Not all steep trails should be restricted for hikers/bikers, trails should be marked to protect vegetation.
- ❖ Elimination of unnecessary and excessive noise from motorcycles.
- ❖ Enforcement of quiet usage and established rules.
- ❖ Riders should be required to stay on trails.
- ❖ Steep trails should be blocked off.
- ❖ Respect from users of Cobble Hill.
- ❖ Respecting one another.

Comments

A consensus that the vegetation/ecosystems/flowers need protection from recreation users, mainly horses. Also the steep and/or eroded trails need repair. Some suggestions include reinforcing trails, blocking off trails and signage.

4. What time of the year do you visit Cobble Hill Mountain and how often? Circle each season that applies and the frequency of visit associated with that season.

The responses were tabulated according to use to determine any patterns. hikers/walkers and dog walkers were included as one type (foot). The other category generally turned up bi-weekly, or sporadic uses such as once a season, seasonally or annually.

- ❖ The foot traffic is very consistent year round and is consistent over the frequency being daily, weekly, monthly, bi-weekly, sporadically in all seasons.
- ❖ Mountain bikers go all year round with a tendency towards more frequent visits (daily or weekly) than to monthly visits. Weekly visits are the most common except in the summer, but it should be noted that many of the users are with a school group, so decreased summer use would be expected.
- ❖ Equestrian users show consistent use spring, summer and fall with a marked decrease in winter. The frequency is dominantly monthly, followed by weekly.
- ❖ The multiple users shows a consistent year round use and the frequency ranges from bi-weekly to sporadic.

5. What facilities does the mountain need? (parking area, corrals, bike racks, picnic tables, campground, benches, maps etc)

- ❖ Paved parking.
- ❖ Parking area/ parking area with space for horse trailers.
- ❖ Signs/Signs (limited).
- ❖ Bench at summit.
- ❖ Some benches along main trails.
- ❖ Simple trail map/maps/map at entrance.
- ❖ Viewing platform at mountain top.
- ❖ Rain shelter/kiosk.
- ❖ Corrals.
- ❖ Bike racks.
- ❖ Picnic tables.
- ❖ Hitching posts.
- ❖ Washroom/outhouse.
- ❖ Crude steps on steep slopes to prevent trail widening.
- ❖ Water trough.
- ❖ Campground.
- ❖ Waste container at tables.
- ❖ Nature trails with interpretative signs.
- ❖ No more facilities of any type. Leave it natural.

Comments

Maps very popular with most users, even some of those who did not want any other facilities. Some were very adamant over no campground. Equestrian users were more inclined towards more facilities such as hitching posts, corrals, signs, tables and larger parking areas to handle trailers.

6. Do you use businesses in Cobble Hill during your visit to Cobble Hill Mountain? If yes, please provide details.

- ❖ Cobblestone Pub.
- ❖ Post Office.
- ❖ Stores, Fuel, Food (Shawnigan Lake).
- ❖ Store.
- ❖ No.
- ❖ Rarely.
- ❖ Gas Station.
- ❖ Coffee Shop.
- ❖ Farmers Institute Hall.

Comments

The Store was the most visited followed by the Cobblestone and then the Post Office. People who live nearby use the businesses in Cobble Hill Village but not necessarily when using the mountain.

7. Do you have any names for the trails you use? If yes, please write on map.

Comments

There was a limited response to this question. A few people named trails at the Open House.

Cobble Hill Mountain Recreation Area

8. Should trails be signposted? If yes, what should the signs say?

No

- ❖ One more thing to be vandalized.
- ❖ Not needed.
- ❖ Leave as natural as possible.

Yes

- ❖ Trailhead signs with arrows to destinations.
- ❖ Trail intersections with destinations.
- ❖ Difficulty, length, direction, exit route, user group.
- ❖ "You are here" map kiosk at main intersections.
- ❖ For necessary direction only.
- ❖ Mark trails if they are designated for single use only.
- ❖ Minimal sign posting/ simple/rustic signs.
- ❖ Dangerous trails/zones.
- ❖ Name of trail at trailhead.
- ❖ Loop trail or one way.
- ❖ Linkages.
- ❖ GPS coordinates.
- ❖ Colour coded.
- ❖ Indicate if horse friendly.
- ❖ Similar to Beaver Lake signage.

Comments

The majority of users preferred some type of signage with the most popular topics being destination, length, degree of difficulty and type of use. The users who prefer a natural appearance were generally against any signage or if there was to be some very simple. These people are probably familiar with the mountain and know all the trails.

