Whistler Recreational Trails Strategy

Topic: Trail Inventory

This topic covers the number and types of trails in Whistler, who is responsible for them, whose land they are on, and whether they interconnect.

Initial Directions

These 'initial directions' are being considered for implementation as next steps after the development of the RTS. They were developed based on the force field analysis and the background information below in this document, and with input from staff and these RMOW committees: the Trails Planning Working Group, the Whistler Bear Advisory Committee, the Forests and Wildlands Advisory Committee, and the Recreation and Leisure Advisory Committee.

1. Continue to utilize trail designs that appeal to a wide range of skill sets (e.g., Flashback in Cheakamus and Chipmunk Rebellion 1&2 in Westside-Sproatt) to maximize sustainability, use across skill levels, and cost effectiveness.

2. Analyze and identify opportunities and deficiencies within the network (e.g. types of trails, trails targeting particular user groups, difficulties of trails, connectivity, adaptive, etc.) to inform a master plan.

3. Increase the focus on network areas that are appropriate for specific difficulties and skill progression while also enabling connectivity of Trail Network Areas across all skill levels.

4. Update the Whistler Trail Standards to include other user type requirements (hiking, trail running, trials moto).

5. Consult trials bike stakeholders regarding trails and areas appropriate to consider for authorization.

Force Field Analysis

Helping Forces

Helping forces are the positive internal and external factors affecting this topic area, including internal strengths/assets and external opportunities/levers.

- The Whistler valley provides access to an extensive, diverse, and world-renowned recreation trail network.
- Trails are well distributed around the valley allowing users to disperse amongst a wide area
- Whistler is primarily designated as Non-Motorized Multi-Use with limited use across the network by trials motorcycles.
- Mountain bikers are the predominant user group on most multi-use trails although there are some localized exceptions.
- ~82% of the trails within the network see high or moderate levels of use indicating strong use for many of the trails within the network.

- Focus over the preceding years on providing more intermediate rated primarily mountain bike trails has seen that segment grow to account for 40% of the network which provides a better balance against the more difficult mountain bike trails that used to dominate the network.
- Modern mountain bike trail development continues to create and develop unique and fun trails that suit a wide range of skill levels and user groups.
- The network has been discovered as suitable for trail running which provides further recreation opportunities to another significant and growing user group.
- Whistler's Trail Network Areas have evolved to provide unique trail experiences.
  - Lost Lake generally has a high density of beginner to intermediate, family friendly trails.
  - Whistler North is 90% black advanced trails providing challenging, technical trails.
  - Westside – Sproatt, as one of the highest use areas, has become increasingly more balanced between intermediate, advanced, and expert level trails.
- Creation of the hiking-only Skywalk network provided much needed hiking trail access to the alpine outside of BC Parks and the Whistler Blackcomb CRAs.
- The Sproatt alpine network has been extremely successfully as a destination hiking trail network.
- Limited ability for "shuttling" style mountain biking reduces high impact riding and generally results in a more sustainable trail network.
- Authorized trail development in Cheakamus is providing much needed inventory to support increasing resident populations in the south end of the community with trails that suit a variety of users and skill levels, helping take pressure off the Lost Lake Park Trail Network Areas.
- Future trail development opportunities exist to connect and expand networks to support anticipated residential development in the valley.
- Some of the lower use Trail Network Areas on the outskirts of the main valley have the potential to provide future trail development opportunities or expansion of hiking trail networks to aid in dispersing use and reducing crowding.
- Opportunities exist to develop off existing artery trail infrastructure that would allow for longer seasonal use to gain more value out of previous investments.
- Many motivated residents are eager to participate in mountain bike trail building and development.
- Potential to update and upgrade some trails suitable for adaptive mountain biking and support that community and the Whistler Adaptive Sports program.

Hindering Forces

Hindering forces are the negative internal and external factors affecting this topic area, including internal weaknesses/gaps and external threats.

- The focus on development of intermediate level mountain bike trails has created gaps in sanctioned development of more difficult or expert level trail, which can contribute to unsanctioned trail building to fill the demand for new trails within those categories
- Most green rated (easier) trails in Whistler tend to be wider crushed gravel style trails which offers limited mountain bike experiential and skill development qualities when compared with green singletrack trails
- Fulsome (bottom to top) climb trails are somewhat limited and incomplete, and hiking trails (Skywalk/Sproatt) can be perceived as hard to reach from valley bottom
- Westside - Sproatt trail network has 20% of Whistler's trail network including the destination Sproatt alpine network, but is not supported by a dedicated staging area
- Westside – Rainbow/Skywalk Trail Network Area is not supported by a suitable dedicated staging area

- Some Trail Network Areas have high density of trails within relatively small areas (e.g. Westside – Sproatt's 'Lower Sproatt' area, or Lost Lake), which can lead to perception of crowding or busyness, and potentially have a negative impact on wildlife and environmental values
- Intensity of use data is a rough snapshot in time based on one data source and can change quickly or year to year due to many factors. Limited distribution of trail counters does not necessarily provide enough data across the network to make clear determinations on use levels or type of users
- Trail difficulty can sometimes shift over time and based on use levels, weather and maintenance frequency factors
- Individual experience, fitness level and perception based on primary residence trail networks can skew visitor understanding of difficulty ratings within the context of the Whistler Valley
- Connectivity between the Trail Network Areas is limited in some places
- WORCA is responsible for maintaining around 30% of the network (145km), and reductions in funding causing a reduction in ability to complete ongoing maintenance could negatively impact the trails under their prevue
- RMOW is responsible for around 30% of the network (137km).45% of the trails (63km) that the RMOW maintain are in the Westside Sproatt network, meaning almost half of the RMOW's resources are directed to one area, with 20% (27km) located in Lost Lake
- Over 55% of unsanctioned trails are in the Westside – Sproatt and Rainbow Trail Network Areas.
- Unsanctioned trails continue to be developed, including within the Whistler CRA.
- Reliance on public volunteers as the main contributors to maintain unsanctioned trails (outside of WORCA, RMOW, and WB), could pose a risk to the standards of the network and cause conflict with land managers and local residents
- Increased usership and climate change could impact long-term sustainability of the network
- Increasing use of electric motorcycles (dirt bikes) on the trail network causes social and trail related impacts

Trail Inventory – Background Information

This background information has informed the Force Field and Initial Directions. It has been reviewed by staff and the four RMOW committees (listed above) and refined based on their input.

Whistler Trail Network Overview

Whistler's extensive and world-renowned recreation trail network is the result of decades of ongoing building and creation through the efforts of both official and unofficial processes including Provincial agencies such as BC Parks and Recreation Sites and Trails, the Municipal Parks department, local not for profit community groups such as the Whistler Off-Road Cycling Association (WORCA) and Whistler Section of the Alpine Club of Canada (ACC-W), and unsanctioned trail construction across user groups. These groups have collectively contributed to the success of the resort in building a network of recreation trails that provides significant resident and tourism value that has been considered world leading in many respects.

Whistler's recreation trail network encompasses 368 km^2 (See Map 1) and covers an area from Brandywine Provincial Park in the south, Wedge Woods in the north, Callaghan Lake in the west, and Cheakamus Lake in the east. The study area was designed to match the RMOW boundary when possible and adjacent areas containing linked trail use.

