Current State Report

VanSplash: Vancouver Aquatics Strategy

NOVEMBER 2017

Vancouver Board of Parks and Recreation

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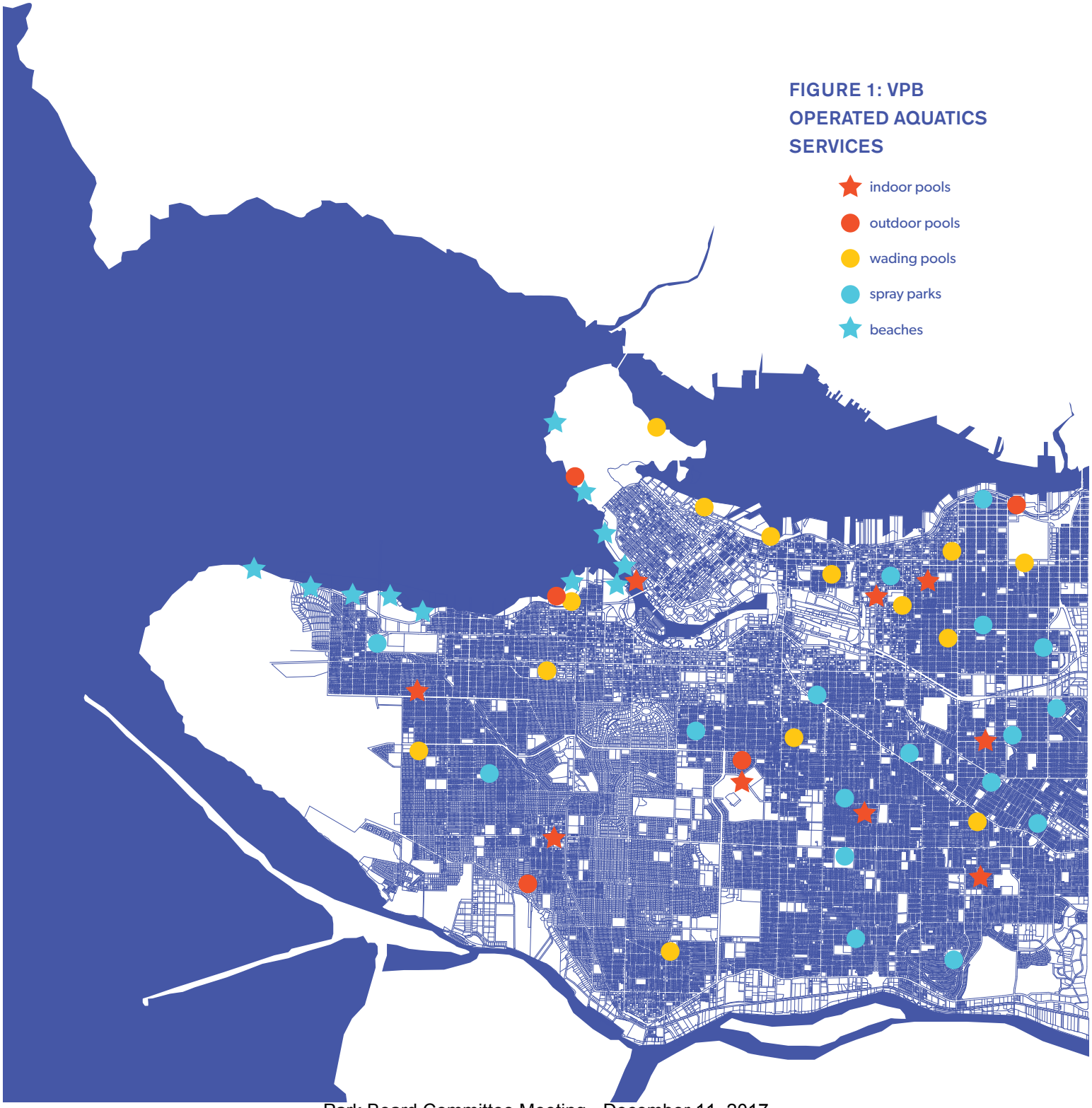


FIGURE 1: VPB OPERATED AQUATICS SERVICES

Executive Summary

In 2016, HCMA Architecture + Design (HCMA), in collaboration with RC Strategies (formerly PERC), were engaged by Vancouver Board of Parks and Recreation (VPB) to develop a new long range vision for the future of aquatics in Vancouver. The future vision will be informed by a core belief that along with providing opportunities for physical health and well-being, aquatic services play a key role in supporting community and personal well-being, and in enhancing social inclusion.

From beaches to pools, there is a long history of providing aquatic services within the City of Vancouver. Vancouver is uniquely positioned as a coastal City and our relationship to water is deep in our roots. This is reflected by our high swims per person per year rate in comparison with other urban centres. The VPB currently manages nine indoor pools, five outdoor pools, three stand-alone indoor whirlpools, 14 spray parks, 15 wading pools, and nearly 18 km of beaches, including Trout Lake swimming beach (see Figure 1). In 2012 the VPB developed a Strategic Plan[1] with the mission to "provide, preserve and advocate for parks and recreation to benefit all people, communities and the environment."

The future vision for aquatics being developed in the 2017 Vancouver Aquatic Strategy (*VanSplash*) will be based upon: an understanding the current state of existing public aquatic infrastructure (including indoor and outdoor pools, spray parks, wading pools, and beaches); public opinion sought through a robust public engagement strategy that sought to ascertain the public's hopes and aspirations for the future of aquatics in the city; and looking worldwide for inspiration related to best practices, trends and innovations in aquatics and assessing their applicability to Vancouver's unique physical and social context.

VanSplash is intended to update the *2001 Aquatic Services Review* and the *2011 Pool Assessment Study* (both of which are described in the next section), and to build on the scope of the previous studies by increasing the targets and measures of success to include social inclusion and community well-being, by including considerations related to environmental sustainability, and to expand the range of aquatic amenities within the City to include beaches as a key component for inclusion in the overall vision and recommendations.

The vision and recommendations in *VanSplash* will be developed through three phases:

PHASE 1: POLICY REVIEW, INVENTORY, AND CURRENT STATE ANALYSIS

- *Current State Report*
- *Precedent Report*
- *Public Engagement Report*

PHASE 2: SERVICE LEVELS AND POLICY UPDATE

- *Interim Report: Recommendations for Service Delivery and Policy*

PHASE 3: FINAL STRATEGY AND IMPLEMENTATION

- *Final Strategy Report*

This report represents the first of the three reports to be delivered in Phase 1, and is focused on providing an overall context within which to consider aquatics amenities based on the drivers for use, aquatic delivery methods, the regional marketplace, pool capacity and operational strategies, and future demographic trends. The final section provides an overview and evaluation of the current public aquatic facilities and amenities within the City of Vancouver, provides realistic life-cycle assessments for each (where applicable), and documents unique features and their role in service delivery. The *Current State Report* should be read in conjunction with the findings presented in the other two reports being delivered as part of the Phase 1 deliverables: the *Precedent Report* and the *Public Engagement Report*.

1 http://vancouver.ca/files/cov/park-board-strategic-plan-presentation-20120627.pdf

Background

In 2001, HCMA and PERC worked with the Vancouver Park Board on the *2001 Aquatic Services Review*. The purpose of the review was to develop a comprehensive strategy to reconfigure the VPB's aquatic services and facilities and to lay a foundation for a 10-15 year revitalization plan. The specific outcome of this work was to provide the Board with recommendations that would enable them to:

- Operate the services and facilities in a cost-effective and fiscally sustainable manner
- Meet current and future demands of the City's residential and working population
- Balance the local neighbourhood services and needs with those of the City and Region as a whole

As a result of the outcomes and recommendations in the 2001 review, in 2002 the VPB endorsed the objectives for aquatic renewal consisting of:

- One city-wide (Destination) facility (up to 800,000 swims/year)
- Two community level facilities (up to 400,000 swims/year)
- Four neighbourhood level facilities (up to 200,000 swims/year)

Subsequently, the Vancouver Park Board implemented the first phase of recommendations which included:

- Building a new, city-wide destination aquatic facility at Hillcrest (2010) (replaced the Percy Norman Pool)
- Re-building Killarney Pool (2006) to a community-level pool
- Renovating Renfrew Pool (2005), which was maintained as a neighbourhood-level pool

Since 2001, the VPB has also:

- Decommissioned two neighbourhood-based outdoor pools (Mount Pleasant and Sunset) at the end of their functional lifespan and replaced them with an outdoor pool located at the Hillcrest Aquatic Centre (2010)
- Decommissioned five wading pools (Norquay Park in 2011, Prince-Edward Park in 2012, Pandora Park in 2015, Carnarvon Park in 2015 and Riley Park in 2016).
- Carnarvon and Riley Park have been converted into greenspace, and Mount Pleasant pool was converted to community garden and skateboard park
- Provided new spray parks at Prince Edward Park, Norquay Park and Pandora Park

In 2010, the VPB engaged HCMA to deliver an Aquatic Services Review. The objective of this study was to provide an update that measured the progress made with regard to recommendations and targets set in the 2001 review. The work also considered existing pool-use data to lay the groundwork for future aquatic facility renewal in the City of Vancouver. The study was intended to provide a comprehensive picture of the City's current aquatic network, and to identify new trends and issues.

Working closely with aquatics and planning staff, HCMA reviewed relevant documentation, assessed the major indoor and outdoor facilities, assessed wading pools and spray parks and conducted interviews with aquatic staff across all levels. Combining this work with research into aquatic trends and best practices, the *2011 Pool Assessment Study* provided both new findings and recommended updates to the 2001 recommendations to inform the future of aquatics relative to the 10 year capital plan.

1 Greenest City Action Plan, 2020 Target: reduce community based GHG emissions by 33% from 2007 levels, and 2050 Target: reduce GHG emissions by 80% below 2007 levels.

The *2001 Aquatic Services Review* made recommendations for facility renewal and policy directions, and recommended phasing out wading pools to be replaced with spray parks, as informed by public consultation. The 2011 study served as an excellent touch point for services review but did not provide an over arching strategy evaluated through a community engagement process, nor was it endorsed by the VPB as policy. The scope of work also did not include other aquatic service opportunities such as aquatic services at beaches, innovative approaches for new outdoor facilities such as natural pools or alternative modes of urban ocean swimming being seen in other marine cities, nor did it consider the role of aquatic services in supporting well-being and social inclusion.

The 2011 work confirmed the current understanding that the renovated and new facilities (Renfrew, Killarney and Hillcrest) have affected the number of annual swims, which have increased from approximately 1.36 million in 1999 to 2.2 million swims in 2014. While greatly improved, this is still below the target of 2.4 million swims set in 2001, and less than the goal of 4 indoor swims/capita set by the Vancouver Board of Parks and Recreation. With a 2011 census population of 603,500, Vancouver's swims/capita was 3.6.

Objectives + Methodology

OBJECTIVES

The purpose of the Strategy, as stated in the Park Board's RFP and as developed by the project team, is to develop a 10-year implementation strategy for aquatics services that:

- Offers a comprehensive and robust community and stakeholder engagement strategy, which includes an online survey.
- Frames aquatic services in the context of supporting community and personal well-being and enhancing social inclusion.
- Reviews the condition, effectiveness, and performance of the Vancouver Park Board aquatics services delivery system.
- Considers current aquatic services within a 25 year time frame which accounts for projected population growth and growth centres in the city.
- Validates optimum city-wide service levels and delivery, including metrics that measure effectiveness of service delivery (e.g. swims per capita, # of users, unmet demand).
- Explores and recommends new and innovative directions to meet city-wide indoor and outdoor aquatic services delivery
- Recommends an outdoor pool strategy, which considers the location and design of a new outdoor pool facility.
- Reviews and recommends the role of wading pools, spray parks and beaches in the aquatic system.
- Matches updated service metric(s) with an implementation plan to renew and invest in the system.
- Incorporates facility performance findings relative to greenhouse gas emissions, based on review of the project RFP and initial discussion with the Client. This is to more accurately align with City of Vancouver policy targets.[1]

METHODOLOGY

The team carried out the Phase 1 work roughly as follows:

- Reviewed existing policy and literature provided by VPB including: previous aquatic service and program reviews, recent facility assessments, aquatic services use numbers (2009-2015), Park Board Strategic Framework, Vancouver Sport Strategy, Healthy City Strategy, and Greenest City Action Plan.
- Developed a branded public engagement strategy that included a public survey (responded to by over 4,500 participants including 60 translated Chinese language responses and 45 comments via email) and two key public outreach events at Kitsilano beach and New Brighton Pool over a key summer weekend in July 2016 (July 23rd and 24th).
- Review of City aquatic facilities including indoor and outdoor pools, whirlpools, representative spray parks and wading pools (2-3) as well as beach and waterfront sites. The team received data on operations, number of visitors, maintenance and energy use for existing pool facilities from VPB staff, with the exception of data for Britannia Pool. Britannia is operated by a third party and the above data was requested but not received.
- Incorporated facility performance findings relative to energy use and greenhouse gas emissions, with the goal of reflecting on City of Vancouver policy targets.
- Carried out five stakeholder workshops, with 60 stakeholder groups represented, to gather specific

feedback on pool usage, to understand the users' likes and dislikes, and percieved barriers related to current aquatic services in Vancouver and the region.

- Evaluated results of review and research and provide conclusions and recommendations into a *Current State Report*.
- Reviewed findings with Staff Working Group.

The consultant study team relied on the assistance of many VPB staff and operators who contributed their time, energy and guidance in the project. Participants included: aquatics programs, operations, maintenance and management staff, as well as planning and regional representatives.

1. Greenest City Action Plan, 2020 Target: reduce community based GHG emissions by 33% from 2007 levels, and 2050 Target: reduce GHG emissions by 80% below 2007 levels.

DATA SOURCING AND ANALYSIS

The consultants spent a great deal of time attempting to determine how much existing pools are used each year and how much revenue and expense is realized each year associated with that use. However, due to different and changing protocols for data collection there are many areas where figures had to be estimated or interpreted in the absence of factual quantitative data. While the result is a data net that is sufficient for high level analysis and general conclusions, there are a few areas where usage numbers for facilities for certain years are difficult to verify. More specifically, please note:

Water costs are known for indoor pools, but not outdoor pools, because outdoor pools are not metered for consumption.

For pools in community centres, the utility cost data applies to the entire facility, including but not limited to community centre, ice rink, and library.

(p. 38) The consultants have some concern about the accuracy of the system that records pool use. There are a few unexplained anomalies. One of the most concerning is the total use for the Killarney Pool, which appears to be significantly more than the pool has the capacity to accommodate. Evidence for this concern is the operating budgets, which have been audited and are therefore assumed to be quite reliable. The revenue per swim at a facility like Hillcrest is calculated to be $4.43, while the revenue per swim at Killarney is calculated to be only $2.49 in 2014 in spite of the fact that user fees for swimming are quite consistent between the two facilities. If indeed the total recorded use at Killarney were reduced to a level close to capacity, the revenue per swim would be much higher and therefore closer to what is realized in other facilities like Hillcrest, further supporting the concern that the uses recorded at Killarney may be too high.

(p. 41) It is important to note that there is indication that usage of indoor pools in 2015 declined quite substantially. While it is difficult to confirm, as data gathering methods changed part way through 2015, the available information shows that usage might have declined as much as 30%. Data also shows that total revenue, which was consistently accounted for in all indoor pool operation in Vancouver, declined from $7.888 million in 2014 to $5.312 million in 2015 after remaining quite stable for three years. This represents a decline of about 33%. The team were unable to determine a reason for this anomaly, and cannot confirm whether there is a gap in data related to the systems change in data collection methods, or if the indicated decline in use is accurate.

(p. 124) Electricity cost data is unknown for Second Beach pool because its electricity is fed from a meter serving multiple park buildings.

Context

1

Benefits of Aquatic Services

Public aquatic facilities can transform communities - they offer opportunities for fitness, a place for community to gather and for families to spend time together, however, public aquatic facilities are among the most expensive facilities that a community can provide for its residents. Almost all communities invest heavily in them; however, because of the tremendous benefits that accrue from their use. These benefits contribute to healthy, active individuals and communities and include:

- Water safety – learning how not to drown (one of the most basic of human needs and public services especially for communities close to natural waterways)
- Learning and improving skills in swimming, diving and other water sports
- Fitness and conditioning in a medium that is least likely to result in injury (due to the buoyancy of the water)
- Rehabilitation and therapy services to those with disabilities, injury, or frailty
- Social opportunities in water or on deck that connect people and reduce feelings of isolation
- Family opportunities to come together in a recreational setting conducive to use by all family members
- Mixing segments and subsets of the community with an activity that is worldwide and appeals to people of all ages and abilities
- Leadership training for young people
- Extensive volunteering opportunities
- Special events that rally community identity, spirit, and pride
- Sport tourism opportunities associated with swim meets

The incredible range of community and individual opportunities that aquatic amenities offer is the rationale and incentive for the high level of subsidization of public aquatic swimming facilities. The typical recovery rate[1] of capital costs for an indoor pool is between 30% and 70% with the remainder of the operating costs funded through municipal taxes.

Given the increasing understanding of the value and importance of the social aspects of aquatics, when looking at the current facilities and aquatic services in the last section of the report, the team showed quantitative data related to usage numbers but tried to capture more difficult-to-measure targets such as social inclusion, community building, wellness, and sustainability for each facility.

It should also be noted that a large range of the aquatic benefits, including water safety, fitness, social and family opportunities, mixing of diverse members of the community, building community spirit etc. can also be gained through the use of beaches. Natural ocean beaches are one of the singular and defining aquatic experiences that distinguish Vancouver from the majority of other urban centres in Canada. Phase 2 will explore how best to build on this unique resource, along with the role that spray parks and innovative aquatic opportunities can play in realizing the benefits of aquatic services.