9. Are there any existing or potential links from the Cobble Hill Mountain trails to other trails or destinations? Indicate on map.

- ❖ Quarry.
- ❖ Koksilah Hills.
- ❖ Bonanza Bluffs/Shawnigan Trails.
- ❖ Kinsol Trestle/TCT/Silvermine Trail.
- ❖ Apparently there are trails in the Doran Road/Kingburne Road area.
- ❖ Across Koksilah River to Riverside Road.
- ❖ Hillbank Road.

Comments

This question often not answered. Assume that people did not know of any.

10. Which trails do you use? Which do you not use? Indicate on map.

- ❖ Use all trails.
- ❖ Most of them.
- ❖ Summit and off Burnham Road.

Comments

Generally poor response. Many people did not return a map.

11. Are there any places you would like to see new trails? Indicate on map.

- ❖ North-south trail along Western boundary /Backside of Mountain/Thain Road side.
- ❖ Wheelchair/handicapped trails?
- ❖ Thain Road trail following contour.
- ❖ There needs to be a Primary Trail from Quarry Nature Park to top .
- ❖ Flagged trail from detour up to bluffs.
- ❖ On the north side of the summit.
- ❖ Meandering longest trail to the corridor?
- ❖ Perimeter trails through the base of the mountain.
- ❖ Trail joining Cobble Hill Mountain across Thain Road to trails on north side.

- ❖ No, too many now.
- ❖ Area too small.

Comments

Some surveys were returned after the Open House and the respondents had seen the potential trails on that map. Some interest in the perimeter trail and a connection from the mountain across Thain Road to Woodlot 22. Little interest in new trails on the main mountain area. Consensus that there were enough trails already.

12. Are there any places where there should not be any trails? Indicate on map.

- ❖ Moss covered areas.
- ❖ Any areas of importance to First Nations unless approved by same.
- ❖ Where there are no trails now.
- ❖ Dangerous areas.
- ❖ Loose rock.

Comments

This question often not answered.

13. List any issues including safety, physical hazards, user hazards, trail user conflicts, etc. (e.g. trails too steep for inexperienced users, slippery footing in winter, trees too close together, line of sight restricted, etc.) Indicate on map.

- ❖ In this limited, highly used by foot traffic area, horse use is not appropriate/ In dry weather horses chew up trails creating dust and loose footing/ Erosion caused by horses and vehicles /Horses kept off fragile paths/ Horse manure around the picnic tables.
- ❖ Garbage in Woodlots.
- ❖ Dogs on leash or not?
- ❖ Erosion, particularly in forest trails.
- ❖ Appropriate footwear requirement, especially on steep sections.
- ❖ No new trails without authorization.
- ❖ User conflicts in area from Quarry Park to summit.

Cobble Hill Mountain Recreation Area

- ❖ Hazardous motorcycle riders and excessive noise/motorcycles who showed no consideration for horses.
 - ❖ Lack of adequate signage and necessary enforcement.
 - ❖ Remove windfalls regularly so new trails are not created around them.
 - ❖ Don't put chips on trails.
 - ❖ Alien species in red-listed areas.
 - ❖ Commercial trail riding on the mountain.
 - ❖ Commercial use on the mountain of any type.
 - ❖ Vegetation gone from around one of the picnic tables.
 - ❖ Footing/slippery footing in winter can be a concern for inexperienced riders/better footing needed in some areas.
 - ❖ Some rules for right-of-way should be made.
 - ❖ Steep/more advanced trails should be signposted at the beginning and at intersections.
 - ❖ If trail surfacing is adequate, there should be no trail user conflicts.
 - ❖ Indications of hazards.
 - ❖ Carriage trails should not be made because small vehicles could access them.
 - ❖ Some trails are too steep and for safety reasons should not be improved or used.
 - ❖ Don't allow 4X4s up there.
 - ❖ Too steep in places for inexperienced horses.
 - ❖ Environmental study.
 - ❖ No grading of the road.
-
- ❖ Most trails and roads are adequate with minor work.
 - ❖ No problems, just fine.
 - ❖ Prefer the challenges, would walk on flatter terrain if they were concerned.

Comments

The recent increase in horse use has caused concern. This is probably the biggest single issue. Many users specifically point to the Commercial trail riding, others consider all equestrian use.