The network contains 635 km of trails (both sanctioned and unsanctioned) and has been broken down into the geographical areas identified in Section 2.2.4 that generally align with the nomenclature used by

the public to identify these locations. The statistics contained within the discussion removed and included primary access and forest service roads where appropriate (as noted), as well as recreational trails, but **do not include the Valley Trail or commercial trails** (e.g. Whistler Blackcomb Bike Park and hiking trails within the CRA, or other Commercial Recreation focused trails on Crown land such as Whistler ATV, Canadian Wilderness Adventures or similar).

Trail Inventory Methodology

Data for this trail inventory was gathered from multiple sources, including the RMOW, Trailforks, GPS Tracks, and input from stakeholders. The gathered data was analyzed using ESRI ARC GIS and Excel. Trail attributes, such as name, authorization, and land use, were either obtained from the data sources or updated using expert knowledge. The trails were then segmented based on network area and land use before being categorized. The final report includes consolidated and summarized data, limited by the available knowledge and data at the time of analysis (2022).

The statistics provided in the report are based on trail length in kilometers, with some counts based on discrete trail asset names. For instance, Into the Mystic Lower and Into the Mystic Upper are treated as separate trails. Access and Forest Service Roads (FSRs) were included in the analysis where appropriate and indicated accordingly.

Trail Use Intensity

Determining relative use levels across the network is an important aspect in understanding how users are using the network and what trails or areas are seeing lesser or increased use. While trail counters have been installed on key trails throughout the network over the years, they generally only quantify use on specific trails and allow for some use characteristics to be extrapolated onto the network area they're located in. Online activity tracking applications have begun to utilize user information to generate heatmaps that depict the levels of use of different trails within networks and areas, including Strava and Trailforks. While use of these applications is limited in respect to overall user numbers, they can provide insight into general trends that, anecdotally, do appear to track with how the network areas and trails are being used.

Heat map information is generated through a process of combining all activities that overlap from low to high use with a progressive colour scheme such as faded red lines increasing in colour intensity to darker red as use levels increase and then the highest use areas showing as bright red/yellow as shown in the example image (Figure 1) below. The information is only relative to the local area and simply represents increasing levels of use from least used to most used but does not indicate a total number of users. This information is useful as a tool to quickly visualize how users are utilizing the trails within the network, especially in the absence of an extensive trail counter network which would be cost prohibitive and require extensive planning and management to effective implement and generate useful statistics.

In an attempt to generally quantify trail use levels and provide a rough view of trail use levels within the Whistler network, a review of Strava heat map use data was conducted by reviewing the mapping and assigning an attribute of high (any trail with yellow), moderate (any trail with denser and darker red), and low (any faded red with limited density) to trails in the Inventory. The assessment shows that 54% of the Whistler Trail network to be of "High" intensity use and 28% to be "Moderate" and 18% as "Low". This information is useful for general planning purposes as it provides a quick visual snapshot of where the highest levels of use are taking place and can be used to support analysis of things such as supporting infrastructure, or potential additions to the network to support those levels of use. It should be noted that this method is just a snapshot in time, time of year, trail conditions, weather, new trail openings, special events and races, in addition to other factors can all greatly influence this approach. That being said it can provide quick general insights on an ongoing basis.
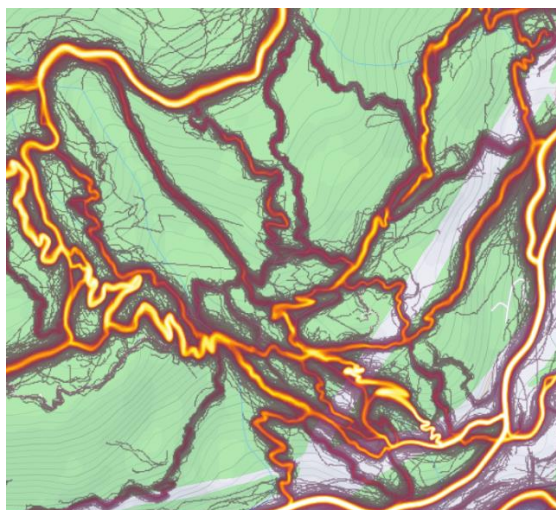
Figure 1 - 2022 Strava Heatmap example showing intensity of use in the Lower Sproatt area of the Westside – Sproatt trail network area. The bright yellow trails are highest intensity use, and the most faded red the lowest.

The RMOW have conducted a trail counter program to assess trail use in the Westside-Sproatt area as part of a parks and trail heads parking assessment. These studies should be incorporated to inform localized management planning.

Trail Rating System

Trails in Whistler are rated as to the RMOW's *Whistler Trail Standards* which were developed in 2003. While this system includes Type I paved trails (Valley Trail), they were not considered in this analysis. The inventory focused on the primary off-road trail types II - V which feature difficulty ratings from Easiest to Expert in addition to Hiking and Mountaineering as shown in Table 1 below. These ratings are used for mountain biking specific and multi-use non-motorized trails (e.g. Mountain biking including Class 1 e-bikes, hiking, trail running, trials motorcycle, nature walking). Mixed use trails are also considered within the inventory and are primarily comprised of double track, forest service roads and other access roads that do not preclude motorized use (e.g. side by side 4x4, motocross and dual sport motorcycles, C lass 2 and above ebikes) but are not part of the rating scheme. Some hiking specific trails and groups also utilize the SAC Hiking Scale rating system, although it is not as common or well understood in Whistler for most users.

Trail Type	Difficulty	User Group
White Circle	Easiest	Multi Use - Mountain biking including class1 e-bikes, other kinds of cycling, foot traffic (including but not limited to dog walking, trail running, hiking)
Green Circle	Easy	
Blue Square	More Difficult	
Black Diamond	Most Difficult	
Double Black Diamond	Expert	

Hiking only		Foot traffic only
Mountaineering		Foot traffic only
Mixed Use		All traffic including side by side 4x4, moto, Class 2 and above ebikes, equestrian

Table 1 - Whistler Trail Standards Rating System

RSTBC is currently undertaking a 'Mountain Bike Pilot Project' process that seeks to review and update management policies and trail standards. This is a province-wide process that has been underway for a few years to determine if and how a standardized approach to trail ratings can be applied universally across the province. In Whistler both the RMOW and WORCA have assessed portions of the network against the proposed standards to attempt to quantify potential impacts in how trails are rated within our network. This feedback has been provided back to the Province and included in their review. The outcome of this process is yet to be determined or decided and will need to be assessed at such time as the process in complete.

Whistler Trail Network Areas

For the purposes of this inventory, the broader Whistler valley area was split into Trail Network Areas (TNAs) to aid analysis by grouping trails together in commonly used networks (Map 1). The following section describes each TNA and the numbering below for each TNA corresponds with the numbers presented on Map 1 for each area. The statistics in this section do not include access roads or unauthorized/unsanctioned trails.

Brandywine (1)

The Brandywine TNA is located south of Whistler between Cougar and Brandywine Creeks west of the highway and includes Brandywine Falls Park with access to Brandywine falls east of the Highway. This area contains relatively few trails compared to other TNAs in Whistler. The Brandywine FSR connects to the Brandywine Meadows trailhead for summer hiking and winter snowmobile access. The Sea to Sky Trail, Lava Lake trail and access to Cal-Check trail and campground provides a route to Whistler off Highway 99. This area is mostly be used access Brandywine Falls, Sea to Sky Trail, Cal-Check Campground and Whistler Bungee for walking along Multi-Use Non-motorized trails. Six trails make up 9km and 2% of the total Whistler network.

