

METRO VANCOUVER REGIONAL DISTRICT REGIONAL PARKS COMMITTEE

REGULAR MEETING

Wednesday, February 10, 2021 9:00 AM 28th Floor Boardroom, 4730 Kingsway, Burnaby, British Columbia

AGENDA1

1. ADOPTION OF THE AGENDA

1.1 February 10, 2021 Regular Meeting Agenda

That the Regional Parks Committee adopt the agenda for its regular meeting scheduled for February 10, 2021, as circulated.

2. ADOPTION OF THE MINUTES

2.1 January 20, 2021 Regular Meeting Minutes

That the Regional Parks Committee adopt the minutes of its regular meeting held January 20, 2021, as circulated.

3. DELEGATIONS

4. INVITED PRESENTATIONS

5. REPORTS FROM COMMITTEE OR STAFF

5.1 Regional Parks Permit Framework

That the Regional Parks Committee receive for information the report dated January 15, 2021, titled "Regional Parks Permit Framework".

5.2 Regional Parks State of Assets Report

That the MVRD Board:

- a) receive for information the report dated January 20, 2021, titled "Regional Parks State of the Assets Report"; and
- b) direct staff to incorporate the findings of the *Regional Parks State of the Assets Report* in the Regional Parks Asset Management Plan.

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 $^{^{1}}$ Note: Recommendation is shown under each item, where applicable.

5.3 Regional Parks – Manager's Report

That the Regional Parks Committee receive for information report dated January 20, 2021, titled "Manager's Report – Regional Parks".

6. INFORMATION ITEMS

6.1 Regional Parks Upcoming Events – February 2021

7. OTHER BUSINESS

8. BUSINESS ARISING FROM DELEGATIONS

9. RESOLUTION TO CLOSE MEETING

Note: The Committee must state by resolution the basis under section 90 of the Community Charter on which the meeting is being closed. If a member wishes to add an item, the basis must be included below.

10. ADJOURNMENT/CONCLUSION

That the Regional Parks Committee adjourn/conclude its regular meeting of February 10, 2021.

Membership:

McEwen, John (C) - Anmore Wiebe, Michael (VC) - Vancouver Calendino, Pietro - Burnaby Clark, Carolina - Belcarra Dilworth, Diana - Port Moody Guerra, Laurie - Surrey Harvie, George - Delta Hodge, Craig - Coquitlam Miyashita, Tracy - Pitt Meadows Muri, Lisa - North Vancouver District Nicholson, Maureen - Bowen Island Penner, Darrell - Port Coquitlam Richter, Kim - Langley Township Soprovich, Bill - West Vancouver Trentadue, Mary - New Westminster

METRO VANCOUVER REGIONAL DISTRICT REGIONAL PARKS COMMITTEE

Minutes of the Regular Meeting of the Metro Vancouver Regional District (MVRD) Regional Parks Committee held at 9:00 a.m. on Wednesday, January 20, 2021 in the 28th Floor Boardroom, 4730 Kingsway, Burnaby, British Columbia.

MEMBERS PRESENT:

Chair, Mayor John McEwen, Anmore
Vice Chair, Councillor Michael Wiebe*, Vancouver
Councillor Pietro Calendino*, Burnaby
Councillor Carolina Clark*, Belcarra
Councillor Diana Dilworth*, Port Moody
Councillor Laurie Guerra*, Surrey
Mayor George Harvie*, Delta
Councillor Craig Hodge*, Coquitlam
Councillor Tracy Miyashita*, Pitt Meadows
Councillor Lisa Muri*, North Vancouver District
Councillor Maureen Nicholson*, Bowen Island
Councillor Darrell Penner*, Port Coquitlam
Councillor Kim Richter*, Langley Township

Councillor Bill Soprovich, West Vancouver Councillor Mary Trentadue*, New Westminster

MEMBERS ABSENT:

None.

OTHERS PRESENT:

Director Sav Dhaliwal, Board Chair and Ex Officio committee member

STAFF PRESENT:

Mike Redpath, Director, Regional Parks, Parks and Environment Jerry W. Dobrovolny, Chief Administrative Officer Amelia White, Legislative Services Coordinator, Board and Information Services

OPENING REMARKS

Director Sav Dhaliwal, Board Chair and Ex Officio committee member, acknowledged the contributions of the Metro Vancouver Standing Committee members in what has been a challenging time for the region due to COVID-19 pandemic and recognized the vital role this Committee will play in moving forward.

^{*}denotes electronic meeting participation as authorized by Section 3.6.2 of the *Procedure Bylaw*

1. ADOPTION OF THE AGENDA

1.1 January 20, 2021 Regular Meeting Agenda

It was MOVED and SECONDED

That the Regional Parks Committee adopt the agenda for its regular meeting scheduled for January 20, 2021, as circulated.

CARRIED

2. ADOPTION OF THE MINUTES

2.1 November 18, 2020 Regular Meeting Minutes

It was MOVED and SECONDED

That the Regional Parks Committee adopt the minutes of its regular meeting held November 18, 2020, as circulated.

CARRIED

3. **DELEGATIONS**

No items presented.

4. INVITED PRESENTATIONS

No items presented.

5. REPORTS FROM COMMITTEE OR STAFF

5.1 2021 Regional Parks Committee Priorities and Work Plan

Report dated December 3, 2020, from Mike Redpath, Director, Regional Parks, providing an overview of the 2021 priorities and work plan items for the Regional Parks Committee.

Members were provided a presentation about the 2021 priorities and work plan items for the Regional Parks Committee including a video on the response to the COVID-19 pandemic, and a video of the parks in the region.

In discussion, the following matters were raised:

- the impact of a high attendance on the regional parks,
- creating trail user guidelines to increase physical distancing compliance,
- asset management of both natural and physical resources, and
- studying alternative transportation options.

It was MOVED and SECONDED

That the Regional Parks Committee endorse the work plan as presented in the report dated December 3, 2020, titled "2021 Regional Parks Committee Priorities and Work Plan".

CARRIED

Presentation material titled "2021 Priorities and Work Plan" is retained with the January 20, 2021 Regional Parks Committee agenda. The videos presentations are not being retained with the agenda.

5.2 Manager's Report – Regional Parks

Report dated December 3, 2020, from Mike Redpath, Director, Regional Parks, providing members an update on various on-going and upcoming programs, and initiatives.

It was MOVED and SECONDED

That the Regional Parks Committee receive for information report dated December 3, 2020, titled "Manager's Report – Regional Parks".

CARRIED

6. INFORMATION ITEMS

6.1 Regional Parks Upcoming Events – January 2021

7. OTHER BUSINESS

No items presented.

8. BUSINESS ARISING FROM DELEGATIONS

No items presented.

9. RESOLUTION TO CLOSE MEETING

It was MOVED and SECONDED

That the Regional Parks Committee close its regular meeting scheduled for January 20, 2021 pursuant to the *Community Charter* provisions, Section 90 (1) (e) as follows:

- "90 (1) A part of the meeting may be closed to the public if the subject matter being considered relates to or is one or more of the following:
 - (e) the acquisition, disposition or expropriation of land or improvements, if the board or committee considers that disclosure could reasonably be expected to harm the interests of the regional district."

CARRIED

10. ADJOURNMENT/CONCLUSION

It was MOVED and SECONDED That the Regional Parks Committee adjourn its regular meeting of January 20, 2021. CARRIED (Time: 10:21 a.m.) Amelia White, Legislative Services Coordinator

43372671 FINAL



To: Regional Parks Committee

From: David Leavers, Division Manager, Regional Parks

Date: January 15, 2021 Meeting Date: February 10, 2021

Subject: Regional Parks Permit Framework

RECOMMENDATION

That the Regional Parks Committee receive for information the report dated January 15, 2021, titled "Regional Parks Permit Framework".

EXECUTIVE SUMMARY

The Regional Parks Permit Framework describes a permit system that provides individuals, groups and organizations with the required authorization to use a regional park for an activity that would otherwise be prohibited, or to acquire temporary exclusivity over a specific area of a park or a regional parks facility. The framework defines and describes the various types of permits used in the system and provides direction to staff involved in the permitting process. Permits described include: filming, special events/special use, commercial use, facility rentals, camping, and special access. The framework describes the process applicants must follow to obtain any of these types of permits.

PURPOSE

To provide for the Committee's information, the *Regional Parks Permit Framework*, a resource document that describes and provides direction to staff regarding Metro Vancouver Regional Parks' permit system.

BACKGROUND

Metro Vancouver Regional Parks has managed an evolving permit system for over 50 years. Changes have been made over the years to assist regional parks staff to manage many different kinds of activities, to establish conditions of use for permit holders, and help to ensure compliance with park rules and the Regional Parks Regulation Bylaw.

Permits provide a mechanism whereby park users can secure authorization to use a park for an activity that would otherwise be prohibited, or to acquire temporary exclusivity over a specific area of a park or a regional parks facility. Permits are used to convey information to the permit holder such as: specific conditions of use, hours, locations, and they can provide special instructions to make their experience safer and more enjoyable. Permits help protect natural assets by preventing the overuse of facilities, and can be used to manage park capacity and minimize conflict between users. Permits are used to administer fees and charges when applicable, collect information for park staff to aid in operations planning and management, and collect data. Permits can also be used to manage risk appropriately, including ensuring all indemnification and insurance requirements are met.

Information regarding the regional parks permit system has not existed in one resource document for staff or others, and the development of a framework document describing the current permit system was included as a 2020 work plan priority for staff and the Regional Parks Committee.

REGIONAL PARKS PERMIT SYSTEM

The *Regional Parks Permit Framework* describes a permit system that offers individuals, groups and organizations permitted opportunities for several types of activities. The framework provides staff with a number of considerations they should make before determining if a permit should be granted for any of these activities.

TYPES OF PERMITS

The framework defines and describes the various types of permits used in the system including:

- Filming Permit
- Special Event / Special Use Permit
- Commercial Use Permit
- Facility Rental Permit
- Camping Permit
- Burns Bog Ecological Conservancy Area Access Permit
- Scientific Research Permit

The framework describes the process applicants must use to obtain any of these types of permits.

ALTERNATIVES

This is an information report. No alternatives are presented.

FINANCIAL IMPLICATIONS

This report and framework has no financial implications to the MVRD. Staff will continue to work within the current Board approved fee schedule to charge the appropriate amount for the various permit types.

CONCLUSION

The completion of the *Regional Parks Permit Framework* accomplishes staff's and Committee's Work Plan commitment to doing so. The framework reflects the Board established priorities of the *Regional Parks Plan*. The framework is intended to be a living document that will be required to change over time to address shifting park use and an evolving regulatory environment.

Attachment

"Regional Parks Permit Framework", dated February 10, 2021

43319741





REGIONAL PARKS PERMIT FRAMEWORK

EFFECTIVE: FEBRUAR	Y 10, 2021	
REPLACES: N/A		
APPROVED BY:	Maile Dedeath Disease Desired Desire	
	Mike Redpath, Director Regional Parks	

PURPOSE

The Regional Parks Permit Framework describes a permit system that offers individuals, groups and organizations permitted opportunities for several types of activities. The framework defines and describes the various types of permits used in the system and provides strategic direction to staff involved with the permitting process including permits for: filming, special events, special use, commercial use, facility rentals, camping, and special access. The framework describes the process applicants must use to obtain any of these types of permits.

APPLICATION

Applicable to all Regional Parks activities that require a permit.

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Introduction

Every year, millions of day use visitors use Metro Vancouver Regional Parks for many different activities without any specific authorization to be on these lands. However, as manager of these lands, Metro Vancouver has the right to control land use and the types of activities of our visitors. The rules and regulations for the use of the parks are enacted under the Regional Parks Regulation Bylaw. Many types of park use are fully authorized without a permit, e.g. hiking on a trail designed for this purpose during park hours. Some park use is always unauthorized, e.g. driving an ATV off trail for personal enjoyment. And for other kinds of uses, Metro Vancouver Regional Parks manages a permit system whereby an individual, group or organization may be permitted authorization to use a park to carry out a specific activity with specific conditions of use.

Why are permits required?

Permits are used to assist regional parks staff to manage many different kinds of activities in regional parks, to establish conditions of use for permit holders, and help to ensure compliance with the Regional Parks Regulation Bylaw. Permits provide a mechanism whereby park users can secure authorization to use the park for an activity that would otherwise be prohibited, or to acquire temporary exclusivity over a specific area of a park or a regional parks facility. Permits can convey information to the permit holder such as specific conditions of use, hours, locations, and they can provide other special instructions to make their experience safer and more enjoyable. Permits help protect natural areas by preventing the overuse of facilities, and can be used to manage park capacity and minimize conflict between users. Permits are used to administer fees and charges when applicable, collect information for park staff to aid in operations planning and management, and collect data regarding visitor use. Permits can also be used to manage risk appropriately, including ensuring all indemnification and insurance requirements are met.

What activities require a permit?

Commercial Activities: The Regional Parks Regulation Bylaw prohibits any person to carry on any business, trade, profession, commercial activity or occupation without a valid commercial use permit. If an individual, organization or business entity wishes to conduct any such business activity in a regional park, a permit is required. This includes providing commercial services such as dog walking, cultural and nature interpretation services, guided trail hikes and rides, fitness boot camps, for-profit events, nature photography lessons, equestrian trail rides and product sampling. Vending, food trucks and concession operations including any food, beverage, and merchandise sales require a permit, as do all buskers and entertainers.

Scientific Research:

All research activities including environmental monitoring, collecting and surveying, and social/citizen science requires a permit. This may include research involving drones in parks not in restricted air space. This may include research conducted by individuals, groups, non-profit organizations, educational institutions or for commercial purposes.

Special Events / Special Use: Public or private special events organized by individuals, groups or non-profit organizations (e.g. runs, sport competitions, cultural festivals, environmental events, agricultural events, corporate gatherings, celebrations of life, weddings and ceremonies) require a

permit. Activities requiring exclusive use of specific regional park spaces / locations (e.g. parking lots, fields) require a permit.

Under the Regional Parks Regulation Bylaw, a number of criteria are used to determine if a permit is required. Staff will access based on a set of criteria if an application meets the criteria of a Special Event Permit or a Special Use Permit.

Filming: All commercial filming activity requires a permit.

Camping: Camping at Edgewater Bar campsite in Derby Reach Regional Park or the reservation of any group campsite requires a camping permit.

Parking: A parking permit is required to park in designated pay parking lots, and could include a parking reservation if required.

Access to Burns Bog Ecological Conservancy Area: These permits are issued to all individuals entering the conservancy area to conduct work on approved projects.

Facility Rentals: Indoor facilities, such as Minnekhada Lodge, Cammidge House, Inverholme Schoolhouse or Camp Capilano, require a permit to reserve the facility, as do any purpose built outdoor facilities, such as picnic shelters.

Considerations when granting a permit:

There are several factors staff must consider before determining if a permit should be granted. First, one must ensure that Metro Vancouver has jurisdiction for the *location* where the activity will occur. Some locations, including some tidal areas or the airspace above a regional park are not within Metro Vancouver's jurisdiction. Next, one must ensure that Metro Vancouver has jurisdiction over the *activity*. For example, drone flight is regulated by the federal government. Fishing is regulated by the provincial government. Finally, can the requested *date/time* for the activity be accommodated amongst other operational needs of the park? Activities that significantly increase visitation would be less appropriate to permit on peak summer weekends in parks that already have capacity challenges.

Other considerations include the operational impacts on the park, impacts on general park users, natural resource impacts on the park's natural areas, and potential impacts on adjacent property owners. With these considerations in mind, field staff must ascertain if the activity is suitable for the location.

Before granting the permit, staff might consider additional questions such as:

- Does the activity contribute to the *Regional Parks Plan* goals to protect Metro Vancouver's natural areas and connect people to them?
- Does the activity contribute to the *Metro Vancouver Board Strategic Plan*?
- Is the activity consistent with the Regional Parks brand and values?
- Will the activity generate revenues that will reduce the overall tax burden on residents of the region?
- In the absence of a facility allocation policy, is there a fair and equitable process for managing limited supply with demand for permit requests for specific locations or specific activities or specific dates/times? (e.g. commercial dog walking at Pacific Spirit Regional Park)

- Will the activity create potential conflict or negative media interest given the nature of the activity?
- Has legal precedent provided some direction regarding unauthorized use? (e.g. homeless encampments)
- Is a Regional Parks permit the most appropriate mechanism to permit use? (rather than another form of agreement i.e. lease agreement)

Visitor Services staff will consult with area staff regarding most permit applications. After determining that the location and activity are appropriate and that the date/time is available for permitted use, and staff have considered the answers to the additional questions listed above, the most appropriate staff person(s) will determine if a permit will be granted.

What types of permits are there?

Filming Permit

Metro Vancouver recognizes the importance of the film industry as a significant contributor to the regional economy. The motion picture industry leverages many existing regional strengths, including a workforce skilled in the creative and technology sectors and the region's diverse natural scenery. Metro Vancouver will consider requests to use MVRD property for filming activities where such activities are compatible with operational requirements. Requests to film on Metro Vancouver property will be subject to Filming Regulations and any further conditions of use as outlined in the permit.



All filming activities will ensure protection of MVRD assets, avoid disruption of operations and maintenance activities, and will ensure that potential liability and adverse impacts on natural resources are minimized. Film productions are required to remediate any damage to properties or the environment.

Film productions must ensure compliance with other municipal, provincial and federal legislation and permitting requirements. Filming crews are encouraged to review and abide by Creative BC's Code of Conduct.

Entities seeking permission to film on MVRD property are required to apply for a permit from Metro Vancouver.

Metro Vancouver will charge fees for filming on MVRD property to recover costs and partially offset operating and maintenance costs of the properties.

All filming fees charged for the use of MVRD property are approved by bylaw and are currently laid out in Schedule A of the Metro Vancouver Regional District Regional Parks Regulation Bylaw. The Bylaw is amended regularly to ensure that fees are appropriate and based on current market conditions.

Special Event / Special Use Permit

Special Events are activities that require approval and possibly site supervision. Generally, a Special Event Permit is required if there is a need for the activity to require exclusive use of a regional park facility or location that is not reservable (e.g. if 20 people were to go to the park and set up lawn chairs without an expectation of keeping the area private for only their group, this would be considered non-exclusive use and would not require a Special Event Permit. However, if



20 people were to go to the park and set up 20 chairs in rows with an aisle down the middle for a wedding party to walk through, that would assume exclusive use is expected or required, and a Special Event Permit would be required). Since each occurrence requires approval, these permits are not meant for ongoing activities.

Under the Regional Parks Regulation Bylaw, a number of criteria are used to determine if a permit is needed. If any <u>one</u> of the following criteria is met, a Special Event Permit is required:

- If the event is to involve more than 50 people requiring exclusive use
- If the event requires the set up/take down of temporary equipment such as tents, stages, tables and chairs
- If the event is to include the licensed serving or consumption of alcohol

To obtain a Special Event Permit, one must fill out the <u>Special Event Application Form</u> and applicants may be required to supply the following documents:

- Signed rental contract including indemnification agreement
- Liability Insurance naming Metro Vancouver as additionally insured
- Payment of fees as shown on rental contract
- Local health authority authorization for food service plan, food safe certificate
- Site layout and route map for walks and runs
- Copy of event brochure or advertising material, and event website address

Special Event Permit fees are charged for the use of MVRD property and are approved by bylaw as currently laid out in Schedule A of the Metro Vancouver Regional District Regional Parks Regulation Bylaw. The bylaw is amended regularly to ensure that fees are appropriate and based on current market conditions.

Special Use Permit

Some Special Event Permit applications may not fully meet the required criteria of this permit type. Some activities may require Metro Vancouver Regional Parks advance notice and/or the ability to control activities that may cause a disturbance to general park visitors. Generally, Special Use Permits can be issued for a park use that is <u>non-exclusive</u>. Since each occurrence requires approval they are not meant for ongoing activities. Special Use Permits are issued free of charge* in these cases.

Special Use Permits may be issued if the activity:

Is for more than 50 people but does not require exclusive use

- Is for education or research purposes only
- Occurs after park hours
- Requires special access to the park
- Requires the use of a generator or amplification/PA systems

There are a number of factors that would result in a permit being issued as a Special Use Permit as opposed to a Special Event Permit. Special Use Permits do not grant the permit holder exclusive use. They are intended to ensure that activities follow an approval process and that a record of the activity is created.

Examples would be activities that: require bollard removals, occur outside park hours, require power generators. These activities are often add-ons to an existing permitted activity and do not require additional fees.

*While there is no permit fee, applicants may be charged for staff time or other recoverable direct costs.

Special Use Permits can also be used to authorize activities by <u>park partners</u> that provide benefits to the park, such as stewardship activities.

Liquor at Special Events:

Liquor *may* be permitted in regional parks by first obtaining a Special Event Permit. Specific liquor requests require the additional approval of the Park Operator, Parks Operations Supervisor, and Parks Management Group. Liquor is allowed at only the following three facilities without a requirement for special approval: Minnekhada Lodge, Inverholme Schoolhouse, and Cammidge House.

The serving and consumption of liquor in a regional park requires a Province of British Columbia issued permit. The permit is obtained online at https://specialevents.bcldb.com or by phone at 866-209-2111.

All municipal requirements must be met (e.g. a noise variance permit must be obtained for outdoor events with liquor within Bowen Island Municipality).

An additional liquor administration fee is applied to the Special Event Permit by Metro Vancouver.

Conditions of use one might expect to be associated with a Special Event Permit:

- Safety plan / first aid attendant onsite
- Security plan / security personnel onsite
- Traffic and parking control plan
- Portable toilet provision
- Food safe certificate
- Serving It Right certificate
- Local health authority requirements met
- Fire safety plan
- Natural Resource Management plan, may include approvals from other jurisdictions (e.g. Boundary Bay Regional Park activities on or near the Wildlife Management Area involve staff from the Ministry of Forests, Lands, Natural Resources Operations and Rural Development)
- Risk management plan
- Waste management plan
- Liquor permit

- Vending plan, may restrict certain kinds of vendors (e.g. tobacco or cannabis products)
- Noise limitations (loud music etc.)
- No bottled water to be distributed or sold
- Certifications if required (e.g. drone certification)

There is an online handout, <u>Green Best Practices for Hosting Special Events</u> that offers tools for organizations to make their event more environmentally sustainable.

Commercial Use Permit



All commercial activities in regional parks are required to obtain authorization from Metro Vancouver. This may be in the form of a Commercial Use Permit, a license agreement, or a contract.

The Regional Parks Regulation Bylaw currently states: A person who carries on a business, trade, profession, commercial activity or occupation, within a regional

park or on regional park property must apply to the park manager for a commercial use park permit.

Metro Vancouver provides opportunities for commercially run businesses to operate in its regional parks via commercial permitting.

A commercial use permit typically meets the following criteria:

- Non-exclusive use of park land
- Ongoing use of regional park spaces
- General <u>Regional Park Guidelines</u> apply
- Permit may be suspended during High or Extreme Fire Danger conditions, or other dangerous weather conditions
- Other site specific conditions of use apply (regional park and commercial activity specific)

Proof of permit must be carried at all times by commercial use permit holders. The permit holder is typically required to report back monthly on dates, times, location, attendance of visits and any other data specified in the conditions of use.

Commercial use permits last for one year, and run the calendar year, January 1st to December 31st. Annual permit fees are not pro-rated.

Examples of commercial activities that are currently permitted in regional parks include:

- Filming (see Filming Permit)
- Photography
- Concession Operations (Belcarra / Boundary Bay) contracted operation procured appropriately and defined in a lease agreement
- Canoe/Kayak rentals (Belcarra) contracted operation procured appropriately and defined in an agreement

- Dog Walking (Pacific Spirit) contracted operation require a Commercial Dog Walking Permit, currently different than standard Commercial Use Permit
- Vending (Pacific Spirit / Wreck Beach) subject to Vending Permit currently different than standard Commercial Use Permit
- Outdoor Nature Schools (Pacific Spirit utilizes standard Commercial Use Permit)
- Paid Parking (Belcarra, Capilano River, Lynn Headwaters, Pacific Spirit) contracted operation procured appropriately and defined by contractual agreement
- Equestrian Trail Rides (Campbell Valley Regional Park, Aldergrove Regional Park)
- Fort Camping (Brae Island) contracted operation procured appropriately and defined by contractual agreement

Commercial Use Permit fees are charged for the use of MVRD property and are approved by bylaw as currently laid out in Schedule A of the Metro Vancouver Regional District Regional Parks Regulation Bylaw. Commercial Use Permits for the same activity (e.g. dog walking) should be applied consistently across the regional park system.