1 Recovery rate is the proportion of all operating costs that are recovered from users through user fees. The complement of recovery rate is subsidy rate. They both add to 100%.

The following pages give an overview of aquatic amenities and answers the following questions in more detail:

Why do people swim?

Drivers of Aquatic Use
p. 14-15

What amenities are required to meet needs?

Nine Categories of Aquatic Services
p. 16

How are amenities accessed?

Three Modes of Pool Operation
p. 17

Where are these amenities in the community?

Three Geographic Levels of Pool Supply
p. 19

Drivers of Aquatic Use

What makes aquatic services so important, and what inspires and guides recommendations around the design of new amenities and the enhancement of existing aquatic opportunities, is related, to a large degree, by reasons **why people want to take part in aquatic experiences.**

People are motivated to use aquatic services for a wide variety of reasons; however, the industry understands, and current research for this study confirms, that some of the most important drivers for use are as follows, in no particular order:

1 LEARNING NOT TO DROWN

The first steps in learning to swim appear to be the most important. As more and more skill is gained, the numbers involved tend to drop. Swimming is a life skill, so most parents want to ensure that their children learn this skill early in order to be safe around water for the remainder of their lives.

2 FITNESS + WELLNESS

Water buoyancy makes activity in the water an ideal path to gaining fitness and overall feelings of wellness. Therapy aspects of aquatics such as warm water pools, sauna, steam, and therapeutic sprays help to meet this driver, which develops as a driver in early adulthood and becomes more important as adults age.

3 SOCIALIZATION

This also includes all ages and can be met through a variety of aquatic experiences, but seems to become more important as adulthood progresses. It is a very important driver among seniors.

4 FUN, RELAXATION, + DIVERSION

This motive applies to all ages, and can be met by an enormous (and growing!) range of aquatic experiences. This driver may start with pre-schoolers and focus on children, but is an aspect of swimming and aquatic usage that applies to all ages and all demographics. It can range from quiet contemplation to the spectacle of aquatic activities such as wave riding or high diving/jumping. It includes the social aspects of play opportunities for tweens, "seeing and being seen", and can be individual or a group social experience. It takes on a multitude of different dimensions and includes such things as "people watching" and just dwelling in a positive environment.

5 COMPETITION/TRAINING

The rigour and structure of training and then testing skill against others (initially in children) and against oneself (especially in adults and seniors) is a strong motivator for many.

6 OTHER

Others access aquatic services for reasons including: getting a job, recovering from a medical event or illness, and gaining satisfaction from volunteering. All of these motives need to be considered when planning for developing and managing aquatic services in the public sector.

Nine Categories of Aquatic Services

After developing a clear understanding of **why** people want to take part in aquatic experiences, or the drivers of aquatic use, the next strategic question becomes:

What type of aquatic uses provide an opportunity to meet those drivers?

There are nine categories of aquatic services under which existing services are assessed and future needs determined. Each category represents a certain type of facility/water condition that would be required, and each requires a slightly different configuration of aquatic spaces, water temperature, or operation to deliver the service. Almost all aquatic services and needs can be categorized under one of the following headings. They are considered to be the nine categories of aquatic services, and are as follows:

1 Recreation + Socializing

- Fun, leisure and play
- Includes watching

2 Skill Development

- Swim lessons primarily
- Other skills taught in lesson format

3 Fitness

- Lane swimming
- Aquasize classes
- Water running

4 Sport Training

- Aquatic sport training

5 Special Events

- Swim meets
- Competitions

6 Therapy + Rehabilitation

- Those who are injured, frail, or have disabilities are active in water because it supports their body weight
- Either in a program, or as an individual

7 Leadership Development

- Life saving
- Life guarding
- Instruction

8 Water Orientation

- Opportunities for young people to gradually get used to being in water

9 Thermal Respite

- Water as a medium to cool off in hot weather
- Water/sauna/steam to warm up in cold weather

Three Modes of Pool Operation

Lastly, after understanding **why** people are motivated to experience aquatics, and categorizing **what** the range of aquatic activities are that meet these motivations, we need to consider **how aquatic amenities can be provided to meet the nine swim categories.** For the purposes of this research, aquatics are considered to operate under three modes, as follows:

DROP-IN
Where individuals and families decide to visit an aquatic amenity on a case by case basis.

PROGRAM
Where users pre-commit, through a registration process, to a series of uses that typically involve some instruction or leadership, and are scheduled at a predetermined time.

RENTAL
Where a group rents some aquatic space and then controls the users and uses of that space.

The nine categories of aquatic service are typically accommodated within the three modes of operation as summarized in Figure 2. These modes require different kinds of support areas in a pool but can be combined so that more than one occurs in a pool tank at the same time.

Understanding the nine categories of aquatic service and how they are met within the three modes of operation is important to the assessment of existing aquatic facilities and in planning for all aquatic amenities and services in Vancouver for the future.

The 2001 and 2011 studies focused primarily on indoor aquatic facilities. Phase 2 of this study will also explore how outdoor pools, spray parks, beaches, and potential new modes of urban aquatic amenities fit into the three modes of operation and how they meet both the drivers and nine categories of aquatic services.

CATEGORIES OF AQUATIC SERVICE	DROP-IN	PROGRAM	RENTAL
RECREATION	✓		✓
SKILL DEVELOPMENT	✓	✓	
FITNESS	✓	✓	
SPORT TRAINING			✓
COMPETITIONS			✓
THERAPY + REHABILITATION	✓	✓	✓
LEADERSHIP TRAINING		✓	
WATER ORIENTATION	✓	✓	
THERMAL RESPITE FROM HOT/COLD	✓		

FIGURE 2: ACCOMMODATING CATEGORIES OF AQUATIC SERVICE WITHIN 3 MODES OF OPERATION

FIGURE 3: THREE LEVELS OF GEOGRAPHIC POOL SUPPLY

LEVEL	DESCRIPTION + PROVISION STANDARD	EXAMPLES	PRIMARY AQUATIC SERVICE CATEGORIES DELIVERED
NEIGHBOURHOOD	Pools with a 25 m six lane tank providing basic aquatic services for a local area of 60,000 to 90,000 residents, with capacity for about 200,000 swims per year.	Renfrew	• Recreation + Socializing • Skill Development • Fitness • Sport Training • Therapy + Rehab • Water Orientation • Thermal Respite
COMMUNITY	A multi-tank pool with more specialized aquatic services serving one quarter to one half of the City, with capacity for about 400,000 swims per year.	Killarney	• Recreation + Socializing • Skill Development • Fitness • Sport Training • Special Events • Therapy + Rehab • Leadership Development • Water Orientation • Thermal Respite
CITY-WIDE (DESTINATION)	Much more comprehensive multi-tank pools serving all residents of the City, centrally located and easily accessible from all parts of the City, with capacity for about 750,000 to 800,000 swims per year.	Hillcrest Vancouver Aquatic Centre	• Recreation + Socializing • Skill Development • Fitness • Sport Training • Special Events • Leadership Development • Water Orientation • Thermal Respite
ALL-INDOOR AMENITIES	The entire inventory of indoor pools should be located such that the vast majority of residents have an indoor pool within about 2-3 km of their residence. (A 3 km radius identifies the area of approximately a 30 minute walk, 15 minute cycle, or 10 minute drive.)		
OUTDOOR AMENITIES	Targets to be established in phase 2 + 3 work.		

	INDOOR AQUATIC AMENITIES			OUTDOOR AQUATIC AMENITIES			
CATEGORIES OF AQUATIC SERVICE	CITY	COMMUNITY	NEIGHBOURHOOD	OUTDOOR	WADING	SPRAY DECK	BEACHES
1 RECREATION + SOCIALIZING	✓	✓	✓	✓	✓	✓	✓
2 SKILL DEVELOPMENT	✓	✓	✓	✓			✓
3 FITNESS	✓	✓	✓	✓			✓
4 SPORT TRAINING	✓	✓	✓	✓			✓
5 SPECIAL EVENTS	✓	✓		✓			✓
6 THERAPY + REHABILITATION		✓	✓	✓			
7 LEADERSHIP DEVELOPMENT	✓	✓		✓			✓
8 WATER ORIENTATION	✓	✓	✓	✓	✓	✓	✓
9 THERMAL RESPITE	✓	✓	✓	✓	✓	✓	✓

FIGURE 4: ACCOMMODATING CATEGORIES OF AQUATIC SERVICE WITHIN DIFFERENT TYPES OF AQUATIC AMENITIES

Three Geographic Levels of Pool Supply

In Vancouver, like in many large urban centres, there are multiple aquatic amenities and each specializes in terms of which of the nine categories of aquatic service it is focused on meeting. This strategy to service delivery is further enhanced by an approach based on different pools that operate at different geographic levels, or within different sized markets. In the 2001 Aquatics Review, three levels of pool supply were formalized and adopted, as summarized in Figure 3. The three levels are categorized as neighbourhood, community and city-wide destination pools. The later phases of this vision strategy will include recommendations and set proposed targets related to the location and frequency of outdoor amenities to complement and support the indoor amenities targets established in 2001.

The nine categories of aquatic service can be met by a range of the levels and types of indoor and outdoor aquatic spaces that exist in Vancouver, but all aquatic amenities don't need to deliver all nine categories. Indeed, a systems approach is required, where specific types of pools and aquatic amenities are positioned to focus primarily on specific categories of aquatic service so that all categories can be optimally served.

Figure 4 summarizes the relationship between both indoor and outdoor aquatic amenities and their specialization in terms of offerings related to the nine category of service.

It is worth noting that in the 2001 Aquatics Review, there was a special mention about competition uses. It suggested that although the City's indoor pools should accommodate swim club training, there was little need at that time for a more specialized competition pool, as UBC and other short and long course tanks were well positioned to host the few competitions that are held each year in the region. Since then, other pools in the region have been added or replaced with some additional capability to host aquatic sport competitions, the most significant examples of which are the new recently opened Grandview Pool in South Surrey, the UBC Aquatic Centre slated to open late January 2017, and the Minoru Pool (containing 2-25 m pools) in Richmond slated to open early 2018.

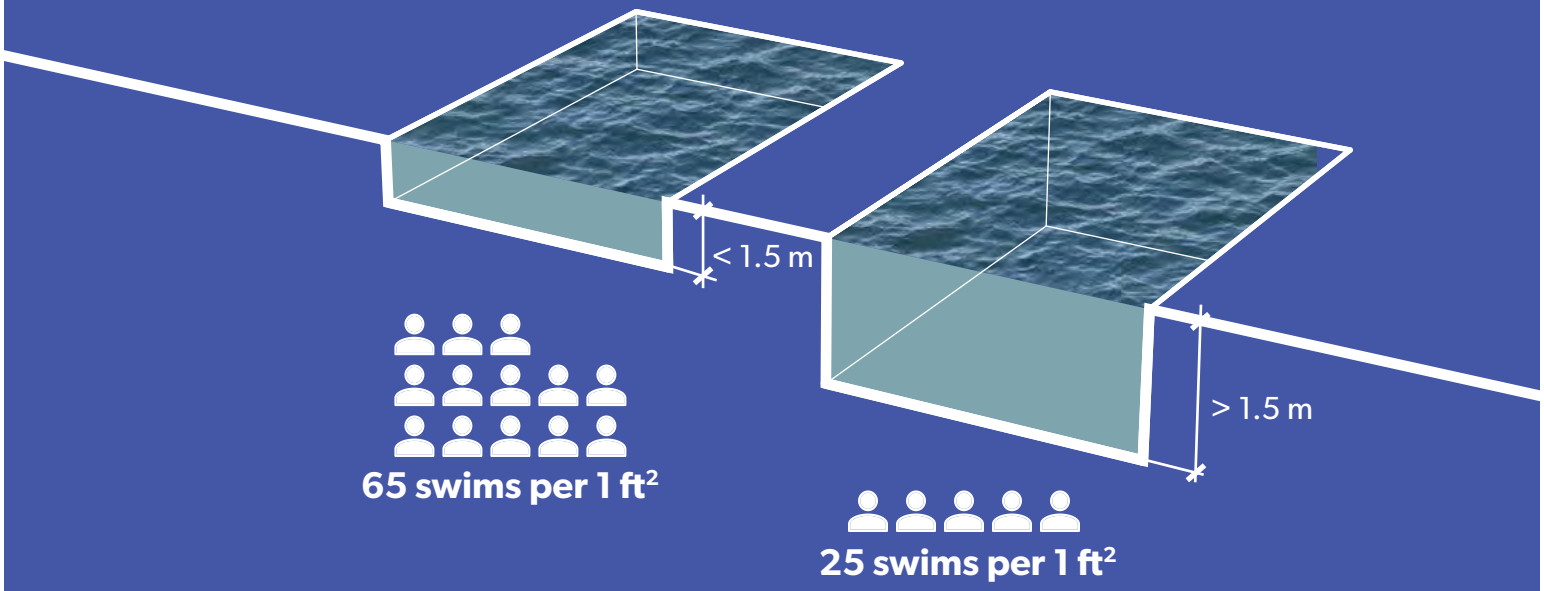


FIGURE 5: MAXIMUM CAPACITY OF INDOOR POOLS

- For water less than 1.5 m (5 ft) deep, indoor pools have a capacity to deliver up to 65 swims per year for each square foot* of water surface area
- For water more than 1.5 m (5 ft) deep, indoor pools have a capacity to deliver up to 25 swims per year for each square foot* of water surface area.

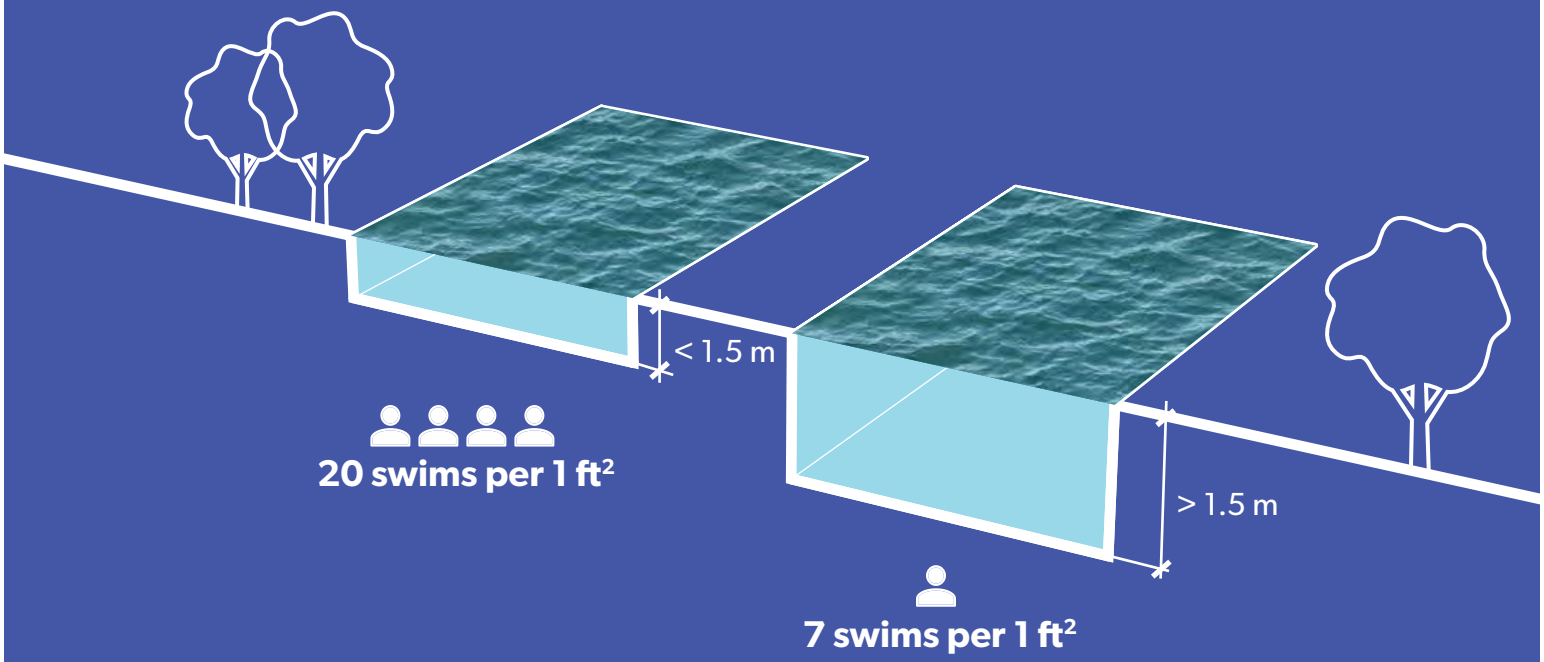


FIGURE 6: MAXIMUM CAPACITY OF OUTDOOR POOLS

- For water less than 1.5 m (5 ft) deep, outdoor pools have a capacity to deliver up to 20 swims per season for each square foot* of water surface area
- For water more than 1.5 m (5 ft) deep, outdoor pools have a capacity to deliver up to 7 swims per season for each square foot*of water surface area

1 It should be noted that this is not "legal capacity" which is laid down in the Swim Pool Regulations under BC's Health Act, and which results in higher capacity than the formula above. In fact, while legal capacity divides pools into water less than and more than 1.5 m deep, it focuses on instantaneous capacity rather than annual capacity. The above definition of capacity relates to a typical public pool which must deliver a variety of categories of aquatic service in a typical 5,000 hours per year municipal operating format.

*square foot of water surface area is a standard unit of measurement for measuring capacity and revenues

Standard Capacity

INDOOR POOLS

The capacity of indoor pools to deliver many or all of the nine categories of aquatic services they are required to meet, relates to:

- The amount of surface area of the pool tank or tanks
- The depth of water in the pool tank or tanks
- Programming and scheduling of the tank or tanks (i.e. different uses can accommodate different totals in the same water surface area and depth)
- The total hours available each year

The indoor pools are available for use about 100 hours each of 49 weeks each year; for a total of approximately 4,900 hours. For such a facility, which attempts to balance all of the nine categories of aquatic service, experience has shown the total capacity for aquatic service can be measured by the formula noted at Figure 5.