14. Should certain trails be restricted to a single type of user (equestrian, mountain bike, hiking) or should trails be multi use where possible? Indicate on map

- ❖ No/multi-use/no restrictions.
- ❖ Multi-use where possible.
- ❖ Multi-use, users decide if their use is appropriate.
- ❖ Multi-use, if too steep turn around.
- ❖ Multi-use, as long as sharing is known by all users and rights-of-way posted.
- ❖ Multi-use, no dirt bikes.
- ❖ Multi-use, unless unsafe.
- ❖ Multi-use, unless erosion is an issue.
- ❖ All trails and roads restricted to hiking and biking.
- ❖ Primary use rather than multi-use.
- ❖ Pedestrian used areas near populated sites should be foot traffic only. Investigate other areas for multiple use.
- ❖ Designated use, specified by the trail builders.
- ❖ Separate use trails.
- ❖ Horses should keep to rough roads and avoid narrow paths.

Management Plan

- ❖ Commercial trail riding restricted to gravel roads and tracks.
- ❖ Restrict horses and bikes to gravel roads.
- ❖ Certain trails should be restricted in winter due to drainage.

Comments

Some surveys were returned after seeing the Conceptual Plan at the Open House so were responding to suggestions made there. In general, hikers were more inclined to prefer designated trails. Mountain bikers wanted to access all trails and were more inclined towards multi-use. Equestrian were the most in favour of multi-use. Many of the multi-use proponents were willing to accept that not all trails could be such because of the physical properties of the trails. Some suggested a user controlled multi-use system where users decide if the trail was too steep or if their use would cause damage.

15. What type of trail surfacing do you prefer?

- ❖ Natural surface/bare dirt/earth/forest floor/as is.
- ❖ No bark mulch.
- ❖ No loose surfacing.
- ❖ Mulch, perhaps in high use areas.
- ❖ Gravel/chips/dirt.
- ❖ Mulch and/or natural.
- ❖ Compacted dirt or dirt/roadbed combination.
- ❖ Prime corridors improved, probably gravel.
- ❖ Mulch on trails should be a priority.
- ❖ Chips or hogfuel.
- ❖ ¼" minus gravel.
- ❖ Gravel.
- ❖ Sand.
- ❖ Anything but rock/anything but hard packed gravel

Comments

Four groups here. One group wanted natural surfaces as they are now. Another who saw a mix of surfaces with some natural and others bark mulch or gravel. Another who suggested surfaces of either bark mulch/hog fuel or gravel/sand. The final group answered in the negative with anything but rock or hard gravel. Mountain bikers preferred a dirt or natural surface while the hikers and equestrians varied.

16. What do you see for the future of recreation on Cobble Hill Mountain?

- ❖ A community park that is inclusive rather than exclusive. Accommodating mountain bikers, hikers and horseback riding/Multi use area/Equality between all user groups/Whatever people want to use it for/Recreation use.
- ❖ More of hiking and general walking. Numerous people exercise themselves and their dogs on a daily basis/Increasing use by foot traffic with dogs.
- ❖ A day recreation area for Cobble Hill/Cowichan Valley. Organized group activities on weekends. Usage activity controlled to maintain wild status.
- ❖ Retain and improve beautiful environment which presupposes thoughtful planning and the necessity for responsible enforcement

Cobble Hill Mountain Recreation Area

- ❖ A destination for people from other places on the island.
- ❖ Don't make any huge changes/Natural "wilderness" area. Would like to see it return to its natural pre-commercial horse state/Remains natural, no hogfuel paths and no signs/Few rules/Hopefully it will remain unchanged.
- ❖ An expanded trail system, but retaining current feel/Some more trails as use increases.
- ❖ Organize trail maintenance days and all users come to help.
- ❖ Restricted trails for various users.
- ❖ Woodlots as model forests.
- ❖ Loop trails for timed rides.
- ❖ Trails upgraded with better footing.

Comments

Above comments have been paraphrased. Some were responding to the Conceptual Plan on display at the Open House.

An open question. Many users responded by restating their preference for multi-use. Other restated their preference for little or no changes. Other had specific ideas.