Callaghan (2)

The Callaghan network area comprises mostly of mixed-use Access and FSR used to access the Madeley Lake/Hanging Lake trailhead and Whistler Olympic Park backcountry, Callaghan Lake Provincial Park, Alexander Falls, Callaghan Conservancy and access to the west side of Mount Sproatt alpine trail network. Four trails cover 8km contributing to 3% of the entire Whistler trail network.

Cheakamus (3)

The Cheakamus area is encompassed by Highway 99 along the northwest side and along Cheakamus River south covering the Jane Lakes area to Cheakamus Lake and following the administrative boundaries of the Whistler Controlled Recreation Area (CRA). The TNA contains the Cheakamus

Crossing neighborhood, Whistler Interpretive Forest, and the area provides access to Garibaldi Park's Cheakamus Lake and Helm Creek trails in addition to the Train Wreck site on the west side of the Cheakamus River. Cheakamus trails are used to access Cheakamus Lake, Loggers Lake, Cheakamus FSR Look Out, Cal-Check Recreation Park, Cheakamus River, Cheakamus River Suspension Bridge, and Train Wreck. Within the Cheakamus TNA there is a BMX track located at Bayly Park. The BMX track is maintained by the volunteer-based Whistler BMX Club. The track and club cater to a wide range of abilities, from run bikers to beginner riders to national level athletes.

This area is predominately multi-use non-motorized with trails accessed via local active transportation on the Valley Trail or staging out of the Function Junction/WIF staging area, Bayley Park staging, or informal parking on the FSR's on either side of the Cheakamus River.

There are 60 km of trail on 90 trails contributing 15% of the Whistler trail network. Given their lower elevation and proximity to Cheakamus Crossing and Creekside, the trails in the Cheakamus area have become an important component of the Whistler trial network and provide important early and late season riding for a wide range of users and skill levels.

Cougar Mountain (4)

The Cougar Mountain area is the most northern trail area in Whistler bound by Highway 99, Sixteen Mile Creek, and Showh Lakes. This area includes several popular mountain bike trails running parallel to the highway including Kill Me Thrill Me, while the Ancient Cedars area by Showh Lake via Sixteen Mile Creek FSR sees much more prevalent hiking use. A significant part of the trail network is located north of the Whistler Heli-port and is primarily used as a user-maintained trials motorcycle network that has been seeing increasing hiker use to access the Cougar Mountain summit area. Mountain bike use in this portion of the network is more limited to small numbers of adventure seeking riders. This area contains mostly advanced level challenging trails. This area contains 13km of trail from approximately five trails contributing 3% of total network.

Controlled Recreation Area (CRA) – Whistler and Blackcomb

Blackcomb CRA (11)

The Blackcomb CRA is part of the Whistler Blackcomb's commercial recreation tenure area and contains several non-commercial trails as well as commercial hiking trails on Blackcomb Mountain. Non-Commercial public use trails are located on the northwest side of the tenure adjacent to the Benchlands neighbourhood above Lost Lake Park and the Fairmont Chateau Whistler Golf Course. This area contains a number of multi-use non-motorized singletrack trails that are extremely popular with mountain bikers, including Micro Climate and Dark Crystal, in addition to lower trails that are also used for provincial and national level cross country races. The area also contains mixed-use trails (service roads) used for commercial ATV tours. The existing public use trails in this area have been authorized through Whistler Blackcomb's updated Master Development Agreement. There are 26 trails non-commercial trails totaling 28km in length and accounting for 7% of the total.

Whistler CRA (12)

The Whistler CRA is part of the Whistler Blackcomb's tenure area and contains many commercial hiking and biking trails, including the Whistler Bike Park, alpine hiking trail network, and the Singing Pass/Musical Bumps hiking only trails leading to Garibaldi Park via Whistler Mountain. Additionally, this area contains many historic public recreation trails that enter/exit into adjacent valley neighborhoods including trails that have been authorized through their updated Master Development Agreement and other widespread unsanctioned trail development. Multi-Use Non-Motorized

recreational trails also exit into Whistler Creekside. The Whistler CRA contains 40 public recreational (non-commercial) trails totaling 16km length and contributing 4% of the total network

Lost Lake Park (5)

Lost Lake Park is in the heart of Whistler Village and contains Lost Lake and associated park amenities. The area offers the closest Multi-use Non-Motorized trails to the core village area and provides easy central access for both tourists and locals. This area primarily accommodates beginner and intermediate users and sees heavy use in most seasons. Lost Lake Park contains 30km of trail from around 40 trails and makes up 7% of Whistler network. 96 % of Lost Like is "High" intensity use and is the second highest used area in the network with 23% of the "High" intensity use trails being in this area based on a qualitive assessment.

Rainbow/Emerald (6)

Rainbow/Emerald trails area north of Whistler village bordering Green Lake (access to a viewpoint) on the south and the Westside - Rainbow trail network to the northwest. This area, affectionately known as the "No Flow Zone", is accessed via the Rainbow and Emerald Neighborhoods and features predominantly challenging technical singletrack trails that are generally utilized by local residents for hiking and mountain biking, with some trials motorcycle use. One Duck Lake is also a destination for residents in the area. There are 18km of trail over 18 trails and 4% of Whistler network.

Westside – Rainbow (7)

The Westside – Rainbow trail network encompasses trail access via the Alpine Meadows and Rainbow Neighborhoods, in addition to the Rainbow Trail trailhead staging area on Alta Lake Road. This area contains the popular destination Skywalk backcountry hiking trail network via 19 Mile Creek and Screaming Cat Lake, in addition to highly used mountain bike trails like Billy Epic, Howler, and Green Monster. The 50 trails total 72km and contribute 18% to the total network. Providing access to other destination points inside the TNA such as, Iceberg Lake, Flank Paraglider Launch, Rainbow Falls and North Flank

Westside – Sproatt (8)

Westside – Sproatt trail area is constrained by Alta Lake Road on the south and is accessed by multiple locations along the road. This area contains backcountry access to alpine destination trails within the Sproatt alpine trail network including Into the Mystic, Lord of the Squirrels, Hanging Lake and the hiking only Rainbow Lake trail. Lower elevation Multi-Use Non-Motorized trails with Rainbow-Flank trail access provides mixed level trail options and is a highly used trail network area featuring much of Whistler's well-known technical mountain biking trails. Westside - Sproatt is the largest network area and contains 20% (91 trails totaling 121km of trail) of Whistler's trail network. The highest used area with 28% of "High" intensity use trails being in this area. Providing access to other destination/viewpoints/lookouts inside the TNA such as Rainbow Falls, Rainbow Lake, Mid-Flank, Happy Hour lookout, Valley Overlook, Canyon/Tusk View Platform, Mid Into the Mystic, Hanging Lake.

Whistler North (9)

Whistler North encompasses an area from Wedge Woods in the north, south to the Lost Lake Park boundary, and is bounded by Green Lake and the boundary of Garibaldi Park. The area contains the destination trail Comfortably Numb in addition to the Sea to Sky Trail which connects north Whistler to the Village, connecting into Lost Lake. This area also contains the Parkhurst ghost town destination,

Playground trials motorcycle network, and a number of popular advanced level trails like Out There. The 35km of trail and over 16 trails contribute 9% of the total network.

Whistler Valley Bottom (10)

The Whistler Valley area accounts for the remainder of trails not included in the previous areas, and includes a number of smaller trail network areas serving local residential areas including Emerald Forest, Cut Yer Bars, and Blueberry which contribute 10km over 20 trail segments containing 2.5% of the total Whistler trail network. This does not include the Valley Trail network but allows access to viewpoints such as Whistler Golf Course Lookout, Blueberry Hill Lookout, Big Timbe and Riverside. The Valley Bottom also includes Whistler Fitzsimmons Bike Park, which consists of four zones; the Jump Track, the Pump Track, the Beginner Skills Area and the Intermediate Skills Area. Additionally, two more pump tracks have been added opposite the Skate Park.