OUTDOOR POOLS

Outdoor pools typically only operate about 100 days per year and operate for fewer hours each day. Also, they are subject to inclement weather which can reduce attendance. Therefore, the formula used to understand the capacity of outdoor pools is noted at Figure 6.

WADING POOLS, SPRAY DECKS + BEACHES

As with outdoor pools, use is much more subject to weather. It is much more difficult to determine the capacity of wading pools, spray decks, and beaches for the following reasons.

- Much more of each use is focused on the areas surrounding the aquatic amenity (e.g. beaches, deck surrounding the spray areas) than in the water itself
- For beaches and spray decks, the concept of water surface area becomes much more nebulous
- There are no industry standards about how to calculate the capacity of these amenities

In addition, use is much more subject to weather. However, in the case of spray decks and beaches, understanding capacity of use may be slightly less relevant in determining their role in the future vision. Both play a very important role in providing aspects of the benefits, drivers and categories of aquatic services; however, their capacity of use is much less fixed than pools. While recommendations regarding targets for geographic locations for spray parks and potential amenities enhancements to beaches will be considered in Phase 2 of this work, capacity of use will not be key drivers. Rather, recommendations will be focused on ways to increase public enjoyment through improvements to the experiential aspects. In the case of beach-going, the vision will consider enhancements to the categories of aquatics (i.e. programs added and/or rentals opportunities increased) offered at beaches rather than on achieving a greater capacity of use.

In other words, while capacity of use formulas are particularly helpful when designing new indoor or outdoor pool facilities or when renovating existing facilities as they help to determine ideal size and design to ensure that the overall range of aquatic facilities can be expected to contribute to reaching an overall swim/capita target, they are less relevant in terms of beaches and spray decks.

Economics of Pool Operation

To frame a holistic understanding of the context within which aquatic facilities operate, some important economic aspects of the delivery of aquatic services also need to be understood and considered along with the drivers, categories of use, and modes of aquatic operation:

- The capital cost of an indoor pool, unlike most other forms of buildings, correlates more directly with the volume of the facility rather than the floor area. This is because, the deeper the water, the more air above the water is typically required. Both water depth and air height are very important and costly considerations when developing an indoor pool as both require large amounts of mechanical systems (water treatment systems which vary with the volume of water, and HVAC systems for handling highly humid air containing chemical substances) associated with those volumes. Two pools with the same floor area can have significantly different construction costs if one has deeper water and higher ceilings than the other.
- Operating costs for indoor public pools are closely related to regulations and largely fixed. About 70% of the operating costs of a typical pool are relatively or completely fixed (i.e. they don't vary significantly whether there is one person swimming or 40 people swimming in the pool enclosure). Operating costs are associated with a minimum required number of life guarding staff, water quality systems, management staff, insurance, utilities, and staffing a customer service control point—none of which vary directly with the volume of use.
- Generally, water shallower than 1.5 m deep is more economical for service delivery than deeper water. Legally, when calculating instantaneous capacity for use, shallow water allows three times more use per square meter of surface area. Also, shallower water is less expensive to operate and can usually be provided in an enclosure with a lower ceiling which also allows for reduced energy costs. **Time lapse photography studies in pools typically show that shallow water areas of a pool tank are used about five times more intensely than deep water and correlates to use for fun, relaxation and socialization. Many patrons come to pools specifically for shallow water opportunities.**
- Operating revenues are variable. In other words, if use increases by 10%, operating revenues go up roughly 10% as the revenue associated with swims in each category of aquatic service is largely constant on a per swim basis.

Because of the previous points:

It is very important, from an economic and environmental sustainability point of view, to operate a pool as close to full capacity as is reasonably possible.

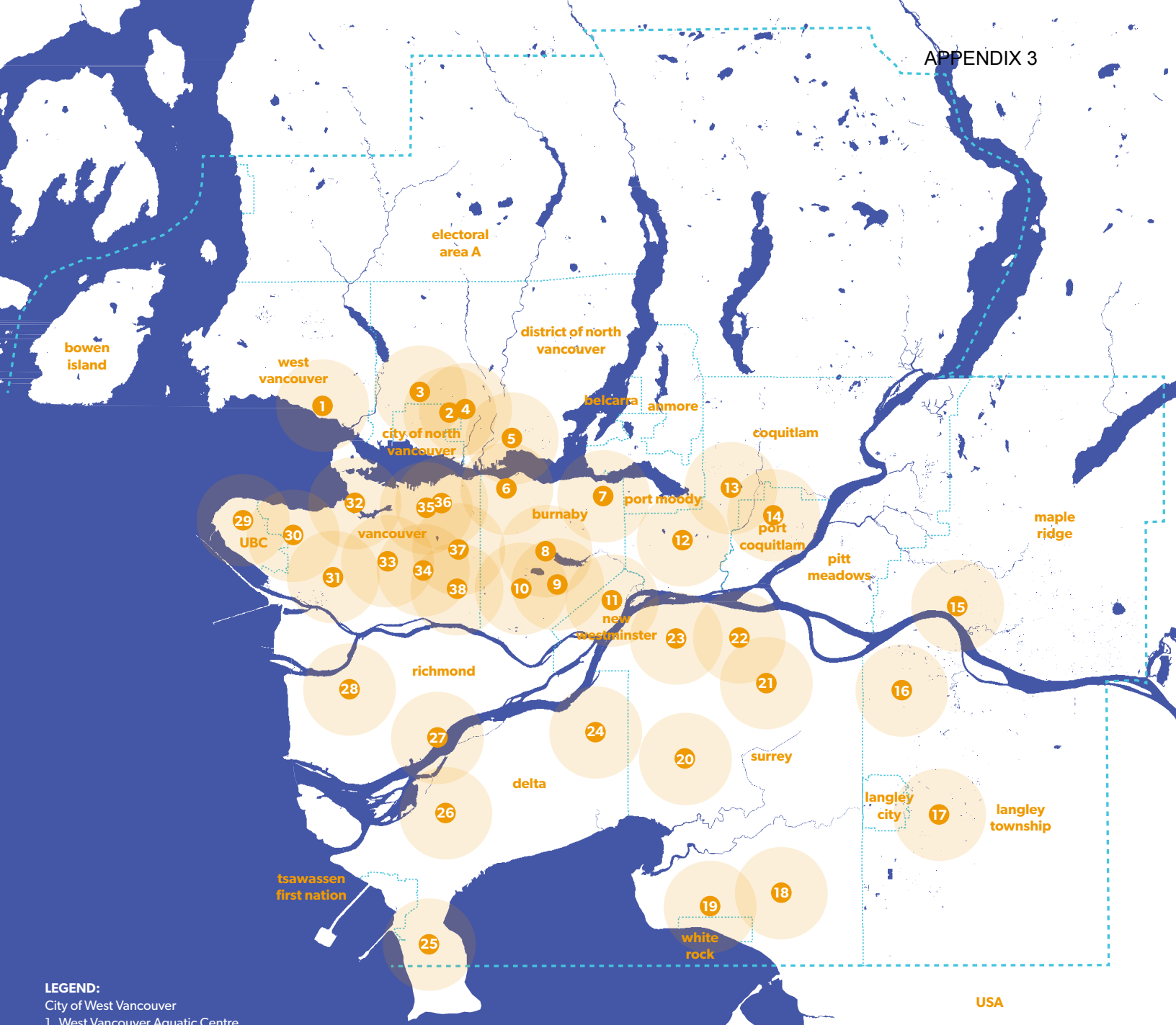
A pool operating at a fraction of its total capacity has a high operating cost, a low operating revenue, and a very high net subsidy and energy consumption per swim. A pool operating close to its full capacity has a high operating cost, a high operating revenue, and a much lower net subsidy and energy consumption per swim. Another way of viewing this relationship is to acknowledge that every additional swim a pool is able to generate will trigger more operating revenue than operating cost and won't increase energy consumption proportionately. This means:

Vancouver should try to size its pools to meet current and short term future needs, and not the needs of the very long term future, as "overbuilding" capacity in the short term to meet long term needs will likely result in operating subsidies per swim that are so high they collectively exceed the cost of adding to the existing pool or building another pool in the future when the community needs it.

Summary of Planning Context

All of the above contextual factors (benefits and drivers of aquatic use, categories of service, modes of aquatic operation, and the geographic levels of pool supply) play an important role in the sizing and configuration of pool spaces and strategic planning to meet long term aquatic needs. In order to ensure the right kinds and amounts of aquatic spaces are built in the future, it is important to consider:

- The proportion of total aquatic use that will be generated in each of the three modes of operation.
- The proportion of total swims that will be generated in each of the nine categories of aquatic service.
- The total swims that result from the first two bullets above translated into a set of aquatic spaces that will optimally respond to those needs and resist the temptation to "overbuild" spaces which won't be used for 10-20 years or more.
- While providing all core aquatic services, attempt to fill gaps in the supply left by other existing pools in the region and not duplicate service in categories which are more specialized and represent fewer swims.
- As many current and short term needs are met within a context of the least amount of volume of space.
- All pools will be operated as close to full capacity as is reasonably possible to avoid unnecessarily high subsidies per swim.
- When considering means to balance the previous points, strive to design facilities with a balance of water depths that maximize aquatic use (revenue), understanding that very shallow water and deep water offer limited opportunities for use compared with waist-deep water, combined with leisure features, which provides the greatest revenue potential (refer to Figures 5+6 on the previous pages).
- The potential role of beaches and ocean swimming in meeting aspects of aquatic use.
- The role that new and innovative aquatic service amenities may play in meeting desired outcomes for future aquatic use.



LEGEND:

City of West Vancouver
1 West Vancouver Aquatic Centre

City of North Vancouver
2 Harry Jerome Community Centre

District of North Vancouver
3 Delbrook Community Recreation Centre
4 Karen Magnussen Community Centre
5 Ron Andrews Community Centre

Burnaby
6 Eileen Dailly
7 SFU Pool
8 CG Brown Memorial Pool
9 Edmonds Community Centre
10 Bonsor Recreation Complex

New Westminster
11 Canada Games Pool

Coquitlam
12 Poirier Sport + Leisure Complex
13 City Centre Aquatic Complex

Port Coquitlam
14 Hyde Creek Recreation Centre

Maple Ridge
15 Maple Ridge Leisure centre

Langley Township
16 Walnut Grove Community Centre
17 WC Blair Recreation Centre

Surrey
18 Grandview Heights Aquatic Centre
19 South Surrey Indoor Pool
20 Newton Recreation Centre
21 Surrey Sport + Leisure Complex
22 Guildford Recreation Centre
23 North Surrey Recreation Centre

Delta
24 Sungod Recreation Centre
25 Winskill Aquatic + Fitness Centre
26 Ladner Leisure Centre

Richmond
27 Watermania
28 Minoru Aquatic Centre

Unincorporated
29 UBC Aquatic Centre

Vancouver
30 Lord Byng Pool
31 Kerrisdale Pool
32 Vancouver Aquatic Centre
33 Hillcrest Aquatic Centre
34 Kensington Pool
35 Britannia Pool
36 Templeton Park Pool
37 Renfrew Park Community Centre
38 Killarney Leisure Pool

MUNICIPAL INDOOR POOL FACILITIES THROUGHOUT THE LOWER MAINLAND

The image on this page gives a high level overview of the locations of the indoor aquatic facilities in the lower mainland as reviewed in the map above and in Figure 7. The facilities each contain a circle identifying a 3 km radius (approximately a 10 minute drive or 30 minute walk).

The Current State

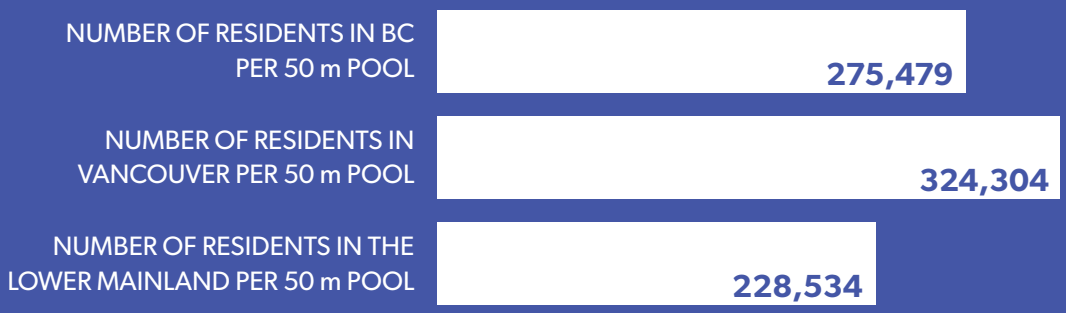
2

FIGURE 7: EXISTING PUBLIC INDOOR POOLS IN THE METRO VANCOUVER REGION

	Population 2015*	# of Indoor Public Pools	Total Capita per pool	# of 50 m Pools
VANCOUVER	648,608	9	72,068	2
BURNABY	238,209	4	79,403	1
LANGLEY TOWNSHIP	116,863	2	58,432	1
SURREY	526,004	6	87,667	3
RICHMOND	207,773	2	103,887	1
COQUITLAM	144,668	2	57,334	1
NEW WESTMINSTER	71,665	1	71,665	1
UNINCORPORATED AREAS (INCLUDING UBC)	26,941	2	26,941	2
REMAINDER OF LOWER MAINLAND	533,138	10	53,314	0
TOTAL LOWER MAINLAND	**2,513,869**	**38**	**69,830**	**11**
REMAINDER OF PROVINCE **	**2,169,270**	**N/A**	**N/A**	**6**
TOTAL PROVINCE OF BC	**4,683,139**	**N/A**	**N/A**	**17**

*population in 2015 according to www.bcstats.gov.bc.ca

** Although Saanich Commonwealth Place technically has two 50 m tanks, one is very seldom configured as a 50 m tank.



The Regional Marketplace

The previous section, Context, presented an introduction to the why, the what and the how of aquatics in a general sense to provide a background on what informs the strategies used to plan for future aquatics service delivery. The introductory pages of this section, Current State, will introduce facts related to the current and future demographics for the City of Vancouver, and present an overview of the various types of aquatics services currently available in the City of Vancouver, from indoor and outdoor pools through spray parks and beaches, available to meet the demographic needs.

However, when developing the future vision and strategy for the aquatic services within the City of Vancouver, it is first necessary to start by considering the larger regional context in which its aquatics service offerings exist. While some facilities in other municipalities may be located very close to the border of the City of Vancouver and therefore provide nearby residents with a more convenient option than a VPB operated public facility, Vancouver residents are willing to travel further to access larger destination facilities and/or facilities offering unique features outside of the City of Vancouver.

There are currently 34 municipal public indoor pools in the Metro Vancouver[1] region, as well as two YMCA pools, one YWCA pool, and two University pools (UBC and SFU)—all of which have significant public access and service. Within that total, there are ten facilities with 50 m tanks. The public pools, including the UBC Pool, but not the Y pools, are listed in Figure 7. There are also many private clubs and condominiums which have some aquatic service. There are more than 550 public pools in the Vancouver Coastal Health Jurisdiction 6.

Vancouver's indoor pool provision rate is generally on a par with most communities in BC. (Figure 7)

However, it has marginally fewer 50 m tanks per capita than other Lower Mainland communities and fewer than the province as a whole. If the facility at UBC were classified as being within Vancouver, as it is often conceived to be by the general public, it would be better served than other communities in the Lower Mainland and in BC in terms of 50 m tanks. It is also worth noting that the usage and configuration of 50 m pools varies from facility to facility. For example, many pools with 50 m tanks take advantage of the size, combined with moveable bulkheads and floors, to offer multiple, simultaneous uses within the tank (i.e. aquafit classes in the shallow end of the pool and lap swimming in the deep end) rather than offering opportunities for full 50 m lap swimming. As well, the width of 50 m pools varies from facility to facility; some 50 m tanks are 25 m wide and thus can offer a greater variation of uses alongside 25 m lengths. Additionally, some are configured with deck space and supporting amenities to be able to offer completion uses. In other words, the use and configuration of 50 m pools is not equal across all facilities and the variation in specialization of 50 m tanks should also be considered when comparing these facilities.

The provision of outdoor pools is much more varied and less subject to comparative provision standards. Some communities, like Surrey, have a large number of outdoor pools and a relatively high provision rate while other communities, like Vancouver, have fewer pools per capita, but offer very large destination pools with much greater capacity per capita than other cities. More on the comparative provision of outdoor pools is provided on p. 43.

1 Metro Vancouver consists of 21 municipalities (Anmore, Belcarra, Bowen Island, Burnaby, Coquitlam, Delta, Langley City, Langley Township, Lions Bay, Maple Ridge, New Westminster, North Vancouver City, North Vancouver District, Pitt Meadows, Port Coquitlam, Port Moody, Richmond, Surrey, Vancouver, West Vancouver, White Rock), 1 electoral area (Electoral Area A) and 1 Treaty First Nation (Tsawwassen First Nation).