17. Other comments?

- ❖ I think this is a super legacy for the future riders and hikers. If we protect it now it will be here in the future
- ❖ Made and conserved for all user groups, therefore cooperation and conservation is essential
- ❖ A new trail around the base of the mountain is a good idea. Pave existing parking lot, does not need expanding. No need for hitching posts or benches. Minimize improvements, keep rustic. There seems to be an agenda to bring in a large number of horses – current hiking, walking would be ruined.
- ❖ Don't ride on it much but would like it to be available for riding and driving.
- ❖ It would be a shame if these trails were lost to development.
- ❖ Any trail with decent footing should be adequate for all users. Trails marked with difficulty levels.
- ❖ No restrictions, open to people, dogs, bikers and horses.
- ❖ Multiple use is not feasible in areas of considerable pedestrian use. Some damage inevitable, but aim to minimize. Assess potential for environment damage. Necessary to have some enforcement.
- ❖ Natural environment of park is the attraction. Added facilities not needed, will be vandalized. Leave trails natural. Could trim trees at lookouts.
- ❖ No commercial use. Bikers would like ladders. Bark mulch not wanted. Mountain bikers need trails of all levels, no restrictions on trails.
- ❖ Plan for trail closures, remediation, and detours in advance. Closing trails and suing? alternatives will minimize long-term impacts. User fees from commercial users used for maintenance.
- ❖ Nothing needs to be done to trails, no money spent. Let them recover. Prior to commercial trail riding, user conflicts did not exist. See Cobble hill maintained with as little human impact as possible so beauty and essential nature is preserved for all.
- ❖ Leave the mountain the way it is.
- ❖ Not happy with ladder jumps. Not appropriate on Cobble Hill Mountain.
- ❖ Need tighter contours on maps to understand trail profiles better.

Management Plan

- ❖ People are bringing dirt bikes from Victoria and not caring what devastation occurs.
- ❖ Haney Horsemen have got an excellent trail system working with hikers and bikers.
- ❖ Above water tower on rooty trail put in gravel and a culvert down the side.
- ❖ There are many wild flowers on the summit where the fire was years ago. They need protection. Maybe a viewing trail around them but no bikes or horses on such.
- ❖ No commercial recreation. The extra horse traffic has degraded the trails and Alpine Stables have alienated the other trail users. Not a positive impact. Electoral areas should not have to pay to fix their damage.

Comments

An open question. Again a range of comments.

Cobble Hill Mountain Recreation Area

APPENDIX IV – PLANT LIST

SOME HERBACEOUS AND SHRUBBY PLANTS ON COBBLE HILL MOUNTAIN

- ❑ *Trillium ovatum* Western Wake Robin; Trillium
 - ❑ *Erythronium oregonum* Giant white fawn-lily
 - ❑ *Allium cernuum* Nodding Onion
 - ❑ *Camassia quamash* Common Camas
 - ❑ *Zygadenus venosus* Death Camas
 - ❑ *Fritillaria lanceolata* Mission Bells; Checker Lily
 - ❑ *Sisyrinchium idahoense* var. *macounii* Idaho blue-eyed-grass
 - ❑ *Calypso bulbosa* Calypso, Fairy Slipper
 - ❑ *Corollorhiza maculata* Spotted Coral Root
 - ❑ *Goodyera oblongifolia* Green-leaf rattlesnake-plantain
 - ❑ *Plantanthera unalascensis* Alaskan rein orchid
 - ❑ *Silene douglasii*
 - ❑ *Achillea millefolium* Yarrow, Milfoil
 - ❑ *Saxifraga cespitosa*
 - ❑ *Saxifraga ferruginea* Russet-hair saxifrage
 - ❑ *Saxifraga occidentalis* Mountain saxifrage
 - ❑ *Lithophragma parviflorum* Prairie Star; Starflower
 - ❑ *Lomatium urticulatum* Bladder desert-parsley
 - ❑ *Chimaphila umbellata* Prince's Pine; Common Pipsissewa
 - ❑ *Chimaphila menziesii* Little Pipsissewa
 - ❑ *Mimulus alsinoides* Wing-stem Monkeyflower
 - ❑ *Collinsia parviflora* Maiden Blue-eyed Mary
 - ❑ *Dodecatheon* spp. Shooting Star
 - ❑ *Plectris congesta* Short-spur seablush
 - ❑ *Pachistima myrsinites* Canby's mountain lover
 - ❑ *Arctostaphylos columbiana* Kinnikinnick; Bristly manzanita
- ❑ The red listed ecosystem- *Arbutus* - hairy manzanita.

This list contains only some of the plant species found on Cobble Hill Mountain. I have not included mosses, lichens, grasses, many shrubs or trees. The spring flowering plants are primarily found on the open rocky areas on the upper slopes. I have noticed that these plant communities are diminishing in size as a result of horses and motorcycles. Broom is also encroaching these open meadows.