There is currently no permit staff can use for one-off (not ongoing) commercial use of our parks. These types of requests would generally fall under the special event category.

Commercial Use permits follow the Regional Park Commercial Use Park Permit Policy.

Facility Rental Permit

Metro Vancouver has locations suitable for group picnicking, weddings and ceremonies, equestrian activities, special events, education, meetings and workshops.

Rentable facilities are listed in the Regional Parks Regulation Bylaw and Metro Vancouver website.

Information such as pricing, capacity etc. are primarily communicated on the website in the "Book a Facility" section. Inquiries are also received by phone.

All facility bookings must be completed by phone/email via Visitor Services staff at Head Office.

Generally, facilities can be rented up to one year in advance.



Facility Rental Payment

Payment is typically via a credit card which the customer provides over the phone only (not by email) or if the customer wishes to pay by cheque an invoice is emailed to the customer. When a payment is due often differs depending on which facility is being booked.

For all buildings and outdoor group camps an information package is emailed to the customer upon booking. For indoor facilities, a registration form or rental agreement is emailed to the client upon booking.

For Camp Capilano the registration form includes catering and pool use requests. These items are added to the permit upon receipt of the registration form.

For all indoor facilities insurance is due 30 days before the rental if not purchased through Metro Vancouver.

All invoices and approved permits list the Regional Park Guidelines.

Individual conditions of use are set by the park staff and automatically printed on contracts and approved permits.

Camping Permit

Derby Reach has 38 unserviced sites available for camping between March 1st and October 31st. There is a limit of two licensed vehicles per pad, and there is a maximum ten-night consecutive stay, and thirty days total from July 1st to September 30th. Day use is permitted in vacant campsites November – February. For campground details and to reserve a campsite, see Edgewater Bar Camping. Campsites can be reserved through an online reservation system.



Regional Parks also manages three purpose built group campsites at Campbell Valley Regional Park, Deas Island Regional Park and Tynehead Regional Park. All group campsite bookings must be completed by phone/email via Visitor Services staff at Head Office. Generally, group campsites can be rented up to one year in advance. (see info under Facility Rental Permit)

Access to Burns Bog Ecological Conservancy Area Permit



Burns Bog Ecological Conservancy Area (BBECA) is a large raised bog ecosystem in the Fraser River delta between the south arm of the Fraser River and Boundary Bay. Metro Vancouver Regional Parks is responsible for overall management of BBECA. The priority for the ecological conservation areas is ecological protection, not public use. The BBECA is closed to the public and is home to sensitive and rare plants and animal species, making it a very fragile ecosystem. All efforts will be made to protect this sensitive ecosystem and maintain its ecological integrity.

Access to BBECA may only be granted for specific purposes relating to operational requirements, bog research or for emergency preparedness and response. All project and access permits are renewed yearly. Project leads must both complete and / or coordinate the following forms:

- <u>Project Approval Application</u> (one per project)
- Access Permit Application (one required for each person)

Metro Vancouver Regional Parks staff will review the submitted information, project requests and inform the applicant of the status of their application. This process takes two weeks. Staff may request additional project information before a permit is issued.

All activities in BBECA are subject to applicable municipal, regional, provincial, and federal acts, regulations, bylaws and agreements. These may include, but are not limited to, the following:

- 1. Burns Bog Conservation Covenant
- 2. MVRD Regional Parks Regulation Bylaw
- 3. City of Delta Bylaws

The permit may be cancelled at any time if:

- the permit holder fails to observe, perform or keep his/her agreements under the permit;
- the permit holder has willfully misrepresented information in the application process which led to the granting of the permit;
- The permit holder damages or destroys any bog features.

Scientific Research Permit



All research activities including environmental monitoring, collecting and surveying, and social/citizen science requires a permit. This includes any research conducted by individuals, non-profit organizations, educational institutions or for research conducted for commercial purposes.

A Scientific Research Permit provides an opportunity for staff to review, influence and track research projects taking place in regional parks. The permit typically provides Metro Vancouver with access to the research findings.

The Natural Resource Management Framework (2020)

describes the strategy and process for groups requiring scientific research permits. (See Strategy 3.3: Enhance understanding of regional parks through research).

When are scientific research permits utilized?

Scientific Research Permits are used whenever a scientific research project is proposed to take place in a regional park. It is different than a Special Use Permit, in that it involves work that may be off trail or in remote areas and may temporarily impact the regional parks' ecology, but will result in an increased understanding of the regional parks natural resources and therefore may provide an opportunity to better manage the land base. It also enables the public to have a greater depth of knowledge and connection to the regional park, while in service to its overall needs. Scientific Research Permits are

typically used with students/faculty of academic institutions, consultants conducting environmental investigations, and partner groups engaging in citizen science initiatives.

Who authorizes the permit?

Typically, the Natural Resource Management Specialist signs off on the permit after consulting with other regional parks staff. The Park Operations Supervisor and Park Operator are provided with a copy of the completed permit via email so that they are aware of the locations and timing of activities taking place in the parks. Authorization may be denied if, in the opinion of Metro Vancouver staff, the proposed research is too invasive, impactful, unsafe, is not compatible with the goals and objectives for the park or does not contribute significantly enough to the body of knowledge that will help guide park management decisions.

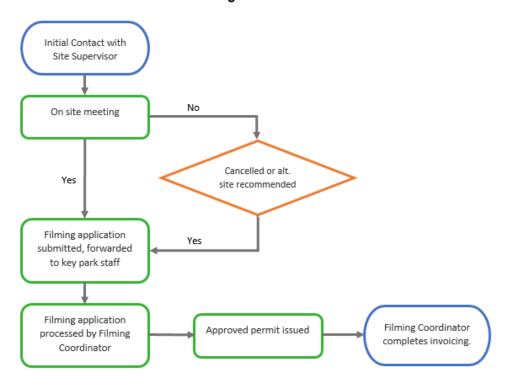
Conditions of use one might expect to be associated with a Scientific Research Permit:

- Researchers must comply with park rules and the Regional Park Regulation Bylaw,
 Provincial/Federal Acts and Regulations as well as Worksafe BC Guidelines
- Research must be conducted during park hours, unless specified under special conditions
- All flagging tape or markings must be inconspicuous, kept to a minimum and removed when the
 research is complete if flagging tape must be used, it should be dated, initialed and have
 permit number noted to ensure that it remains in place for the duration of the research
- While conducting research, applicants should respond to inquiries from park visitors in a friendly and courteous manner so as to inform park visitors of the importance of the work and to ensure that the visitors understand that the impacts on the park are minimal
- No fungi, vegetation, wildlife or important habitat elements will be removed from the park unless specified
- Researchers should wear a high-visibility vest while conducting research in the park
- Researchers will carry a signed copy of the research permit which may be inspected by staff and the public at any time
- Applicants will be a resource for Metro Vancouver Regional Parks in the development of educational/interpretive programs that highlight the findings of the research
- A report summarizing the research and its findings will be submitted to Metro Vancouver Regional Parks

Process to obtain permits/How does one apply for a permit?

To obtain a **Filming Permit** the first step is to contact Metro Vancouver's contracted filming site supervisor who will set up a site visit at the proposed filming location. The film company's Location Manager and the Parks Operations Supervisor (or designate) will participate in the site visit with the contracted filming site supervisor to review specific details of the film shoot and decide if the shoot can be accommodated. Next, the Location Manager will be asked to fill out the <u>Filming Application</u> which is sent to the Metro Vancouver Filming Coordinator to process and ensure all required paperwork is in place. The Filming Coordinator will send the application to appropriate staff to seek concurrence that the film shoot can be approved. Filming permits will only be granted if filming activities follow the Metro Vancouver Filming Policy.

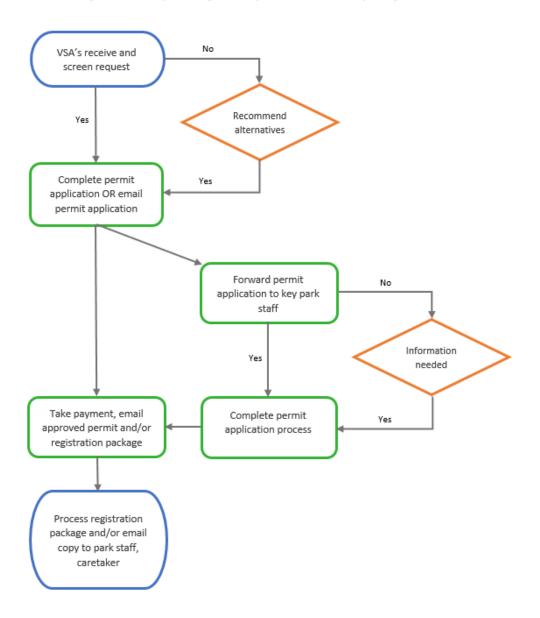
Filming Permit Process



If a member of the public wants to obtain a **Special Event**, **Facility Rental**, **Commercial Use**, or **Special Use** permit, the first step is to contact the Visitor Services Assistant (VSA) office. The VSA will relay all relevant information, screen the request and send out an application form if the use is determined appropriate. Once the form is returned it will then be sent to key staff for decision.

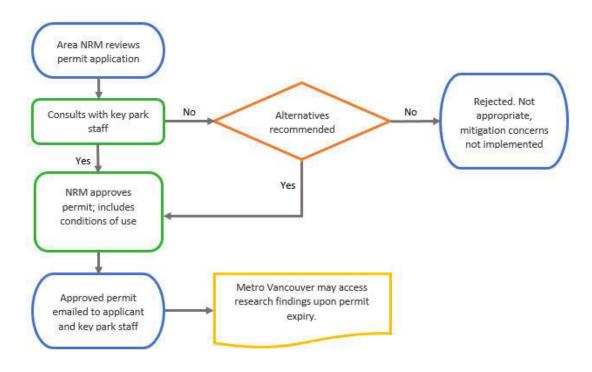
If required, a site visit may be arranged. If approved, and after insurance and payment are received, an approved permit will be issued.

Special Event, Facility Rental, Commercial Use, or Special Use Permit Process



For **Scientific Research Permits**, the first step is to contact one of the Natural Resource Management Specialists (NRMS). When a scientific research permit is requested, the area NRMS whose regional park(s) are implicated may consult with other staff to determine the need for the research, the conditions of use that may apply, and to identify any potential conflicts with park operations or other researchers. If necessary, staff may suggest appropriate sites, alterations to the research methodology, and alternatives that may be possible which the researcher may not have considered. The NRMS will strive to provide consistency and communication about research projects across all areas by communicating with each other on novel projects.

Scientific Research Permit Process



Who approves the permit?

Depending on the type of permit, different staff are consulted before approval is given.

Type of Permit	Staff consulted for approvals	Final Approval
Special Event	Park Operator, Park Assistant, Park Operations Supervisor, Park Interpreter (Leader & Specialist), Area Visitor Services Specialist, Community Development Coordinator (if applicable)	Park Operator
Special Use	Park Operator, Park Assistant, Park Operations Supervisor, Park Interpreter (Leader & Specialist), Natural Resource Management Specialist	Park Operator
Commercial Use	Park Operator, Park Operations Supervisor	Park Operator
Scientific Research	Natural Resource Management Specialist, Park Operator, Park Assistant, Park Operations Supervisor	Natural Resource Management Specialist
Filming	Park Operator, Park Operations Supervisor, Park Interpreters, Natural Resource Management	Park Operator

	Specialist (if applicable), Area Visitor Services Specialist	
Burns Bog Ecological Conservancy Area Access	Natural Resource Management Specialist, Park Operator, Park Assistant, Park Operations Supervisor	Natural Resource Management Specialists
Camping	Park Operator, Park Assistant, Park Assistant II	Visitor Services Assistant
Facility Rental	Visitor Services Assistant	Visitor Services Assistant

Permit fees

Permit fees are considered annually by staff in the Visitor and Operations Services division and staff recommendations are reviewed and approved by the Regional Parks Committee / Metro Vancouver Board as part of Schedule A in the Regional Parks Regulation Bylaw: Regional Parks Regulation Bylaw.

A security deposit may be required for some permits such as filming and indoor facility rentals. Member municipalities are exempt from payment of permit fees for events/rentals.

All schools are exempt from payment of special event permit fees, but not from paying facility rental fees.

Exempting permit fees

If fees are a financial barrier for an applicant, permit fees *may* be exempted at the discretion of the Director, Regional Parks. Considerations include:

- Is someone being paid to organize the event? (If yes, will not be considered for a fee exemption)
- Is the organization not-for-profit? Charitable?
- Is the organization raising funds for a not-for-profit that resides in Canada?
- Does the requesting organization offer a benefit in return for waiving the fees?
- Does the mandate of the organization align with Metro Vancouver Regional Parks' mandate?
- How will Metro Vancouver be recognized for exemption?
- Is there a cost to Metro Vancouver associated with this request? For example, if the group rents Cammidge House, a caretaker is required to clean up after the group.

Currently, groups that have Parks Manager (Director, Regional Parks) authorized fee waivers/exemptions for Special Event Permits and Facility Rentals include:

- 7 Park Associations
- All member jurisdictions

The Parks Manager (Director, Regional Parks) may consider fee waivers/exemptions for:

- Schools
- Registered Charities (unless they have a paid event organizer)

There are several groups that have had fees exempted for either special events, facility rentals or both in the past and could be considered 'grandfathered'. Many of these groups have an agreement in place with Metro Vancouver that provides the group with access at no cost.

Some of these groups are:

- Campbell Valley Equestrian Society has a lease agreement with East Area Office. In their lease agreement, there is mention of a certain number of special events that they are allowed to host each year without the need for a Special Event Permit or fee.
- **Delta Rowing Club** currently has a lease agreement with Central Area Office for buildings within Deas Island Regional Park. Recently they have requested to use the Inverholme School House for meetings free of charge, and this group was granted that. This is stipulated in their License Agreement for the area on the island.
- Sasamat Outdoor Centre uses Widgeon Marsh Regional Park for camping for free.
- **Tsawwassen Lions Club** is not required to pay rental fees for Cammidge House in perpetuity due to agreement with Metro Vancouver Regional Parks. The Lions donated the Cammidge House to Metro Vancouver.
- **Port Moody Power Squadron** has fees waived for Special Event Permit at Belcarra Regional Park for Remembrance Day activities. (this has followed the procedure of a written request to Director, Regional Parks).
- Metro Vancouver internal use (External Relations Department) Approximately 4-5 times each
 year, the Community and Education Coordinator, External Relations, utilizes Regional Parks
 facilities for the Youth-4-Action team, including Camp Capilano, Inverholme Schoolhouse,
 Muskrat Meadows Group Camp, and Widgeon Marsh Regional Park for camping.
- Catching the Spirit Youth Society (CTS) each year, CTS utilizes several regional parks for their camping weekends. Currently, these include areas of Burnaby Lake Regional Park, Pacific Spirit Regional Park, Capilano River Regional Park and Tynehead Regional Park.

Website Communications

Visitor Services staff work with communications staff and the MV Webmaster to ensure that information is provided online for members of the public seeking information about the permitting of regional parks.

Information about filming is found on the Metro Vancouver Filming Website.

How to cancel a permit?

Cancelations can be made by phone or by email to the VSA office at 604-432-6359. Refunds are subject to Metro Vancouver's cancellation policy. The cancellation policy is found in Schedule A of the <u>Regional Parks Regulation Bylaw</u>.

Insurance requirements

Why Liability Insurance?

Because of a permit holder's operations or actions, clients are open for possible suit from third parties. The permit holder may not be liable but will need to be defended in court. A Liability policy pays for this

defense as well as any costs found against the permit holder. Legal fees can be very expensive and this can be an affordable way to have them covered.

Metro Vancouver is able to provide a policy that covers legal liability for bodily injury to or damage to property of others such as spectators, passers-by, property owners and others resulting from the activity. The insurance must list Metro Vancouver as an additional insured. The program is designed principally for facility renters and event organizers. In addition, legal liability for injury to participants is covered in most cases (a few sports disciplines may not be eligible). Loss Prevention Advice is available on a nation-wide basis including video presentations and seminars. Claims Service is available on a national basis from specialists who have a wide range of services at their disposal.

Who is Insured?

Any group using Metro Vancouver facilities or property who does not have access to other insurance is able to purchase liability insurance through Metro Vancouver.

Activities Covered

Consist of rentals and events sanctioned or authorized by the permit holder and Metro Vancouver.

Who is Covered?

All members collectively including Executives, Managers, Leaders, Officials, Event Organizers and Volunteers while acting within the scope of their duties on behalf of the permit holder.

Activity requiring a permit	Risk	Insurance required
Special event permit	Medium	Yes - \$2,000,000
Special use permit	Medium	Sometimes, depending on risk level
Picnic shelter rental	Low	No
Facility rental	Medium	Yes - \$2,000,000
Outdoor ceremony	Low	Yes - \$2,000,000
Indoor group camp	Med	Yes - \$2,000,000
Equestrian Event	High	Yes - \$5,000,000
Outdoor group camp or	Low	No
camping at Edgewater Bar		
Scientific Research	Low	No
Filming	High	Yes - \$5,000,000

Conclusion

The completion of the *Regional Parks Permit Framework* accomplishes staff's and the Regional Park Committee's Work Plan commitment to doing so. The framework reflects the Board established priorities of the *Regional Parks Plan*. The framework is intended to be a living document that will be required to change over time to address shifting park use and an evolving regulatory environment.



To: Regional Parks Committee

From: Jeffrey Fitzpatrick, Division Manager, Design and Development, Regional Parks

Date: January 20, 2021 Meeting Date: February 10, 2021

Subject: Regional Parks State of the Assets Report

RECOMMENDATION

That the MVRD Board:

- a) receive for information the report dated January 20, 2021, titled "Regional Parks State of the Assets Report"; and
- b) direct staff to incorporate the findings of the *Regional Parks State of the Assets Report* in the Regional Parks Asset Management Plan.

EXECUTIVE SUMMARY

The Regional Parks system is comprised of natural and built assets. Natural assets are the ecosystems protected within the regional parks system. Built assets are the trails, buildings and other amenities that provide public access and support land management.

The Regional Parks State of the Assets Report (Attachment 1) provides an inventory, condition and value assessment of built assets, and an overview and preliminary condition assessment of natural assets.

The total replacement value of built assets is estimated at \$292 million. The ten categories of Regional Parks built assets are in fair or good condition. Development of methodologies to assess condition and value of the services provided by natural assets is underway and will be included in future reports.

The Regional Parks State of the Assets Report is a milestone in the development of the Regional Parks Asset Management Plan which will be brought to the MVRD Board for consideration in 2021.

PURPOSE

To seek MVRD Board endorsement of the *Regional Parks State of the Assets Report*, and support for incorporating the findings of the report in the Regional Parks Asset Management Plan.

BACKGROUND

At its April 26, 2019 meeting, the MVRD Board approved the *Asset Management for Regional Parks Policy* (Attachment 2). The policy established asset management principles and a framework to balance asset performance, risk and cost to support the long-term provision of the Regional Parks service.

At the July 15, 2020 meeting, the Regional Parks Committee received for information the report dated June 12, 2020, titled "Regional Parks – State of the Assets Report for Buildings". The buildings report

was prioritized to proceed the full *Regional Parks State of the Assets Report* due to the number and value of buildings in the regional parks system.

Completion of the *Regional Parks State of the Assets Report* is included in the 2021 Regional Parks Committee work plan. The report is a key step in the development of the Regional Parks Asset Management Plan, which will also be brought forward for MVRD Board consideration in 2021.

STATE OF THE ASSETS

The Regional Parks system is comprised of natural and built assets that provide critical services to regional residents – physical and mental health, recreation, clean air and water, habitat, biodiversity and climate resilience. In 2020, the regional parks system received 16.6 million visitors.

Metro Vancouver maintains natural assets through resource management. Built assets are maintained with regular maintenance and lifecycle replacement. New natural and built assets are added to the system through capital development and stewardship projects.

Supporting the ecological health of natural assets, and the safety and maintenance of built assets, ensures a regional parks system that supports a livable region and is resilient to climate change and growing park visitation over the long term.

Natural Assets

The Regional Parks system protects a range of natural assets including bogs, floodplains, salt marshes and old growth forest. Metro Vancouver is working to develop methodologies to assess condition and value of the services provided by natural assets. This information will be used to plan maintenance and restoration initiatives and will be included in future reports.

Built Assets

Metro Vancouver manages ten categories of built assets. These assets are inventoried and inspected regularly. Maintenance and replacement is planned based on condition assessments, expected service life and other considerations.

The table below summarizes built asset inventory, condition and replacement value:

Regional Parks Built Asset Summary			
Category	Inventory	Condition	Replacement Value
Barriers	65 km fencing, 1,597 bollards and gates	Good	\$7m
Bridges and Boardwalks	623	Good	\$33m
Buildings	340	Fair	\$112m
Land Protection	4 km dikes, 6 dams, 1.8 km retaining walls, 1386 culverts, 8 drainage structures, 3 km drainage lines	Good	\$32m
Park Fixtures	1514	Good	\$4m
Recreational Facilities	1 beach, 2 playgrounds, 2 nature play areas, 3 group camps, 1 campground, 2 pools, 1 tennis court, 1 baseball field	Good	\$4m
Roads and Parking Lots	43km roads, 3783 parking stalls, 42,900 m2 hardened surface	Fair	\$46m
Signs	65 entrance signs, 77 kiosks	Good	\$4m
Structures	99	Good	\$4m
Trails	290 km	Good	\$26m
Utilities	93 km utility lines, 2430 point features	Fair	\$20m
TOTAL		•	\$292m

The Asset Management for Regional Parks Policy established condition assessment metrics and targets. For all built assets, excluding buildings, a 1 to 5 (very good to critical) condition scoring system is used. The performance target is a condition score of 3 (fair) or better. All built asset categories have condition scores of 3 (fair) or good (2).

Asset replacement value is the estimated cost for a complete replacement of an asset, not including land acquisition. The total asset replacement value of all built assets in the regional park system is estimated at \$292 million.

Projected Renewal Expenditure Requirements

Over the next 30-years, the projected renewal expenditure required to maintain Regional Park built assets is estimated to average \$8.7 million annually. The annual renewal expenditure budgeted over that timeframe, based on the 2021-2025 Financial Plan, is projected to average \$8.0 million annually.

Projected renewal expenditure requirements, in the *Regional Parks State of the Assets Report*, are determined based on asset inspections, current pricing for capital projects, market testing and research, industry best practice from other jurisdictions and historic values. A 2.3% CPI annual increase was applied for years beyond 2021.

Projected renewal expenditure requirements are subject to change based on external market factors, the addition or removal of assets, levels of service and maintenance standards that will be confirmed in the Regional Parks Asset Management Plan.

Renewal expenditure budget projections, in the *Regional Parks State of the Assets Report*, reflect the capital budget included in the 2021-2025 Financial Plan. For subsequent years beyond 2025, an annual 2.3% CPI increase was applied.

Next Steps

A Regional Parks Buildings Strategy is underway which will establish levels of service and a decision-making framework in order to set priorities for building maintenance, replacements and new construction. The Regional Parks Building Strategy will identify any buildings not needed to meet levels of service and the Regional Parks' mandate. The strategy will include budget implications and will be brought forward to the Regional Parks Committee and MVRD Board for consideration in 2021.

Staff will use the *Regional Parks State of the Assets Report* and the forthcoming Regional Parks Building Strategy to develop the Regional Parks Asset Management Plan. The Asset Management Plan will confirm levels of service, outline operating and maintenance strategies and confirm renewal expenditure requirements.

ALTERNATIVES

- 1. That the MVRD Board:
 - a) receive for information the report dated January 20, 2021, titled "Regional Parks State of the Assets Report"; and
 - b) direct staff to incorporate the findings of the *Regional Parks State of the Assets Report* in the Regional Parks Asset Management Plan.
- 2. That the MVRD Board receive for information the report dated January 20, 2021, titled "Regional Parks State of the Assets Report" and provide staff with alternate direction.

FINANCIAL IMPLICATIONS

There are no financial implications presented.

Over the next thirty years, the projected average annual renewal expenditure required to maintain regional park asset is \$8.7 million. Annual renewal expenditures budgeted over that timeframe, based on the 2021-2025 Financial Plan, is projected to average \$8.0 million annually.

Staff will incorporate the findings from the *Regional Parks State of the Assets Report*, and forthcoming Regional Parks Building Strategy, to develop a Regional Parks Asset Management Plan in 2021, which will refine budget projections based on confirmed levels of service and standards, for consideration in future annual budgeting process.