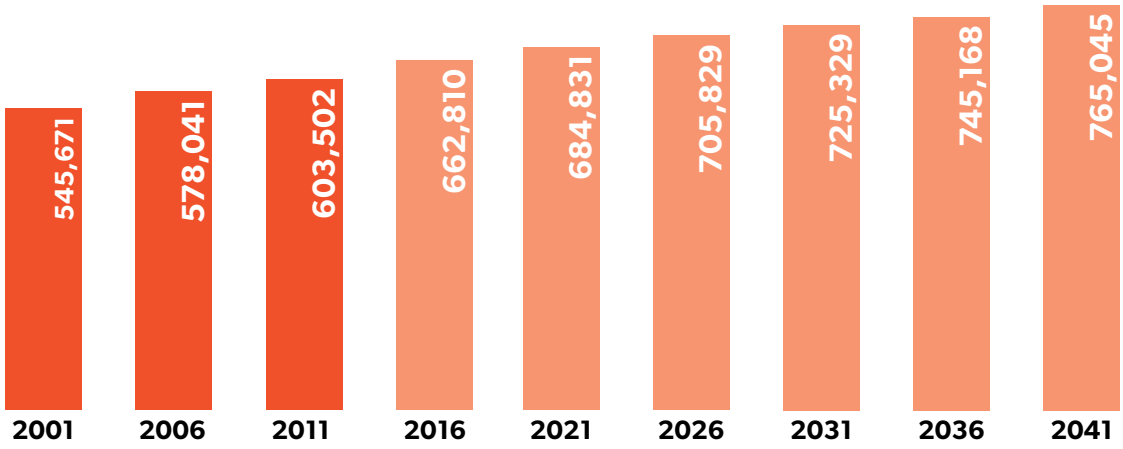


FIGURE 8: ACTUAL + PROJECTED GROWTH IN VANCOUVER'S POPULATION

*Actual population data from Stats Canada census data, projection data from Urban Futures, May 2012

FIGURE 9: AREAS OF MOST LIKELY GROWTH IN THE CITY OF VANCOUVER OVER THE NEXT 25 YEARS*

*Numbers from Statistics Canada, 2011 Census

Demographic Influences on Planning for Aquatic Services

In 2012, Urban Futures completed the most rigorous population projection available as a basis for planning. According to that analysis:

- The population of Vancouver has grown significantly since the 2001 Aquatics Review; the growth in that period is equal to almost 15%.
- Growth will likely increase quite significantly over the next 25 years, as summarized in Figure 8.
- The average age of the population will increase significantly with a net increase in those over 65 of about 119% between 2011 and 2041 and a net reduction of residents under 25 of 14% in the same time period.
- The population is projected to be housed in progressively smaller accommodation and increasingly in multistory apartments, almost all built with aquatic facilities inside.
- The population is expected to age significantly over the next 25 years with net fewer school aged children and many more older adults. Since use of public pools is directly correlated with the proportion of school aged children, even a larger population will have trouble maintaining the current rate of swims per capita.

Further work by the City of Vancouver shows that the growth referred to in the Urban Futures report will most likely be focused along a north/south spine within the city that begins in the downtown core in the north and proceeds south along the Cambie Corridor as shown in Figure 9.

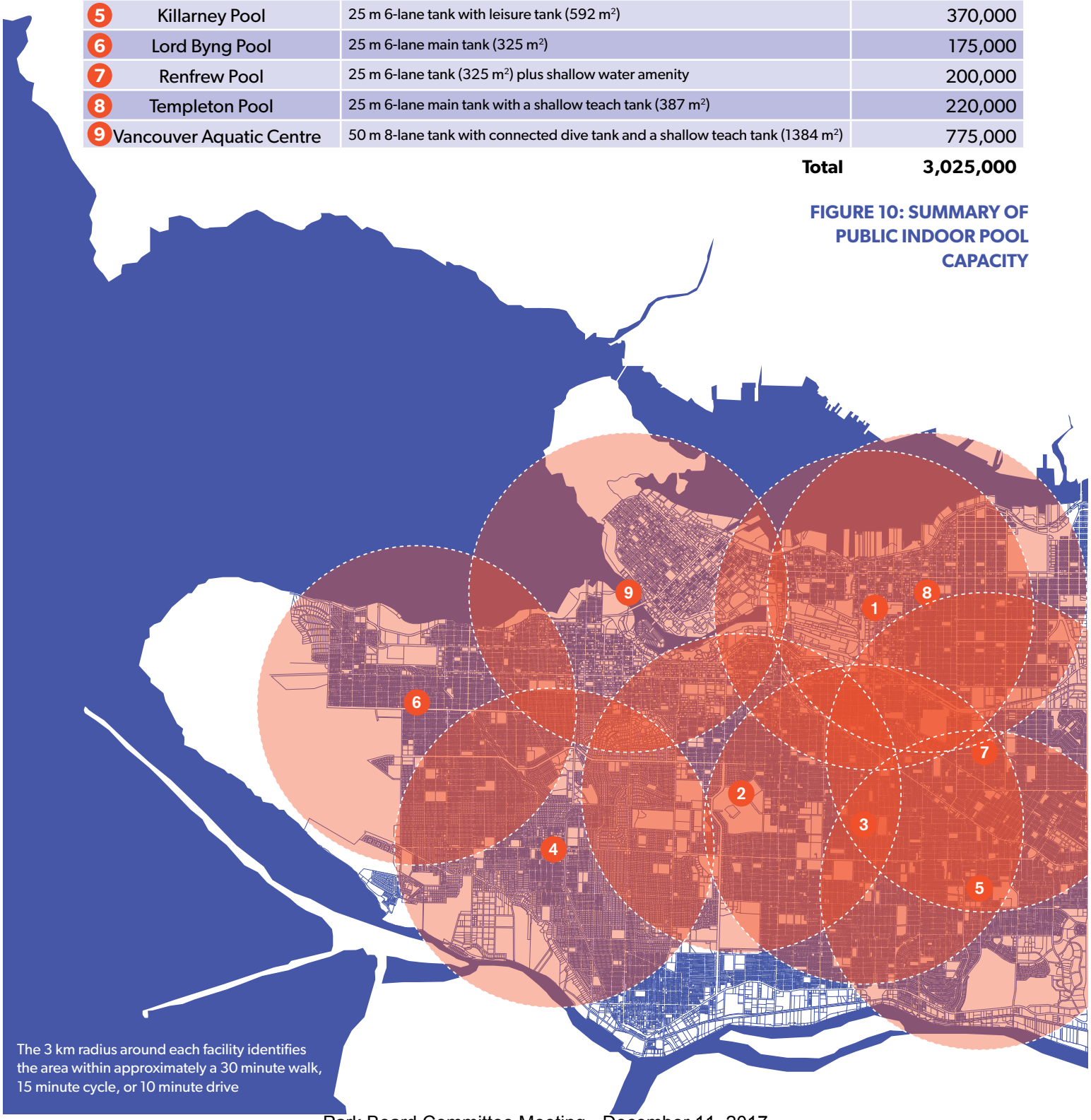
Swim lessons are typically one of the largest of the nine categories of swimming. They are also typically focused on school aged children. If this large segment of swimming is already a saturated market (i.e. almost all children now learn to swim) and if it is stagnant or declining as a percentage of any community, it will cause a lag in the total number of swims. In a market with an aging adult population, the significant increases in swims are most likely in the fitness, recreation, and rehab + therapy categories. However, seniors currently make up only a small portion of the first two large categories and a large portion of the third small category. So, an increase in seniors swimming won't increase overall swims enough to offset the decline in the swim lesson category.

Capacity of Existing Facilities

Any inventory of aquatic amenities must consider not just the number of facilities but also their capacity for use. Many smaller facilities may actually have less usable space than fewer larger ones. While capacity of some of the outdoor spaces (e.g. beaches) is much more difficult to determine, attempts have been made on the following pages to assess the capacity for use where it is possible to do so.

Indoor Pool Facilities	Tank Size	Approx. Annual Capacity in Swims
1 Britannia	25 m 6-lane main tank plus leisure tank (385 m^2)	215,000
2 Hillcrest Centre	50 m 8-lane main tank with a separate large leisure tank (1242 m^2)	750,000
3 Kensington Pool	15 m 4-lane shallow tank (131 m^2)	120,000
4 Kerrisdale Pool	30.5 m 6-lane tank (385 m^2)	200,000
5 Killarney Pool	25 m 6-lane tank with leisure tank (592 m^2)	370,000
6 Lord Byng Pool	25 m 6-lane main tank (325 m^2)	175,000
7 Renfrew Pool	25 m 6-lane tank (325 m^2) plus shallow water amenity	200,000
8 Templeton Pool	25 m 6-lane main tank with a shallow teach tank (387 m^2)	220,000
9 Vancouver Aquatic Centre	50 m 8-lane tank with connected dive tank and a shallow teach tank (1384 m^2)	775,000
	Total	**3,025,000**

FIGURE 10: SUMMARY OF PUBLIC INDOOR POOL CAPACITY



The 3 km radius around each facility identifies the area within approximately a 30 minute walk, 15 minute cycle, or 10 minute drive

Indoor Pools

There are currently nine indoor public pools in Vancouver, eight of the nine city pools are operated by the Vancouver Park Board and one, Britannia, is operated by a partnership of public agencies.

There are a few other indoor pools which are available to the public or subsets of the public, and are operated by public agencies:

- The University of British Columbia provides a large indoor pool, and although UBC is often considered to be within the City boundaries it is officially outside of the City's borders.
- The GF Strong Pool and the Stan Stronge Pool are operated by Vancouver Coastal Health and provide aquatic-based therapy, rehab and adapted recreational uses for the City and the region.

There are also another 169 indoor pools licensed to operate within the City. They are operated by the private sector (e.g. hotels and a teaching pool called Aquaventures[1]), the not for profit sector (e.g. clubs and associations), and condo residential associations. Many are used by broad cross sections of the public (e.g. YWCA, YMCA, Jewish Community Centre), while others are used only by residents of the complex within which they are located or by the customers of the private facilities.

The Vancouver Coastal Health Authority licenses 199 hot tubs and whirlpools. While many are associated with the indoor pools above or the outdoor pools in subsequent sections, that number still leaves many stand-alone hot tubs. Most of these are within residential condo units but many are also of a special-purpose nature (e.g. a professional sports team training facility or a physiotherapy service provider).

As Figure 10 shows:

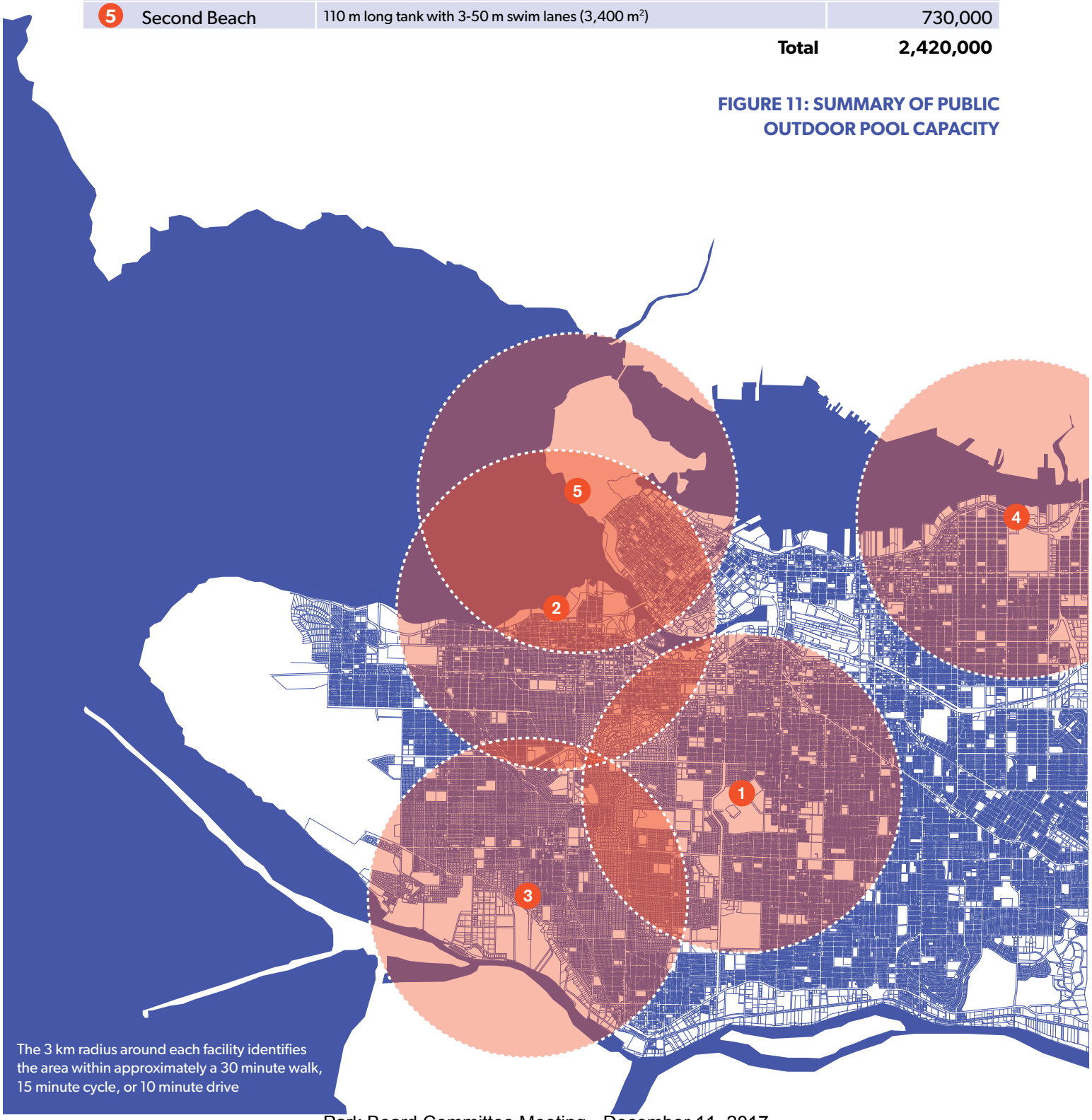
There is reasonably good coverage of indoor pools in Vancouver, with the possible exception that:

- **There is a small area in south central Vancouver that is not within 3 km of an indoor pool.**
- **There is a significant amount of overlap in service areas, with the most dramatic one in the area served by both Templeton and Britannia pools and by the area around Kensington pool.**

1 http://www.aquaventuresswim.com/

Outdoor Pool Facilities	Tank Size	Approx. Annual Capacity in Swims
1 Hillcrest	Shallow water leisure tank (273 m^2)	60,000
2 Kitsilano	137 m long tank, all shallow water (4,715 m^2)	1,000,000
3 Maple Grove	Free-form shallow leisure pool (1,220 m^2)	260,000
4 New Brighton	55 m tank with 6-25 m swim lanes (1,725 m^2)	370,000
5 Second Beach	110 m long tank with 3-50 m swim lanes (3,400 m^2)	730,000
	Total	**2,420,000**

FIGURE 11: SUMMARY OF PUBLIC OUTDOOR POOL CAPACITY



Outdoor Pools

There are five outdoor pools within the City of Vancouver at present. They offer a total of 2.4 million swims per year in terms of capacity, as shown in Figure 11, compared to the total capacity of 3.0 million swims per year currently being offered by indoor pool facilities.

It is important to understand that although the number of outdoor pools in Vancouver is relatively small compared to some other urban centres in Canada (e.g. Montreal and Toronto), at least two of the Vancouver outdoor pools are notably large, and therefore:

The total capacity for swimming in public outdoor pools in Vancouver is at least as high as many cities that have more pools.

For example, the Kitsilano Pool has the equivalent capacity to about ten regular 25 m six lane pools. (See also note on page 27 regarding the pool per capita comparison)

It should also be clear that the outdoor pools, like the indoor pools, vary a great deal in terms of which aquatic service categories they are optimized to meet. While the Hillcrest and Maple Grove pools aren't focused on fitness swimming, sport training or competitions, they are optimized for recreational swimming, water orientation for toddlers, recreational fun, and socializing. On the other hand, the pools with short course and long course swim lanes meet a different set of needs and focus on fitness swimming, skill development, and sport training as well as some recreational swimming and leadership training.

As outdoor pools come to the end of their functional life, the City has been gradually phasing out its inventory of stand-alone outdoor pools, as recommended in the 2001 Aquatic Services Review. This trend has been evident for some time for a number of reasons including:

- Swimmers often prefer an indoor/outdoor aquatic experience so that they can move from one to the other depending on weather.
- Outdoor pools attached to an indoor facility are more cost effective to operate.
- Stand-alone outdoor pools often exhibit a higher subsidy per swim than indoor pools. Even though outdoor tanks cost less per hour to operate, use varies considerably due to weather and guard schedules are difficult to adjust accordingly. There are often high start-up, close down at the start and end of the season along with maintenance costs during the winter months when no revenue is earned. Additionally, heating costs for water are significantly higher than indoor pools and fluctuate greatly given outdoor air temperature.
- The busiest times for indoor pools are often the summer months. When a parent registers a child in swim lessons they often prefer to have the lessons indoors so that weather doesn't cancel any of the lessons and the environment is consistent, optimizing comfort.