Provided by Helen Reid (Common names added by RRL Recreation Resources Ltd.)

APPENDIX V – BIRD LIST

Common Name	Spring	Summer	Fall	Winter
Bald Eagle	✓	✓	✓	✓
Sharp-shinned Hawk		✓	✓	✓
Cooper's Hawk	✓	✓	✓	✓
Northern Goshawk			✓	✓
Red Tailed Hawk	✓	✓	✓	✓
Merlin	✓	✓	✓	✓
Ruffed Grouse	✓	✓	✓	✓
California Quail	✓	✓	✓	✓
Band-tailed Pigeon	✓	✓	✓	✓
Great Horned Owl	✓	✓	✓	✓
Barred Owl	✓	✓	✓	✓
Western Screech Owl	✓	✓	✓	✓
Northern Pygmy Owl			✓	✓
Northern Saw-whet Owl			✓	✓
Common Nighthawk		✓	✓	
Black Swift	✓	✓	✓	
Rufous Hummingbird	✓	✓	✓	
Northern Flicker	✓	✓	✓	✓
Red-breasted Sapsucker	✓	✓	✓	✓
Downy Woodpecker	✓	✓	✓	✓
Hairy Woodpecker	✓	✓	✓	✓
Pileated Woodpecker	✓	✓	✓	✓
Pacific-slope Flycatcher	✓	✓		
Hammond's Flycatcher	✓	✓		
Tree Swallow	✓	✓		
Violet-green Swallow	✓	✓		
Barn Swallow	✓	✓		
Steller's Jay	✓	✓	✓	✓
Northwestern Crow	✓	✓	✓	✓
Common Raven	✓	✓	✓	✓
Chestnut-backed Chickadee	✓	✓	✓	✓
Brown Creeper	✓	✓	✓	✓
Red-breasted Nuthatch	✓	✓	✓	✓
Winter Wren	✓	✓	✓	✓
Bewick's Wren	✓	✓	✓	
Golden-crowned Kinglet	✓	✓	✓	✓
Ruby-crowned Kinglet	✓		✓	✓
Swainson's Thrush	✓	✓		
Hermit Thrush	✓		✓	✓
Varied Thrush	✓		✓	✓
American Robin	✓	✓	✓	✓
European Starling	✓	✓	✓	✓
Hutton's Vireo	✓	✓	✓	✓
Cassin's Vireo	✓	✓		
Warbling Vireo	✓	✓		
Orange-crowned Warbler	✓	✓	✓	
Yellow-rumped Warbler	✓		✓	

Cobble Hill Mountain Recreation Area

Black-throated Gray Warbler	✓	✓		
Townsend's Warbler	✓	✓	✓	
Wilson's Warbler	✓	✓		
Spotted Towhee	✓	✓	✓	✓
Song Sparrow	✓	✓	✓	✓
Chipping Sparrow	✓	✓		
Dark-eyed Junco	✓	✓	✓	✓
White-crowned Sparrow	✓		✓	✓
Golden-crowned Sparrow	✓		✓	✓
Fox Sparrow	✓		✓	✓
Lincoln's Sparrow			✓	
Brown-headed Cowbird	✓	✓	✓	
Pine Siskin	✓	✓	✓	✓
American Goldfinch	✓	✓		
Red Crossbill	✓	✓	✓	✓
Purple Finch	✓	✓	✓	✓
House Finch	✓		✓	✓

List prepared by: Derrick Marven and Tania Tripp

Bird List from David Aldcroft (October 2002)