Map 1 – Trail Network Areas (TNAs) and trail destinations

Table 2 – Subset of trail destinations as shown on Map 1 – Trail Network Areas (TNAs) and .

Number On Map	Asset Type	Name	Trail Network Area
1	Scenic Point	Brandywine Falls	Access via Brandywine
2	Scenic Point	Train Wreck	Cheakamus
3	Scenic Point	Alexander Falls	Callaghan
4	Scenic Point	Rainbow Falls	Westside - Sproatt
5	Scenic Point	Ancient Cedars	Cougar Mountain
6	Scenic Point	Loggers Lake Crater Rim	Cheakamus
7	Scenic Point	Loggers Lake Lookout	Cheakamus
8	Scenic Point	Green Lake Viewpoint	Rainbow/Emerald
9	Scenic Point	Green Lake Boardwalk	Whistler Valley Bottom
10	Scenic Point	Whistler Golf Course Lookout	Whistler Valley Bottom
11	Scenic Point	Blueberry Hill Lookout	Whistler Valley Bottom
12	Scenic Point	Skywalk Lookout	Westside - Rainbow
13	Scenic Point	Cheakamus FSR Lookout	Cheakamus
14	Scenic Point	Top of the World Lookout	Whistler CRA
15	Scenic Point	Madeley Lake	Callaghan
16	Scenic Point	Rainbow Lake	Westside - Sproatt
17	Scenic Point	Screaming Cat Lake	Westside - Rainbow
18	Scenic Point	Iceberg Lake	Westside - Rainbow
19	Scenic Point	Jane Lakes	Cheakamus
20	Scenic Point	Brandywine Meadows	Brandywine
21	Scenic Point	Showh Lakes	Cougar Mountain
22	Scenic Point	Parkhurst Ghost Town	Whistler North
23	Viewpoint	Brandywine Falls	Access via Brandywine
24	Viewpoint	Whistler Peak	Whistler CRA
25	Viewpoint	Flank Paraglider Launch	Westside - Rainbow
26	Viewpoint	Rainbow Falls	Westside - Rainbow
27	Viewpoint	Cheakamus River	Cheakamus
28	Viewpoint	Cheakamus River – Trainwreck South	Cheakamus
29	Viewpoint	Cheakamus Lake	Access via Cheakamus
30	Viewpoint	Cheakamus Lake/Singing Creek	Access via Cheakamus
31	Viewpoint	Cheakamus River Suspension Bridge	Cheakamus
32	Viewpoint	Big Timber	Whistler Valley Bottom
33	Viewpoint	Mid-Flank	Westside - Sproatt
34	Viewpoint	North Flank	Westside - Rainbow
35	Viewpoint	Happy Hour Valley Overlook	Westside - Sproatt
36	Viewpoint	Canyon/Tusk View Platform	Westside - Sproatt

37	Viewpoint	Mid Into the Mystic	Westside - Sproatt
38	Campsite	Madeley Lake	Callaghan
39	Campsite	Hanging Lake	Westside - Sproatt
40	Campsite	Cal-Check Rec	Cheakamus
41	Campsite	RV Park	Brandywine
42	Campsite	Cheakamus Lake	Access via Cheakamus
43	Campsite	Riverside	Whistler Valley Bottom
44	Skills Park	Fitzsimmons Skills Park	Whistler Valley Bottom
45	Skills Park	Whistler BMX Track	Cheakamus

Figure 2 and Figure 3 displays total percentage of primary access trails and recreation trails within each of Whistler's 12 designated trail areas. As displayed, the Westside/Sproatt trail area contains the largest percentage of trails with over 25%. The smallest percentage of trails are within the Brandywine and Cougar mountain trail areas.
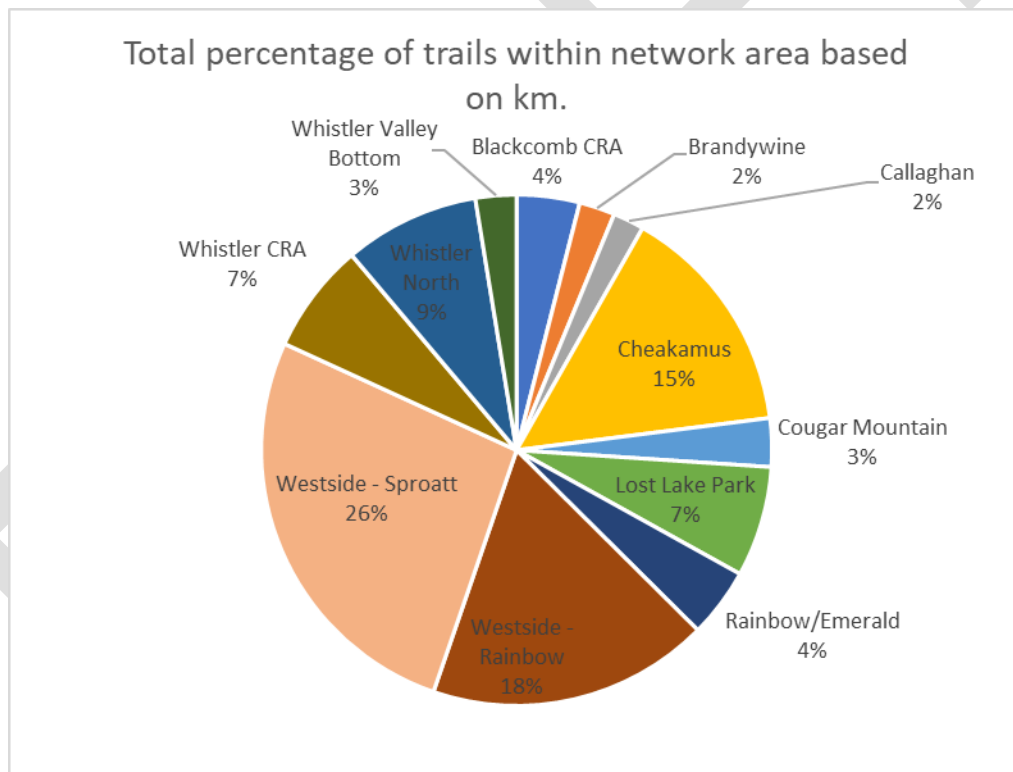