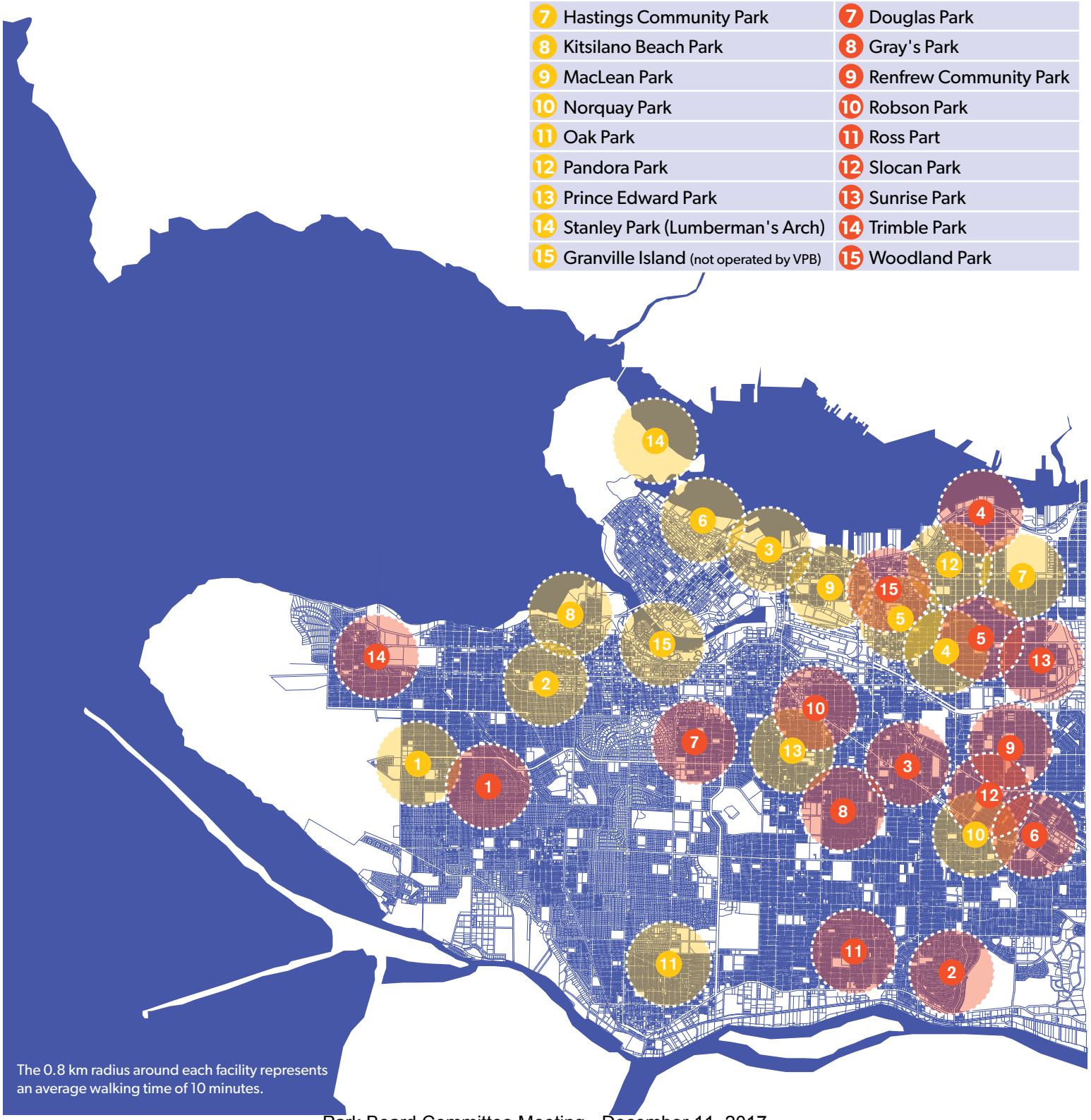
In keeping with the above challenges, the number of stand-alone outdoor pools within the City of Vancouver has declined. Most recently, Mt. Pleasant Outdoor Pool has closed which specialized in fitness swimming. An outdoor pool focused on recreation and socializing as part of an indoor pool complex was added at Hillcrest. Going back further, three additional outdoor pools (Sunset, Hastings, and Oak) were closed in 2006 and the early nineties. This trend is consistent with current trends seen in other urban centres. There are significantly fewer outdoor municipal pools in urban centres across Canada now than there were ten years ago even though communities have more residents. In addition to closures, there have been almost no new outdoor pools constructed in British Columbia over the last twenty years, although a few tanks have been replaced or phased out at the end of their lifespan.

In addition to the five publicly operated outdoor pools, the Vancouver Coastal Health Authority licenses an additional 90 outdoor pools which are owned and operated by the private sector (e.g. hotels and private clubs), non profit societies, condominiums, and schools.

The development of the vision in Phases 2 and 3 of *VanSplash* will consider whether or not the trend to close, or stop constructing, stand-alone pools is serving the needs and desires of the public, as well as how outdoor pools fit within the overall objectives and targets for aquatic service delivery within the City of Vancouver.

FIGURE 12: LOCATION OF SPRAY PARKS + WADING POOLS

VPB Spray Parks	VPB Wading Pools
1 Chaldecott Park	1 Balaclava Park
2 Connaught Park	2 Bobolink Park
3 CRAB Park at Portside	3 Brewers Park
4 Garden Park	4 Burrard View Park
5 Grandview Park	5 Clinton Park
6 Harbour Green Park	6 Collingwood Park
7 Hastings Community Park	7 Douglas Park
8 Kitsilano Beach Park	8 Gray's Park
9 MacLean Park	9 Renfrew Community Park
10 Norquay Park	10 Robson Park
11 Oak Park	11 Ross Part
12 Pandora Park	12 Slocan Park
13 Prince Edward Park	13 Sunrise Park
14 Stanley Park (Lumberman's Arch)	14 Trimble Park
15 Granville Island (not operated by VPB)	15 Woodland Park



Spray Parks + Wading Pools

Spray parks and wading pools offer a unique introduction to water. They allow visitors a playful interaction with water and can provide new swimmers with an enjoyable, comfortable "first touch" experience with water and swimming. Spray parks provide a more spontaneous and less intimidating interaction with water than wading pools as spray parks do not require immersion and are generally tailored toward play.

Fifteen spray parks are licensed to operate in Vancouver. Fourteen are operated by the Vancouver Park Board and one by the Federal Government at Granville Island. Three have recirculating water systems and three have been designed to feed adjacent wetlands. The remainder are "drain to waste" type systems where water is sent to sewer or diverted for reuse. Patrons use the sites primarily for recreation, socializing, and respite from summer heat. It is interesting to note that many communities opt to configure their spray parks without water treatment systems. In these cases, water is used to drive spray features on the spray deck and is then captured and used in various “grey water” areas (e.g. to irrigate the surrounding park, or flush park toilets), thereby meeting environmental objectives and operating more cost effectively than other configurations of spray parks. This can be considered to be a “best practice” and is followed by the VPB for all new spray parks. Spray parks' water supplies are on timers, many of which are centrally located at the works yard. See Figure 12 for a map of all wading pools and spray parks in the City of Vancouver.

The VPB currently has, in its inventory, seventeen operating wading pools largely constructed in the 1960s and early 1970s. They are designed as "fill-and-draw" pools and have historically been operated and supervised by community centre program staff. These facilities typically operate for about 100 days per year. They are required to be licensed as pool features fall under the Health Act regulations. Additionally, since these facilities have standing water they must be supervised until empty.

The VPB wading pools are gradually being phased out, as they are in many municipalities across Canada, in favour of spray parks. This is due in large part to revised Health Act Regulations as they no longer meet the revised regulations, compelling conversion or removal. In addition to wading pools no longer meeting revised Health Act regulations, their conversion to spray parks are also driven by the fact that:

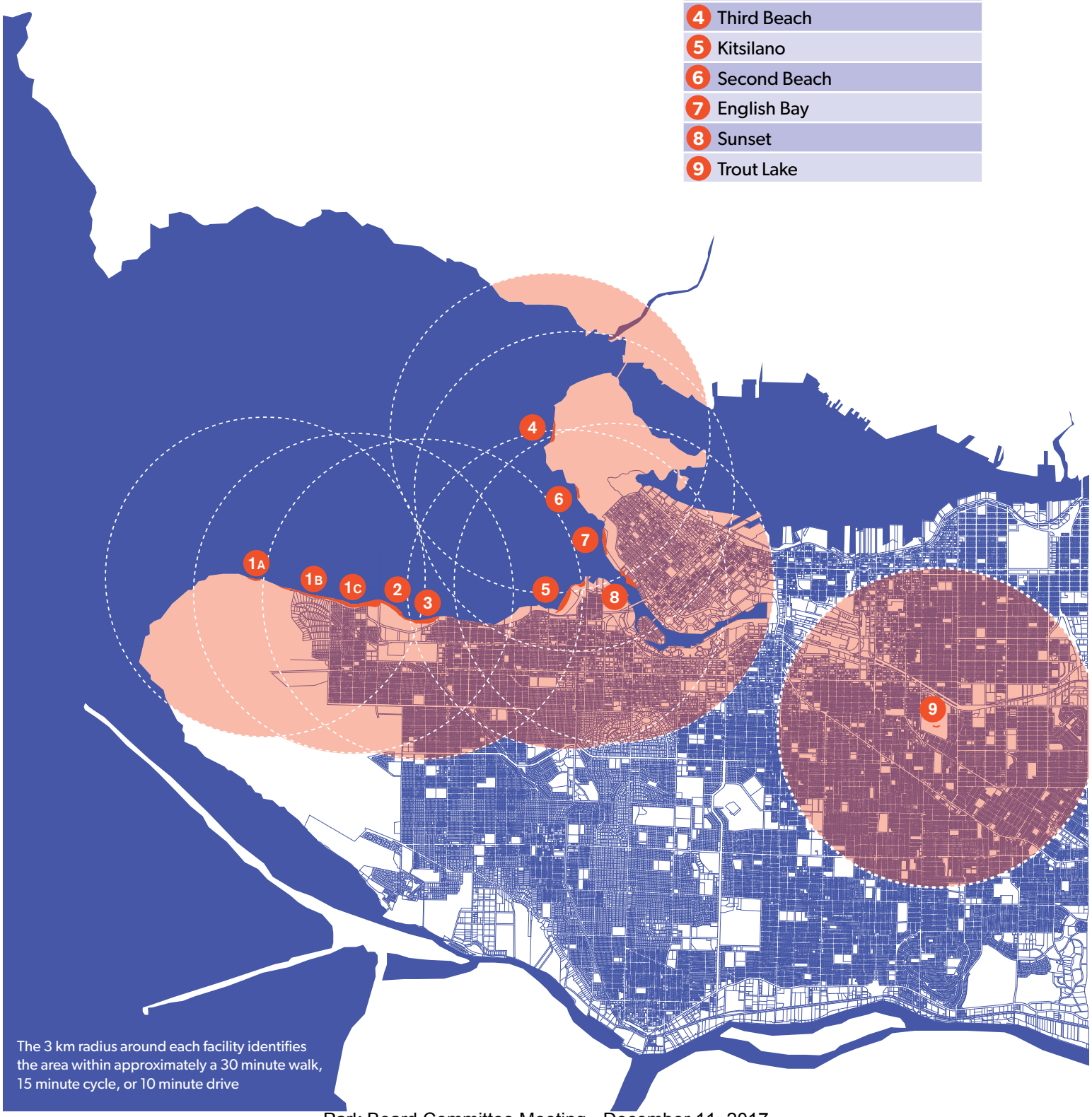
Spray parks provide more opportunities to meet a broader range of ages and needs and provide much greater flexibility in meeting activity needs than wading pools. Spray parks are seen to have advantages in that they offer an opportunity for all ages, from very young children to adults, to play, socialize, and seek respite from summer heat together.

Spray parks also feature hand activated sprays which minimize water use. Wading pools, conversely, offer a more singular use, which tends to generate the most interest in narrower age range of users focused primarily on pre-school aged children. Spray parks also offer the possibility of year-round use as the topography and some of the features offer opportunities for imaginative play even when the water is not running. Finally, per the 2011 Pool Assessment Study, the conversion of wading pools to spray parks is also driven by the fact that spray parks are more economical to operate. Unlike Vancouver’s existing wading pools, spray parks meet Ministry of Health regulations and do not require supervision which impacts staffing costs.

The next phase of this work will consider the value and role of wading pools within the overall context of aquatics within Vancouver, will review the benefits of spray parks over wading pools, and make recommendations related to whether the continued phase-out of all wading pools in the City (in favour of conversion to water/spray parks) is supported by public interests and meets the overall aspirations for the future of aquatics in Vancouver.

FIGURE 13: LOCATION OF PUBLIC BEACHES (SUPERVISED)

Public Beaches
1A Spanish Banks (Extension)
1B Spanish Banks (West)
1C Spanish Banks (East)
2 Locarno
3 Jericho
4 Third Beach
5 Kitsilano
6 Second Beach
7 English Bay
8 Sunset
9 Trout Lake



The 3 km radius around each facility identifies the area within approximately a 30 minute walk, 15 minute cycle, or 10 minute drive

Beaches

Vancouver is known throughout the world for the spectacular beauty of its waterfront setting. The extensive natural sand and rocky beaches it offers are a unique and valuable part of its overall aquatic offerings. The variation of solar orientation, topography, and natural vs. urban locations make each of its beaches well-loved, and, if you ask locals (which we did in the *VanSplash* Survey – refer to the *Public Engagement Report*), everyone has a favourite. The role that beaches play in aquatic services offerings in Vancouver is significant. Beaches were not included in the scope of either the 2001 or the 2011 aquatics studies.

The City of Vancouver and the Vancouver Park Board manage eleven lifeguarded (from late May until early September annually) beach areas in the City which total approximately 18 linear km of beach area (shown in Figure 13). Ten are on the ocean and one is at a small lake. Amenities offered at each location vary. At each location there is a great deal of capacity to use the beach and the water. Each managed beach has a designated and buoy-marked swim zone. It is difficult to define capacity for use, which varies considerablu based on weather, season, and with how willing patrons are to crowd together. Similar to outdoor pools, **beaches in Vancouver currently play a very significant role in two of the nine categories of use: respite from heat and recreation + socializing.** Interestingly, beaches see a large proportion of their use focused not necessarily on patrons in the water, but on a desire to be near the water. Thus the nature, cleanliness, size of the beach, and ease of access are likely significant drivers for use rather than the water itself. Much of summer time use is related to socializing and recreation through activities like building sand castles, tide pool viewing, beach walking, Frisbee throwing, and the general enjoyment related to both the natural setting and "seeing and being seen". Beaches also see many engaging in ocean play and swimming as well as fitness uses on the water (kayaking, wind-surfing, boogie boarding) and at the edge of the water (skim boarding). Open water fitness swimming is popular with local clubs offering workouts, coaching, and competitions.

There are millions of swims possible at these locations each year from Victoria Day to Labour Day. While beaches currently focus on meeting the needs of respite from summer heat and socializing, they also offer some water orientation for toddlers and some recreational swimming. See Figure 13 for a map of all beaches in the City of Vancouver.

The role of beaches in meeting the targets and vision for the future of aquatics in Vancouver will be considered in phases 2 and 3 of *VanSplash* work. Areas to be considered include opportunities for improvements to beaches to see them play a greater role in meeting service needs in the nine categories of aquatics, with potential to increase their role in skill development, fitness and potentially special events. Public input regarding the role of beaches, as in all areas of aquatic services, will also inform the future vision.

FIGURE 14: VANCOUVER INDOOR PUBLIC POOL USE OVER THE PAST 30 YEARS

INDOOR POOL FACILITIES	1985[1]	1994[1]	1999[1]	2010[2]	2014[2]
BRITANNIA	72,400	215,300	155,200	92,700	135,200
HILLCREST CENTRE[3]	0	0	0	237,900	674,200
KENSINGTON POOL	63,700	103,200	90,100	110,600	98,500
KERRISDALE POOL	83,500	102,400	95,600	108,900	99,300
KILLARNEY POOL	118,600	178,400	200,400	498,600	460,200
LORD BYNG POOL	92,000	123,400	106,900	154,900	112,100
PERCY NORMAN[4]	117,800	176,300	171,000	109,200	0
RENFREW POOL	86,000	175,500	153,300	137,500	204,100
TEMPLETON POOL	153,200	138,500	125,400	159,600	178,300
VANCOUVER AQUATIC CENTRE	249,200	243,800	261,700	267,500	203,800
TOTAL	**1,036,400**	**1,456,800**	**1,359,600**	**1,877,400**	**2,165,700**

*all figures rounded to the nearest hundred

1 Figures for 1985 to 1999 are from the 2001 Aquatic Services Review

2 Figures from 2009 to 2014 are from the Vancouver Park Board Safari system

3 Hillcrest figures from 2010 are only from 5 months of operation

4 Percy Norman figures for 2010 are for only 7 months of operation

Note: Public use of pools always drops during "work days," particularly in the early afternoons (1-4 pm).

FIGURE 15: CURRENT USE IN RELATION TO CAPACITY OF INDOOR POOLS

INDOOR POOL FACILITIES	APPROXIMATE ANNUAL CAPACITY IN SWIMS	USE IN 2014	PROPORTION OF CAPACITY UTILIZED
BRITANNIA	215,000	135,183	63%
HILLCREST CENTRE	750,000	674,231	90%
KENSINGTON POOL	120,000	98,463	82%
KERRISDALE POOL	200,000	99,306	50%
KILLARNEY POOL	370,000	460,225	124%
LORD BYNG POOL	175,000	112,089	64%
RENFREW POOL	200,000	204,110	102%
TEMPLETON POOL	220,000	178,290	81%
VANCOUVER AQUATIC CENTRE	775,000	203,764	26%
TOTAL	**3,025,000**	**2,165,661**	**72%**

Current Use, Capacity, and Operating Budget

Section 1, Context, presented an introduction to the why, the what and the how of aquatics, to establish a solid background to support strategies that are used to inform planning for future aquatics service delivery. The previous pages in this section have introduced facts related to the current and future demographics for the City of Vancouver, presented an overview of the aquatic amenities that currently exist, and presented information on the capacity for use for the existing indoor and outdoor pools in Vancouver. The next part of the Current State section will report on how the potential capacity of the existing aquatic infrastructure is being used, and the economics of their current and recent use.

When revenue is discussed, it is important to note that not all patrons pay, or pay full admission, as a number of subsidies exist to support swimming as a social service. While the dilution effect of subsidy on revenue is recognized, it should be reviewed in conjunction with the positive impact of targets for social impact, inclusivity, and equity through swimming facilities and programs.

While long term analysis of use, capacity, and operating budgets is made difficult by changes over time in the way that use and revenue values have been collected at the various facilities operated by the VPB over the past three decades, some analysis can be done. This information is presented on the following pages.