CONCLUSION

The Regional Parks State of the Assets Report summarizes inventory, condition and value assessment of built assets, and provides an overview and preliminary condition assessment of natural assets.

The total replacement value of Regional Parks built assets is \$292 million. The ten categories of built assets are all in fair or good condition. Development of methodologies to assess condition and value

of the services provided by natural assets is underway and will be included in future Regional Parks State of the Assets Reports.

The Regional Parks Asset Management Plan will confirm asset renewal expenditure requirements based on levels of service, maintenance and operational standards, for MVRD Board consideration.

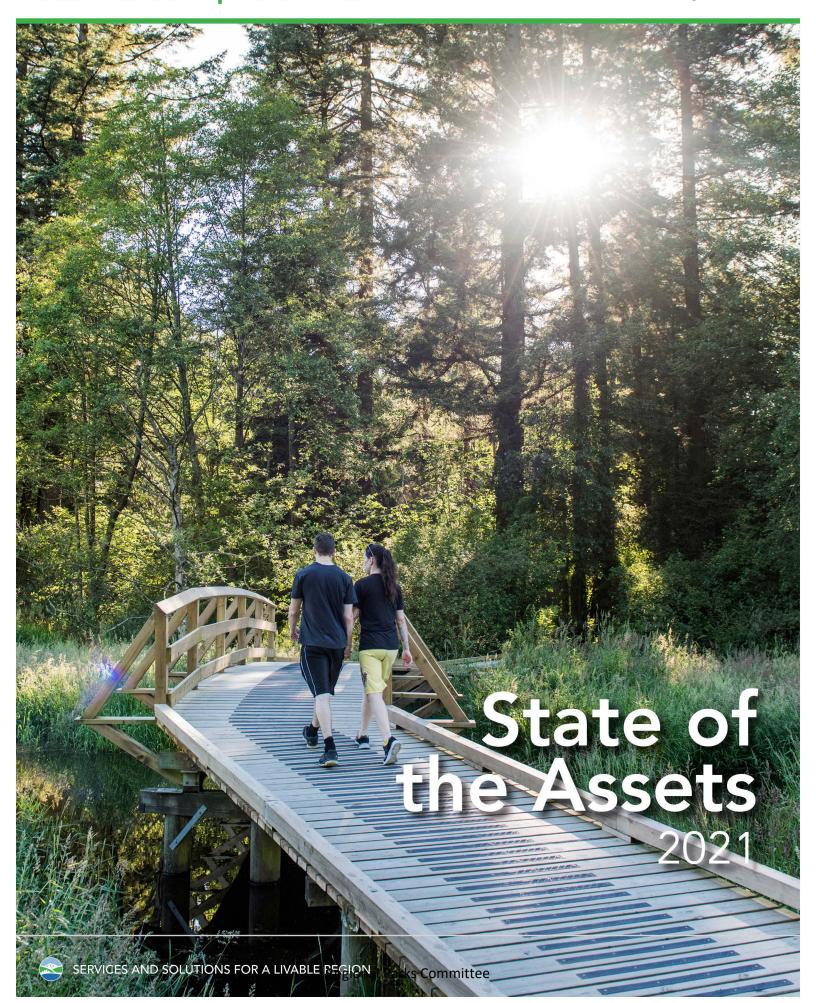
Staff are seeking MVRD Board endorsement of the *Regional Parks State of the Assets Report* and direction to in incorporate the findings of the report in the Regional Parks Asset Management Plan.

Attachments

- 1. Regional Parks State of the Assets Report
- 2. "Asset Management for Regional Parks Policy", dated, April 26, 2019

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The Regional Park system is comprised of natural and built assets. Natural assets are the ecosystems protected within the regional park system. Built assets are the trails, buildings and other amenities that provide public access and support land management.

Natural assets provide critical services to regional residents – recreation, clean air and water, habitat, biodiversity and climate resilience. In 2020, built assets supported park visitation of over 16 million. The total replacement value of regional park built assets is \$292 million.

The Regional Parks State of the Assets report provides an inventory, condition and value assessment of built assets; and an overview and preliminary condition assessment of natural assets.

Supporting the ecological health of natural assets, and the safety and maintenance of built assets, ensures a resilient regional park system over the long term.

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February 2021

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INTRODUCTION

The Regional Park system is comprised of natural and built assets. Natural assets are the ecosystems protected within the regional park system. Built assets are the trails, buildings and other amenities developed to support public access and land management.

Metro Vancouver maintains natural assets through resource management. Built assets are maintained with regular maintenance and lifecycle replacement. New natural and built assets are added to the system through capital development and stewardship projects.

This report provides a summary inventory, condition, replacement and maintenance costs of built assets over a 30-year period in a condition that meets targeted levels of service. This information included in this report informs asset management planning budgeting and continuous improvement.

An overview and preliminary condition assessment of natural assets is included in this report. A complete condition assessment, replacement and projected maintenance costs for natural assets is under development and will be provided in future State of the Assets reports.

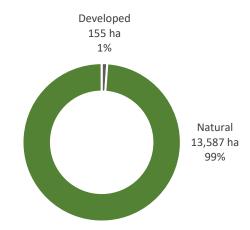


Natural Assets

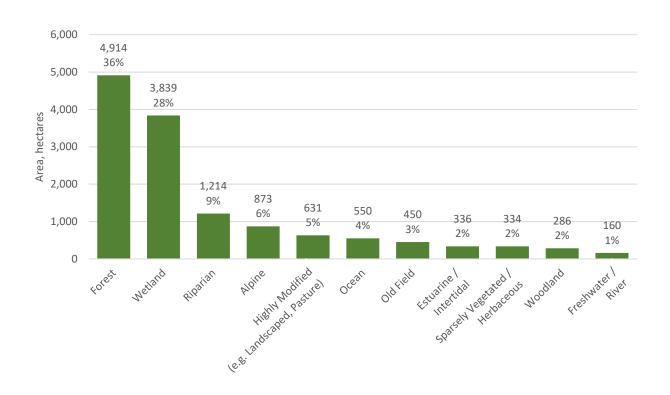
Quantity: **13,587** hectares Average Condition: **Unknown**

Metro Vancouver is working to develop methodologies to assess condition and value the services provided by natural assets. This information will be used to plan maintenance and restoration of natural assets over the long term. Updates on this work will be provided in subsequent reports.

Proportion of Natural and Developed Areas in Regional Parks (in hectares)



99% of regional parks consists of natural assets





Barriers

Quantity: 65 km fencing

1597 gates + bollards

Average Condition: GOOD



Bridges & Boardwalks

Quantity: **623**

Average Condition: GOOD



Buildings

Quantity: 340

Average Condition: FAIR



Land Protection

Quantity: 64 km linear assets

1,415 features Average Condition: GOOD



Park Fixtures

Quantity: 1514

Average Condition: GOOD



Recreational Facilities

Quantity: 13

Average Condition: FAIR



Roads & Parking Lots

Quantity: 43 km roads

3783 parking stalls

Average Condition: FAIR



Signs

Quantity: 65 entry signs

77 information kiosks

Average Condition: GOOD



Structures

Quantity: **99**

Average Condition: GOOD



Trails

Quantity: 290 km

Average Condition: GOOD



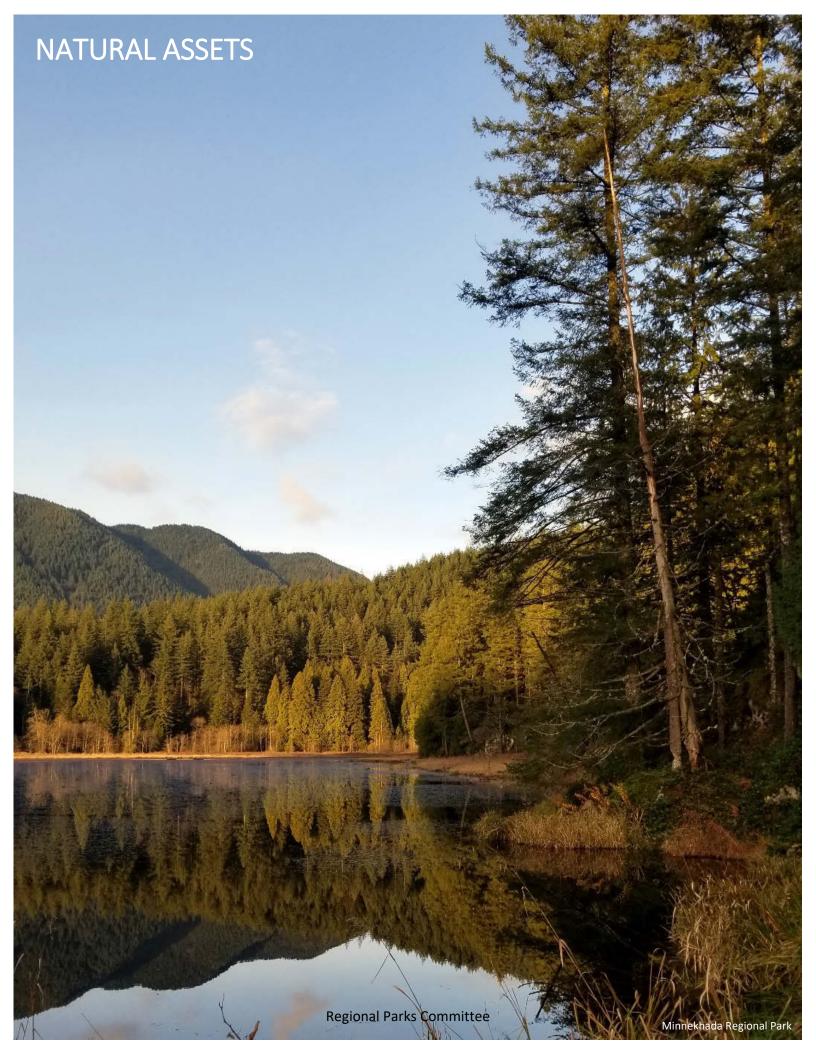
Utilities

Quantity: 93 km utility lines

2430 utility point features

Average Condition: FAIR

Total **built** asset replacement value of \$292 million



CONDITION DEFINITIONS

Traditionally, asset management has focused solely on built assets. The incorporation of natural assets is an emerging and innovative area of practice. Metro Vancouver's *Asset Management for Regional Parks Policy* included a commitment to integrate natural assets into the asset management system.

The Natural Assets section of this report documents the work completed so far to build a natural assets inventory and assess aspects of condition. Future reports will contain a more fulsome condition assessment, considering the value of services provided by natural assets, along with levels of service.

The preliminary condition assessment included in this report is based on existing regional park ecological data including:

- Sensitive ecosystem 'quality'
- Age of forested natural assets
- Proportion of natural and developed area, by park



NATURAL ASSETS (Overview)



Natural assets are the stock of natural resources and ecosystems that yield a flow of benefits to people. Regional parks protect a range of natural assets including bogs, floodplains, salt marshes and old growth forest. Natural assets provide important services including recreation, clean air and water, habitat and biodiversity.

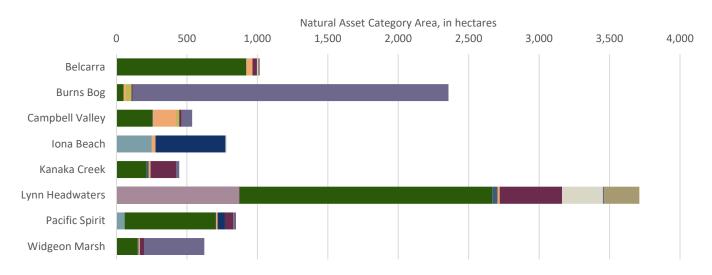
Natural Asset Category Definitions

Alpine	Ecosystems above or near tree-line.
Estuarine	Ecosystems at the confluence of rivers with the sea.
Forest	Forest ecosystems of all ages. Coniferous, broadleaf or mixed.
Freshwater	Bodies of water. Lakes, ponds, and reservoirs.
Herbaceous	Non-forested, usually with shallow soils and often subject to natural disturbances.
Highly Modified	Vegetated areas too young or disturbed for other Natural Asset categories. Includes landscaped areas, cultivated fields and pasture, invasive-dominated areas.
Intertidal	Ecosystems linking marine and terrestrial environments. Little freshwater input.
Ocean	Marine environment (not mapped in detail).
Old Field	Grass-dominated ecosystems. Maintained at a low frequency to support productive wildlife
Riparian	habitat. Vegetation associated with, and influenced by, freshwater. E.g. alongside streams and lakes.
River	Rivers and associated gravel bars and tidal mudflats.
Sparsely Vegetated	Generally low vegetation cover, may have high cover of mosses, liverworts and lichens.
Wetland	Ecosystems where soils are saturated by water for enough time to influence the vegetation.
Woodland	Open canopy forests on dry, south facing slopes. Coniferous or mixed. Boundary Bay Regional Park

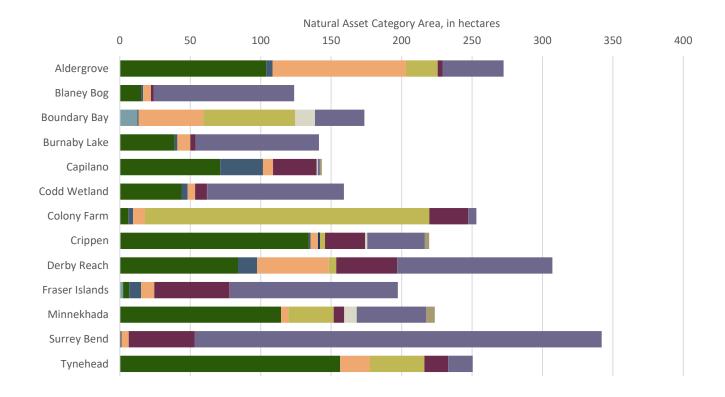
NATURAL ASSETS BY PARK



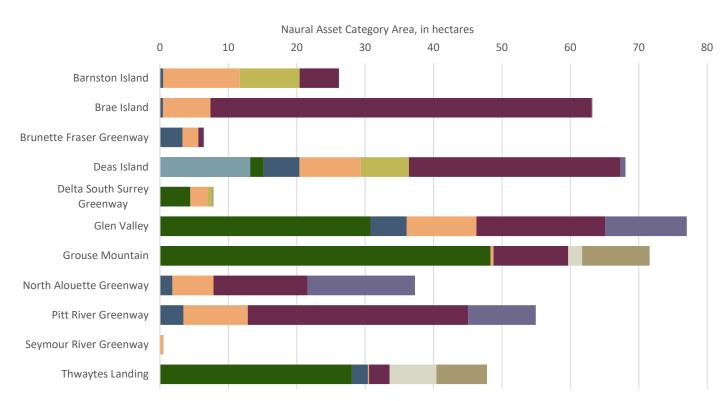
Larger Regional Parks (between 450 and 3,750 hectares)



Medium-sized Regional Parks (between 80 and 450 hectares)



Smaller Regional Parks and Greenways (less than 80 hectares)

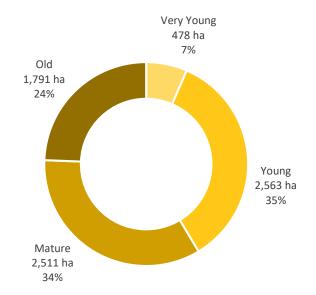


Ecosystem Quality

The Metro Vancouver Sensitive Ecosystem Inventory (SEI) maps important ecological areas in the region, and a large proportion of park ecosystems (85%) are included in the inventory. The SEI includes an assessment of 'quality' for mapped ecosystems. Ecosystems rated as 'higher quality' were observed to have fewer visible disturbances, tend to be larger in size, and are adjacent to other vegetation, rather than roads and urban areas.

80% of SEI ecosystems in regional parks were rated 'higher quality'

Age of Forested Natural Assets



Forest Age Definitions

Old Complex structure, i.e. old trees but also a

mix of other tree ages and understory vegetation. Canopy trees are mostly

250 years old or more.

Mature Some complexity in structure.

80 to 250 years old.

Young Complexity beginning to develop.

30 to 80 years old.

Very Young No complexity. 15 to 30 years old.

58% of forested natural assets are mature or old

Age of forested natural assets is an estimate based on the appearance and characteristics of each stand of trees.

Forest stands of different ages provide different ecological functions. Generally, older forests have experienced less disturbance, support higher biodiversity, and are of higher condition than younger forests.

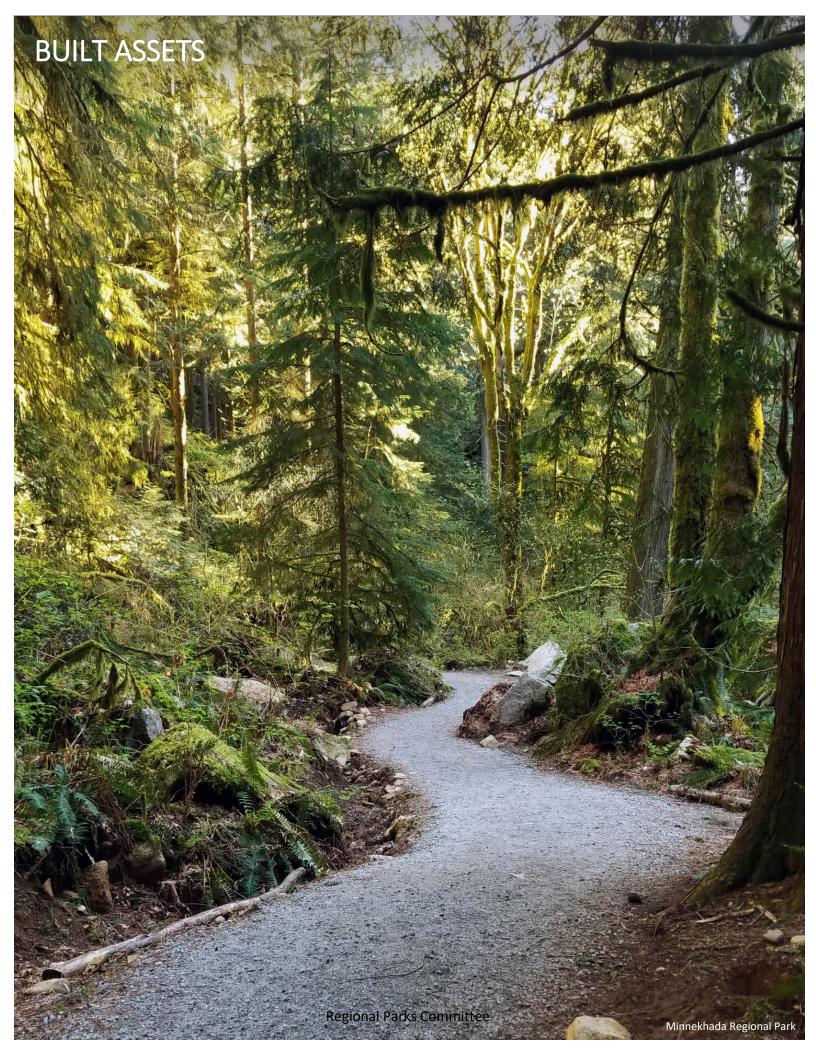


Proportion of Natural and Developed Areas

Park or Greenway Name	% of Developed Area	Park area (hectares)
Aldergrove	3%	280
Barnston Island	2%	27
Belcarra	1%	1,034
Blaney Bog	0%	124
Boundary Bay	11%	193
Brae Island	6%	67
Brunette Fraser Greenway	55%	10
Burnaby Lake	3%	145
Burns Bog	0%	2,361
Campbell Valley	2%	548
Capilano	5%	151
Codd Wetland	0%	159
Colony Farm	2%	258
Crippen	1%	223
Deas Island	7%	73
Delta South Surrey Greenway	7%	8
Derby Reach	2%	315
Fraser Islands	0%	198
Glen Valley	0%	77
Grouse Mountain	3%	74
Iona Beach	1%	786
Kanaka Creek	1%	451
Lynn Headwaters	0%	3,718
Minnekhada	2%	227
North Alouette Greenway	1%	38
Pacific Spirit	1%	860
Pitt River Greenway	6%	58
Seymour River Greenway	58%	1
Surrey Bend	2%	347
Thwaytes Landing	0%	48
Tynehead	2%	255
Widgeon Marsh	1%	627
	Widgeon I	Marsh Regional P

By area, 1% of parks and 8% of greenways are developed

The amount of developed area in regional parks is a measure of condition for natural assets. Developed areas in parks are primarily parking lots, buildings, roads and trails. Higher levels of development would indicate more disturbance and fragmentation of natural assets.



CONDITION DEFINITIONS

Assets are managed in accordance with the *Asset Management for Regional Parks Policy*. This includes clearly defined condition assessment metrics and targets. Regional Parks asset performance categories, key performance indicators, and targets are provided in the table below.

Performance Category	Performance Category Definition	Key Performance Indicator (KPI)	Performance Target
Condition	Condition of assets	Condition Score (see	condition score of 3 or
		table below)	better.
Condition (buildings)	Condition of building	Facility Condition	FCI condition score of 4
	assets	Index (FCI)	or better.

For all built asset classes, excluding buildings, Regional Parks will use a 1 to 5 condition scoring system. When condition information is not available, an age based remaining service life will be used as a proxy for asset condition.

Condition Score		Description	
1	Very good	is new, OR has no apparent wear and no apparent defect(s).	
2	Good	has wear and/or only minor defect(s) that do not detract from functionality. Repair not required.	
3	Fair	is operational but has defect(s) more significant than minor, that do not detract from functionality. Long-term repair may be scheduled.	
4	Poor	is operational but has defect(s) that affect functionality, OR has defect(s) that may result in loss of function and/or operation. Should be scheduled for major repair or replacement.	
5	Critical	is not operational, OR is non-functional, OR is past the point of economic repair. Must be repaired, replaced, decommissioned, or removed.	

For buildings, Regional Parks will use a scoring system in accordance with the general table below where:

Facility Condition Index Rating Scale

Very good 0-1%	Good 1-5%	Fair 5-10%	Poor 10-30%	Critical >30%
1	2	3	4	5

DATA CONFIDENCE RATING

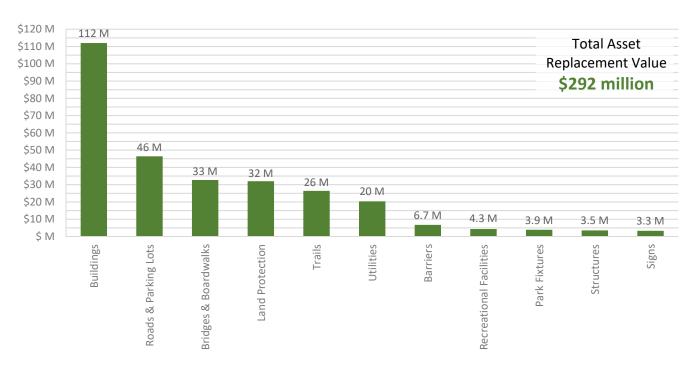
Data confidence ratings are included for all asset categories to inform decision making, identify information gaps and prioritize future asset management work/collection.

Rating	Description
High	Highly reliable and complete data, collected through best practices (investigated, documented, measured, etc.).
	Estimated accuracy ≥ 85%
Medium	Moderately reliable and complete data, with portions of data coming from older inventories or non-documented collection processes. Small percentage of data may be incomplete. Estimated accuracy 60% to 84%
Low	Unknown, uncertain, or incomplete data, with the majority of data coming from older inventories, or non-documented collection processes (i.e. best educated guesses, extrapolation, etc.) Estimated accuracy < 59%



ASSET REPLACEMENT VALUE

The cost for a complete replacement of an asset including design, permitting, archeology, site preparation, servicing and construction. Land acquisition is not included in this cost.



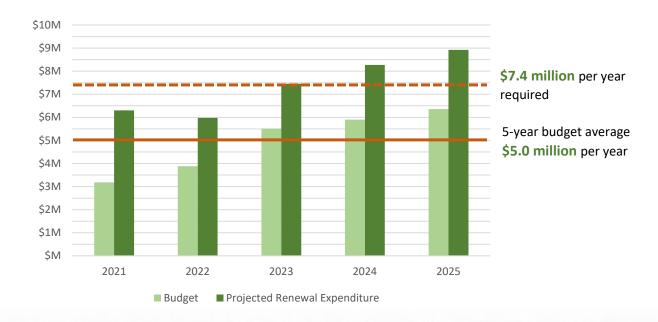
Asset replacement values are determined based on current pricing for regional park projects, market testing with local contractors, industry best practice from other jurisdictions, market research, and historic values. Appendix A outlines the source and values for each asset category.