Turkey Vulture	Barred Owl	Pacific Slope	Swanson's Thrush
Osprey	Northern Saw-whet Owl	Tree Swallow	Hermit Thrush
Bald Eagle	Common Nighthawk	Violet-green Swallow	American Robin
Sharp Shinned Hawk	Black Swift	Barn Swallow	Varied Thrush
Coopers Hawk	Vaux's Swift	Steller's Jay	Cedar Waxwing
Northern Goshawk	Rufous Hummingbird	Northern Crow	Cassin's Vireo
Red-tailed Hawk	Belted Kingfisher	Common Raven	Hutton's Vireo
Swainson's Hawk	Red-breasted Sapsucker	Chestnut-backed Chickadee	Warbling Vireo
Merlin	Downy Woodpecker	Bushtit	Orange-crowned Warbler
Blue Grouse	Hairy Woodpecker	Red-breasted Nuthatch	Yellow Warbler
Ruffed Grouse	Northern Flicker	Brown Creeper	Yellow-rumped Warbler
California Quail	Pileated Woodpecker	Winter Wren	Black-throated Gray Warbler
Band-tailed Pigeon	Olive-sided Flycatcher	Golden-crowned Kinglet	Townsend's Warbler
Western Screech-Owl	Willow Flycatcher	Ruby-crowned Kinglet	MacGillivray's Warbler
Great Horned Owl	Hammond's Flycatcher	Townsend's Solitaire	Common Yellow-throat
Wilson's Warbler	Spotted Towhee	Savannah's Sparrow	Fox Sparrow
Song Sparrow	Lincoln's Sparrow	Golden Eared Sparrow	White-crowned Sparrow
Dark-eyed Junco	Red-winged Blackbird	Brewer's Blackbird	Brown-headed Cowbird
Purple Finch	House Finch	Red Crossbill	Pine Siskin
American Goldfinch	Evening Grosbeak		

APPENDIX VI - TRAIL RECOMMENDATION TABLES

Trails Recommendations			
Trail	Width	Proposed Use	Recommended Changes/Improvements
Empress Trail	3 m	Fire Access Road Gated 4WD access Multi-use	<ul style="list-style-type: none"> Grade road to allow 4WD vehicle access and to allow for easier walking Install benches
South Summit Trail	3 m	Fire Access Road Gated 4WD access Multi-use	<ul style="list-style-type: none"> Grade road to allow 4WD vehicle access and to allow for easier walking Install fire access gate at Bamberton Access Small parking area at Bamberton Access Upgrade detour to allow vehicle access or alternatively, due to expense, leave as trail Install picnic table and hitching post
Perimeter Trail	1-2 m	Multi-use	<ul style="list-style-type: none"> Promote and maintain as a main trail with overall low gradient Upgrade existing section first, then build new section around west and north side of mountain Mix of natural and gravel (roadbase) footing
Summit Loop	1-2 m	Multi-use	<ul style="list-style-type: none"> Built alternate route around steep section Closure of trails Promote and maintain as main trail to summit Natural footing where possible Install hitching post to locate horses away from picnic tables and to protect red-listed ecosystem
Bear Trail	1-2 m	Multi-use	<ul style="list-style-type: none"> Promote and maintain as a main trail Mix of natural and roadbase footing
Thain Trail	1-2 m	Multi-use	<ul style="list-style-type: none"> Upgrading and new trail building A main trail from the Main Summit down to Thain Road – will connect with the Perimeter Trail
Huff + Puff Loop	<1m	Foot and Mountain bike Foot only in Low Impact Recreation Zone Area Unsafe for horses	<ul style="list-style-type: none"> Minimal improvements Natural footing Clear out short connecting trail to create an alternative for mountain bikes so they do not have to dismount Protection of red-listed ecosystem
Water Tower Trail	1-2 m	Foot and mountain bike Unsuitable for horses due to steepness	<ul style="list-style-type: none"> Upgrade steep section Initially natural footing, road base if use requires
Quarry Road	4 m	Service Road Multi-use	<ul style="list-style-type: none"> No improvements
Rob's Trail	<1 m	Foot and Mountain bike	<ul style="list-style-type: none"> Minimal improvements Natural footing Education of users about staying on one trail and not widening trail footprint
Polara Loop	2-3 m	Woodlot Logging road Multi-use	<ul style="list-style-type: none"> Garbage removal Widen parking area at Polara Access No changes