Indoor Pools

Use of indoor pools in Vancouver declined for many years during the 1980s then stabilized during the end of that decade and began increasing in the early 1990s, peaking in 1994 at about 1,457,000 swims. Use then stabilized again for several years as little was done to improve the facilities and the population grew. Use declined by 7% from 1994 to 1999, then flattened for a few years before substantial investment in three facilities began in 2008. Those investments triggered a significant overall increase in the past eight years. All of this is summarized in Figure 14.

During the past fifteen years, improved programs and services also made a measurable difference. **Since the Aquatics Review of 2001, the three major investments in public pools has triggered a turnaround in the patterns of use of indoor pools with growth from 1.356 million swims in 1999 (2.4 swims per capita) to 2.166 swims in 2014 (3.4 swims per capita), the last year for which consistent data is available.[1] That is an increase of over 800,000 swims, or almost 60%.** The growth validates the conclusions of the 2001 Aquatic Review that there was substantial latent and frustrated demand at the time that could be tapped with a strategic focus on modernizing and updating public pools with a focus on recreational and fitness swimming.

Even with that growth however, many of the oldest pools are still operating at much less than full capacity, as illustrated in Figure 13. The four oldest pools that have not had any significant reinvestment (i.e. Lord Byng, Vancouver Aquatic Centre, Kerrisdale and Britannia) are operating at the lowest proportion of their capacity and have shown a collective loss of almost 80,000 swims per year over the past seven years (see Appendix A) as illustrated in Figures 15 and 16. The opening of Hillcrest along with the introduction of pay parking along all West End streets significantly affected use at the Vancouver Aquatic Centre.

1 In 2015, the Vancouver Board of Parks and Recreation embarked on a change to the software used to register for recreation programs and track use. As this change occurred mid year, there was some overlap in systems and any yearly totals can't be relied upon from 2015

FIGURE 16: NET OPERATING SUBSIDIES FOR INDOOR PUBLIC POOLS IN VANCOUVER

INDOOR POOL FACILITIES	2011				2014			
	Operating Costs	Operating Revenue	Operating Subsidy	Subsidy Per Swim	Operating Costs	Operating Revenue	Operating Subsidy	Subsidy Per Swim
BRITANNIA	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
HILLCREST CENTRE [3]	$3,328,830	$2,693,788	$635,042	$1.01	$3,769,878	$2,989,468	$780,410	$1.16
KENSINGTON POOL	$635,342	$514,738	$173,561	$1.72	$583,331	$508,079	$75,252	$0.76
KERRISDALE POOL	$636,885	$402,245	$234,640	$2.40	$781,372	$431,690	$349,682	$3.52
KILLARNEY POOL	$1,786,237	$1,074,806	$711,431	$1.59	$1,888,142	$1,143,842	$744,300	$1.62
LORD BYNG POOL	$772,819	$412,585	$360,234	$3.13	$713,341	$472,038	$241,303	$2.15
RENFREW POOL	$1,067,425	$757,102	$310,323	$1.45	$1,064,490	$859,400	$205,090	$1.00
TEMPLETON POOL	$826,547	$311,676	$550,871	$3.25	$847,055	$340,032	$507,023	$2.84
VANCOUVER AQUATIC CENTRE	$1,995,534	$1,069,046	$926,488	$3.94	$2,030,925	$1,143,952	$886,973	$4.35
CENTRAL AQUATICS	0	0	0		$783,514	0	$783,514	
TOTAL	**$11,085,619**	**$7,235,986**	**$3,902,590**	**$2.58**	**$12,462,048**	**$7,888,501**	**$4,573,547**	**$2.23**

Note: Central aquatics includes the wages of aquatic administration, including each pool programmer (one per site).

As Figure 15 shows, there are a few pools (i.e. Hillcrest, Killarney and Renfrew) that are operating close to, or even over, their capacity for use. It is no coincidence that the operational efficiencies for these facilities are related to the significant investments made to bring them up to the standard for the neighbourhood, community and City-wide pool designation as recommended in the 2001 Aquatic Strategy. It is similarly worthy of note that use, in relation to capacity, is lowest in the facilities that are oldest and most out of date.

Figures for net operating subsidies for indoor public pools in Vancouver are summarized in Figure 16. It is somewhat difficult to compare individual pools between 2011 and 2014 as the cost of overall pool management and administration was pulled out of each pool and centralized into its own budget heading between those two years. (See Central Aquatics, 2014 in Figure 16.)

Overall, pools became more efficient between 2011 and 2014.

The operating costs increased marginally, as did the operating revenues and the net subsidy. However, since use increased substantially, the net subsidy per swim decreased.

This continues a trend that started almost 20 years ago; in 1996, an analysis of all indoor pool use and operating subsidies concluded that the total net subsidy per swim at that time was about $2.47.

The most cost effective pool is Kensington, largely because it is operating at or above its capacity and focusses on skill development, one of the most cost effective of all aquatic service categories.

However, it is important to note that operating costs and revenue for Kensington include revenues associated with fitness centre use which may skew the subsidy.

The next most cost effective facilities are the three newest ones—Hillcrest, Killarney, and Renfrew. These three facilities are modern and operate at a high proportion of capacity and have new leisure tanks. They have high percentages of use in the recreational swim and skill development categories which are two of the most cost effective categories of aquatic services.

Their collective subsidy per swim is less than the other pools except for Kensington.

The least cost effective pools are generally the oldest of the pools, which also happen to operate at lower proportions of capacity and have far fewer swims in the recreational swimming category. Many of these pools have loyal patrons who faithfully swim frequently. These loyal users inform the Vancouver Park Board that the quality of experience is important and factors strongly for residents in their choice of pool.

FIGURE 17: HISTORIC USE OF OUTDOOR POOLS

OUTDOOR POOL FACILITIES	1986[1]	1991[1]	1999[1]	2010[2]	2014[2]
HASTINGS POOL	11,000	10,200	Closed in 1994		
KITSILANO	218,900	170,700	128,800	123,200	173,400
MAPLE GROVE [3]	N/A	N/A	N/A	47,000	N/A
MOUNT PLEASANT	18,100	14,700	14,400	Closed in 2010	
NEW BRIGHTON	71,100	50,500	39,000	48,800	56,300
OAK POOL	13,700	12,000	Closed in 1996		
SECOND BEACH	N/A	N/A	N/A	81,000	86,600
SUNSET POOL	18,500	15,600	9,400	Closed in 2007	
TOTAL	**351,300**	**273,700**	**191,600**	**300,000**	**316,300**

*all figures rounded to the nearest hundred

1 2001 Aquatic Services Review

2 Park Board Figures

3 2011 Pool Assessment Study update contains the reference to the measured use of Maple Grove

FIGURE 18: SUMMARY OF CURRENT USE IN RELATION TO CAPACITY OF THE OUTDOOR POOLS IN 2014

OUTDOOR POOL FACILITIES	ANNUAL CAPACITY FOR SWIMS	TOTAL SWIMS IN 2014	PROPORTION OF CAPACITY UTILIZED
HILLCREST	60,000	N/A	N/A
KITSILANO	1,000,000	173,422	17%
MAPLE GROVE	260,000	N/A	N/A
NEW BRIGHTON	370,000	56,348	15%
SECOND BEACH	730,000	86,621	12%
TOTAL	**2,420,000**	**316,391**	

FIGURE 19: NET OPERATING SUBSIDIES FOR OUTDOOR POOLS IN 2011 + 2014

OUTDOOR POOL FACILITIES	2011					2014				
	Expenses	Revenue	Subsidy	Total Swims	Subsidy per Swim	Expenses	Revenue	Subsidy	Total Swims	Subsidy per Swim
KITSILANO	$625,173	$463,275	$161,898	126,333	$1.28	$825,770	$687,039	$138,740	173,422	$0.80
MAPLE GROVE	$117,305	$74,524	$102,781	N/A	N/A	$148,751	$101,406	$47,345	N/A	N/A
NEW BRIGHTON	$345,757	$114,897	$230,860	40,534	$5.70	$383,321	$161,305	$222,016	56,348	$3.94
SECOND BEACH	$491,247	$318,125	$173,122	71,213	$2.43	$474,036	$215,800	$258,236	86,621	$2.98
TOTAL	**$1,639,482**	**$970,821**	**$668,661**	**238,080**	**$2.38**	**$1,831,888**	**$1,168,550**	**$663,337**	**316,391**	**$1.96**

Outdoor Pools

Use of outdoor pools in Vancouver, summarized in Figure 17, has varied quite widely from year to year, likely due in large part to variation in summertime weather. However, overall, use peaked in 1985 at about 400,000 swims and trended downward towards 1999 when total use was less than half of the peak. The downward trend during this period is quite typical in Western Canada as outdoor summer swims shifted to indoor swims when new indoor pools were built. In fact, summers are typically the busiest season for indoor pools. Because of that downward trend, the VPB began a long term strategy of reducing outdoor pool capacity, with the first closures of the Hastings Pool and the Oak Pool in the nineties followed by the closure of the Sunset Pool and the Mount Pleasant Pool in the first years of the new millennium.

Hillcrest Centre's outdoor pool, which sees significant usage in the summer months, is not shown in Figure 18 as its use is not tracked separately from the use of the indoor pool to which it is attached. Many patrons use both on the same visit and therefore visits to one are not additive to the other, although the outdoor pool may be a draw for some users in the warm weather.

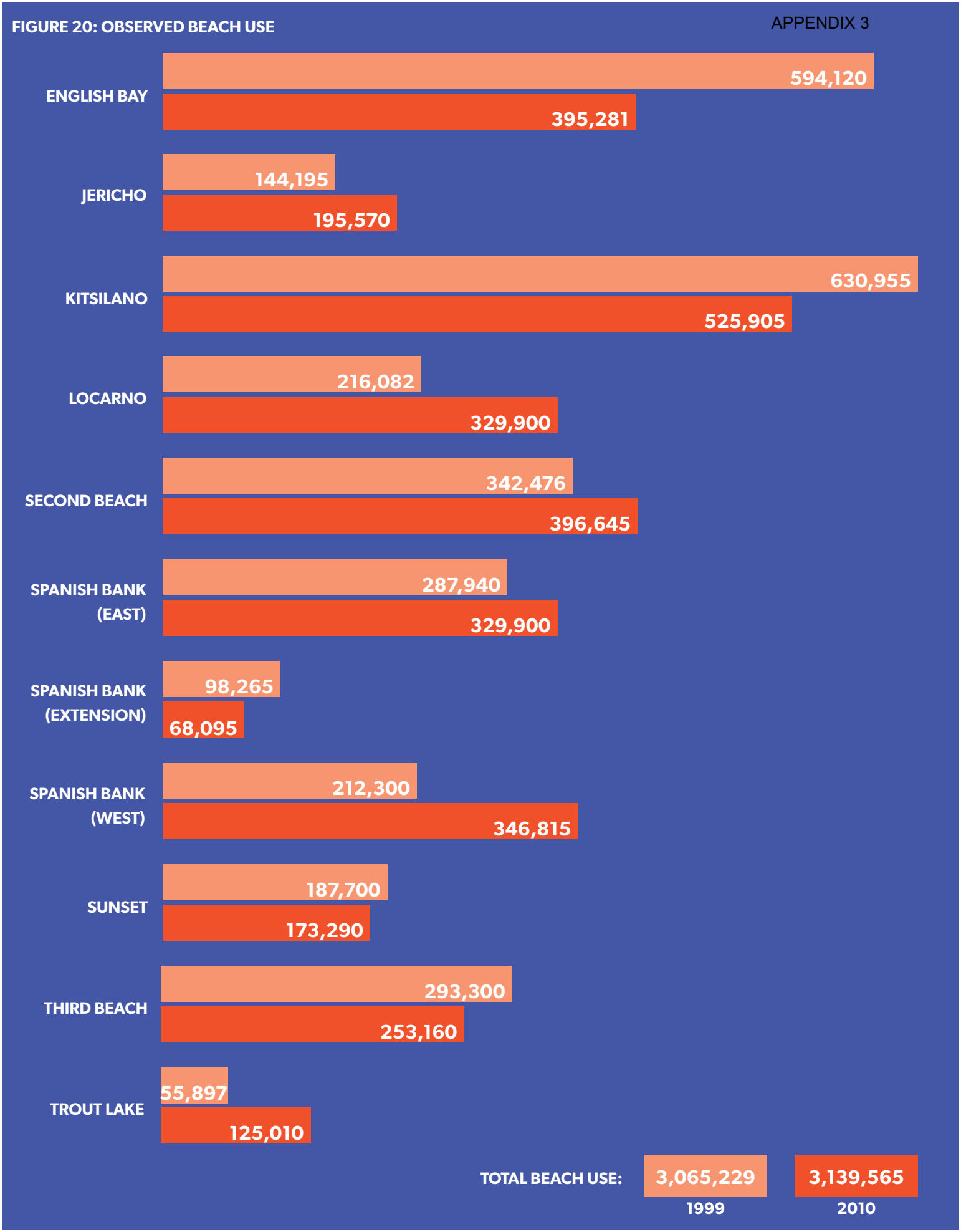
While reductions in outdoor pool capacity have been evident over the past 30 years in Vancouver, as in most Western Canadian centres, the reduced capacity cannot be tied directly to reduced swimming overall in outdoor pools. There is currently more capacity than is being utilized even with the closing of four pools and when the remaining pools are examined, there has not been any consistent increase in their use as other facilities have closed. For example, the Kitsilano Pool has fewer swims each year in recent years than it had 30 years ago. However, there does appear to be a steady upward trend in usage of outdoor pools in Vancouver from 1999 through 2010 and into 2014 in spite of the fact that there are fewer outdoor pools available. While the total outdoor pool use in 2014 does not meet the peak use of 1986, it comes within 35,000 swims of the 351,300 swim count for 1986, with four fewer pools in the system.

As Figure 18 shows, where use of outdoor pools in relation to outdoor pool capacity can be measured, a very small proportion of available space is being utilized. A comparison of Figure 14 and Figure 17 also shows that swimming use in outdoor public pools represents a very small proportion of all overall swimming in Vancouver - less than twenty percent of the use of indoor pools.

Figure 19 shows the degree to which outdoor pool use is subsidized, which, when compared with the average subsidy per swim for indoor pools in 2014, shows that outdoor pools operate at a lower subsidy per swim on average than indoor pools ($1.93/swim for outdoor pools, $2.23/swim for indoor). The net operating subsidy for each pool was calculated by using the direct cost for each facility, adding its proportionate share of the “Outdoor Pool Administration” budget, and subtracting from this total cost the operating revenue for each year. The cost of operating the Hillcrest Outdoor Pool cannot be separated from the cost of operating the indoor spaces to which it is attached, therefore, it is excluded from Figure 19. See the facilities overview section for a description for costs not included in overall expenses. Note that while the net subsidy analysis may favour an outdoor pool, most indoor pools offer a much broader range of amenities, programs, and services.

With the above noted, Figure 19 shows that visits to outdoor pools increased between 2011 and 2014, and the net public subsidy per visit has decreased.

FIGURE 20: OBSERVED BEACH USE



Spray Parks + Wading Pools + Beaches

As described on pages 34-35, it is very difficult to determine total capacity for use of spray parks and beaches, and no hard and reliable data collection has been conducted to measure actual usage of these aquatic amenities within the City of Vancouver to date. Part of the reason for the lack of collected data may be that there is little or no revenue attached and little or no capital or operating cost when compared to indoor and outdoor pool facilities. There is a cost of maintenance associated with spray parks, and maintenance, life guarding, food service staffing, and rentals associated with beaches.

However, what is known about beach use was collected by lifeguards at the 11 guarded beaches in Vancouver and is summarized in Figure 20. The data for usage was collected in 1999 and 2010 indicates relatively steady use of local beaches during this time.

Over 3.1 million annual total use of beaches in Vancouver in 2010, approximately 1.0 million greater than the combined annual indoor and outdoor pool swims recorded for 2010. The highest beach use was seen at Kitsilano and English Bay beaches.

While total use was quite consistent from one decade to the next, some specific beaches experienced variances of up to 63% up or down in those two years, the reasons for which are unclear. The consultant team are not aware of any reliable figures for beach use more recent than 2010. It is difficult to know how many of the patrons that used a beach actually used the water; it can be assumed that a great deal would have only used the beach.

Use of Vancouver beaches is very much a regional market as few other municipalities in the Lower Mainland operate guarded ocean beaches and many lower mainland residents are willing to travel a greater distance to experience them. In addition, while not represented in available data, experience indicates that Vancouver beaches also attract a high number of visitors and tourists to Vancouver each year, making them a component of the aquatic service delivery system that offers a high degree of cultural diversity.

Beaches are an incredible aquatic resource with the VPB range of aquatic services and meet a large number of the benefits of aquatic services presented on page 12 with no capital cost and very low operating costs. They offer a unique, natural, outdoor aquatic experience that is available in very few urban centres in the country, and, along with spray parks and wading pools, are available for public use with no entry fee. Phases 2 and 3 of the Vancouver Aquatics Strategy will look more closely at the role of spray parks, wading pools, and, in particular, the role of beaches in meeting the future vision for aquatic services in Vancouver.

Key Findings

The review of the current state of aquatic services in Vancouver clarifies a number of important issues that need to be considered in the development of a new Aquatic Services Strategy. They are summarized below.