Figure 2- Total percentage of trails within network area based on km (access roads not included).
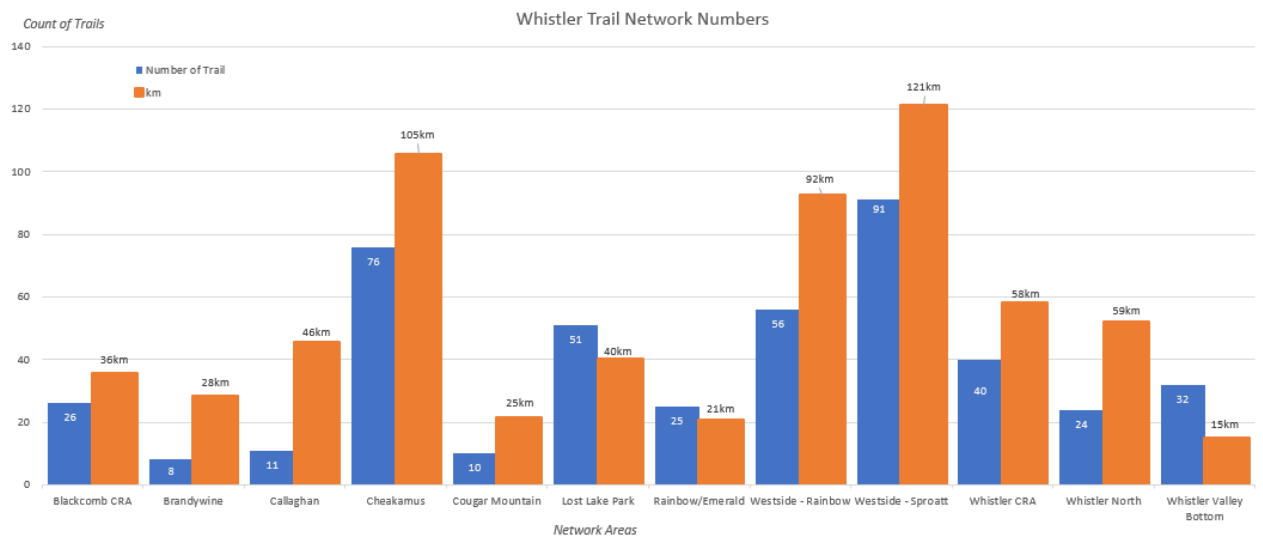
Figure 3 – Total number of Trails (trail names) and Length (km) of trails within each trail network area.

Trail Types

The recreation trail network in Whistler is primarily designated as Non-Motorized Multi-Use featuring hiking, trail running, dog walking, and mountain biking user groups, with limited use across the network by trials motorcycles including Access Roads. Single use trails are generally limited to hiking-only on a small number of trails distributed throughout the valley. Mixed-Use generally refers to access roads and FSR's which permit motorized use but are heavily used by recreational users and important pieces of the network to access or connect trails and routes. (Figure 4, Figure 5)

Multi-Use Non Motorized trails make up over 50% of the Whistler network, with a high number of access roads contributing to the 34% of Mixed-Use trails. Without access roads, Multi-Use Non Motorized trails make up 80% of the total network. Cheakamus has the most Mixed Use trails (45km) and Westside-Rainbow has the most Hiking Only trails (26km) and the most Multi Use Non Motorized are found in Westside Sproatt 15%
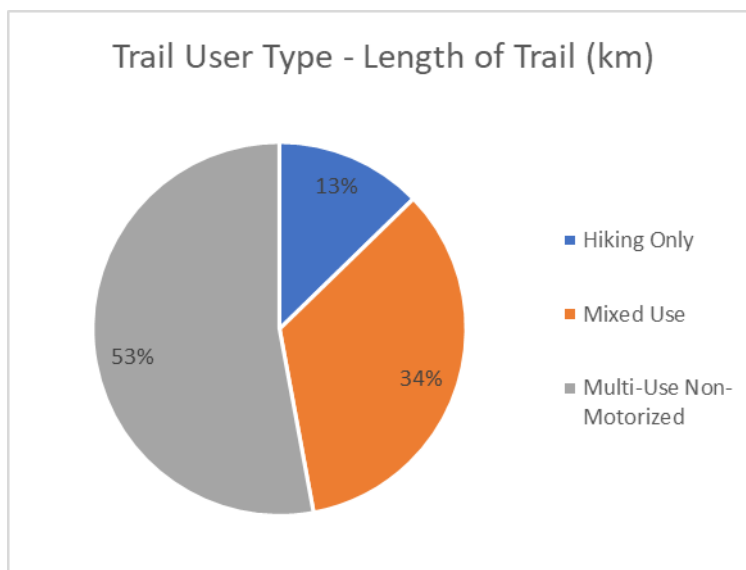
Figure 4– Summary of Trail Use Type total length of total Network Area (including access roads).
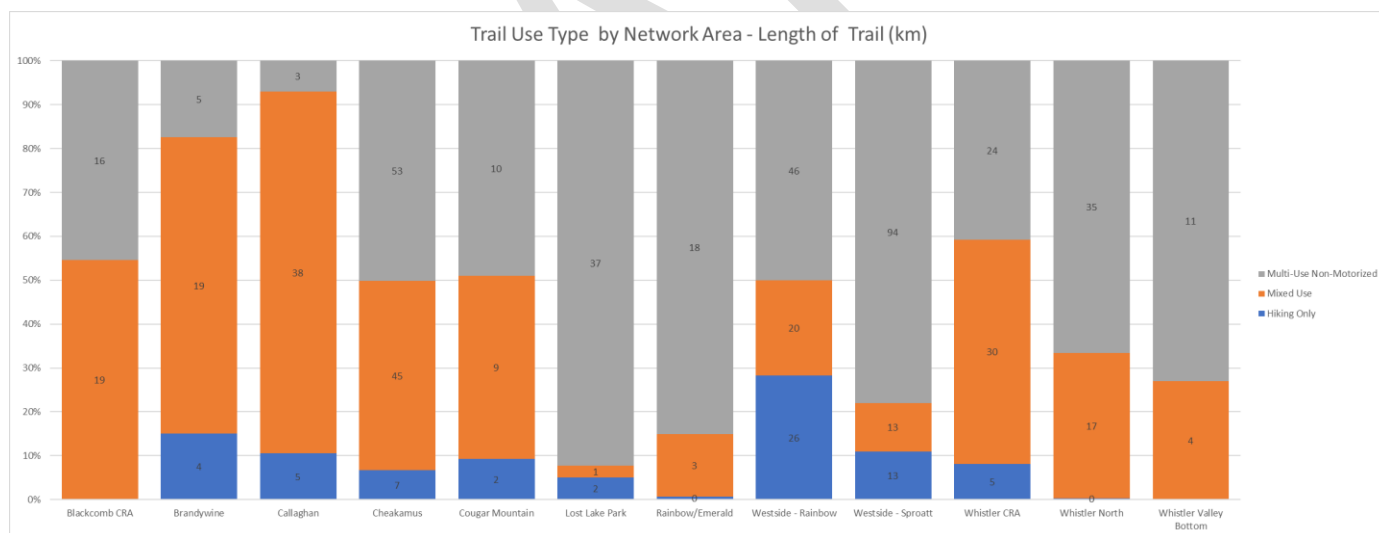

Figure 5– Summary of Trail Use Type total length by Network Area (including access roads).

Technical Difficulty Ratings

A review was conducted on Whistler's trail network, assessing its technical difficulty rating. The data used for this review were sourced from Trailforks, RMOW, and Whistler Trail Standards. The trails were categorized into two groups: Hiking Only and Mountaineering. The Mixed Use Non-Motorized trails were rated based on their difficulty in relation to mountain biking. Access, which includes double track and FSR (mostly Mixed-Use), accounts for 28 segments, covering a distance of 246 km within the recreation trail network. This makes up 26% (246 km) of the network but is not included in the percentage calculations.

Excluding access trails, the most common trail difficulty rating is Black Diamon (Most Difficult), which accounts for around 32% of the network 141km. There are a total of 125 Blue Square trails covering 139 km in length. This is followed by around 32% of the network, which is made up of 112 Black Diamond (Most Difficult) trails totaling 139 km in length. Green Circle (Easy) trails make up only 11% of the network, with 23 trails covering 50 km in length. Double Black Diamond (Expert) rated trails make up 7% of the network, with 27 trails covering 28 km. Hiking Only trails and Mountaineering routes account for 18% of the total network, with 25 trails covering 80 km.