PROJECTED RENEWAL EXPENDITURE

The estimated cost of ongoing maintenance, up to and including replacement, required to maintain an asset in a specified condition over its service life.

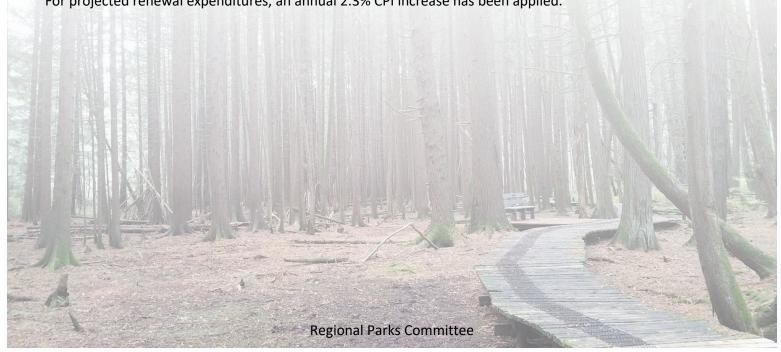
5-YEAR ESTIMATED BUDGET REQUIREMENT

Projected renewal expenditure required to maintain Regional Parks assets to fair or better condition from 2021-2025.



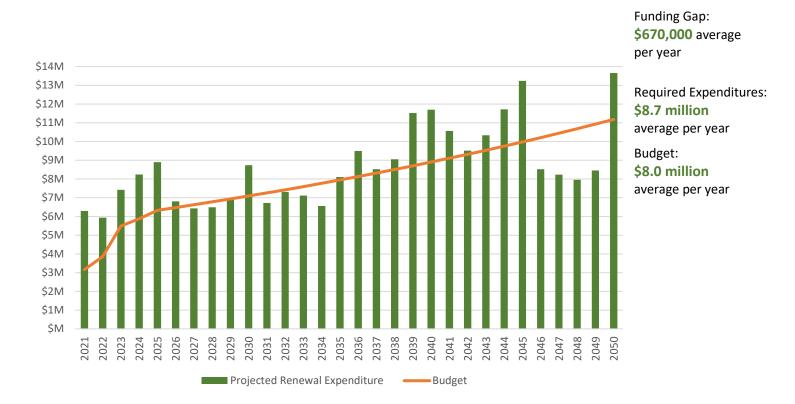
Note: the capital budget projections included in this report reflect the 2021-2025 MVRD Financial Plan. For subsequent years beyond 2025 a 2.3% CPI increase is applied.

For projected renewal expenditures, an annual 2.3% CPI increase has been applied.



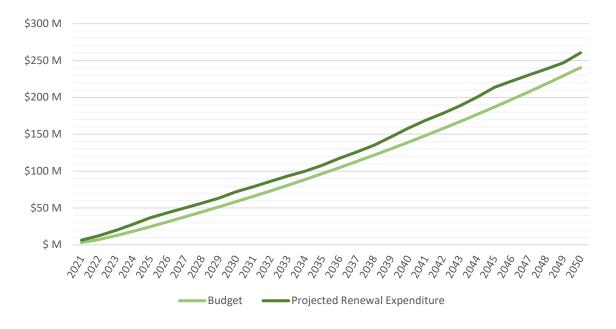
30-YEAR ESTIMATED BUDGET REQUIREMENTS

Projected renewal expenditure required to maintain assets in fair or better condition over a 30-year term.



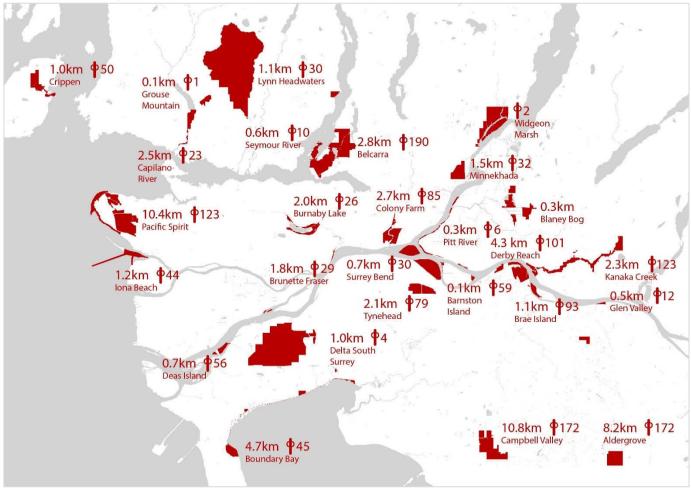
ACCUMULATED 30-YEAR PROJECTION

The cumulative projected renewal requirements of an asset category over a 30-year term, compared to the projected budget allocations over this time. Projected renewal requirements are based on estimated service life and asset condition assessments where available. These graphs display the long-term funding trends.

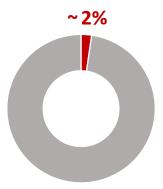


Funding Gap: \$20.1 million over 30 years





INVENTORY + ASSET REPLACEMENT VALUE



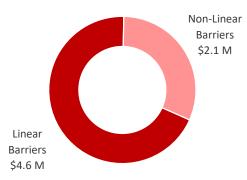
Barriers comprise 2% of the total value of regional park built assets

Regional Parks maintains **65 km** linear barriers and **1,597** non-linear barriers; asset replacement value **\$6.7 million**



BARRIER BY TYPE

Barrier Asset Replacement Value







Linear Barriers are linear upright structures preventing people, vehicles, or animals from entering an area. They include post & rail, stacked split rail, chain-link, roadside barriers, farm fencing, rows of concrete lock blocks or boulders, etc.

Non-Linear Barriers are barriers on a trail or road to block vehicular access. These include gates, bollards, boulders, etc.

Barrier Type	Number of Assets	Asset Replacement Value
Linear Barriers	65 km	\$4.6 M
Non-Linear Barriers	1,597	\$2.1 M
*Data Confidence: HIGH		\$6.7 M

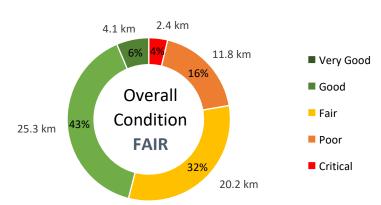
ASSET CONDITION

Overall Condition

Good

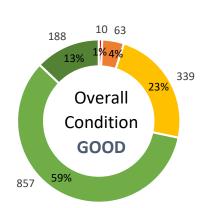
LINEAR BARRIERS

Condition (2020)



NON-LINEAR BARRIERS

Condition (2020)



^{*}Data Confidence: HIGH

PROJECTED RENEWAL EXPENDITURE

Based on inspections and estimated service life, an average annual budget of \$160,000 is required to maintain barriers from 2021-2025. Based on the capital budget included with the 2021-2025 MVRD Financial Plan, a cumulative \$530,000 funding shortfall is projected by 2025.

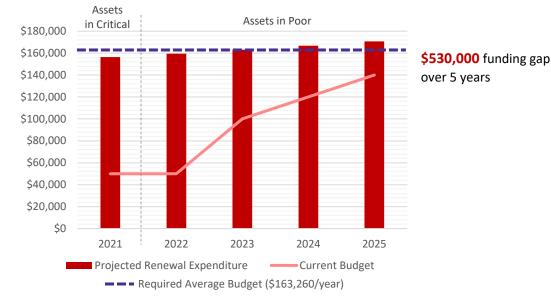
5-year budget for Barriers (2021-2025 Financial Plan)

Over the 30-year term, an average annual budget of \$270,000 is required (based on estimated service life). A cumulative funding shortfall of \$2.8 million is projected by 2050.

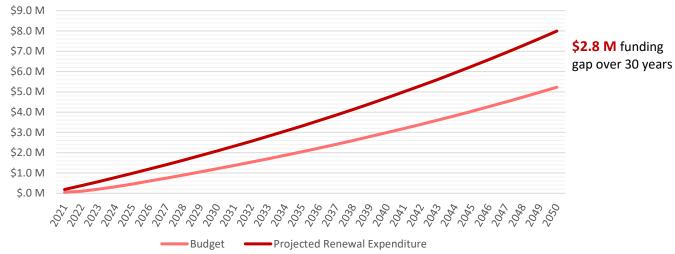
2021 \$50,000 2022 \$50,000 2023 \$100,000 2024 \$120,000 2025 \$140,000

5-Year Estimated Budget Requirements

(replacements based on critical and poor condition ratings of assets)



Accumulated 30-Year Projection (based on estimated service life of assets)



⁻ Current 5-year budget (2021-2025 MVRD Financial Plan) used in accumulated 30-year projection. 2026 to 2050 budget based on 2025 budget with a 2.3% increase per year.

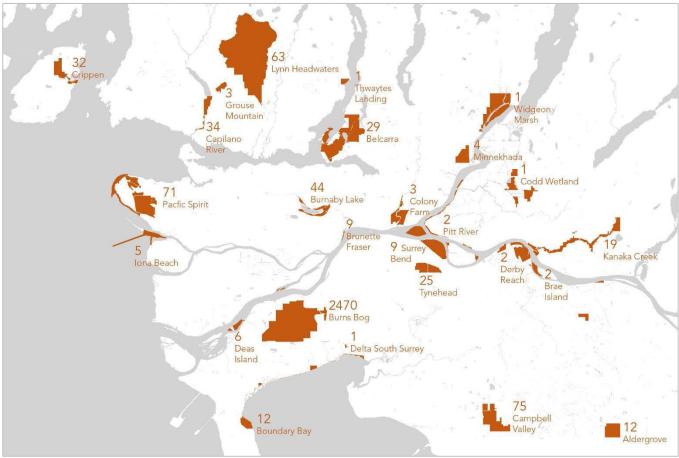
BARRIERS (MAINTAINED BY OTHERS)

There are **387 m** of linear barriers and **2** non-linear barriers in the regional park system that are maintained by external agencies.

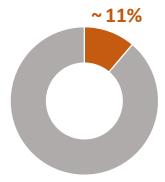
^{- 2022} to 2050 required expenditures includes an increase of 2.3% per year.



BRIDGES & BOARDWALKS



INVENTORY + ASSET REPLACEMENT VALUE



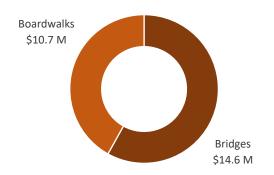
Bridges and boardwalks comprise 11% of the total value of regional park built assets

Regional Parks maintains **623** bridges and boardwalks; asset replacement value **\$33** million



BRIDGES & BOARDWALKS BY TYPE

Bridge + Boardwalk Asset Replacement Value





Bridges are trail or road structures, erected over a depression or waterway, to allow pedestrian and/or vehicles to cross from one side to the other.



Boardwalks are elevated footpaths enabling park users to cross wet, unstable, uneven, or ecologically sensitive areas.

	Number of Assets	Length (m)	Asset Replacement Value
Bridges	200	2,006	\$14.6 M
Boardwalks	423	6,452	\$18.1 M
*Data Confidence: HIGH	623	8,458	\$32.7 M

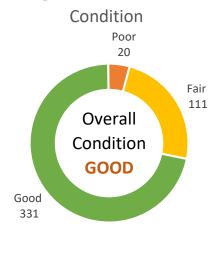
ASSET CONDITION

■ Very Good

■ Good

Overall Condition Good

Bridges and Boardwalks





Critical

Fair

Poor

^{*}Data Confidence: HIGH

PROJECTED RENEWAL EXPENDITURE

Based on inspections and estimated service life, an average annual budget of \$1,360,000 is required to maintain bridges + boardwalks from 2021-2025. Based on the capital budget included with the 2021-2025 MVRD Financial Plan, a cumulative \$4.0 million funding shortfall is projected by 2025.

5-year budget for Bridges & Boardwalks (2021-2025 Financial Plan)

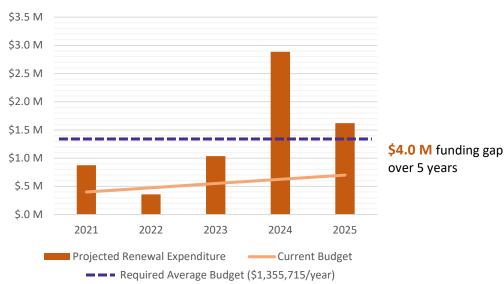
Over the 30-year term, an average annual budget of \$1,830,000 is required (based on estimated service life). A cumulative funding shortfall of \$28.2 million is projected by 2050.

2021 \$400,000 2022 \$475,000 2023 \$550,000 2024 \$625,000 2025 \$700,000

Renewal expenditures are based on estimated service life. Bridges and Boardwalks past their expected service life, but still in fair or good condition, will remain in service and be monitored. Assets that remain in service beyond expected service life reduce funding requirements over time.

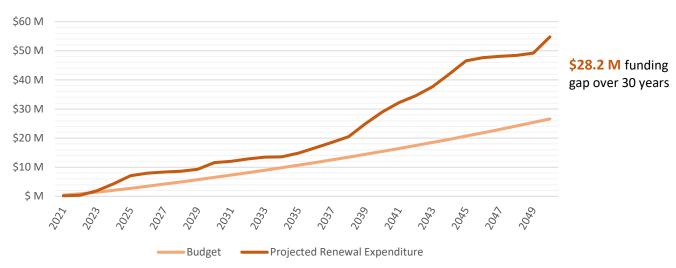
5 Year Budget Requirements

(based on estimated service life + condition of assets)



Accumulated 30-Year Projection

(based on estimated service life + condition of assets)



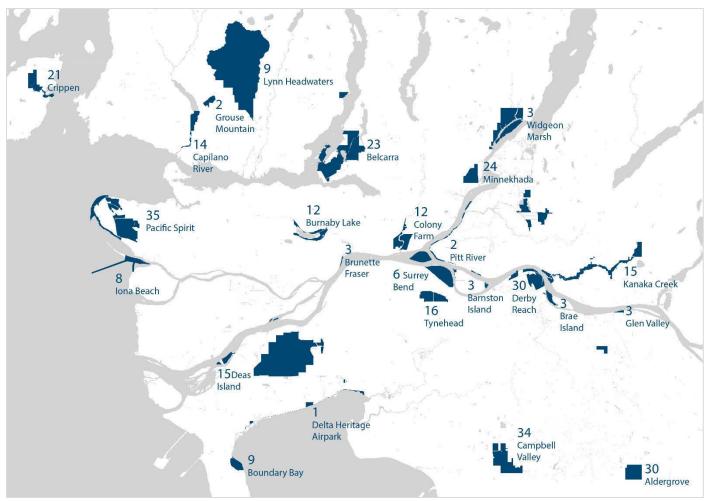
- Current 5-year budget (2021-2025 MVRD Financial Plan) used in accumulated 30-year projection. 2026 to 2050 budget based on 2025 budget with a 2.3% increase per year.
- 2022 to 2050 required expenditures includes an increase of 2.3% per year.

BRIDGES & BOARDWALKS (MAINTAINED BY OTHERS)

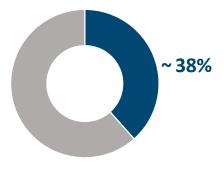


There are 4 bridges located in regional parks and maintained by utility agencies for service vehicle access to infrastructure.





INVENTORY + ASSET REPLACEMENT VALUE



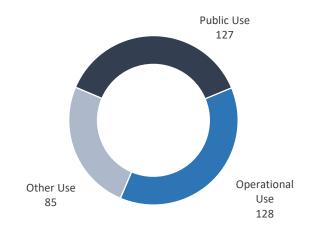
Buildings comprise 38% of the total value of regional park built assets

Regional Parks maintains **340** Buildings; asset replacement value **\$112** million



BUILDINGS BY GENERAL USE

Number of Buildings



	Area (m²)	Asset Replacement Value
Public Use	6,566	\$37 M
Operational Use	8,106	\$25 M
Other Use	11,038	\$50 M
	25,710	\$112 M

Public Use are buildings accessible by the public, ranging from washrooms and picnic shelters, to nature houses and concessions.

Operational Use are buildings that support planning, maintenance, security and utilities for regional parks, ranging from offices and workshops, to utility buildings and caretaker dwellings.

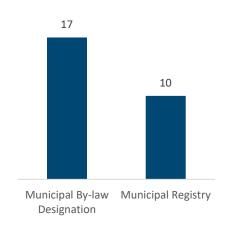
Other Use buildings include those used by licensees, rental houses and outbuildings, and vacant buildings.



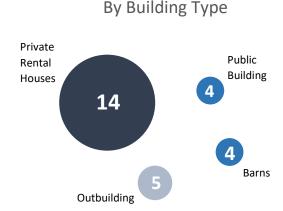
BUILDINGS BY DETAILED USE

	Asset Replacement Value	Num	ber of Assets
Washroom	\$8.1 M		85
Bookable Shelter	\$2.1 M	17	
Bookable Building	\$8.8 M	6	
General Public Use	\$0.3 M	6	
Vacant Display	\$0.4 M	4	Public Use
Concession/Washroom	\$9 M	3	Tablie 030
Bookable Building/Caretaker	\$6.3 M	2	
Nature House	\$0.9 M	2	
Nature House/Washroom	\$0.5 M	■ 1	
Office/Washroom	\$0.1 M	■ 1	
Operations	\$11.4 M		99
Office/Operations	\$5.5 M	11	
Office	\$3.4 M	7	Operational Use
Caretaker	\$2.9 M	5	operational osc
Utility	\$0.5 M	5	
Caretaker/Operations	\$1.5 M	I 1	
Rental House	\$17.7 M	27	
Rental Outbuilding	\$7.6 M	26	Other Use
Vacant	\$16.8 M	20	
License to External Agency	\$8 M	12	

HERITAGE BUILDING STATUS



27 buildings are identified as heritage



Detailed Use Definitions

Bookable Building	Short term building rental (e.g. Cammidge House).
-------------------	---

Bookable Shelter Rentable shelter (e.g. picnic shelter, group camp).

Caretaker Residential facility for a caretaker, including adjacent outbuildings.

Concession Food service building.

General Public Use Building or structure used by park visitors excluding other category types (e.g.

non-bookable picnic shelters).

License to External Agency Building used by a person, group, or groups through a license or lease agreement;

long-term rentals that are not residential tenancies.

Nature House Building or structure used to display educational materials and host educational

events. Can include limited office space, but not as the predominant use.

Office Building used by staff for meetings and office work tasks.

Operations Building used by staff as a workshop and storage of equipment and materials.

Rental House A house rented out as a residential tenancy.

Rental Outbuilding An outbuilding rented out as part of a residential tenancy (e.g. barn, garage, etc.).

Utility Building in which a utility system is operated (e.g. pump houses, electrical shed,

chlorination sheds).

Vacant Building or structure that is empty and not used for display purposes.

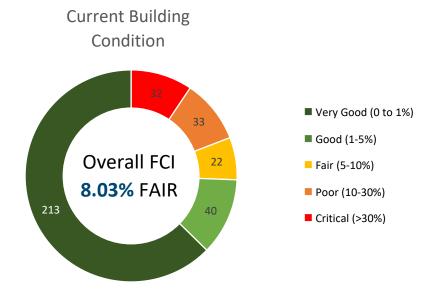
Vacant Display Building or structure that is empty but valued for its role as display in the

landscape. Often has heritage value.

Washroom Washroom facility (e.g. pit toilets, flush toilets, etc.). Can include showers and/or

change rooms.

Regional Parks Committee



AVERAGE CONDITION BY DETAILED USE

		Average FCI	
	Vacant Display	175%	
	General Public Use	32%	
	Office/Washroom	5%	
Se	Bookable Building	4%	
Ď	Bookable Shelter	3%	
ollo	Bookable Building/Caretaker	2%	
Public Use	Nature House	2%	
	Washroom	1%	
	Concession/Washroom	0%	
	Nature House/Washroom	0%	_
_	Operations	17%	
na	Office/Operations	9%	
Operational Use	Caretaker	2%	
era U	Utility	1%	
)dC	Office	1%	
	Caretaker/Operations	0%	
_	C Vacant IAL BEACH	73%	
ther	Rental Outbuilding	24%	LA
Ot	Rental House	5%	The same of the sa
	License to External Agency	2%	

PROJECTED RENEWAL EXPENDITURE

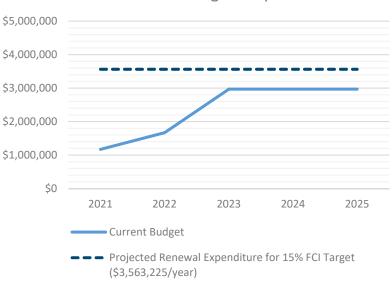
Based on inspections and estimated service life, an average annual budget of \$3,560,000 is required to maintain buildings, to an FCI target of 15%, from 2021-2025. Based on the capital budget included with the 2021-2025 MVRD Financial Plan, a cumulative \$6.1 million funding shortfall is projected by 2025.

Over the 30-year term, an average annual budget of \$3,350,000 is required (based on inspections and estimated service life). A cumulative funding surplus of \$12.5 million is projected by 2050.

5-year budget for Buildings (2021-2025 Financial Plan)

\$1,170,000 \$1,670,000 \$2,970,000 \$2,970,000 \$2,970,000

5-Year Estimated Budget Requirements



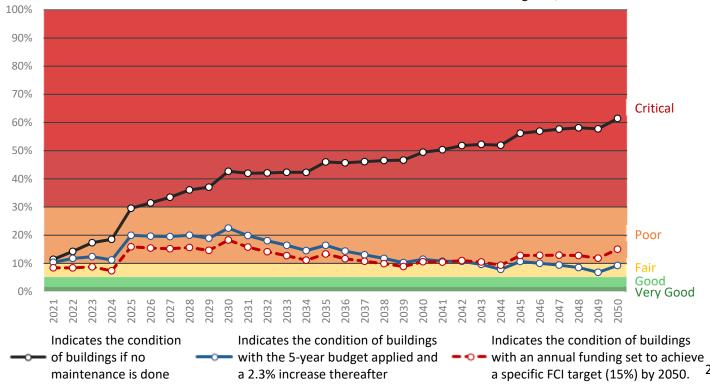
Projected renewal expenditures include **+30%** for design work, permits, feasibility studies, archaeology, contingency, etc.

\$6.1 M funding gap

over 5 years

30-YEAR FACILITY CONDITION INDEX MODEL

Calculated average funding to maintain assets at a 15% FCI Target = \$3.3 million



Accumulated 30-Year Projection

(based on inspections and estimated service life of assets)



30-year Projected Renewal Expenditure
30-year Budget

M \$10 M \$20 M \$30 M \$40 M \$50 M \$60 M \$70 M \$80 M \$90 M \$100 M \$110 M

BUILDINGS (MAINTAINED BY OTHERS)

These buildings are located on regional park land but are maintained by external groups through an agreement.



Building Maintained by Others

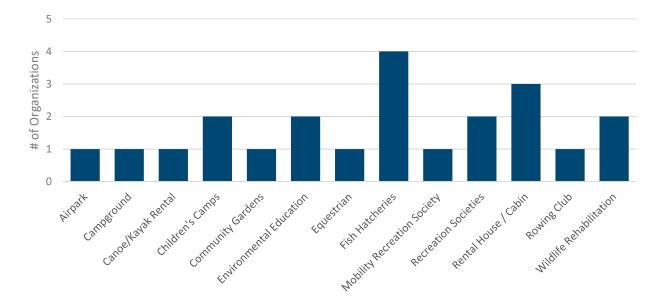
Uses are often complementary to Regional Parks' mandate to protect natural areas and connect people to them, e.g. camps, fish hatcheries, wildlife rehabilitation, etc.