INDOOR POOLS

- The five indoor pools that are approaching the end of their functional lifespan (Vancouver Aquatic Centre, Kerrisdale, Britannia, Lord Byng, and Templeton) are the most underutilized and therefore the least efficient in the delivery of aquatic service. They make up only 34% of all visits to indoor pools in Vancouver and have the highest rates of subsidy per visit.
- The three indoor pools that are newest, or have had significant recent investment (Renfrew, Killarney and Hillcrest) are the best utilized and are the most financially efficient in delivering aquatic services. These three facilities realize about 62% of all indoor swims in the indoor pools and have among the lowest public subsidies per swim.
- Together, all nine indoor pools generate about 2.165 million swim visits per year, which represents an increase in indoor visits of close to 60% over the past fifteen years and results in an increase in the swim rate from 2.4 per capita in 1999 to 3.4 swims per capita in 2014.
- Geographically, all areas of Vancouver are well served with indoor pool facilities within the targeted range of a 3km radius (approximately 10 minute drive) with the exception of a small area in South Vancouver near Cambie and Marine Drive.

OUTDOOR POOLS

- There are fewer public outdoor pools in Vancouver than there were ten years ago, a trend that is consistent with most Canadian urban centres. But the City still has available unused capacity in its remaining outdoor pools that is consistent with other major centres.
- The remaining outdoor pools are typically destination pools, servicing all residents of the city and region, and collectively they generate over 300,000 visits per year (in a season of approximately 100 days), or about 15% the number of swims that indoor pools generate over the course of a year.
- There are fewer swims at outdoor pools in 2014 than 30 years ago, even though the population has increased. However, the use of the outdoor pools has increased steadily since 1999, despite the closure of four outdoor facilities over the past 25 years.
- There is still a great deal of unused capacity in the existing destination outdoor pools that is currently available that can support what may be a trend towards greater usage of outdoor pools.
- The net subsidy per swim in outdoor pools is slightly lower than the subsidy per swim at indoor pools; however, clearer data is required to confirm the level of subsidy.
- Currently, there is no best practice target for geographic location (i.e. ideal walking/biking/driving radius) for outdoor pool facilities so a radius of 3 km has been used on facility maps to show relative adjacencies and potential gaps in service.

SPRAY DECKS + WADING POOLS

- The City has 15 spray decks and 15 wading pools. The ratio of spray decks to wading pools has increased over the past twenty years as many wading pools have closed and many new spray decks have replaced them. This is consistent with current "best practices" with regards to operating wading pools and with the trend in urban centres across the country, especially as "fill and draw" pools no longer meet health regulations.
- Use of spray decks and wading pools is not currently measured, nor is the financial efficiency. So, no conclusions can be made about the net public subsidy per visit to these aquatic amenities.
- Currently, there is no best practice target for geographic location (i.e. ideal walking/biking/driving radius) of spray parks or wading pools.

BEACHES

- The City manages 11 guarded beaches over 18 km of linear beach. Ten are on the ocean and one is on a small lake. While visits to these amenities have not been consistently measured, it is clear that they are destination amenities which are used regionally by millions of residents and visitors. It is also clear that the majority of those that visit a beach in a bathing suit do not actually swim in the water. No trends are available in terms of beach use.
- Further data collection regarding use of beaches is warranted, and further consideration related to how beaches and ocean water swimming are contributing, and can continue to contribute, to the overall future aspirations and targets for aquatic service delivery for Vancouver is required.

These key findings will be used in Phase 2 of the work to form the basis of the recommendations for the aquatics strategy.

Introduction

Further to the background provided in the previous sections of this report, the future vision will be informed by a core belief that, along with providing opportunities for physical health and well-being, aquatic services play a key role in supporting community and personal well-being as well as in enhancing social inclusion. Understanding how existing VPB aquatic facilities are performing, both from a quantitative operational and building performance perspective, but also from a more qualitative user experience perspective, is key to understanding their success and their role within the overall aquatic infrastructure.

Building on both the facility assessments carried out as part of 2001 Aquatic Services Review, which provided overall lifecycle reviews including electrical, mechanical, and structural assessments, recommended facilities upgrades where required, as well as the facility profiles carried out in the 2011 Pool Assessment Study, this section provides an updated facility overview. The facility reviews carried out as part of this Current State Analysis relied heavily on data provided by the VPB and City of Vancouver for facility age, operational costs[1],and swim numbers, as well as include an updated list of amenities for each pool along with aquatic experience information provided through a Pool Programmer survey conducted as part of this current scope of work.

The following pages contain an overview of both indoor and outdoor existing pool facilities in the area. An overview and analysis of information is provided on context, demographics, site, and amenities. In addition to the statistics of the facility itself, this section gives an overview of more experiential aspects of the building, including social inclusivity, well being, and connection to nature.

The following information, not considered in the previous studies, has been included to consider aspects of social inclusion and environmental sustainability for each facility:

- LGBTQ policies[2]
- Pool Programmer Surveys (Including Part 2 Seniors Inclusivity Review) (Full answers in Appendix B)
- Energy Use and Greenhouse Gas Emissions (GHG) Data[3]

The additional information included increases the targets and measures of success in accordance with overall City policy and to capture aspirational aspects of the Aquatics Strategy including the role of aquatics in social inclusion and community well-being, and the role of aquatics facilities in meeting overall Green Gas Emissions objectives.

1 Data sourced in part from the City of Vancouver + City of Vancouver Energy and Utilities Department.

2 Information is included from the VPB's new recommended LGBTQ policies that were established in 2014, in their report titled Building a Path to Parks + Recreation for all: Reducing Barriers for Trans* & Gender Variant Community Members (referred to in the following section as the TGVIWG Report). Various aquatic facilities are having policies rolled out and are indicated in more detail in the section following for each facility participating as part of the pilot program.

Trans* = an inclusive umbrella term used to refer to communities and individuals with nonconforming gender identities and expressions.

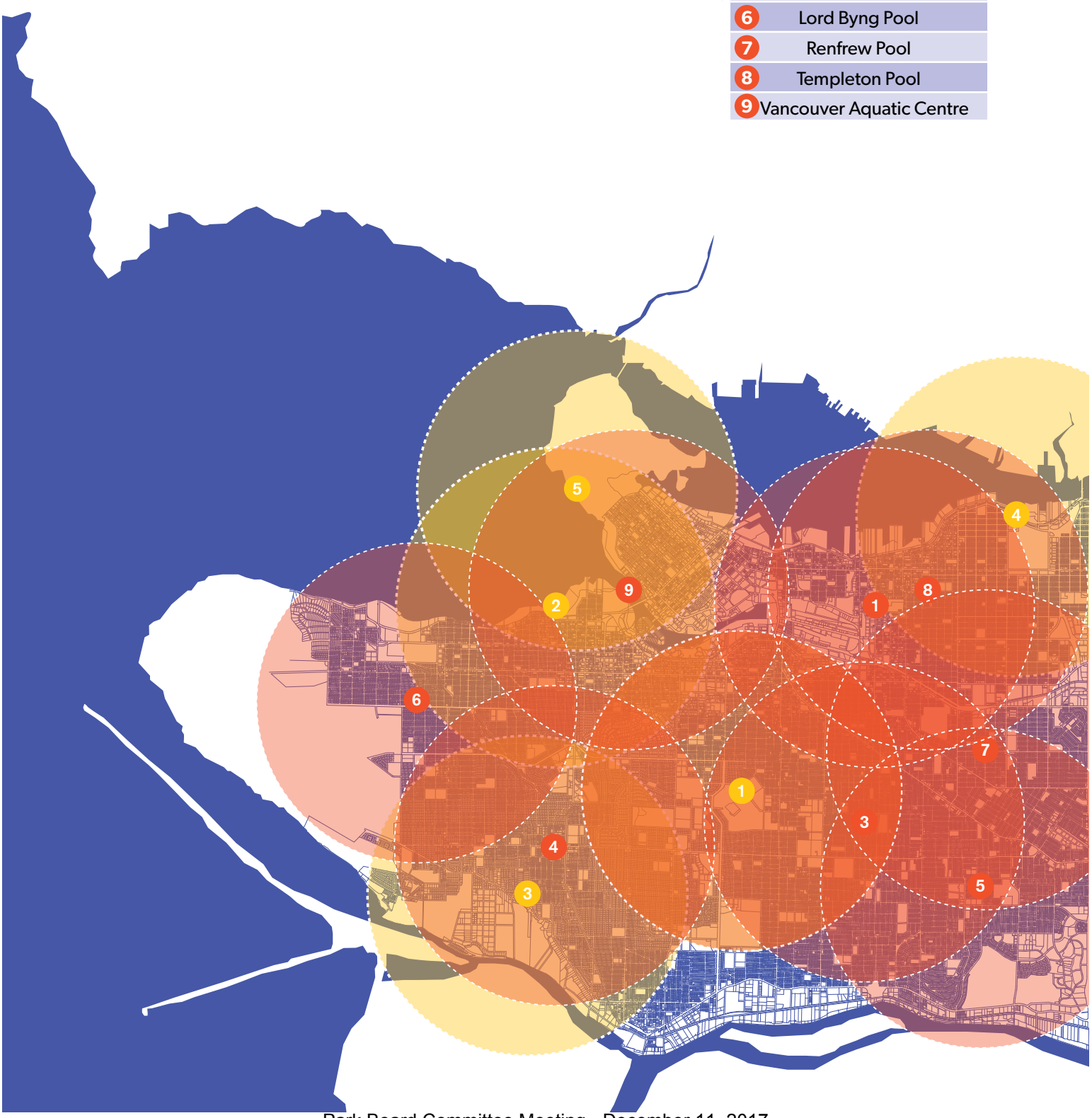
3 Lifecycle / Operational energy use and Greenhouse Gas Emissions data are evaluated to provide an indication of operational efficiency to highlighting facilities with exceptionally high consumption. It is important to note that the diversity of functions served in each facility can impair any comparisons made between energy use in facilities assessed. For example, a facility containing only aquatic elements cannot accurately be compared to a facility with aquatic plus recreation elements (i.e. ice rink, gym), as the energy loads within these space types vary considerably. Numbers on emissions and use were sourced from the City of Vancouver Real Estate + Facilities Management Department.

Existing Facilities Overview

3

Outdoor Pool Facilities	
1	Hillcrest
2	Kitsilano
3	Maple Grove
4	New Brighton
5	Second Beach

Indoor Pool Facilities	
1	Britannia
2	Hillcrest Centre
3	Kensington Pool
4	Kerrisdale Pool
5	Killarney Pool
6	Lord Byng Pool
7	Renfrew Pool
8	Templeton Pool
9	Vancouver Aquatic Centre



Facilities at a Glance

INDOOR POOLS	Year Built	Year Renovated	Amenities [1] (* - ****)	Sustainability		Accessibility + Inclusion [2]			LGBTQ/2S Pilot Program
				Energy use intensity	GHG Emissions Intensity	Poor	Average	Good	
POOLS ONLY									
BRITANNIA	1975	1998	**	N/A	N/A	X			X
LORD BYNG	1979	-	**	1,164.31	168.79		X		
TEMPLETON	1974	-	**	1,363.16	195.91			X	X
VANCOUVER AQUATIC CENTRE	1974	-	***	707.10	96.10		X		
POOL + COMMUNITY CENTRE									
KENSINGTON	1979	-	**	657.77	85.04	X			
KERRISDALE	1955	1996*	*	511.33	72.79	X			
RENFREW	1963	1970+2005	****	634.51	83.01			X	
POOL + COMMUNITY CENTRE + RINK									
HILLCREST	2010	-	****	1,086.87	111.67			X	X
KILLARNEY	2006	-	****	786.50	88.49		X		X

Note: Energy use Intensity and GHG Emissions Intensitynumbers include energy use/GHG for connected amenities, such as a community centre and rink. The table is organized to attempt to more directly compare similar scale and programmed facilities.

* The 1996 renovation of Kerrisdale Pool did not change the swimming amenities. The pool is much the same as was built in 1955.

OUTDOOR POOLS	Year Built	Year Renovated	Amenities (* - ****)	Sustainability		Accessibility + Inclusion			LGBTQ/2S Pilot Program
				Energy use intensity	GHG Emissions Intensity	Poor	Average	Good	
KITSILANO	1931	1979	***	411.38	65.83		X		
MAPLE GROVE	1995	-	**	306.99	50.00	X			
NEW BRIGHTON	1936	1973	**	468.02	71.17		X		
SECOND BEACH	1934	1995	***	468.83	84.53		X		

1 Amenities star ratings based on a qualitative understanding of the variety of opportunities provided at each facility, including its success in the areas such as providing amenities across age, gender, and other demographic areas. Based on the overall quality of experience.

2 Poor, Average and Good ratings are based on the following: "Poor" provides minimal inclusion with it just being classified as a "wheelchair accessible facility", "Average" facilities are wheelchair accessible facilities, with another inclusive feature such as beach style entry, "Good" facilities provide a variety of options for inclusivity such as lifts, wheelchairs, ramp access, and specially designed change facilities. For a specific list of inclusive features for people with disabilities, see each facility data sheet in the following pages.

Britannia
Neighbourhood Pool
1975, RENOVATED 1998

Pools

25 m

6 lanes (320 m^2 water area)
1 m diving board
Rope swing
Small slide
Leisure/teaching pool (59 m^2 water area)
whirlpool (11 m^2 water area)

Amenities

**

sauna (in changeroom)
steam room
weight room/fitness centre (small in-facility)
family change rooms

Swims (2014)

135,183

200,000 planned target capacity (For a new or upgraded neighbourhood pool.) See Figure 15.

Total visitors 2010:147,301
(Including 7,910 school class visits)

Aquatic Experiences

- 5,028 scheduled annual operating hours (2016)
- Mix of drop-ins, lengths, aquafit, adapted programs, lessons, and rentals
- Pool is also considered a classroom for 1,100 students from preschool to grade 12
- Registration levels drive programs but time and space are very limited
- Serves diverse ethnic population and low-income community (pre-school to elderly populations have specific program opportunities)

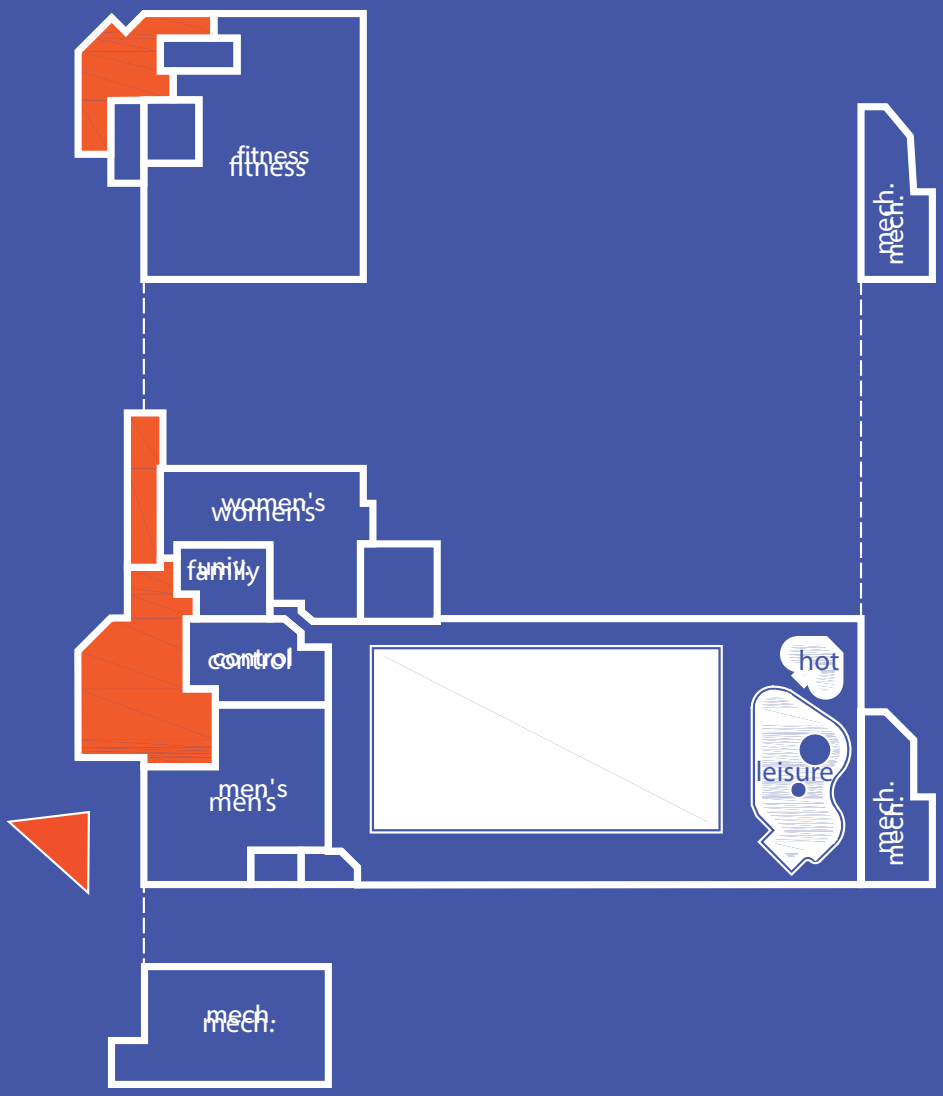
Operating Budget (2014)

Revenues	N/A
Costs	N/A
Subsidy	N/A
Recovery Rate	N/A
Participant Swims	135,183
Cost/Swim	N/A
Revenues/Swim	N/A
Subsidy/Swim	N/A

*Revenues + Costs not received for Britannia

"My favourite aspect is the space to sit on the pool deck to observe."