However, information on trail style types, such as adaptive trails, crushed gravel surfaces, e-bike friendliness, flow vs technical, and climbing primary vs downhill primary, is currently not available in the inventory.
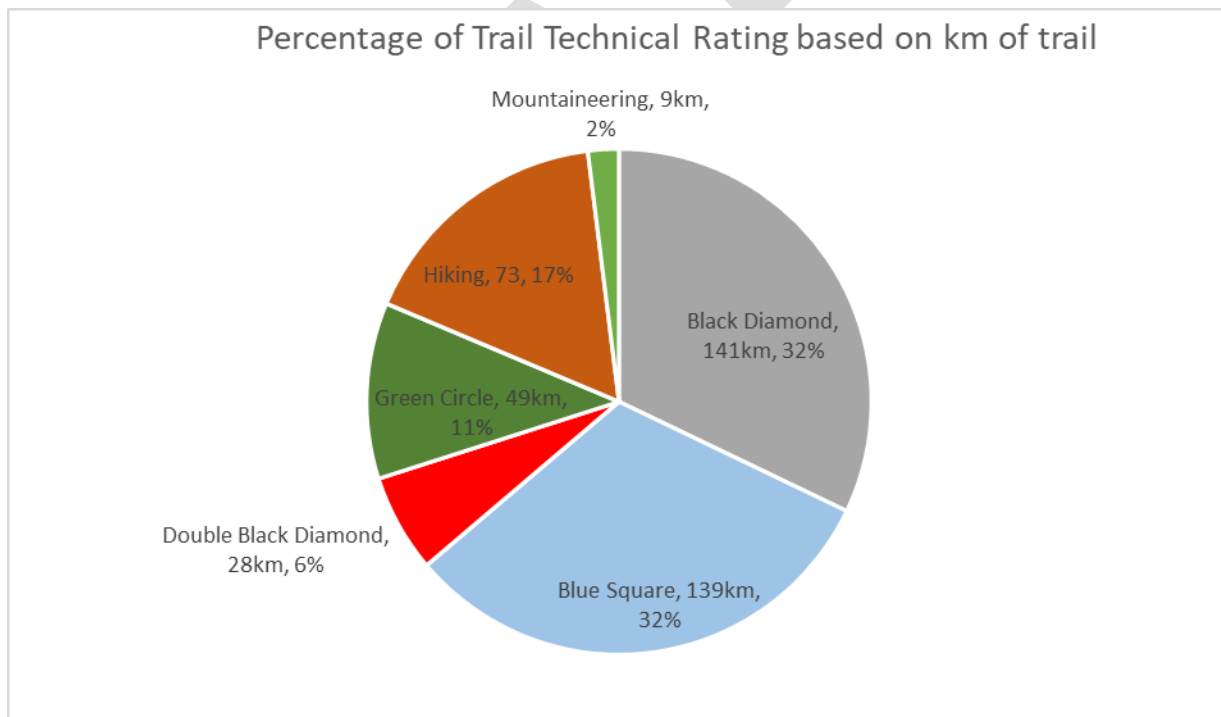

Figure 6 – Percentage summary of Technical Trail Rating in Whistler based on the km of trails.

Technical Trail Difficulty Rating by network area

Based on trail length in kilometers, the subsequent analysis excludes access trails. A qualitative evaluation of "physicality" is included in the summary, which is determined based on the overall ratings and terrain characteristics of each area (refer to Table 3 and Figure 7).

Cheakamus has the largest number of Hiking Only trails in Whistler (10), whereas Westside-Rainbow has the most trails in terms of kilometers, with a total of 19km. Cheakamus also has the highest number of Green trails in Whistler by kilometers, covering 18km, followed by Lost Lake with 13km.
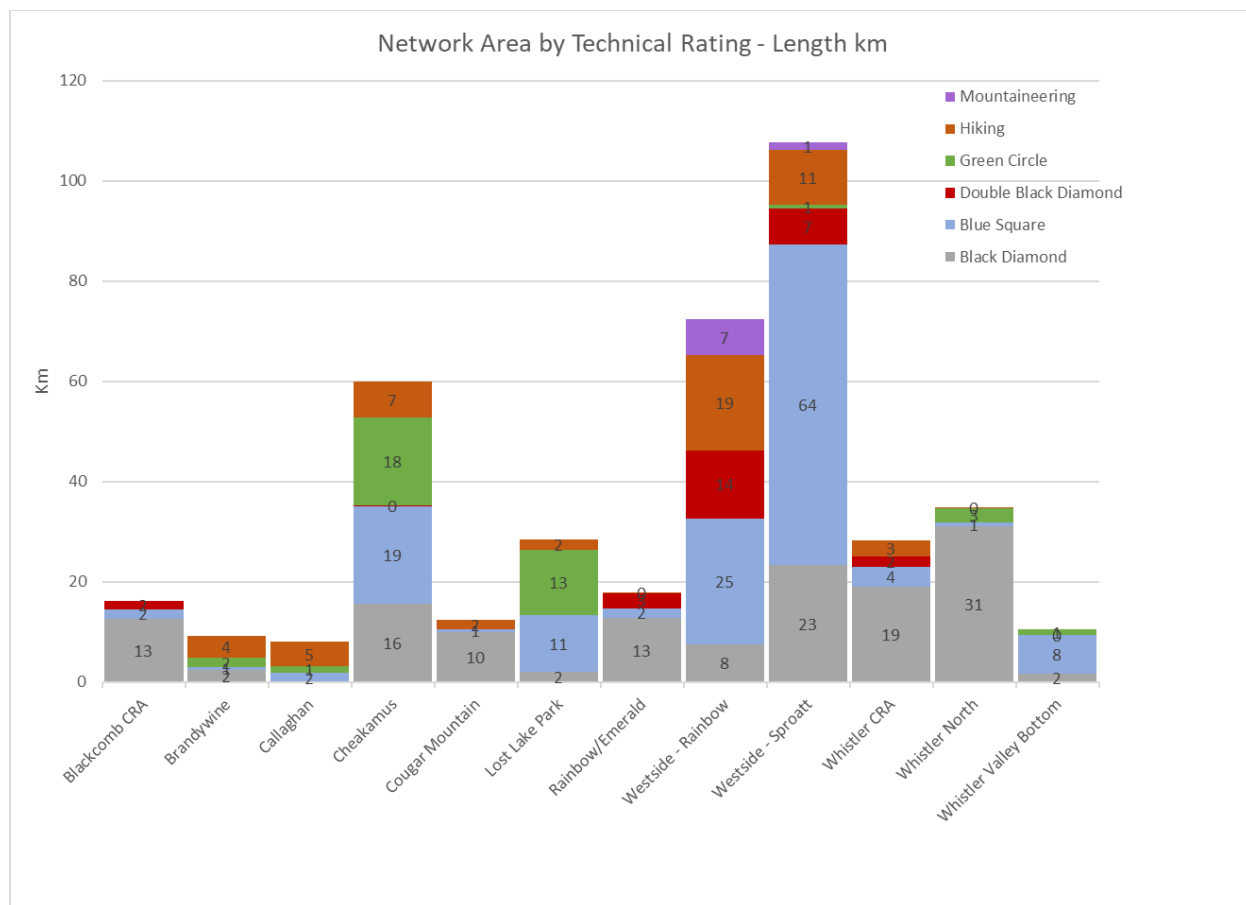
Westside-Sproatt offers the most kilometers of blue trails (64km) and supports the highest number of Black Diamond Trails (22) as well as Double Black Diamond trails (10). It also has the longest Double Black Diamond trail at 13km. Meanwhile, Whistler North has the highest number of Black Trails by length, covering 31km.