40

Non-MV Maintained Buildings within Regional Parks

*small ancillary buildings not included

TYPES OF BUILDINGS MAINTAINED BY OTHERS



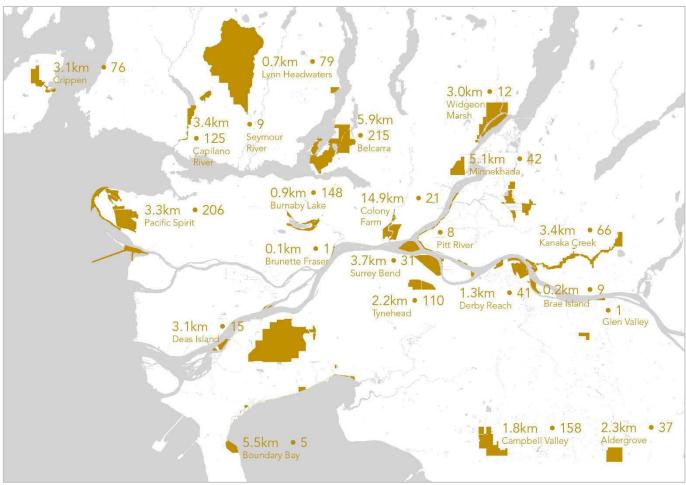
HERITAGE BUILDING STATUS

6

Buildings with Municipal By-law Designation Status



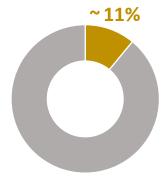
LAND PROTECTION



INVENTORY + ASSET REPLACEMENT VALUE

Regional Parks maintains 4 km dikes, 6 dams, 1.8 km of retaining walls, 1386 culverts, 8 drainage structures, and 58 km of drainage lines; asset replacement value \$32 million





Land Protection comprise 11% of the total value of regional park built assets

LAND PROTECTION BY TYPE

Dikes are embankments installed to prevent flooding.

Dams are structures that are used to retain and manage water in streams, rivers, or lakes.

Retaining walls are walls built to hold back soil to change topography, often to create a flat surface. In Regional Parks, these are made of stone, concrete, wood, sand bags, or willow.

Culverts are pipes that allow water to flow under a trail, road, or other hardened surface. They are used to manage water flows across infrastructure and to reduce erosion.

Erosion Protection are the armouring of slopes to prevent soil erosion

Drainage Structures are structures installed to move water or control the flow of water, e.g. flood gate, pump stations, etc.

Drainage Lines are ditches, swales, drain pipes, etc. installed to move water over or through a landscape.



	Number of Assets	Length (km)	Asset Replacement Value
Dikes	-	4	\$11,498,000
Dams	6	-	\$2,871,000
Retaining Walls	77	1.8	\$2,074,000
Culverts	1386	6.4	\$1,066,000
Erosion Protection	-	-	\$4,308,000
Drainage Structures	8	-	\$2,847,000
Drainage Lines	-	57.9	\$7,320,000

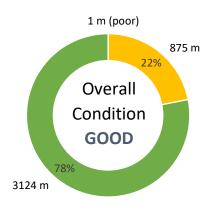
^{*}Data Confidence: HIGH (dikes, dams, retaining walls, culverts)

\$32 M

^{*}Data Confidence: LOW (erosion protection, drainage structures, drainage lines)

DIKES

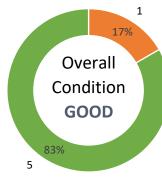
Condition (2020)



*Data Confidence: HIGH

DAMS

Condition (2020)



*Data Confidence: HIGH

■ Very Good

■ Good

■ Fair ■ Poor

■ Critical

RETAINING WALLS

Condition (2020)
28 m 147 m
8%

Overall
Condition
GOOD

69%

*Data Confidence: HIGH

CULVERTS

Condition (2020)



*Data Confidence: HIGH

Note:

No condition data for erosion protection, drainage structures, or drainage lines



PROJECTED RENEWAL EXPENDITURE

Based on inspections and estimated service life, an average annual budget of \$330,000 is required to maintain land protection assets from 2021-2025. Based on the capital budget included with the 2021-2025 MVRD Financial Plan, a cumulative \$640,000 funding shortfall is projected by 2025.

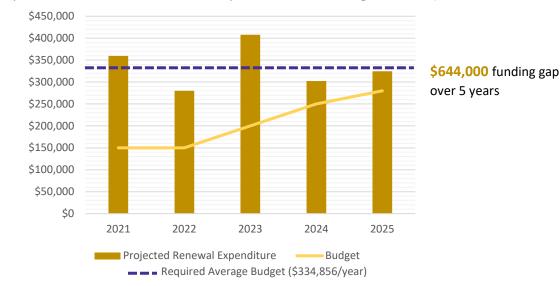
Over the 30-year term, an average annual budget of \$490,000 is required (based on estimated service life). A cumulative funding shortfall of \$4.2 million is projected by 2050.

5-year budget for Land Protection (2021-2025 Financial Plan)

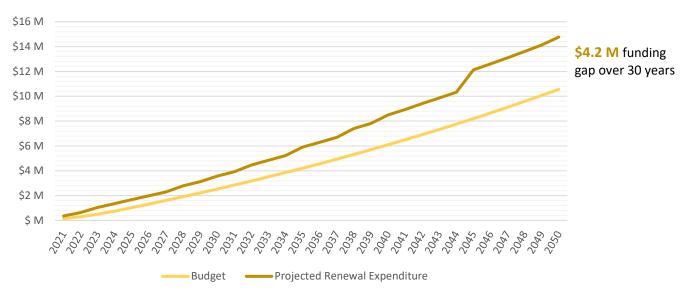
2021 \$150,000 2022 \$150,000 2023 \$200,000 2024 \$250,000 2025 \$280,000

5-Year Estimated Budget Requirements

(replacements based on critical and poor condition ratings of assets)



Accumulated 30-Year Projection (based on estimated service life of assets)

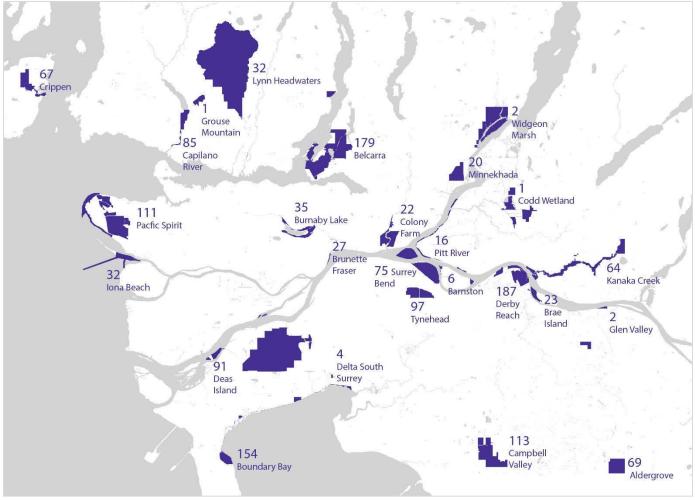


⁻ Current 5-year budget (2021-2025 MVRD Financial Plan) used in accumulated 30-year projection. 2026 to 2050 budget based on 2025 budget with a 2.3% increase per year.

^{- 2022} to 2050 required expenditures includes an increase of 2.3% per year.

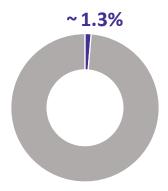


PARK FIXTURES



INVENTORY + ASSET REPLACEMENT VALUE

Regional Parks maintains **1514** park fixtures; asset replacement value **\$3.9 million**



Park Fixtures comprise 1.3% of the total value of regional park built assets



PARK FIXTURES BY TYPE

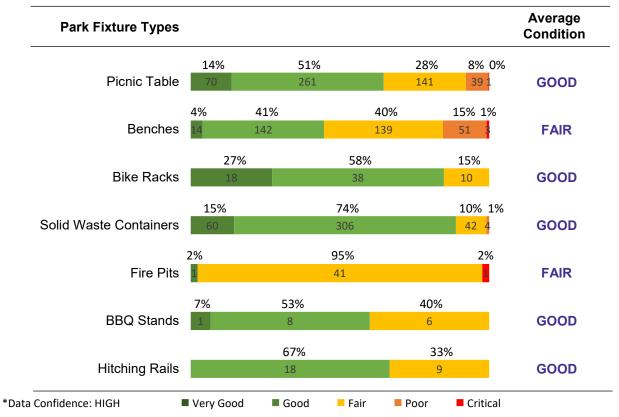
Park fixtures are furnishings that support the park visitor experience, e.g. picnic tables, bike racks, etc.



Park Fixture Types	Asset Replacement Value	Number of Assets		
Picnic Tables	\$2,106,000		541	
Benches	\$645,000		349	
Bike Racks	\$69,000	66		
Solid Waste Containers	\$946,000		462	
Fire Pits	\$29,000	53		
BBQ Stands	\$61,000	1 6		
Hitching Rails	\$9,000	2 7		
ta Confidence: HIGH	\$3.9 M	1514		

ASSET CONDITION

Overall Condition Good



PROJECTED RENEWAL EXPENDITURE

Based on inspections and estimated service life, an average annual budget of \$30,000 is required to maintain park fixtures from 2021-2025. Based on the capital budget included with the 2021-2025 MVRD Financial Plan, a cumulative \$160,000 funding surplus is projected by 2025.

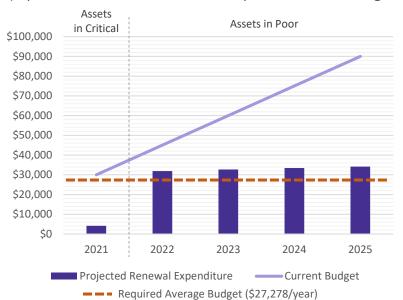
For the 30-year term, an average annual budget of \$90,000 is required (based on estimated service life). A cumulative funding surplus of \$760,000 is projected by 2050.

Many park fixtures have been replaced or added in the last 10 years, resulting in a smaller required annual budget for the 5-year term vs the 30-year term.

5-year budget for Park Fixtures (2021-2025 Financial Plan)

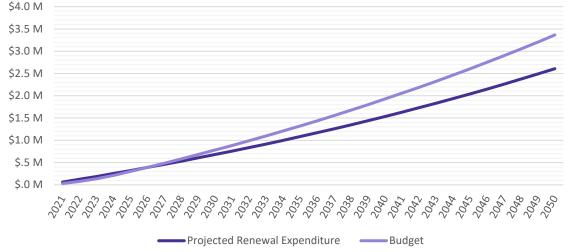
2021 \$30,000 2022 \$45,000 2023 \$60,000 2024 \$75,000 2025 \$90,000

5-Year Estimated Budget Requirements (replacements based on critical and poor condition ratings of assets)



\$160,000 funding surplus over 5 years

Accumulated 30-Year Projection (based on estimated service life of assets)



paid through Donor

renewal expenditures.

Note:

\$760,000 funding

surplus over 30 years

225 memorial benches + 50 memorial picnic tables Commemoration Program. Not included in projected

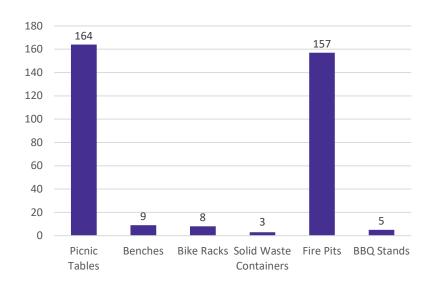
- Current 5-year budget (2021-2025 MVRD Financial Plan) used in accumulated 30-year projection. 2026 to 2050 budget based on 2025 budget with a 2.3% increase per year.

- 2022 to 2050 required expenditures includes an increase of 2.3% per year.

PARK FIXTURES (MAINTAINED BY OTHERS)

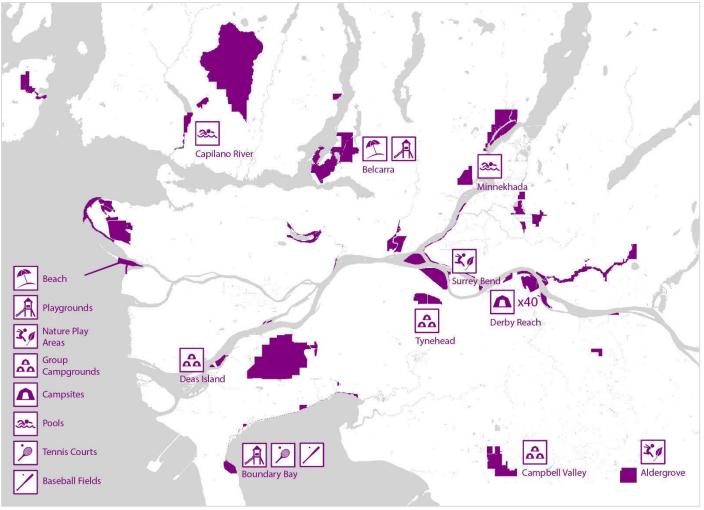
These park fixtures are located on regional park land but are maintained by external organizations through an agreement. The majority of these assets reside in the Brae Island Regional Park campground.







RECREATIONAL FACILITIES

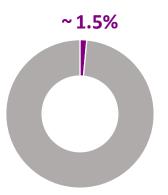


INVENTORY + ASSET REPLACEMENT VALUE

Regional Parks maintains: 1 beach 2 playgrounds
2 nature play areas 3 group camps

1 campground (40 campsites) 2 pools 1 tennis court

1 baseball field asset replacement value \$4.3 M



Recreational facilities comprise 1.5% of the total value of regional park built assets



RECREATIONAL FACILITIES BY TYPE

Beaches for water access. Beaches included in this section are constructed beaches only, and not naturally occurring beach.

Playgrounds - recreational playground equipment. This does not include nature play areas that include primarily natural features.

Pools - swimming pools.

Campgrounds are cleared and maintained areas available for tent/trailer camping.

Nature Play Areas are areas in the park designed for park visitors to engage in unstructured play with natural elements, such as logs, rocks, sticks, etc.

Tennis Courts – tennis courts. There are two in regional park system, one is maintained by Metro Vancouver Regional Parks.

Baseball Fields - baseball fields. There are two in regional park system, one is maintained by Metro Vancouver Regional Parks.

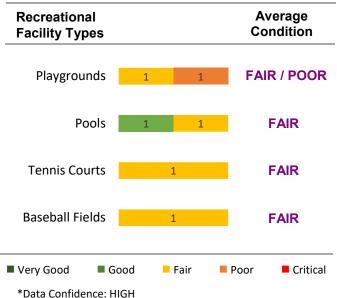
Group Camps reservable areas for groups camping.



	Number of Assets	Area (m²)	Cost per m²	Asset Replacement Value
Beach	1	7,600	\$368	\$2,800,000
Playgrounds	2	-	-	\$581,000
Pools	2	175	\$1,626	\$284,500
Campgrounds	1 (40 campsites)	5,731	\$45	\$258,000
Nature Play Areas	2	-	-	\$115,000
Tennis Courts	1	1,300	\$77	\$100,000
Baseball Fields	1	3,200	\$31	\$98,000
Group Camps	3	945	\$45	\$42,500
**				

*Data Confidence: HIGH \$4.3 M





Note: Group camps and campground condition not available - TBD

PROJECTED RENEWAL EXPENDITURE

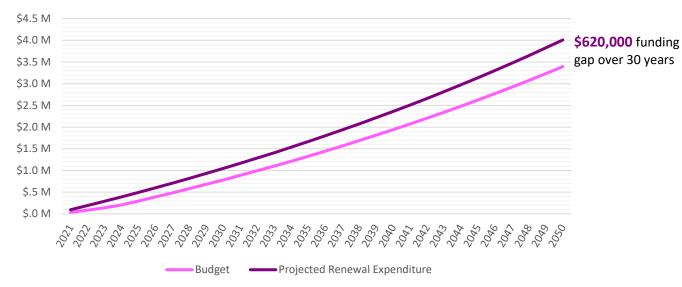
Based on the estimated service life, an average annual budget of \$100,000 is required to maintain recreational facilities from 2021-2025. Based on the capital budget included with the 2021-2025 MVRD Financial Plan, a cumulative \$200,000 funding shortfall is projected by 2025.

Over the 30-year term, an average annual budget of \$130,000 is required (based on estimated service life). A cumulative funding shortfall of \$620,000 is projected by 2050.

Accumulated 30-Year Projection (based on estimated service life of assets)

5-year budget for Recreational Facilities (2021-2025 Financial Plan)

2021 **\$36,000** 2022 **\$46,000** 2023 **\$56,000** 2024 **\$66,000** 2025 **\$91,000**



⁻ Current 5-year budget (2021-2025 MVRD Financial Plan) used in accumulated 30-year projection. 2026 to 2050 budget based on 2025 budget with a 2.3% increase per year.

^{- 2022} to 2050 required expenditures includes an increase of 2.3% per year.

RECREATIONAL FACILITIES (MAINTAINED BY OTHERS)

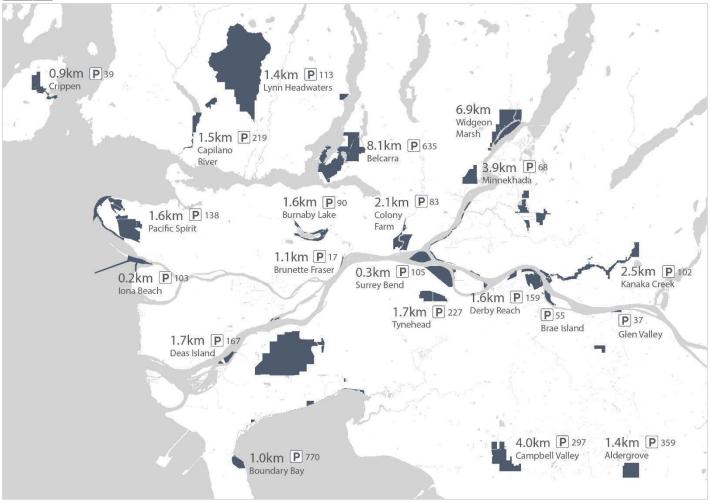
These recreational facilities are located on regional park land but are maintained by external groups through an agreement.



- **1** Baseball Field, Crippen
- 1 Campground (150 campsites), Brae Island
- 1 Checkerboard playground element, Crippen
- 2 Playgrounds, Aldergrove + Brae Island
- **1** Tennis Court, Belcarra



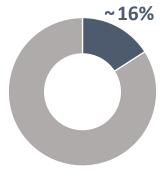
ROADS & PARKING LOTS



INVENTORY + ASSET REPLACEMENT VALUE

Regional Parks maintains 43 km of roads, 3,783 parking stalls, and 42,900 m² of other hardened surfaces; asset replacement value \$46 million





Road & Parking Lots comprise 16% of the total value of regional park built assets

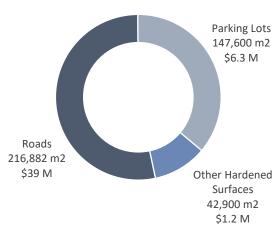
INVENTORY

Roads are surfaces, which vehicles can use to move through the park. Service roads, used as trails, are included in the Trail asset category.

Parking Lots are paved or graveled areas, intended for parking vehicles. Fields used for event parking are not included.

Other Hardened Surfaces other than roads, parking lots, and trails, are used as park amenities and/or assist in the maintenance of the park, i.e. staging areas, service yards, pull-outs, etc.





ROADS

	Km	Area (m²)	Cost per m²	Asset Replacement Value
Paved Surfaces	22,533	135,906	\$250	\$34.0 M
Gravel Surfaces	18,834	75,206	\$65	\$4.9 M
Natural Surfaces	1,910	5,770	\$7	\$40,000
*Data Confidence: HIGH	43,277	216,882		\$39 M

PARKING LOTS

91 parking lots total

Public Parking Stalls are stalls open to all visitors who wish to visit the park.

Operations Parking Stalls are reserved for operations staff to facilitate maintenance of the park.

Facility Parking Stalls are reserved for visitors using specific facilities within the park, e.g. reservable buildings, group camps, etc.

m²	No. of St	alls
142,858		3672
1,891	47	
2,860	64	

	Area (m²)	Cost per m²	Asset Replacement Value
Paved Surfaces	65,100	\$60	\$3,906,000
Gravel Surfaces	80,700	\$30	\$2,421,000
Natural Surfaces	1,800	\$7	\$12,600
*Data Confidence: HIGH	147,600		\$6.3 M

Notes:

- Parking lots or roadside parking outside Metro Vancouver's tenure and maintained by other agencies not included.
- Operations stalls, within service yards, not included. Asset replacement value accounted for in Other Hardened Surfaces.

OTHER HARDENED SURFACES



Service Yards are areas designated to support operations and maintenance; may include roads, parking, service buildings, material storage, and equipment/vehicle storage.

Primary service yard (16 total) – the main service yard for a park

Secondary service yards (3 total) – additional smaller spaces required to support maintenance

Misc. Hardened Surfaces are gravel or paved surfaces not covered under any other asset class. This includes small access trails to assets, trail/road pull-outs, dog off-leash areas, public staging areas, etc.

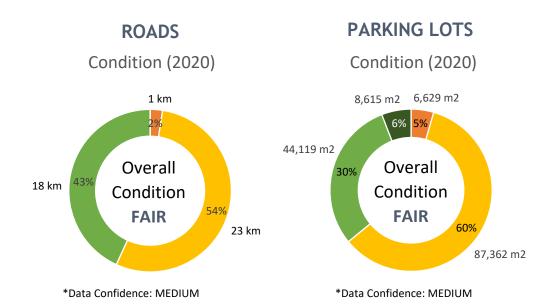
	Area (m²)	Cost per m ²	Asset Replacement Value
Service Yards			
Paved Surfaces	3,600	\$60	\$215,000
Gravel Surfaces	20,900	\$30	\$627,200
Natural Surfaces	12,700	\$7	\$88,800
Sub-total	37,200		\$931,000
Misc. Hardened Surfaces			
Paved Surfaces	2,300	\$60	\$138,000
Gravel Surfaces	3,400	\$30	\$102,000
Sub-total	5,700		\$240,000
	42,900		\$1.2 M

^{*}Data Confidence: HIGH (service yards)

Note:

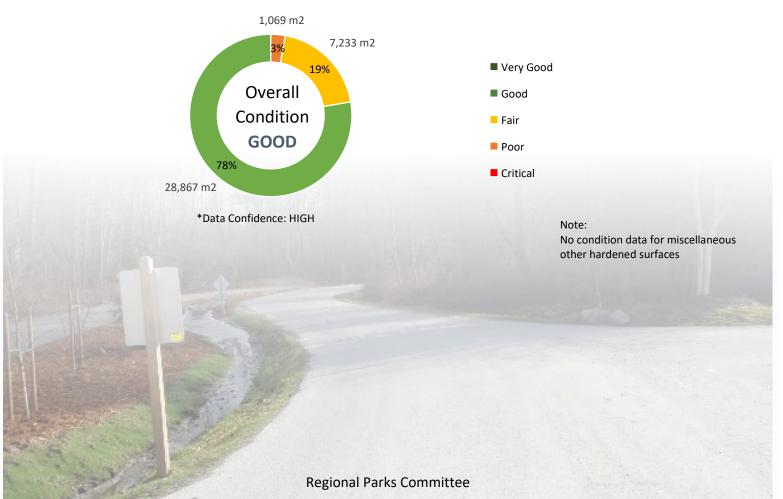
^{*}Data Confidence: LOW (misc. hardened surfaces – partially inventoried)

⁻Service yards include only surface material. Buildings, fencing, etc. are captured in other asset categories.
- Operations parking in service



OTHER HARDENED SURFACES

Service Yard Condition (2020)



PROJECTED RENEWAL EXPENDITURE

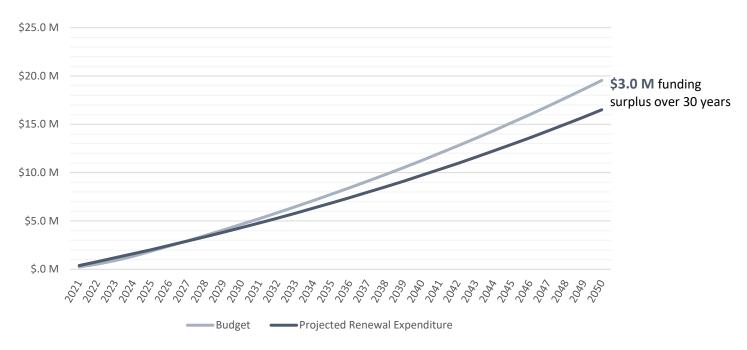
Based on inspections and estimated service life, an average annual budget of \$410,000 is required to maintain roads + parking lots from 2021-2025. Based on the capital budget included with the 2021-2025 MVRD Financial Plan, a cumulative \$160,000 funding shortfall is projected by 2025.

Over the 30-year term, an average annual budget of \$390,000 is required (based on estimated service life). A cumulative funding surplus of \$3.0 million is projected by 2050.