Cobble Hill Mountain Recreation Area

Trail Clusters Recommendations			
Trail	Width	Proposed Use	Recommended Changes/Improvements
Quarry Park Pedestrian		Foot traffic only Close to parking area Family-oriented area	<ul style="list-style-type: none"> Well-groomed trails Dominantly gravel
Quarry Park Multi-use		Multi-use	<ul style="list-style-type: none"> Mixture of gravel and natural footing Cistern maintained as drinking water source for dogs and horses Potential for interpretative signage around quarry site
Main Summit		Foot in Low Impact Recreation Zone Foot and bike on south side Multi-use elsewhere	<ul style="list-style-type: none"> Important Low Impact Recreation Zone Alien species removal, revegetation Mark Low Impact Recreation Zone boundary Closure of short trails Natural footing
Little Bluff		One multi-use One foot and mountain bike	<ul style="list-style-type: none"> Closure of old road Education of users to avoid widening the trail tread over the bluffs Natural footing Red-listed ecosystem
Beacon Summit	<1m	Foot and mountain bike	<ul style="list-style-type: none"> Minimal improvements Natural footing
South Summit		Foot traffic only Area is too steep and sensitive for other uses	<ul style="list-style-type: none"> Important Low Impact Recreation Zone Alien species removal, revegetation Mark Low Impact Recreation Zone boundary Trail pattern to be determined. <ul style="list-style-type: none"> Option 1- Dead end trail from South Summit Trail Option 2- Loop trail from South Summit Trail or connection trail from South Summit Trail to Perimeter Trail Potential for interpretative trail

APPENDIX VII– TRAIL USER ETHICS

A TRAIL USERS CODE OF ETHICS

(Back Country Horsemen Society of British Columbia)

Hikers, mountain bikers and horse riders are increasingly sharing the trails they travel. They also have concern for minimizing their impact on the backcountry.

Some dangers exist when different users share the same trails. However, all recreationists who are aware of others and practice "treading lightly" will help reduce conflicts and environmental damage, making everyone's trip outdoors more enjoyable.

Certain etiquette practiced by all trail users is easy to do and contributes to a better outdoor experience for everyone. A simple way to adopt the essential habits is to remember the "3 C's":

- Common Sense
- Communication
- Courtesy

1) Common Sense

Common Sense begins with planning your trip and continues to your encounters with others on the trail. Although trail travelers' protocol calls for the most mobile to yield the right of way, assess the situation and use common sense to determine who can get out of the way most easily. In ideal cases, cyclists yield to everyone and hikers yield to horses. A loaded string of horses going uphill always has the right of way, and a cyclist climbing a steep pitch will appreciate the same consideration.

2) Communication

A friendly word of greeting reassures horses and lets others know of your presence. Communicate with other trail users to warn them of dangers or adverse trail conditions, but also to share with them an exceptional view stop or picnic area that you found. It is a good idea to tell other travelers how many people are in your group, so they can prepare to pass them on the trail. Peer group policing is everyone's responsibility - if you see someone acting irresponsibly in the backcountry, warn him or her about the potential dangers.

3) Courtesy

Treat other trail users with courtesy. User conflicts can lead to trail closures an unnecessary measure if people cooperate and practice the "3 C's".

Cobble Hill Mountain Recreation Area

APPENDIX VIII- INFORMATION SOURCES

Base mapping data was provided by the CVRD. This information included TRIM contours, streams, trails, roads, lot boundaries, SEI and cadastral information.

The Conservation Data Centre provided information on two occurrences of rare species in the planning area. The Ministry of Sustainable Resource Management provided information on Old Growth Management Areas or OGMA's within the Planning Area.

The Ministry of Forests, Woodlot Forester, provided a copy of the current Development Plan for Woodlot #21.

A number of Internet Web Sites related to trails and trail planning were accessed and these are referenced in the report.

The Ministry of Energy and Mines Web site on-line listing of Mineral occurrence Database (MIN File) was reviewed. There are no active quarries or mines. One quarry and two mineral occurrences are listed.

A substantial amount of information was received from members of the communities surrounding the Cobble Hill Mountain Recreation Area. This included information on plants, trees, birds, logging, quarrying and World War II history, as well as information on recreational use (past and current).

Field visits to the site occurred throughout the project. Most of the trails were hiked at least once. Visits were made on weekends, holidays, and weekdays both during the day and after regular working hours.

References

Cowichan Valley Regional District. *Cobble Hill Official Community Plan Background Report*. Volume I. 1989.

CitySpaces Consulting Ltd. *CVRD South Sector Parks Strategy*. Prepared for the Cowichan valley Regional District. June 1996.

Richardson, Tim & Development Services department, Cowichan Valley Regional District. *Cobble Hill Village Neighbourhood Plan*

Ministry of Forests. *Woodlot Licence Program*. Brochure.

Ministry of Sustainable Resource Management.
www.gov.bc.ca/cdc/sei/vancouverisland/ecosystems.htm. Information on SEI mapping and ecosystem descriptions.

International Mountain Biking Association. www.imba.com. Information on trails building, trail ethics, multi-use trails, etc.

**APPENDIX IX – RECREATION RESERVE MANAGEMENT
AGREEMENT**