Lost Lake has the highest trail density at 1.6km per 1km2, which is almost four times greater than the density of the next highest areas, Rainbow/Emerald (0.47km per 1km2) and Whistler North (0.44km per 1km2). Lost Lake also has the highest number of Green Circle Trails (15).

#	Trail Network Area	Hiking Only	Green	Blue	Black	Double Black	Physicality
1	Brandywine	46%	22%	7%	25%		Moderate physicality – low elevation change, but can be longer distance
2	Callaghan	60%	18%	23%			Moderate physicality – hiking trails with moderate elevation change and longer distances
3	Cheakamus	10%	30%	33%	26%		Moderate Physicality - Range in elevations and lengths of trails create routes suitable for intermediate mountain bikers and offers hikers a variety of trails providing many trail route options of differing lengths
4	Cougar Mountain	16%		5%	80%		High Physicality – Significant elevation gains, lengths of the routes and technical difficulty make this a high physicality area
5	Lost Lake		46%	40%	7%		Low Physicality - low elevations and high density of beginner trails with the proximity to the village and the ability to make routes of varying lengths and difficulty
6	Rainbow/Emerald (No Flow Zone)			11%	72%	16%	Moderate Physicality – high technical difficulty and undulating elevations however but mainly low elevations, close proximity to access and options of short or longer loops
7	Westside-Rainbow	26% +10% Mtnering		35%	11%	18%	High Physicality – Significant elevation gains, lengths of the routes and technical difficulty
8	Westside – Sproatt	10%		63%	18%	7%	High Physicality – Significant elevation gains, lengths of the routes and technical difficulty
9	Whistler North		11%	2%	90%		High Physicality – Significant elevation gains, lengths of the routes and technical difficulty make this a high physicality area.
10	Whistler Valley Bottom	11%		73%	15%		Low Physicality - Proximity to access, low elevation, and intermediate technicality rating
11	Blackcomb CRA (Controlled Recreation Area)	Commercial hiking		12%	78%	10%	High physicality based on the steep access regardless of technical trail ratings and the high percentage of Most Difficult and Expert Unlimited trails
12	Whistler CRA (Controlled Recreation Area)	11%		14%	67%	8%	Moderate Physicality – high/moderate technical difficulty and high elevations

Table 3 – Percentage of each trail area dedicated to each difficulty rating with a qualitive commentary of overall physicality.

Figure 7– Length (km) of Trails of Technical difficulty groups within each Whistler Trail Network Area (access not included).

Network Area by Technical Rating - Length km

Authorization Status

Trail authorization status is categorized in to three groups for analysis.

- **Authorized trails** - have some type of sanction or authorization and include trails with a Section 57 assignment. Whistler and Blackcomb CRA, RSTBC, Whistler Interpretive Forest and RMOW.
- **Existing Unauthorized trails -** are publicly known and recognized by WORCA and the RMOW. They are visible on Trailforks and possibly maintained by WORCA or others.
- **Other Unsanctioned trails -** are known unsanctioned trails maintained and built by the public and not publicly shown/available on Trailforks (these trails are mapped, although generally not public facing, but catalogued within our analysis dataset)
- *Access, double track, FSR and Valley Trails are not included in the authorization status analysis.*

67% Whistler trails (386km) have some kind of authorization,15% are Existing Unauthorized trails (89km) and 18% are Other Unauthorized trails (105km). (Figure 8)

34% of the total Existing Unauthorized trails are in the Westside – Sproatt network (38 trails, 23km) followed by Westside – Rainbow at 22% (24 trails, 24km) of the total. Cougar Mountain has the most km (29km) of Other Unauthorized trails and Westside – Sproatt the highest number (32 trails 24%) of Other Unauthorized trails. (Figure 9)
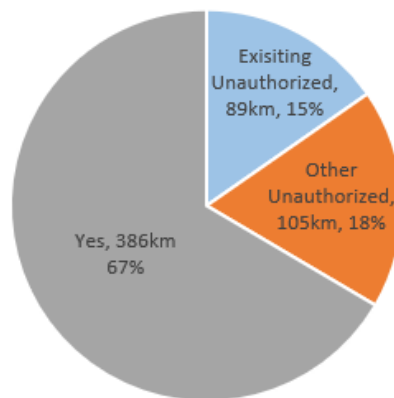

Figure 8– Shows the breakdown of Authorization of Whistler trail across the network based on km (access not included)

Kilometers of Trails Based on Authorization Status

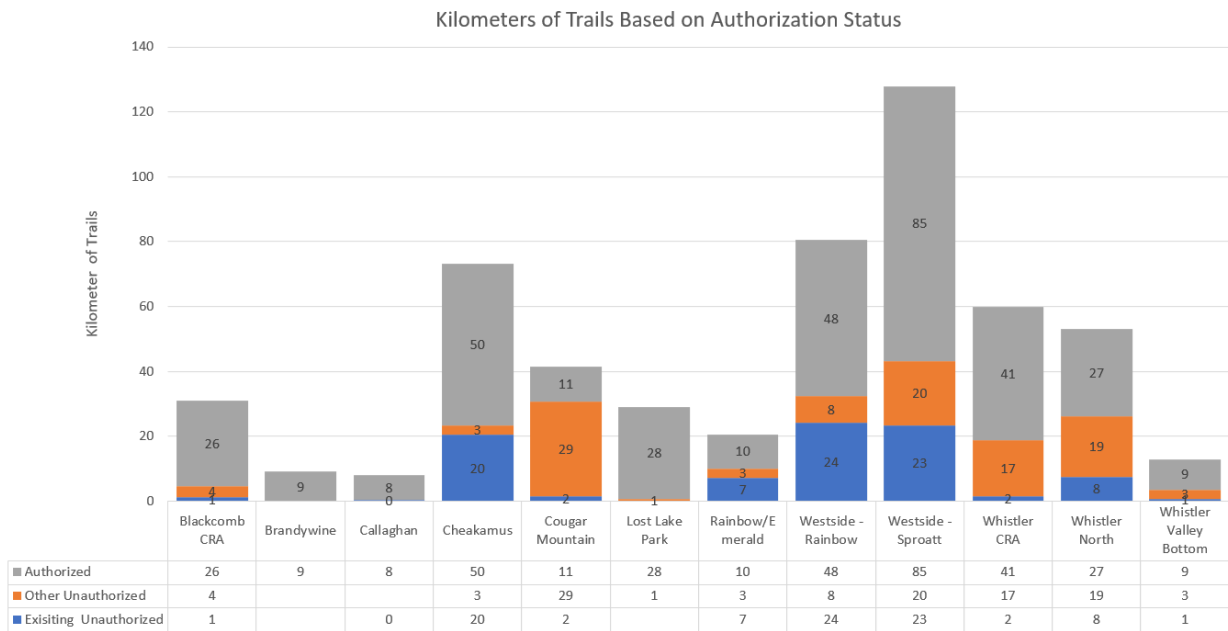|	Blackcomb CRA	Brandywine	Callaghan	Cheakamus	Cougar Mountain	Lost Lake Park	Rainbow/Emerald	Westside - Rainbow	Westside - Sproatt	Whistler CRA	Whistler North	Whistler Valley Bottom
Authorized	26	9	8	50	11	28	10	48	85	41	27	9
Other Unauthorized	4			3	29	1	3	8	20	17	19	3
Exisiting Unauthorized	1		0	20	2		7	24	23	2	8	1

Figure 9– Shows the breakdown of the kilometers of trails by authorization of Whistler trail across the network, by network area

Maintenance Responsibility

Whistler recreation trails are maintained by a variety of organizations based on Land Use Manager/Ownership. WORCA, Whistler Blackcomb, RMOW and public volunteers are the main contributors to maintain trails within the network (Figure 10). The RMOW with WORCA maintain over 80% of the entire Whistler trail network:

- 36% of the Whistler network are maintained by WORCA
- 34% of trail across the Whistler network are maintained by RMOW of which 44% are in Lost Lake Park but has the highest density of trails
- 10% of trails a jointly maintained by WORCA and RMOW
- Whistler Blackcomb is responsible for 10% of the total network that are not commercial trails.