5-year budget for Roads + Parking Lots (2021-2025 Financial Plan)

2021 \$244,000 2022 \$294,000 2023 \$369,000 2024 \$444,000 2025 \$519,000

Accumulated 30-Year Projection (based on estimated service life of assets)



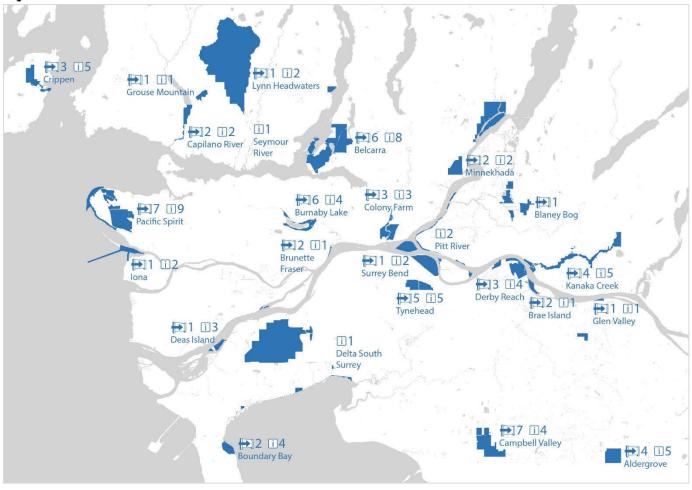
- Current 5-year budget (2021-2025 MVRD Financial Plan) used in accumulated 30-year projection. 2026 to 2050 budget based on 2025 budget with a 2.3% increase per year.
- 2022 to 2050 required expenditures includes an increase of 2.3% per year.

ROADS & PARKING LOTS (MAINTAINED BY OTHERS)

Roads **11km**Parking Lots **330 stalls**

These roads, parking lots, and other hardened surfaces are located on regional park land but are maintained by external groups through an agreement.





= entry sign = information kiosk

INVENTORY + ASSET REPLACEMENT VALUE

~1.1%

Signs comprise 1.1% of the total value of regional park built assets

Regional Parks maintains **65** entrance signs and **77** information kiosks; asset replacement value **\$3.3** million



SIGNS BY TYPE



In-Park Signs wayfinding, regulatory, instruction, safety, and entry signs in parks.

Information Kiosks located at staging areas to provide information about the park (map, amenities, trails, events, rules & regulations, etc.)

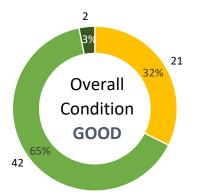
Roadside Approach Signs are directional signage located on highways and roads leading to regional parks.

Interpretive signs, exhibits and elements Park interpretation media, mostly in the form of outdoor signs and exhibits, are intended to raise visitor awareness, appreciation and understanding of the park features.

Signage Type	Asset Value	Number of Assets
In-Park Signs		
All (except entry signs)	\$266,000	-
Entry Signs	\$490,000	65
Information Kiosks	\$475,000	77
Roadside Approach Signs	\$400,000	-
Interpretive Signs, Exhibits and Elements	\$1,650,000	-
*Data Confidence: HIGH	\$3,281,000	142

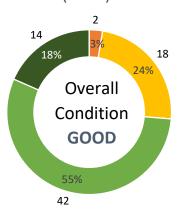
ENTRY SIGNS

Current Condition (2020)



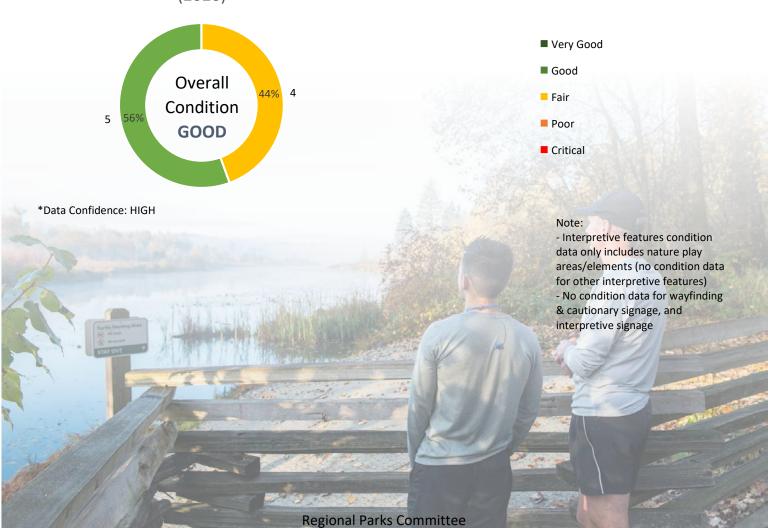
INFORMATION KIOSKS

Current Condition (2020)



INTERPRETIVE DISPLAYS

Current Condition (2020)



PROJECTED RENEWAL EXPENDITURE

Based on inspections and estimated service life, an average annual budget of \$160,000 is required to maintain signs from 2021-2025. Based on the capital budget included with the 2021-2025 MVRD Financial Plan, a cumulative \$240,000 funding shortfall is projected by 2025.

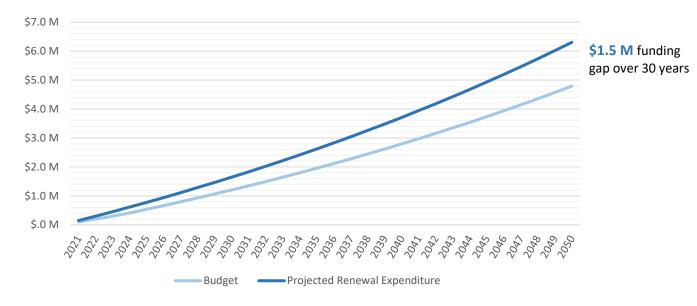
Over the 30-year term, an average annual budget of \$210,000 is required (based on estimated service life and previous expenditures). A cumulative funding shortfall of \$1.5 million is projected by 2050.

5-year budget for Barriers (2021-2025 Financial Plan)

2021 **\$100,000** 2022 **\$100,000** 2023 **\$100,000**

2024 **\$110,000** 2025 **\$125,000**

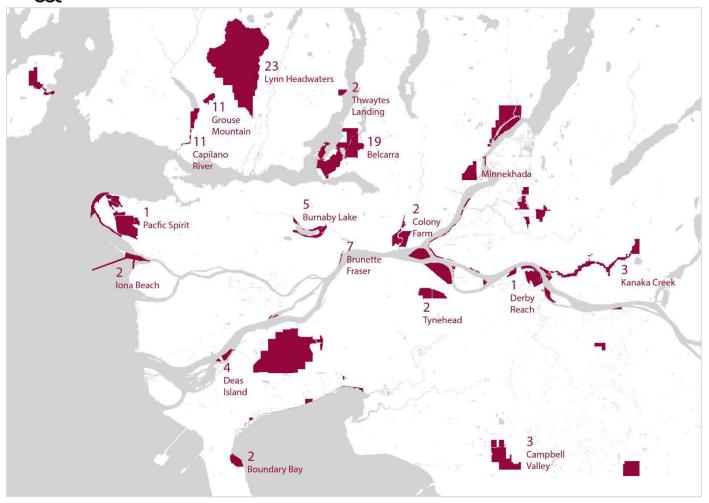
Accumulated 30-Year Projection (based on estimated service life of assets)



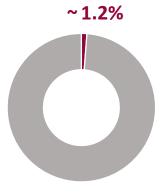
⁻ Current 5-year budget (2021-2025 MVRD Financial Plan) used in accumulated 30-year projection. 2026 to 2050 budget based on 2025 budget with a 2.3% increase per year.

^{- 2022} to 2050 required expenditures includes an increase of 2.3% per year.





INVENTORY + ASSET REPLACEMENT VALUE



Structures comprise 1.2% of the total value of regional park built assets

Regional Parks maintains **99** structures; asset replacement value **\$3.5** million



Regional Parks Committee

STRUCTURES BY TYPE

Operational Structures are used to support visitor safety, and to provide access and storage in more remote locations (e.g. tool and supply caches, helipads).

Stair Structures are outdoor staircases provided as part of a trail. Stairs connected to buildings are accounted for in the building asset class.

Viewing Structures are lookout platforms, either single or multilevel that orient park visitors towards a view.

Water Access Structures are platforms and floats that provide access directly to the water, such as piers, docks and ramps.

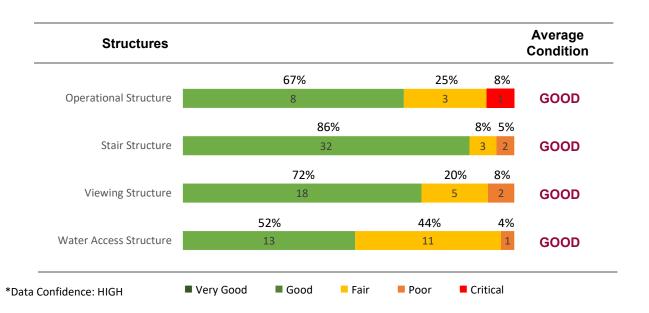


Structures	Asset Replacement Value	Number of Assets
Operational Structure	\$104,203	12
Stair Structure	\$378,038	
Viewing Structure	\$1,339,053	25
Water Access Structure	\$1,655,069	25
*Data Confidence: HIGH	\$3,476,362	

ASSET CONDITION

Overall Condition

Good



PROJECTED RENEWAL EXPENDITURE

Based on inspections and estimated service life, an average annual budget of \$130,000 is required to maintain structures from 2021-2025. Based on the capital budget included with the 2021-2025 MVRD Financial Plan, a cumulative \$10,000 funding shortfall is projected by 2025.

Over the 30-year term, an average annual budget of \$180,000 is required (based on estimated service life). A cumulative funding surplus of \$110,000 is projected by 2050.

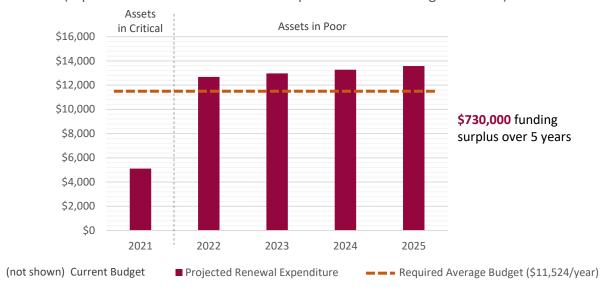
A number of larger facilities will require significant maintenance and replacement in the next 10 to 20 years, resulting in a larger budget need over the long-term.

5-year budget for Structures (2021-2025 Financial Plan)

2021 \$130,000 2022 \$132,990 2023 \$136,049 2024 \$139,178 2025 \$142,379

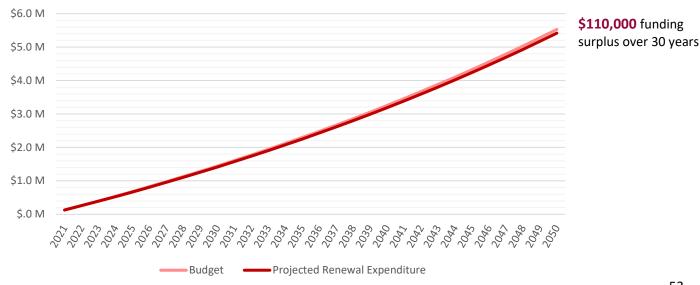
5-Year Estimated Budget Requirements

(replacements based on critical and poor condition ratings of assets)



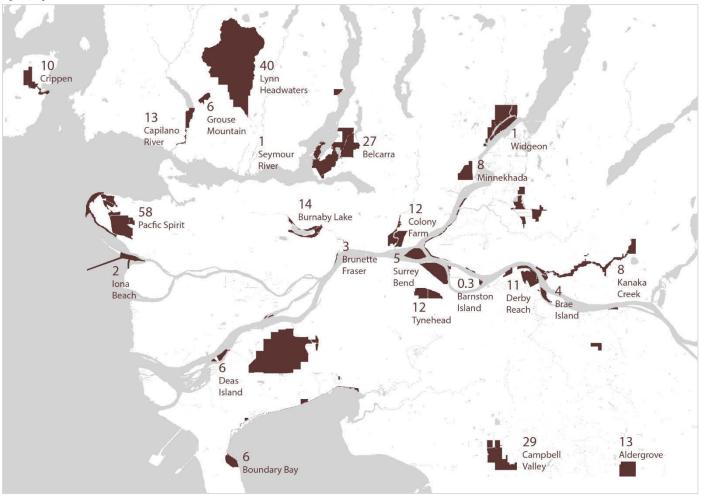
Accumulated 30-Year Projection

(based on estimated service life of assets)



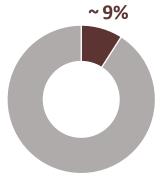
- Budget based on \$130,000/year, with a 2.3% increase each following year.
- 2022 to 2050 required expenditures includes an increase of 2.3% per year.





INVENTORY + ASSET REPLACEMENT VALUE

Regional Parks maintains **290 km** trails; asset replacement value **\$26 million**



Trails comprise 9% of the total value of regional park built assets



TRAILS BY SURFACE MATERIAL

Trails enable park users to connect with nature, park features, and park amenities. Trail types include hiking, cycling, and equestrian trails. Trails range from fully accessible multi-use paths to natural back country trails.

Steps are timber steps built into the trail allowing park users to traverse up or down steep slopes. Standalone stair structures are captured under structures.



	Length (km)	Area (m²)	Cost per m2	Asset Replacement Value
Paved Surfaces	15	45,877	115	\$5.3 M
Gravel Surfaces (road/trail)	3	11,219	65	\$0.7 M
Gravel Surfaces (trail)	187	414,193	45	\$18.6 M
Natural Surfaces	85	132,455	7	\$0.9 M
Beach Accessibility Path	0.1	178	117	\$20,826
	290	603,922		\$25.6 M

	Number of Steps	Cost per Step	Asset Replacement Value
Steps	3426	\$225	\$0.8 M

^{*}Data Confidence: HIGH Total Trails + Steps \$26.4 M

ASSET CONDITION

Overall Condition Good

Notes: **GRAVEL SURFACES** - No condition data on paved surfaces or natural surfaces **Current Condition** - Trail inspections completed on some trails not maintained by Metro Vancouver Parks (2020)0.1 km 9 km 18 km ■ Very Good ■ Good Overall Fair Condition Poor GOOD Critical 89% 211 km *Data Confidence: MEDIUM **Regional Parks Committee**

PROJECTED RENEWAL EXPENDITURE

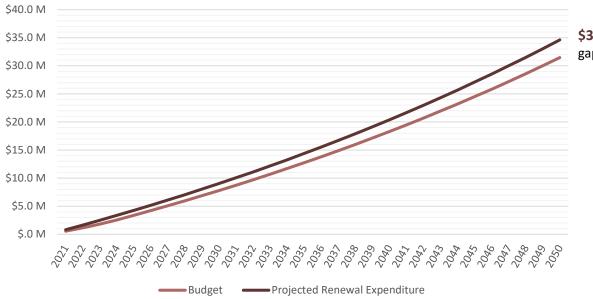
Based on inspections and estimated service life, an average annual budget of \$850,000 is required to maintain trails from 2021-2025. Based on the capital budget included with the 2021-2025 MVRD Financial Plan, a cumulative \$890,000 funding shortfall is projected by 2025.

Over the 30-year term, an average annual budget of \$1,150,000 is required (based on estimated service life). A cumulative funding shortfall of \$3.2 million is projected by 2050.

5-year budget for Barriers (2021-2025 Financial Plan)

2021 \$550,000 2022 \$600,000 2023 \$650,000 2024 \$750,000 2025 \$825,000

Accumulated 30-Year Projection (based on estimated service life of assets)



\$3.2 M funding gap over 30 years

- Current 5-year budget (2021-2025 MVRD Financial Plan) used in accumulated 30-year projection. 2026 to 2050 budget based on 2025 budget with a 2.3% increase per year.
- 2022 to 2050 required expenditures includes an increase of 2.3% per year.

TRAILS (MAINTAINED BY OTHERS)



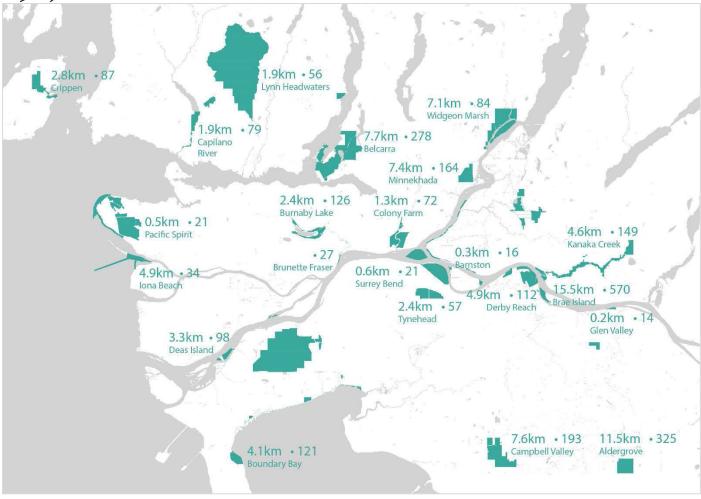
41 km of trail are maintained by others

Trails Maintained by Others

These trails are located on regional park lands but are maintained by another Metro Vancouver department or external group through an agreement; or are trails on lands owned by other agencies, where Metro Vancouver Regional Parks has an agreement to operate, but major maintenance work is the responsibility of the other agency.

Examples of trails maintained by others include licensee run campgrounds, equestrian trails maintained by equestrian groups through an agreement, greenways/dikes maintained by other agencies, etc.





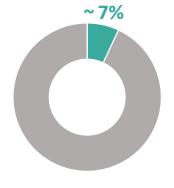
INVENTORY + ASSET REPLACEMENT VALUE



Regional Parks maintains

93 km of utility lines and
2430 utility point features
(e.g. valves, power poles, tanks, meters, etc.)

Asset Replacement Value \$20.3 Million



Utilities comprise 7% of the total value of regional park built assets

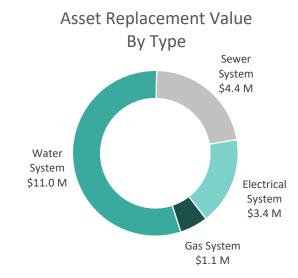
UTILITIES BY TYPE

Water Systems include pipes and point features such as tap-stands, fountains, hydrants, meters, valves, reservoirs, pumps, wells and treatment systems.

Sewerage Systems include pipes and point features including tanks, pumps and septic fields.

Electrical Systems include lines and point features such as poles, transformers, solar panels, generators, batteries, kiosks, outdoor plugs, meters and junction boxes.

Gas Systems are made up lines, and point features such as meters, tanks and valves.



WATER SYSTEMS



Key Features:

15 long service lines

5 water systems

66 access points to water

16 water treatment systems

	Asset Replacement Value	Number of Assets
Pipes	\$7,729,900	30km
Valves	\$880,900	814
Reservoirs	\$865,800	1 9
Outlets	\$755,500	448
Wells	\$560,000	3 4
Other	\$215,900	110
*Data Confidence: HIGH	\$11.0 M	Other includes: pumps, treatment systems, strainers, and meters

ELECTRICAL SYSTEMS

	Asset Replacement Value	Number of Assets
Lines		
Electrical	\$885,000	25 km
Data	\$520,000	26 km
Sub-total	\$1.4 M	51 km
Point Features		
Power Poles	\$1,433,000	232
Electrical kiosks	\$177,000	15
Energy Generation	\$157,000	9
Other	\$491,000	760
Sub-total	\$2.3 M	1016

*Data Confidence: MEDIUM \$3.7 M

Other includes: Panels/boxes, transformers, meters, lighting, inverters, switches, receptacles, and security cameras

SEWER SYSTEMS



Key Features

3.5km force mains

5.0km gravity lines

43 pumps in

27 pump stations

40 septic fields

	Asset Replacement Value	No. of Assets
Tanks	\$2,317,000	93
Sewer Lines	\$1,956,559	8.5 km
Distribution Boxes	\$121,000	38
Manholes	\$120,000	24
Cleanouts	\$5,500	11
*Data Confidence: LIGH	\$4.5 M	

*Data Confidence: HIGH \$4.5 M

GAS SYSTEMS

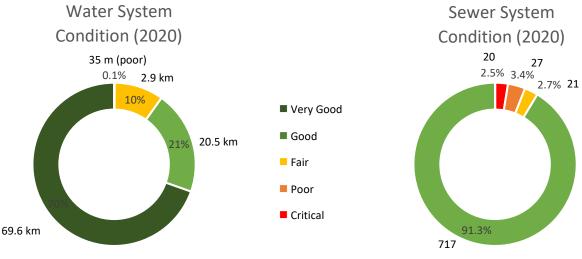
	Asset Replacement Value	Number of Assets
Pipes	\$1,071,000	3,967 m
Meters	\$7,100	39
Tanks	\$6,300	10
Valves	\$5,100	51
	44.4.4	

^{*}Data Confidence: HIGH \$1.1 M

ASSET CONDITION

Overall Condition

Fair



Data Confidence: HIGH - Condition based on line age

*Data Confidence: HIGH

- Individual elements inspected and rated



PROJECTED RENEWAL EXPENDITURE

Based on estimated service life, an average annual budget of \$360,000 is required to maintain utilities from 2021-2025. Based on the capital budget included with the 2021-2025 MVRD Financial Plan, a cumulative \$98,000 funding surplus is projected by 2025.

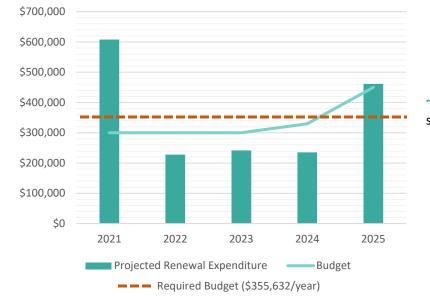
Over the 30-year term, an average annual budget of \$440,000 is required (based on estimated service life). A cumulative funding surplus of \$3.9 million is projected by 2050.

Current 5-year budget for Utilities (2021-2025 Financial Plan)

2021 \$300,000 2022 \$300,000 2023 \$300,000 2024 \$330,000

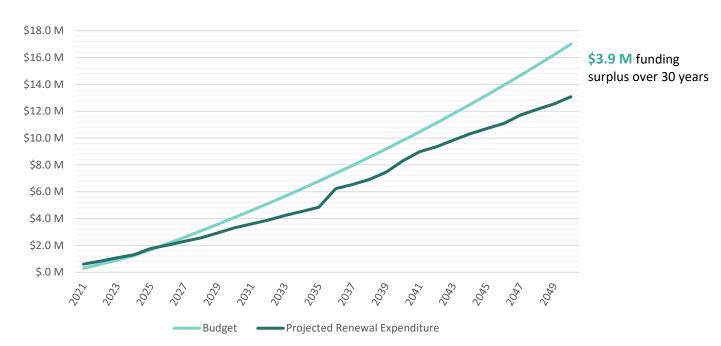
2025 \$450,000

5-Year Estimated Budget Requirements (replacements based on critical and poor condition ratings of assets)



~\$98 K funding surplus over 5 years

Accumulated 30-Year Projection (based on estimated service life of assets)



⁻ Current 5-year budget (2021-2025 MVRD Financial Plan) used in accumulated 30-year projection. 2026 to 2050 budget based on 2025 budget with a 2.3% increase per year.

^{- 2022} to 2050 required expenditures includes an increase of 2.3% per year.

UTILITIES (MAINTAINED BY OTHERS)

A range of utilities, maintained by other agencies, are located in regional parks (e.g. water and sewer mains, power lines, cellular transmission towers, etc.). These utilities are not inventoried through the asset management program.

APPENDIX

APPENDIX A: ASSET REPLACEMENT VALUE, RENEWAL COSTS, AND ESTIMATED SERVICE LIFE OF BUILT ASSETS TABLE

Note: Custom assets do not have a standard cost and are not shown in this table, but are accounted for in the State of the Assets Report.