WORCA maintains over 50% of trails in three of the trail network areas based on the length of trails, 70% of Whistler North, 90% of the Rainbow/Emerald and 53% of Cheakamus trail areas. The RMOW maintain 90% of tails in Lost Lake, 80% in Callaghan and 60% of the trails in the Westside – Sproatt area. 90% of trail maintained by the ACC are in Westside/Rainbow.
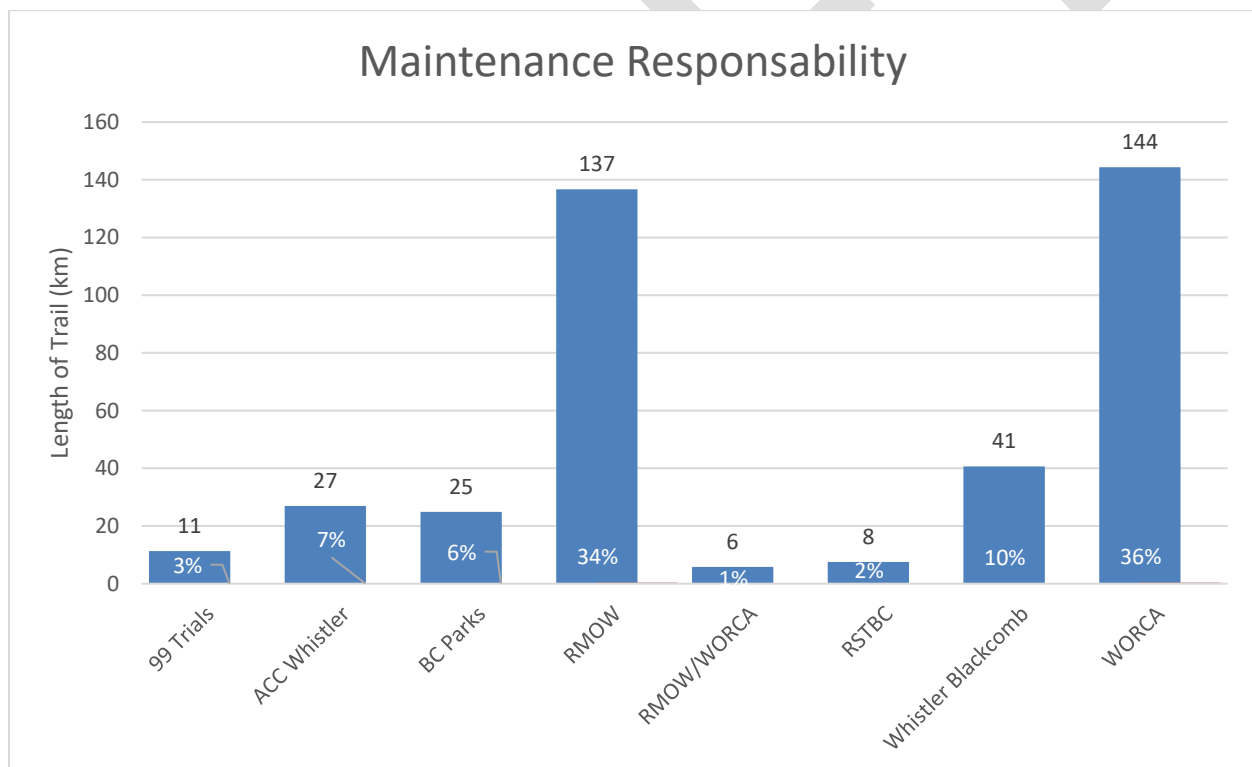

Figure 10– Shows the breakdown of the km of trails by maintenance responsibility in the network

Land Manager/Ownership

The study area comprises of a variety of land ownership from Crown and Municipal lands to private property based on km of trail (Figure 11).

- 51% of Whistler trails are located upon Crown land, (with an additional 8% on Crown Provincial Land titled parcels with the BC Land office) with 11 % in the interpretive forest
- 11% of trails are on Municipal land
- 4% of Whistler trails are on private land
- Over 60% of Unauthorized/Unsanctioned trails are on Crown land with 5% on Private land and 12% in the CRA
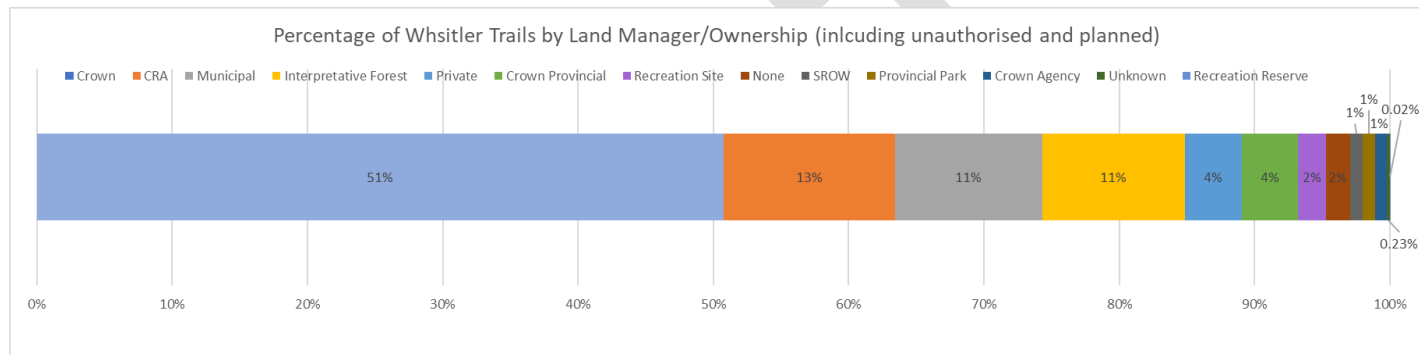

Figure 11- Percentage of Whistler trail network by Land Manger/Ownership (Commercial Trails Not included, based on km**)**

For Trails that are located on Crown land 30% (>100km) are in Westside-Sproatt trail network area. 25% of trails on Private land occur in the Cougar trail network and 25% in Westside Rainbow. 55% of trails located on Municipal land are located in Lost Lake

Trail Access and Staging Areas

In general terms there are 21 trail access staging areas in Whistler. 28% of those in the Whistler Valley Bottom trail network area (6) with 23% (5) being in Cheakamus network area. There are 18 informal parking areas and with 50% being with in the Cheakamus trail network area. There are 12 known roadside parking of which 50% are in the Westside Sproatt trail network area (Map 4 - Parking).

Parking and trailheads amenities are further discussed in a separate document (see Trail Access and Staging).