BARRIERS

	!	Asset				Estimated	
Asset	Material/Type	Replacement	Cluit	Renewal	Unit	Service Life	Source
		Value				(years)	
Linear Barriers	Aluminum	\$155	per metre	\$155	per metre	40	Industry Research
Linear Barriers	Barrier Fence	\$215	per metre	\$215	per metre	20	Detailed Cost Estimate
Linear Barriers	Boulder	\$100	per metre	\$100	per metre	200	Current Market Pricing
Linear Barriers	Chainlink Fence	\$35	per metre	\$35	per metre	30	Current Market Pricing
Linear Barriers	Chainlink/Concrete Barrier Hybrid	\$175	per metre	\$175	per metre	40	Current Market Pricing
Linear Barriers	Concrete Jersey Barrier	\$78	per metre	\$78	per metre	50	Current Market Pricing
Linear Barriers	Concrete Lock Block	\$78	per metre	\$78	per metre	20	Current Market Pricing
Linear Barriers	Post and Chain	\$215	per metre	\$215	per metre	20	Detailed Cost Estimate
Linear Barriers	Post and Page Wire	\$16	per metre	\$16	per metre	30	Current Market Pricing
Linear Barriers	Post and Rail - Round Wood	\$55	per metre	\$55	per metre	30	Current Market Pricing
Linear Barriers	Post and Rail - Split Cedar	\$55	per metre	\$55	per metre	30	Current Market Pricing
Linear Barriers	Roadside Metal Guards	\$150	per metre	\$150	per metre	20	Detailed Cost Estimate
Linear Barriers	Simple Wood	\$55	per metre	\$55	per metre	30	Current Market Pricing
Linear Barriers	Stacked Split Rail - Cedar	\$90	per metre	\$90	per metre	30	Current Market Pricing
Linear Barriers	Steel Barrier	\$100	per metre	\$100	per metre	40	Industry Research
Non-Linear Barrier	Bollard - steel	\$500	each	\$500	each	40	Current Market Pricing
Non-Linear Barrier	Bollard - wood	\$330	each	\$330	each	15	Detailed Cost Estimate
Non-Linear Barrier	Boulder	\$200	each	\$200	each	200	Current Market Pricing
Non-Linear Barrier	Concrete Jersey Barrier	\$195	each	\$195	each	20	Current Market Pricing
Non-Linear Barrier	Concrete Lock Block	\$135	each	\$135	each	9	Current Market Pricing
Non-Linear Barrier	Man-gate - Aluminum	\$500	each	\$500	each	40	Industry Research
Non-Linear Barrier	Man-Gate - Chainlink 4'(1.2m)	\$500	each	\$500	each	30	Industry Research
Non-Linear Barrier	Man-Gate - Chainlink 6'(1.8m)	\$645	each	\$645	each	30	Industry Research
Non-Linear Barrier	Man-Gate - Chainlink 6'(1.8m) (double)	\$1,290	each	\$1,290	each	30	Industry Research
Non-Linear Barrier	Man-gate - wood basic	\$200	each	\$200	each	15	Industry Research
Non-Linear Barrier	Man-gate - wood intricate	\$500	each	\$500	each	15	Industry Research
Non-Linear Barrier	Metal Barrier	\$500	each	\$500	each	40	Industry Research
Non-Linear Barrier	Plastic Delineator Post	\$30	each	\$30	each	5	Current Market Pricing
Non-Linear Barrier	Vehicular Gate - Chainlink Cantilevered	\$15,000	each	\$15,000	each	30	Current Market Pricing
Non-Linear Barrier	Vehicular Gate - Electronic	\$10,000	each	\$10,000	each	15	Industry Research
Non-Linear Barrier	Vehicular Gate - Farm Gate (double lane)	\$2,000	each	\$2,000	each	40	Current Market Pricing
Non-Linear Barrier	Vehicular Gate - Farm Gate (single lane)	\$1,000	each	\$1,000	each	40	Current Market Pricing
Non-Linear Barrier	Vehicular Gate - Post & Chain	\$500	each	\$500	each	20	Detailed Cost Estimate
Non-Linear Barrier	Vehicular Gate - Steel (double lane)	\$12,400	each	\$12,400	each	30	Current Market Pricing
Non-Linear Barrier	Vehicular Gate - Steel (single lane)	\$6,200	each	\$6,200	each	30	Current Market Pricing
Non-Linear Barrier	Vehicular Gate - Wood (double lane)	\$1,000	each	\$1,000	each	15	Industry Research
Non-Linear Barrier	Vehicular Gate - Wood (Single Lane)	\$500	each	\$500	each	15	Industry Research
Non-Linear Barrier	Wood Barrier	\$500	each	\$500	each	20	Current Market Pricing

BRIDGES + BOARDWALKS

		Asset				Estimated	
Asset	Material/Type	Replacement	Unit	Renewal	Unit	Service Life Source	Source
		Value				(years)	
Boardwalks	Below Deck Elements (steel, concrete, or	\$1,000	per square metre	\$1,000	per square metre	40	Current Market Pricing
Boardwalks	Below Deck Elements (wood)	\$1,000	per square metre	\$1,000	per square metre	20	Current Market Pricing
Boardwalks	Decking and Railing (steel, concrete, or	\$500	per square metre	\$500	per square metre	40	Current Market Pricing
Boardwalks	Decking and Railing (wood)	\$500	per square metre	\$500	per square metre	15	Current Market Pricing
Bridges	Below Deck Elements (steel, concrete, or	\$1,500	per square metre	\$1,500	per square metre	40	Current Market Pricing
Bridges	Below Deck Elements (wood)	\$1,500	per square metre	\$1,500	per square metre	20	Current Market Pricing
Bridges	Decking and Railing (steel, concrete, or	\$500	per square metre	\$500	per square metre	40	Current Market Pricing
Bridges	Decking and Railing (wood)	\$500	per square metre	\$500	per square metre	15	Current Market Pricing
Bridges (Complex)	Below Deck Elements (steel, concrete, or	\$6,000	per square metre	\$6,000	per square metre	40	Current Market Pricing
Bridges (Complex)	Below Deck Elements (wood)	\$6,000	per square metre	\$6,000	per square metre	20	Current Market Pricing
Bridges (Complex)	Decking and Railing (steel, concrete, or	\$500	per square metre	\$500	per square metre	40	Current Market Pricing
Bridges (Complex)	Decking and Railing (wood)	\$500	per square metre	\$500	per square metre	15	Current Market Pricing

BUILDINGS

		Asset				Estimated	
Asset	Material/Type	Replacement Unit	Unit	Renewal	Unit	Service Life Source	Source
saniquing Park	Calculated from Individual Uniformat II Building Elements	varies	per square metre	varies	per square metre		varies Industry Standard
	1						
PARK FIXTURES							
		Asset				Estimated	
Asset	Material/Type	Replacement Unit	Unit	Renewal	Unit	Service Life Source	Source

tte		Asset				Estimated	
Asset	Material/Type	Replacement	Unit	Renewal	Unit	Service Life	Source
		Value				(years)	
Park Fixtures	BBQ Stands	\$350	each	\$350	each	30	Industry Research
Park Fixtures	Benches - Non-Standard	\$500	each	\$500	each	12	Current Market Pricing
Park Fixtures	Benches - Standard	\$2,200	each	\$2,080	each	25	Current Market Pricing
Park Fixtures	Bike Racks - Basic	\$100	each	\$100	each	40	Current Market Pricing
Park Fixtures	Bike Racks - Single	\$500	each	\$500	each	40	Current Market Pricing
Park Fixtures	Bike Racks - Standard	\$1,205	each	\$1,205	each	40	Current Market Pricing
Park Fixtures	Fire Pits	\$500	each	\$500	each	40	Industry Research
Park Fixtures	Hitching Rails - Single Post	\$100	each	\$100	each	25	Detailed Cost Estimate
Park Fixtures	Hitching Rails - Steel	\$550	each	\$550	each	40	Detailed Cost Estimate
Park Fixtures	Hitching Rails - Wood	\$200	each	\$200	each	25	Detailed Cost Estimate
Park Fixtures	Picnic Tables - Accessible	\$4,500	each	\$2,080	each	40	Current Market Pricing
Park Fixtures	Picnic Tables - Non-Standard	\$1,000	each	\$1,000	each	20	Current Market Pricing
Park Fixtures	Picnic Tables - Standard	\$4,000	each	\$2,080	each	40	Current Market Pricing
Park Fixtures	Solid Waste Containers - Ash Can	\$2,300	each	\$2,040	each	30	Current Market Pricing
Park Fixtures	Solid Waste Containers - Double (full)	\$2,200	each	\$1,709	each	30	Current Market Pricing
Park Fixtures	Solid Waste Containers - Double (mini)	\$2,100	each	\$1,692	each	30	Current Market Pricing
Park Fixtures	Solid Waste Containers - Single (full)	\$1,700	each	\$1,341	each	30	Current Market Pricing
Park Fixtures	Solid Waste Containers - Single (mini)	\$1,600	each	\$1,220	each	30	Current Market Pricing
Park Fixtures	Solid Waste Containers - Temporary Station	\$2,000	each	\$2,000	each	30	Current Market Pricing
Park Fixtures	Solid Waste Containers - Triple (full)	\$3,000	each	\$2,273	each	30	Current Market Pricing
Park Fixtures	Solid Waste Containers - Triple (mini)	\$2,800	each	\$2,150	each	30	Current Market Pricing

LAND PROTECTION

		Hasel				raniiionen	
Asset	Material/Type	Replacement	Unit	Renewal	Unit	Service Life	Source
		Value				(years)	
Land Protection	Culverts - Concrete over 0.5m diameter	\$500	each	\$500	each	40	Detailed Cost Estimate
Land Protection	Culverts - Concrete under 0.5m diameter	\$2,000	each	\$2,000	each	40	Detailed Cost Estimate
Land Protection	Culverts - HDPE/PVC over 0.61m diameter	\$1,400	each	\$1,400	each	15	Detailed Cost Estimate
Land Protection	Culverts - HDPE/PVC under 0.61m diameter	\$500	each	\$500	each	15	Detailed Cost Estimate
Land Protection	Culverts - Metal over 0.61m diameter	\$2,000	each	\$2,000	each	15	Detailed Cost Estimate
Land Protection	Dams (based on consequence rating and size)	varies	each	varies	each	varies	Consultant Assessments Completed
land Brotection		57 875	oper solliere metre	\$11.100	reavious	n	Asset Value: Industry Research
ralid riotection	DIVES	35,013	hei shaare illene	001,110	pei yeai	BII	Renewal: Current Market Pricing
- t			4	550,000		i i	Asset Value: Historic Inventory
רפנות גומוברוומנו	Diamage Lines	Valles	בפרוו	non'nee	pei yeai	Valles	Renewal Cost: Current Market Pricing
notation basi	Oranipana Structuras	Soires	dyce	varias	dyce	V	Asset Value: Historic Inventory
ralia riotection	בומווומפר טוותרוחוב	Valles	במרוו	Valles		2	Renewal: Estimate (based on 40-year
acition of the contract of the	400	roires	di co	noine.	4000	100	Asset Value: Historic Inventory
ralia riotection	Elosioli riotectioli	Valles	בפרוו	Valles	בפרוו	700	Renewal: Estimate (based on 100-year
Doctorios	Retaining Walls - Concrete (oversized	61 134	0.440	61 134	0.00	5	0 + 1 0 0 F 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
יפוות גומוברוומוו	retaining blocks)	+21,10	bei squain illenie	+71,10	hei shaare iiiene	2	Detailed Cost Estimate
Or desired barries	Retaining Walls - Concrete (standard	0000	0.440	6000	0.00	5	0 + 1 0 0 Follows
בפוום בוסוברווסוו	retaining blocks)	0000	hei shaaic iiicac	0000	per square mene	2	Detailed cost estimate
Land Protection	Retaining Walls - Sand Bags/Willow	\$702	per square metre	\$702	per square metre	20	Detailed Cost Estimate
Land Protection	Retaining Walls - Stone	\$817	per square metre	\$817	per square metre	35	Detailed Cost Estimate
Land Protection	Retaining Walls - Wood	\$565	per square metre	\$565	per square metre	25	Detailed Cost Estimate

							kenewai: Estimate (based on 100-year
Land Protection	Retaining Walls - Concrete (oversized retaining blocks)	\$1,124	per square metre	\$1,124	per square metre	20	Detailed Cost Estimate
Land Protection	Retaining Walls - Concrete (standard retaining blocks)	\$898	per square metre	\$898	per square metre	20	Detailed Cost Estimate
Land Protection	Retaining Walls - Sand Bags/Willow	\$702	per square metre	\$702	per square metre	20	Detailed Cost Estimate
Land Protection	Retaining Walls - Stone	\$817	per square metre	\$817	per square metre	35	Detailed Cost Estimate
Land Protection	Retaining Walls - Wood	\$565	per square metre	\$565	per square metre	25	Detailed Cost Estimate
Damm RECREATIONAL FACILITIES	ACILITIES						
		Asset				Estimated	
Asset	Material/Type	Replacement Value	Unit	Renewal	Unit	Service Life (years)	Source
Recreational Facilities	Baseball Fields	\$98,000	each	\$805	per year	na	Asset Value: Industry Research Renewal: Detailed Cost Estimate
Dorrostional Escilition		6369	0.000	ÇE 000	2007.000	č	Asset Value: Detailed Cost Estimate
אברובמנוסוומו ו מרווונובא	הפמרו	9900	per square mene	מחחירה	per year	B.	Renewal: Current Market Pricing
Recreational Facilities	Camping Pads/Group Camps - Gravel	\$45	per square metre	\$12	per square metre	10	Current Market Pricing
Recreational Facilities	Nature Play - large areas	\$35,000	each	na	na	na	Current Market Pricing
Recreational Facilities	Nature Play - large areas (gravel)	na	na	\$1,000	each	10	Current Market Pricing
Recreational Facilities	Nature Play - large areas (wood elements)	na	na	\$25,000	each	15	Current Market Pricing
Recreational Facilities	Nature Play - small areas	\$10,000	each	na	na	na	Current Market Pricing
Recreational Facilities	Nature Play - small areas (gravel)	na	na	\$500	each	10	Current Market Pricing
Recreational Facilities	Nature Play - small areas (wood elements)	na	na	\$5,000	each	15	Current Market Pricing
Decreational Facilities	(utival amos bas acis an based) sharrowiseld	neiren	drea	varion	reckied	varior	Asset Value: Historic Costs
עברו בפרוחוופו ו פרווורוב	riaygrodinas (based oli size alid complexity)	Nalley Nalley	בפרוו	Nall Co	per year	S I I I	Renewal: Park Staff Experience
Decreational Facilities	Plood	noire	dyce	varian	1000	20	Asset Value: Historic Costs/Industry Research
vericational Lacinities	500	Silby		CO IBA	per year	2	Renewal: Estimate (based on 20-year
Recreational Facilities	Tennis Courts	\$100,000	each	\$10,000	per year	10	Asset Value: Historic Costs
							Kenewal: Park Starr Experience

ROADS + PARKING LOTS

3	1000	Asset		1		Estimated	
Asset	Material/Type	Replacement	Unit	Renewal	Unit	Service Life Source	Source
		Value				(years)	
Roads	Gravel	\$65	per square metre	\$18	per square metre	18	Detailed Cost Estimate
Roads	Natural	\$7	per square metre	\$2	per square metre	40	Industry Research
Roads	Paved	\$250	per square metre	\$30	per square metre	30	Contractor Cost
Parking Lots	Gravel	\$30	per square metre	\$12	per square metre	18	Current Market Pricing
Parking Lots	Natural	57	per square metre	\$2	per square metre	40	Industry Research
Parking Lots	Paved	\$60	per square metre	\$30	per square metre	30	Current Market Pricing
Service Yards	Gravel	\$30	per square metre	\$18	per square metre	18	Current Market Pricing
Service Yards	Natural	57	per square metre	\$2	per square metre	40	Industry Research
Service Yards	Paved	\$60	per square metre	\$30	per square metre	30	Current Market Pricing
Misc. Hardened Surfaces Grave	Gravel	\$30	per square metre	\$18	per square metre	18	Current Market Pricing
Misc. Hardened Surfaces Paved	Paved	\$60	per square metre	\$30	per square metre	30	Current Market Pricing

kset	Material/Type	Asset Replacement Value	Unit	Renewal	Unit	Estimated Service Life (vears)	Source
Signs	Entry Signs - 1829 mm (6')	\$7,600	each	\$7,600	each	20	Current Market Pricing
v	Entry Signs - 2438 mm (8')	87,600	each	87,600	each	20	Current Market Pricing
Signs	Kiosks - 1219 mm (4')	\$4,900	each	\$4,900	each	20	Current Market Pricing
Signs	Kiosks - 2438 mm (8')	\$6,300	each	\$6,300	each	20	Current Market Pricing

Operational Structures, Viewing Structures, varies per square metre varies Water Access Structures Stair Structures \$1,500 per metre \$1,500	Asset	Material/Type	Asset Replacement Value	Unit	Renewal	Unit	Estimated Service Life (years)	Source	
Stair Structures \$1,500 per metre \$1,500 per metre 30	Structures	Operational Structures, Viewing Structures, Water Access Structures	varies	per square metre	varies	per square metre		Asset Value: Historic Costs/Current Market Pricing	
	Structures	Stair Structures	\$1,500	per metre	\$1,500	per metre	30	Current Market Pricing	

TRAILS

Asset Material/Type Replacement Value Unit Service Life (years) Source (years) Trails Beach Accessibility Path (road/trail) \$117 per square metre (317) \$127 per square metre (318) \$12 per square metre (318) \$12 per square metre (318) \$13 current Market Pricing (corrent Market Pricing (318) current Market Pricing (318		5 5	Asset				Estimated	
Beach Accessibility Path \$117 per square metre 7 7 Gravel (road/trail) \$65 per square metre \$12 per square metre 18 Gravel (trail) \$45 per square metre \$18 per square metre 18 Natural \$7 per square metre \$2 per square metre 40 Paved \$15 per square metre \$2 per square metre 30	Asset	Material/Type	a	Unit		Unit	Service Life (years)	Source
Gravel (road/trail) \$65 per square metre \$12 per square metre 18 Gravel (trail) \$45 per square metre \$18 per square metre 18 Natural \$7 per square metre \$2 per square metre 40 Paved \$15 per square metre \$55 per square metre 30	Trails	Beach Accessibility Path	\$117	per square metre	\$117	per square metre	7	Current Market Pricing
Gravel (trail) \$45 per square metre \$18 per square metre 18 Natural \$7 per square metre \$2 per square metre 40 Paved \$115 per square metre \$55 per square metre 30	Trails	Gravel (road/trail)	\$65	per square metre	\$12	per square metre	18	Current Market Pricing
Natural \$7 per square metre \$2 per square metre 40 Paved \$115 per square metre \$55 per square metre 30	Trails	Gravel (trail)	\$45	per square metre	\$18	per square metre	18	Current Market Pricing
Paved \$115 per square metre \$55 per square metre 30	Trails	Natural	\$7	per square metre	\$2	per square metre	40	Industry Research
	Trails	Paved	\$115	per square metre	\$55	per square metre	30	Current Market Pricing

UTILITIES

		Asset				Estimated	
Asset	Material/Type	Replacement Value	Unit	Renewal	Unit	Service Life (years)	Source
Electrical System	Power Generation - Generators, batteries, solar panels					10 to 25	based on Engineer's estimate
	Power system - all electrical lines, based on						
Electrical System	the fact that there are a lot of short service lines maintained by BC Hydro, and \$75 per	\$35	per metre	\$35	per metre	30	Current market pricing
	meter for longer line						
Electrical System	Power system - lamp pole (wood)	\$2,000	each	\$2,000	each	30	Current market pricing
Electrical System	Power system - large kiosk	\$5,000	each	\$5,000	each	30	Current market pricing
Electrical System	Power system - Meter	\$181	each	\$180	each	30	Current market pricing
Electrical System	Power system - other kiosk		each		each	30	based on Engineer's estimate
Electrical System	Power system - Pole	\$6,000	each	\$6,000	each	30	Current market pricing
Electrical System	Power system - Pole with transformer	\$7,643	each	\$7,643	each		
Electrical System	Power system - pull box in ground	\$300	each	\$300	each	30	Current market pricing
Electrical System	Power system - small electrical box on post (Brae Island)	\$500	each	\$500	each	30	Current market pricing
99 Electrical System	Power system - small kiosk	\$3,000	each	\$3,000	each	30	Current market pricing
O Electrical System	Power system - switch	\$2,600	each	\$2,600	each	30	Current market pricing
© Electrical System	Power system - transformer	\$4,750	each	\$4,750	each	30	Current market pricing
B Electrical System	Communication system - all lines, in ground and overhead	\$20	each	\$20	each	30	Current market pricing
S Gas System	Lines	\$270	per metre	\$270	per metre	80	Current market pricing
Gas System	Meters	\$181	each	\$181	each	80	Current market pricing
Gas System	Tanks - small	\$400	each	\$400	each	80	Current market pricing
Gas System	Tanks - large	\$850	each	\$850	each	80	Current market pricing
i Gas System	Valve	\$100	each	\$100	each	80	Current market pricing
a Sewer System	Cleanouts	\$500	each	\$500	each	50	Industry Standard
O Sewer System	Distribution Boxes	\$3,000	each	\$3,000	each	50	Industry Standard
Sewer System	Forcemains	\$300	per metre	\$300	per metre	50	Current Market Pricing
Sewer System	Gravity Pipe	\$165	per metre	\$165	per metre	50	Current Market Pricing
Sewer System	Main	\$220	per metre	\$220	per metre	50	Current Market Pricing
Sewer System	Perforated Pipe	\$200	per metre	\$200	per metre	50	Current Market Pricing
Sewer System	Manholes	\$5,000	each	\$5,000	each	20	Industry Standard
Sewer System	Tank - Standard	\$17,000	each	\$17,000	each	20	Industry Standard
Sewer System	Tank - Large	\$50,000	each	\$50,000	each	20	Industry Standard

UTILITIES (continued)

400 each 2500 each 200 each 1500 each 1500 each 1500 each 1500 each 1500 each 1000 each 1000 each 2000 each 1000 each 2000 each 2000 each 300000 each 200 each 200 each 300 each 100 each 200 each 300 each 400 each 1000 each 400 each 400 each 400 each 1000 each 400 each 400 each 400 each 400 each 400 each 400 e		400 each		20 20	Double cost to purchase
Water System Outlet - Standplip E Symm on tall post with 1500 each Water System Outlet - Standplip E Symm on tall post with 1500 each Water System Outlet - Standplip E on small post (hand tap- 200 each Water System Outlet - Standplip E on small post (hand tap- 1500 each Water System Outlet - Water System 1500 each Water System Outlet - Unit all post with multiple 1500 each Water System Outlet - Unit all post with multiple 1500 each Water System Outlet - Unit all pump pump pump 200 each Water System Outlet - Unit all pump pump pump 200 each Water System Pump - Gobble well pump system (ALD) 1500 each Water System Reservoir - Relating reservoir Milit P Pine 30000 each Water System Reservoir - Stem Pump - Gobble well pump system (ALD) 1500 each Water System Reservoir - Relating reservoir Milit P Pine 3000 each Water System Reservoir - Relating reservoir Milit P Pine<				I	
Water System Outlet - Standpipe or Small post (with app. 200 each Water System Outlet - Standpipe or Small post (hand tap. 200 each Water System Outlet - Standpipe or Small post (hand tap. 200 each Water System Outlet - Thank tap must shall be with multiple 1500 each Water System Outlet - Thank tap must shall be with multiple 1500 each Water System Outlet - Tingation large sprinkter head (ALD) 1000 each Water System Outlet - Tingation large sprinkter head (ALD) 1000 each cach Water System Outlet - Tingation large sprinkter head (ALD) 1000 each cach Water System Pump - well pump pump system (ALD) 1000 each cach Water System Pump - well pump may system (ALD) 1000 each cach Water System Pump - well pump may system (ALD) 1000 each cach Water System Reservoir - Relating reservoir Mitte Pine 2000 each cach Water System Reservoir - Settlem seervoir Mitte Pine 2000 each cach cach cach cach cach cach cach		2500 each		15 Cu	Current market pricing
Water System Outlet - Standpile on small post (hand rapport post or marker System) Outlet - Standpile on small post (hand rapport post or marker System) Outlet - Stand United and Stand Water System) Outlet - Stand (apport 25mm with sump 1500 each Water System Outlet - Individual accessible with multiple 1500 each 1500 each Water System Outlet - Tife Molant accessible with multiple 1500 each each Water System Outlet - Tife Molant accessible with multiple 1500 each each Water System Outlet - Tife Molant accessible with multiple 1500 each each Water System Dunip - Goolbe well pump system (ALD) 1500 each each Water System Pump - Goolbe well pump system (ALD) 1500 each each Water System Reservoir - Mide or reservoir Will the Pline 30000 each each Water System Reservoir - Mide or reservoir Will the Pline 3000 each each Water System Reservoir - Stall access reservoir Will the Pline 3000 each each Water System <td< td=""><td></td><td>1500 each</td><td></td><td>30 Cu</td><td>Current market pricing</td></td<>		1500 each		30 Cu	Current market pricing
Water System Outlet - Yand Hydrant Zinm with sump 1500 each Water System Outlet - Hand tap of the Water System 200 each Water System Outlet - Lournain accessible with multiple 1500 each Water System Outlet - Fire hydrant current pump 1500 each Water System Outlet - Fire hydrant care sprinkler head (ALD) 1500 each Water System Outlet - Fire hydrant care sprinkler head (ALD) 1500 each Water System Pump - wall circuitation or sump pump 1500 each Water System Pump - wall we Couldle well pump system (ALD) 1500 each Water System Reservoir - Elicara reservoir Minit Pine 3000 each Water System Reservoir - Elicara reservoir Willing Pine 3000 each Water System Reservoir - Elicara reservoir Williegon System Value - System V		200 each		30 Dc	Double cost to purchase
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Valve - 18-38mm in bvld 200 per metre Well - active, including electrical and waterline in core 25000 each				\neg	Current market pricing
Well - active, including electrical and 25000 each waterline in core			per metre 70	70 to 80 Cu	Current market pricing
		25000 ea	each 1	100 Cu	Current market pricing
Water System Well - on our property but risk we may need to 5000 each 0	2000	0 each		100 Cu	Current market pricing







To: Finance and Intergovernment Committee

From: Mike Redpath, Director, Regional Parks

Jamie Vala, Division Manager, Planning and Engineering Services, Regional Parks

Date: April 2, 2019 Meeting Date: April 10, 2019

Subject: Regional Parks Asset Management Policy

RECOMMENDATION

That the MVRD Board approve the *Asset Management for Regional Parks Policy* as presented in the report dated April 2, 2019, titled "Regional Parks Asset Management Policy".

PURPOSE

To present for MVRD Board consideration and approval the *Asset Management Regional Parks Policy,* which will establish asset management principles and a framework to balance asset performance, risk and cost that supports the long-term provision of Regional Parks Service.

BACKGROUND

In 2018, asset management policies for the Metro Vancouver Housing Corporation (MVHC) and Liquid Waste Services were adopted by the MVHC and Greater Vancouver Sewerage and Drainage District (GVS&DD) Boards, as part of the work underway across the organization to develop an overall asset management program and series of asset management policies for all Metro Vancouver functions. Development of an asset management policy for Regional Parks is on the 2019 Regional Parks Committee Work Plan.

This report brings forward the *Regional Parks Asset Management Policy* for consideration by the Finance and Intergovernment Committee and the MVRD Board. The Policy has also been reviewed for input by the Regional Parks Committee and the Performance and Audit Committee in advance of this meeting.

ASSET MANAGEMENT IN REGIONAL PARKS

Metro Vancouver Regional Parks manages a system of regional parks, regional greenways, ecological conservancy areas and regional park reserves. Building new infrastructure and maintaining existing assets in a state of good repair is critical to the success of Regional Parks. Good infrastructure stewardship enables Metro Vancouver to provide quality and affordable services to the community. Metro Vancouver Regional Parks infrastructure is a public investment distributed over 13,600 hectares of land across the region.

Asset Management is the process of monitoring and maintaining assets with the objective of providing the best possible service to users. It is a systematic process of deploying, operating, maintaining, upgrading, and disposing of assets cost-effectively.

Finance and Intergovernment Committee Regular Meeting Date: April 10, 2019

Regional Parks in Metro Vancouver have evolved and matured significantly since their establishment as part of the Vancouver Fraser Park District in 1967. Today, fifty-two years into the future, MVRD continues to implement resource management practices throughout the Regional Parks system.

Since 2000, Regional Parks has collected asset information in a central inventory, and conducted inspections on asset categories. A project to complete the asset inventory and undertake condition assessments was initiated in 2018 and is estimated to be substantially complete by the end of 2019.

Asset management is an integrated approach involving all levels of the organization that translates the organization's objectives into asset related decisions, plans and activities using a risk based approach in order to maximize benefits, reduce risks and provide the desired performance of assets in a sustainable manner over their full life cycle, considering both current and future needs. Asset related decision-making is evidence based and supports the delivery of clearly defined performance measures.

PROPOSED ASSET MANAGEMENT POLICY

The proposed Asset Management for Regional Parks Policy contains the following key areas that will guide the management of assets within regional parks:

- Asset Management Principles
- Asset Classes
- Asset Data and Information
- Asset Likelihood of Failure
- Consequence of Asset Failure
- Asset Risk & Lifecycle Management Strategies
- Asset Levels of Service
- Asset Management Plan
- Continuous Improvement

The principles and evaluation criteria outlined in the proposed policy will assist staff in implementing the direction of the MVRD Board by ensuring that the appropriate asset management principles are adopted as a core business model that promotes continuous improvement. The policy provides asset management principles that balance asset performance, risk and the cost that supports the long term provision of Regional Parks service. This is a strong mandate and catalyst for business improvement activities and a basis to develop asset management related objectives that align with Metro Vancouver's overarching strategic objectives.

The Regional Parks Committee considered the Asset Management for Regional Parks Policy at its meeting on March 13, 2019. The committee subsequently endorsed the policy and provided no additional comments. The policy is also being reviewed by the Performance and Audit Committee on April 10, 2019.

ALTERNATIVES

1. That the MVRD Board approve the Asset Management for Regional Parks Policy as presented in the report dated April 2, 2019, titled "Regional Parks Asset Management Policy".

2. That the MVRD Board receive for information the report dated April 2, 2019, titled "Regional Parks Asset Management Policy" and provide alternate direction to staff.

FINANCIAL IMPLICATIONS

If the MVRD Board approves alternative one, the policy will be implemented within existing resources and without additional immediate costs to Metro Vancouver. Over the next five years, additional effort will be required to improve the coverage and accuracy of asset data and information, through condition and risk assessments as well as software improvements to manage the wealth of data, streamline current maintenance activities and use that data to guide decisions regarding long-term infrastructure investments. Over the longer term, costs for the Asset Management Program are anticipated to be offset by maximizing the lifespan of assets and avoiding costs for reactive asset repair and replacement.

Following the completion of the asset inventory project, staff will develop a long term asset management plan that will include the long term financial implications. Any implications will be reviewed through the regular budgeting process.

SUMMARY / CONCLUSION

The goal of the proposed Asset Management for Regional Parks Policy is to balance asset performance, risk, and cost. This policy outlines MVRD's commitment and methodology to manage regional parks assets in a manner that minimizes asset failure risks and impacts to park users while optimizing the life cycle of assets. The policy will guide Regional Parks to meet asset performance targets within a specified budget and enable evidence based decision making with respect to infrastructure rehabilitation and replacement.

Staff recommend Alternative 1, that the MVRD Board approve the *Asset Management for Regional Parks Policy*.

Attachment (28480238)
Asset Management for Regional Parks Policy

28642776

ATTACHMENT BOARD POLICY



ASSET MANAGEMENT FOR REGIONAL PARKS

Effective Date:

Approved By: MVRD Board

PURPOSE

To establish asset management principles and a framework that balances asset performance, risk, and cost in the provision of Regional Parks Service.

POLICY

Metro Vancouver Regional Parks manages a system of regional parks, regional greenways, ecological conservancy areas, and regional park reserves. Regional Parks' mandate is to protect natural areas and connect people to them; therefore, inherent to this asset management Policy is the need to systematically protect and monitor both natural and built assets.

This Policy outlines Metro Vancouver's commitment to manage Regional Parks assets in a manner that minimizes asset failure risks and impact to visitors, optimizes the life cycle value of assets to consistently meet asset performance targets, and enables integrated, evidence based decision making, to continuously provide quality regional park services and protect the natural areas.

NATURAL ASSETS

Natural assets, such as forests, wetlands, rivers and estuaries, provide ecosystem services which are the essential benefits that nature provides humans. These services support life, enhance security, and improve quality of life for humans and other organisms.

Natural assets such as wetlands, ponds, and restored forested or riparian areas can also be constructed to improve ecosystem function. Whether they are naturally occurring or they have been constructed, these assets must be operated and maintained. However, if managed appropriately, natural assets do not require replacement.

As the tools and methodologies for quantitatively assessing natural assets evolve, Regional Parks will determine how best to inventory and assess natural assets in order to ensure these assets can be managed in accordance with the principles set out in this Policy.

BUILT ASSETS

Built assets have been constructed/engineered to protect natural assets and enable people to connect to regional parks. For example, buildings, bridges, and trails help in the delivery of regional parks services, and retaining walls and barriers help protect natural assets.

ASSET MANAGEMENT PRINCIPLES

The following principles guide the methodology for managing regional parks assets:

- a) Integrated: a comprehensive approach that examines the combined implications of managing all aspects of the asset life cycle. This includes interdependencies of assets or asset systems.
- b) Risk-based: manage asset risk relative to defined performance targets and consequence of asset failure, and focus expenditures and priorities on risk and associated cost and benefit.
- c) Sustainable: a long-term approach to estimating asset investment and activities, which will better enable assets to meet future challenges, including changing demographics, legislative requirements and technological, financial and environmental factors.
- d) Fiscally Responsible: activities and decisions aim to reduce asset ownership life cycle costs and meet defined asset performance targets.
- e) Systematic: a formal, consistent, repeatable and methodical approach to the management of assets.
- f) Innovative: continuous improvement in asset management by examining new tools, technologies, practices and solutions.

ASSET CLASSES

This Policy is applicable to the management of Regional Parks assets. Built asset classes include:

Recreational Facilities

2. Buildings and Structures

3. Trails

4. Land Protection

5. Bridges and Boardwalks

6. Utilities

7. Roads and Parking Lots

8. Barriers

9. Signage

10. Park Fixtures

ASSET DATA AND INFORMATION

To measure performance of regional parks built assets, Regional Parks will develop and maintain an asset registry with comprehensive and accurate asset data and information. Data will be organized in a structured manner so that it can be stored, analyzed and reported at an adequate level for different business needs. Integrity of the data shall be monitored, updated and maintained to provide accurate asset information.

The Regional Parks Asset Registry will include at a minimum, the following:

- Asset class
- Asset location (e.g. park, geospatial reference)
- Asset details (e.g. material, size, install / construction date)
- Asset identification (e.g. type, number, description)
- Consequence of asset failure
- Financial information (e.g. estimated replacement cost)
- Asset condition and estimated service life

ASSET PERFORMANCE AND LIKELIHOOD OF FAILURE

Regional Parks will manage each built asset in accordance with clearly defined condition assessment metrics and targets. Condition information is used as an indicator of an assets' likelihood of failure. Regional Parks asset performance categories, key performance indicators, and targets are provided in the table below.

Performance	Performance	Key Performance	Performance Target
Category	Category	Indicator (KPI)	
	Definition		
Condition	Condition of assets (excluding buildings)	Condition Score (see table below)	The performance target for condition score is 3 or better.
Condition (buildings)	Condition of building assets	Facility Condition Index (FCI)	The performance target for FCI is a condition score of 4 or better.

For all built asset classes, excluding buildings, Regional Parks will use a 1 to 5 condition scoring system in accordance with the general table below, specifics will vary by asset class. When condition information is not available, an age based remaining service life will be used as a proxy for asset condition. Condition information will be stored in the asset register at a level most practical to capture and maintain the condition data. Regional Parks will develop asset specific descriptions based on the table below to enable assignment of 1 to 5 condition scores for all built assets.

Condition Score		Description	
1	Very Good	New or Excellent condition, no apparent defects.	
2	Good	Asset is in good state of repair, possible minor defects that do not detract from functionality.	
3	Fair	Asset is operational, but non-critical defects are apparent.	
4	Poor	Asset requires replacement or major repair, functionality is affected and failure is possible.	
5	Critical	Asset is past the point of economic repair, is defective, or non-functional, and should be replaced, repaired, decommissioned, or removed.	

For the buildings asset class, Regional Parks will use Facility Condition Index (FCI), which is an industry standard infrastructure risk metric used to track condition performance of facilities and portfolios.

ASSET CRITICALITY AND CONSEQUENCE OF FAILURE

Consequence of asset failure is considered in planning built asset replacement, rehabilitation, decommissioning, removal, operations and maintenance strategies as well as alternative risk mitigation strategies (e.g. emergency preparedness and response planning). High consequence assets (e.g. buildings, bridges, utilities) have the potential for significant impact on services if they fail. Low consequence assets (e.g. split rail fence) will have low or no impact on services if they fail. As there is

less tolerance to asset failure for high consequence assets, they will be monitored more frequently and have higher priority for asset inspection and improvement work than medium or low consequence assets. The information outlined in the table below will be considered to determine asset consequence of failure.

Consequence of Failure Criteria (Criticality)				
Health & Safety	Risk of injuries, illness, or death			
Security	Protect site or people from external forces			
Service Impact	Reduces Level of Service			
Energy & Operational Savings	Impacts on energy use/operations and maintenance costs			
Accessibility Opportunity	Appropriate time to improve access/universal design			
Regulatory Requirement	Required by provincial or other legislation or regulation			
Environmental Risk	Impacts to ecosystems			

ASSET RISK AND LIFECYCLE MANAGEMENT STRATEGIES

Managing risks associated to the assets is essential for maintaining expected Regional Parks service levels. Risk is the combination of likelihood and consequence of a failure event occurring:

Risk = Likelihood x Consequence

Asset risk will be monitored to ensure that asset performance is within targets. When asset data and information indicates that an asset is failing to meet performance target(s), Regional Parks staff will identify the relative consequence if the asset fails, assess the risk and identify options to address the risk. Risk mitigation options could include asset replacement, rehabilitation, decommissioning, removal, modified operations and maintenance strategies as well as modified emergency preparedness and response planning.

In evaluating different options, economic, social, and environmental benefits will be considered for each option. Total asset life cycle costs including capital investment, expenditures related to operations and maintenance of the asset as determined by Regional Parks Levels of Service and decommissioning costs will also be considered.

Where infrastructure investment is required, Regional Parks will consider opportunities to address other needs or future requirements (e.g. improved capacity, accessibility, environmental stewardship, etc.) consistent with integrated infrastructure investment planning.

LEVEL OF SERVICE

Levels of service describe the standard of service to be delivered to regional parks users based on parameters that reflect social, political, economic and environmental outcomes.

Regional Parks will define and quantify the levels of service within each asset class. These levels of service will be indicators of asset needs and be used for planning, operational resource management and investment decision making.

ASSET MANAGEMENT PLAN

Regional Parks will have an asset management plan to summarize asset performance data and information, including a summary of performance risks. The Asset Management Plan will be organized by asset class and will outline the risk mitigation strategies, including capital investments, operating and maintenance strategies and emergency response strategies. The Asset Management Plan will be updated on a regular schedule at a minimum of every 5 years.

CONTINUOUS IMPROVEMENT

Regional Parks will examine, monitor, identify, and address asset management improvement opportunities to enhance asset management tools, technologies, and business practices. Staff will be properly trained to support asset management activities, from assessing asset condition to renewing assets to improve asset performance.



To: Regional Parks Committee

From: Mike Redpath, Director, Regional Parks

Date: January 20, 2021 Meeting Date: February 10, 2021

Subject: Manager's Report – Regional Parks

RECOMMENDATION

That the Regional Parks Committee receive for information report dated January 20, 2021, titled "Manager's Report – Regional Parks".

EXECUTIVE SUMMARY

The Regional Parks Committee Work Plan for 2021 is attached for information. The status of work program elements is indicated as pending, in progress or complete. The listing is updated as needed to include new issues that arise, items requested by the Committee and changes in the schedule.

REGIONAL PARKS CAPITAL DEVELOPMENT UPDATE

Regional Park Service Yards

Capilano, Crippen and Pacific Spirit Regional Park service yards are scheduled for replacement in 2021. These upgrades will ensure continued safe and efficient operation, maintenance and stewardship of regional park sites.

Campbell Valley Management Plan Implementation

A multidisciplinary team is guiding the implementation of the 2020 MVRD Board approved park management plan. The scope of this project includes expanding the trail and greenway network, improving park access and ecology, enhancing the Little River Bowl area, and developing and opening McLean Pond for public access. The project will proceed from 2021-2024. Priorities for 2021 include developing a phasing strategy, completing park concept design and permitting, and implementing priority trail and access improvements.

Derby Reach Edgewater Bar Washrooms

The purpose of this project is to establish a full service washroom facility at Edgewater Bar in Derby Reach Regional Park. Environmental and Agricultural Land Reserve permit applications have been submitted. Preload will proceed in 2021 with construction of the washroom facility to follow in 2022.

Grouse Mountain Trail and Amenity Improvements

In 2020 the Government of Canada and Province of BC announced a \$2.5 million grant for the Grouse Mountain Trail and Amenity Improvement Project under the Investing in Canada Infrastructure Program. The purpose of the project is to implement the park management plan, and improve access and safety for park users. Trail enhancements to the Grouse Grind and BCMC Trail will continue through 2021. Design of the enhanced trailhead, secondary trail connections and rest areas will also proceed this year.

Widgeon Marsh Regional Park Development

The process to design and develop Widgeon Marsh Regional Park is moving forward. A multidisciplinary team is advancing technical studies, phasing plans and park design to guide development and ecological enhancements.

Regional Parks staff are working closely with the City of Coquitlam on rezoning and permitting requirements. A rezoning application will be submitted in the first quarter of the year. Regional Parks staff continue to engage First Nations in sharing information, seeking input and exploring opportunities for collaboration. An archaeological impact assessment is underway for all development areas in the park.

Implementation of the project will proceed from 2021-2023. An application to the Investing in Canada Infrastructure Program – Community, Culture and Recreation Program for funding to advance park development in 2021/2022 was submitted in October 2020. Phase 1 Implementation, planned for 2021, will focus on upgrades on existing infrastructure and trails.

CAMPBELL VALLEY REGIONAL PARK - LITTLE RIVER LOOP BOARDWALK TREE DAMAGE AND REPAIRS

On January 3, 2021, due to heavy rainfall and winter storms, a western red cedar tree fell down on the east side of the Little River Loop trail boardwalk. The tree had a substantial root ball located beneath an elevated boardwalk that spanned the low wet sections of the trail. When the tree fell, the roots lifted and significantly damaged approximately 12 meters (40 feet) of boardwalk. Regional Parks staff immediately assessed the damage and closed the trail until repairs were completed.









Repaired Boardwalk at Campbell Valley Regional Park

CAPILANO RIVER REGIONAL PARK – 500- YEAR OLD TREE DAMAGE

Capilano River Regional Park, located in the Districts of North Vancouver and West Vancouver, is known for its towering trees. Sadly, one of the biggest trees succumbed to laminated root rot (a natural process), and recently fell on December 8, 2020. Estimated at around 500 years old, this giant tree was a familiar sight to park visitors on the Giant Fir Trail. At almost two meters in diameter and about 58 meters high, the tree survived centuries of fierce storms, raging fires, insect attacks as well as logging in the early 1900s.

Fortunately, three other old-growth giant trees still remain in the park as do other significant second-growth Douglas firs.

The fallen tree will remain in place and begin the natural process of giving back to the forest ecosystem. Beetles, wood-borers and other insects have already begun breaking down the wood. Birds, squirrels and other creatures will make their home in the hollowed out spaces (and feed on the insects).

The nutrients contained in the fallen tree will eventually be released back into the forest floor, and will be used by surrounding trees.



Capilano River Regional Park

COLONY FARM REGIONAL PARK – TRANS MOUNTAIN EXPANSION PROJECT TEMPORARY WORKSPACE AGREEMENT

In late Spring of 2020, Trans Mountain Expansion Project advised Metro Vancouver that they required temporary use of approximately 11 acres of Colony Farm Regional Park. On January 21, 2021, Trans Mountain served Metro Vancouver with a 45-day Notice to Commence Work, with an expected entry into Colony Farm Regional Park on or around March 8. This Notice is a requirement under the terms of Temporary Workspace and Access Agreement that was approved by the Metro Vancouver Board.

Over the past month, Metro Vancouver staff and Trans Mountain representatives have been meeting weekly to discuss topics including site specific environmental matters, public communications, and security concerns. Metro Vancouver is waiting on the site specific environmental management plan from Trans Mountain for further review and comment. Once Trans Mountain moves onto the site the west perimeter trail will be closed to the public until work is completed.

Metro Vancouver has met with the Colony Farm Park Association (CFPA) and the Burke Mountain Naturalists (BMN) on several occasions to understand their concerns and to plan for future meetings. It is expected that the knowledge shared from the meetings with CPFA and BMN will assist Trans Mountain in developing their restoration plan. Trans Mountain is also engaging Kwikwetlem First Nation, with Metro Vancouver's involvement, as the impacted park lands are within Kwikwetlem First Nation's core territory.

REGIONAL PARKS PROGRAMS

Regional Parks Animal Webinars

With record visitation at Regional Parks during COVID- 19, the park interpretation team is striving for new ways to connect people to nature by modifying in-park programs to virtual formats. As part of this strategy, new online webinars have been developed to educate people about the unique wildlife in Regional Parks. These interactive, nature-based webinars connect many community groups, such as Girl Guides, home learners and seniors, who are not able to meet in-person or visit regional parks.

In a webinar called Bear IQ, a park interpreter explained the life of a black bear to a Girl Guides group through a virtual walk. Viewers found out how to co-exist at home, in parks and while camping with these intelligent animals by learning about bear diet, habits, and the signs they leave behind.

Due to high interest, two new webinars will be offered soon: "Wonders of Owls", that explores the lives of these elusive raptors, and "Calling for Coyotes" that enlightens viewers about coyote calls, their survival in the wild, and their adaptation to city life. Walks in regional parks will also be paired with these to showcase where these animals live.

The Park Interpretation team will continue to provide nature-based programs both in-park when possible and virtually, in order to keep our community members connected to nature and for their mental health during these stressful times.

Attachment

Regional Parks Committee 2021 Work Plan

43484377

Regional Parks Committee 2021 Work Plan

Report Date: February 10, 2021

Priorities

1 st Quarter	Status
Regional Parks Park Partnership Program Update	In Progress
Regional Parks State of Assets	In Progress
Regional Parks Permit Framework	In Progress
Visitor and Parking Capacity Management Update	In Progress
Regional Parks Program and Interpretation update	Pending
Widgeon Marsh Regional Park Development Update	Pending
Burnaby Lake Regional Park – Agreement with the City of Burnaby Update	In Progress
Regional Parks Building Strategy Update	Pending
2 nd Quarter	
Regional Parks Annual Report for 2020	Pending
Regional Parks Capital Development Update	Pending
Widgeon Marsh Regional Park Development Update	Pending
Burnaby Lake Regional Park – Agreement with the City of Burnaby	In Progress
Delta Nature Reserve Management Plan – Phase 1 Engagement	Pending
Bylaw Amendment for Land Dedication	Pending
Regional Parks Plan Update	Pending
Brunette Fraser Greenway Sapperton Opening	Pending
Pacific Parklands Foundation Update	Pending
Hazard Tree Management Update	Pending
Grouse Mountain Regional Park Grant Update	Pending
Visitor and Parking Capacity Management Update	Pending
3 rd Quarter	
Regional Parks Committee Tour of Regional Parks	Pending
Widgeon Marsh Regional Park Development Update	Pending
Metro Vancouver 2021 Regional Parks PNE Display Update	Pending
Regional Parks Building Strategy	Pending
Asset Management Plan	Pending
Visitor and Parking Capacity Management Update	Pending
Review/Renew Park Association Contribution Agreements	Pending
4 th Quarter	
Regional Parks Development Cost Charge Program	Pending
Widgeon Marsh Regional Park Development Update	Pending
Regional Parks Park Partnership Program Review	Pending
Visitor and Parking Capacity Management Update	Pending
Regional Parks Annual Budget and 5-year Financial Plan	Pending
Regional Parks Regulation Amending Bylaw	Pending
Crippen Regional Park - Dorman Point Concept Plan Update	Pending
Regional Parks Natural Assets	Pending
Forest Health Results Study Update	Pending
Alternative Transportation Study – Phase 2	Pending
Regional Parks Capital Development Update	Pending

Status = Pending, In Progress or Completed

METRO VANCOUVER REGIONAL PARKS Upcoming Events February 2021

DATE **UPCOMING EVENTS**

09 FEB 2021 **Piper Spit Bird Count**

BURNABY LAKE REGIONAL PARK

Wheel of Nature Quiz Game

ONLINE

15 FEB 2021 **Family Day Campfire**

PACIFIC SPIRIT REGIONAL PARK

Once Upon a Forest (Self guided)

BELCARRA REGIONAL PARK

18 FEB 2021 **Wonders of Owls: Webinar**

ONLINE

Wonders of Owls: Walk 19 FEB 2021

ALDERGROVE REGIONAL PARK

20 FEB 2021 **Barefoot Bears Walk**

KANAKA CREEK REGIONAL PARK

^{*}Note: For more information on Regional Parks Programs & Events, please visit http://www.metrovancouver.org/events/calendar