— From 2016 Pool Programmer Survey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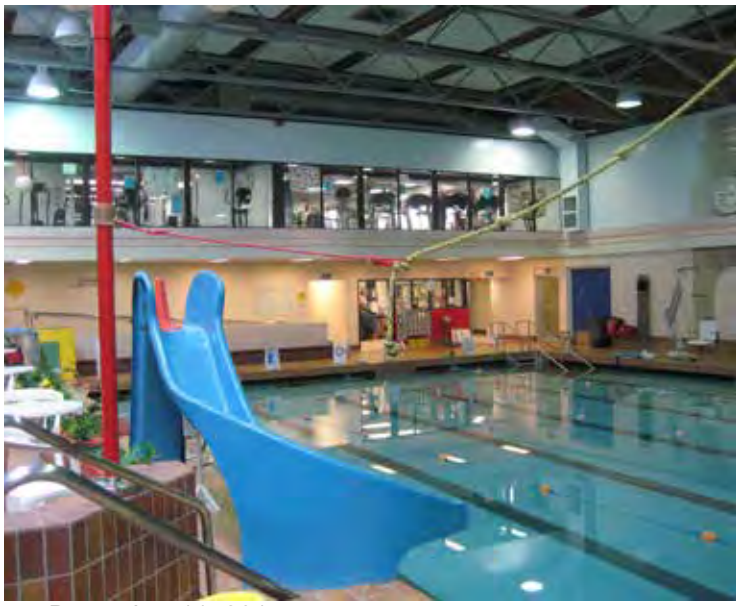
pool
entrance


SLOW
Keep Right



Community Building

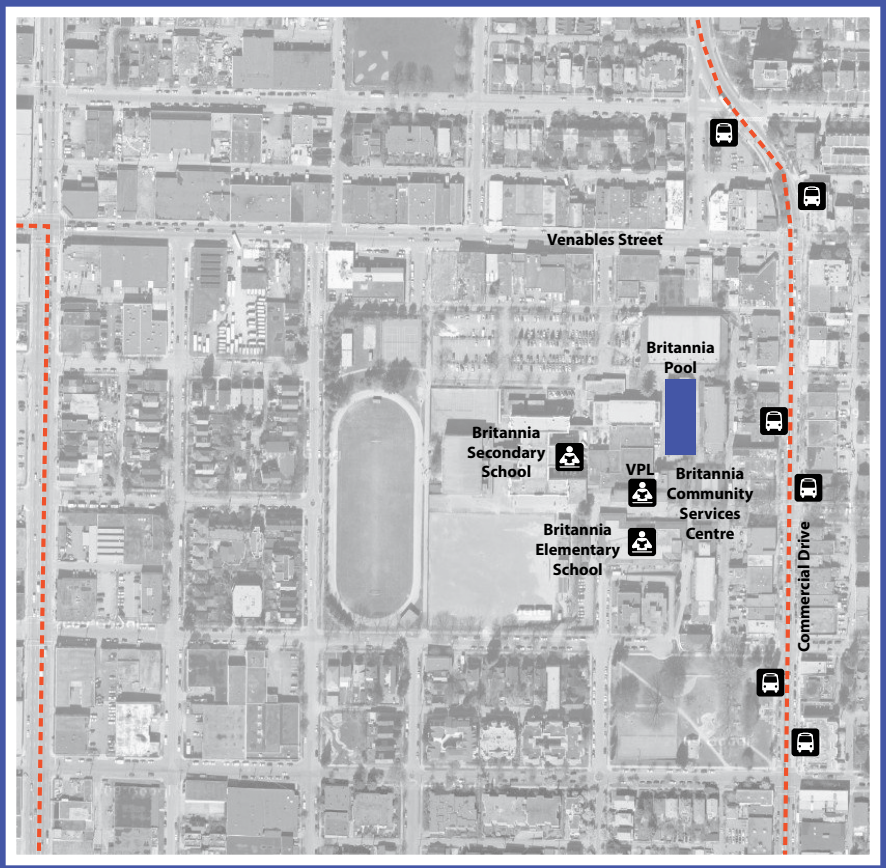
CONTEXT

Britannia Pool is part of a 35-year-old community services centre complex in collaboration with the school and library boards on the east side of Vancouver. A portion of the operating expenses are covered by the school board and the remainder by the City of Vancouver. It is located just off Commercial Drive serving primarily the Grandview-Woodland and Strathcona community areas and is operated by a non-profit society.

The 2011 population of the two major communities was 39,470 with the majority being in the 25-54 year range. English and Chinese are by far the primary mother tongues.

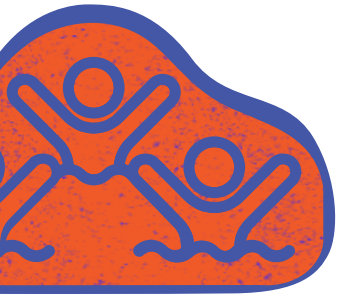
*Population and demographic data extracted from 2011 census

Site Context



"My favourite aspect of the pool is: The main pool with slide, swinging rope and diving board. Love to watch the kids enjoy their aquatic experiences."

— From 2016 Pool Programmer Survey



SITE

- Situated on a seven-hectare complex west of the Napier Greenway that features many facilities sharing the site with diverse programs and activities for all ages
- The site is owned by the Vancouver Park Board and the School Board
- A new comprehensive Master Plan was developed for the site in 2011 (funding was approved in 2014 and work has begun as of 2016)
- Parking lots are shared and the site is next to a track, play fields and Grandview Park, which had the following amenities recently updated: playground, pathways, water play feature, stage, washrooms, lawns, planting and a bike polo court

> **"The estimated average duration is 1.5 hours. They will swim and use the hotspots."**
>
> — From 2016 Pool Programmer Survey

Relationship to other facilities / amenities

- Part of a multi-facility complex which includes gyms, courts, fields, parks as well as an ice rink, youth centre, seniors lounge, art gallery, library and school
- Both Britannia Elementary and Secondary schools are on-site as well as a child care centre and two specialized education centres
- Templeton Pool located approximately 1 km east

Transit & Bike Accessible

- Accessible by transit from along Commercial Drive and Venables
- Close to the Adanac bicycle route

COMMUNITY AMENITIES

Is it part of a larger community centre?
Britannia Community Centre has an indoor pool, tennis courts, seniors (55+) centre with computer lab, teen/youth centre, fitness centre, ice rink, and - for classes only - a darkroom and pottery studio. The 2011 Britannia Community Masterplan will renew the community facilities and surrounding area, positioning it as a place of public-use, co-locating and integrating community and civic uses (e.g. schools, multipurpose spaces. Shared changeroom and fitness centre were renewed with the intent of increasing accessibility and inclusion. The pool facility is maintained by the Vancouver School Board.

Other Community Uses of the Facility?
Fitness centre/weight room

IMPACT OF EXTERNAL / REGIONAL FACILITIES

In 2010, the ice rink next to the pool was used as an Olympic facility and the Olympic activity, high security in the area, and fencing barriers had a significant impact on decreased participation levels. The opening of Hillcrest on August 2010 also appears to have had an impact on participation and has drawn users away from the facility.

Social Inclusivity

PEOPLE WITH DISABILITIES

- Wheelchair accessible facility
- Elevator

LGBTQ/2S

This facility is designated as a pilot facility for new policies from the 2014 TGVIWG Report and includes the following alterations:

- Installation of new, universal signage for all single stall washrooms + change rooms
- Change stalls changed from "family" to "universal"

SENIORS

- Hot pools most popular facility amenity
- Most popular programs for seniors are Range of Motion and Mild Aquafit classes
- Most visit the facility between 6:30 am - 11:00 am
- Number of seniors visitors remains steady

> "Our aquatic lift is seldom used. We don't have many patrons that require the use of the equipment."
>
> — From 2016 Pool Programmer Survey

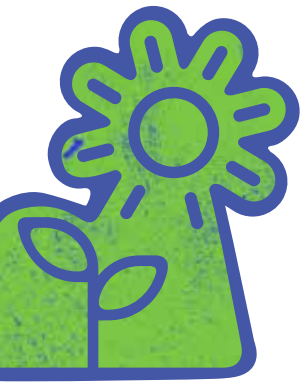
Well Being

- Sauna and steam room in facility
- Whirlpool
- Weights room
- Universal change area

Staff surveys indicated that in addition to the features listed above, there is also space on the pool decks, with tables and chairs. However, in reality this is a narrow area designed primarily for circulation around the pool. Staff indicated that the majority of patrons using the seating are parents and caregivers rather than loungers using the space to relax.

Connection to Nature

The pool is surrounded by other civic facilities and so is unable to have direct views to the outside and adjacent sports fields. There are a few skylights that allow natural light into the space, creating a separation between the pool and natural environment.



Sustainability

CONDITION AND LIFECYCLE

Built in 1975 and extended in 1998, the facility is generally at the end of its lifecycle. Further ongoing investments in repairs and maintenance have been made subsequent to the renovation in 1998 and are indicative of the aging of the systems in the building. For example, the steam room was rebuilt recently and in 2011 additional funds were put into mechanical systems.

Elements beyond life span:

- Built-up roof coverings

> **"Full renewal - it is an aging facility."**
>
> — From 2016 Pool Programmer Survey

ENERGY USE

Use Per Swim		Use per Area		Totals	
Energy Use /Swim (kWh/swim)	GHG / Swim ($kgCO_2e$/swim/yr)	Energy Use Intensity ($kWh/m^2/yr$)	GHG Emissions Intensity ($kgCO_2e/m^2/yr$)	Total Energy (kWh/yr)	Total GHG ($kgCO_2e$/yr)
n/a	n/a	n/a	n/a	n/a	n/a

GHG = Annual Green House Gas Emissions measured in kilograms of CO_2 equivalent

Swim Number Data from 2014 annual numbers; Energy and GHG data from 2016 Q2 (Apr 2015-Mar 2016)

Other uses in facility that will impact total energy use: Rinks, gymnasiums, fitness centres, multi-purpose rooms will all impact overall energy use.

Final Observations

Britannia was recommended for upgrades in the 2011 Pool Assessment Study both in terms of range of user experiences offered and to address aging infrastructure. It is currently operating at 63% capacity; however, as operational data was not available for this facility the subsidy per swim cannot be provided. An overall masterplan is currently underway for the Britannia site which will impact the near term future of this facility.

Hillcrest
City-Wide Indoor/Outdoor Aquatic Facility
2010, LEGACY COMPONENT 2011

Pools

50 m

8 lanes (858 m^2 water area)
Twin bulkheads, Moveable floor
1 m + 3 m spring board
5 m platform dive
Large scale inflatables
Leisure tank (384 m^2)
Toys, sprays + lazy river
Outdoor Pool (273 m^2)
Sprays + bubble jets
Whirlpool (64 m^2 water area)

Amenities

****

sauna
steam room
weight/fitness centre
family + universal change rooms

Swims (2014)

674,231

750,000* planned target capacity (Planned annual target capacity for a city-wide pool.) See Figure 15.

*Includes paid visits by non-swimming participants

Aquatic Experiences

- 5,749 scheduled operating hours (2016)
- Public swim/leisure opportunities all day
- Majority of use by far (80%) is recreational and fitness, followed by aquafit programs and lessons
- Entire facility is wheelchair accessible
- The facility draws a high number of participants who stay for longer periods of time with the emphasis on leisure and flexible use
- Outdoor component is very popular during the warm season with afternoon high averages of 100 swimmers (2010)

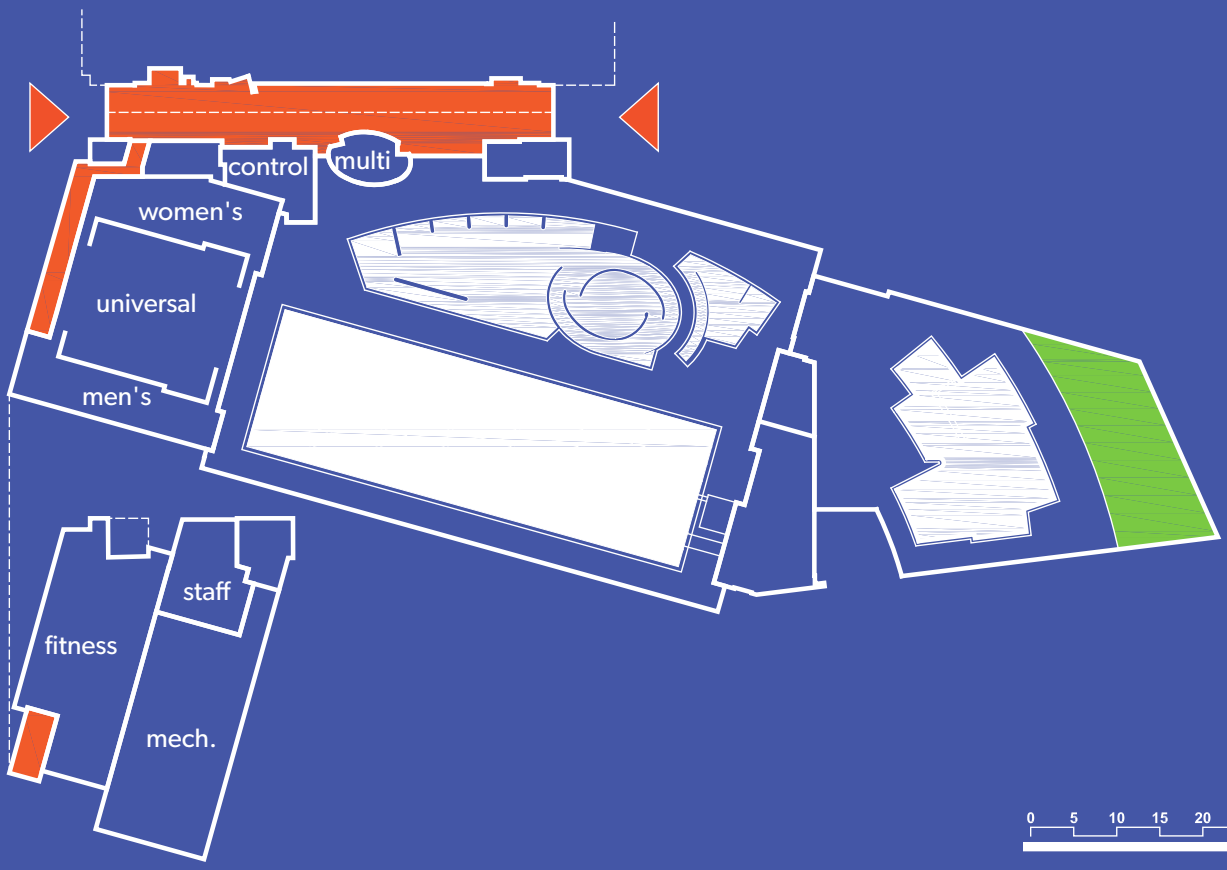
Operating Budget (2014)

Revenues	$2,989,468
Costs	$3,769,878
Subsidy	$780,410
Recovery Rate	79%
Participant Swims	674,231
Cost/Swim	$5.59
Revenues/Swim	$4.43
Subsidy/Swim	$1.16

*expenditures excludes utilities (water, sewer)

"Each space is successful for different things. The pool is very well laid out and popular."

— From 2016 Pool Programmer Survey


control
multi
women's
universal
men's
staff
fitness
mech.
0 5 10 15 20 25
Legend
public space
pool
entrance
green space

Community Building

CONTEXT

The Hillcrest Aquatic Centre serves as a destination facility for the city as well as for the region and for visitors. Located in Riley Park–Little Mountain, the immediate and surrounding community areas are varied in their demographics and characteristics. Surrounding communities include Mt. Pleasant, Kensington-Cedar Cottage, Sunset, Oakridge, South Cambie and Fairview.

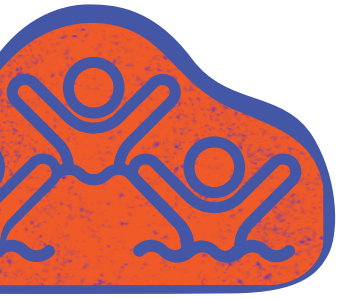
In Riley Park-Little Mountain community the 2011 population was 21,795, with the majority being in the 40-64 year range closely followed by 20-39 year-olds. English and Chinese are the predominant mother tongue. Close to 42% do not drive to work. Local demographics are expected to change over the next few years with a number of housing developments in the immediate area either planned or under construction.

*population and demographic data extracted from 2011 census

Site Context

"Most of the places to meet and hang out is on the deck or in the large hot tub."

— From 2016 Pool Programmer Survey



SITE

- Nearby parks include Cartier, Grimmett, Hillcrest, Prince Edward, Riley, and Queen Elizabeth as well as Nat Bailey Stadium
- Hillcrest and Riley Park playgrounds are next door
- Views of the mountains and park

Relationship to other facilities / amenities

- Connected to a new ice rink, and community centre as well as a library
- Three elementary schools are nearby
- Closest pool is Kensington (approximately 2.5 km east)

Transit & Bike Accessible

- On bus route, with easy transfer access from the Canada Line and Oakridge Mall
- Accessible via Ontario and Cambie bicycle routes

"We have a number of people who come and watch lessons - during the lesson time there is an average of 15-20 people sitting in chairs watching the lessons who do not swim."

— From 2016 Pool Programmer Survey

COMMUNITY AMENITIES

Is it part of a larger community centre?
Hillcrest Aquatic Centre is part of a major community facility that contains a fitness centre, ice rink,curling, gymnasium, indoor cycling, multi-purpose rooms, games room, dancing studio, playgrounds, childcare centre and cafe.

Other Community Uses of the Facility?
Offers both indoor and outdoor, structured and leisure swimming facilities.

IMPACT OF EXTERNAL / REGIONAL FACILITIES

The annual swim target for Hillcrest, designed as a city-wide pool, was 750,000 swims. Hillcrest has seen a consistent increase in annual swims since it's opening in 2011, hitting a grand total of 5,000,000 swims in 2014. While its success may be due in part to its co-location with other community facilities (library and a multi-use recreation facility), it is also a result of the wide range of aquatic opportunities it offers, both indoor and outdoor, combined with the innovative approach to the change room layouts which provide a clear emphasis on universal change space. As a result of its success, Hillcrest has been considered an exemplar and has influenced aquatic facility design in surrounding municipalities in terms of its mix of water types and sizes, change room layout and size, and the success of combining an outdoor pool with an indoor pool facility, which has led to approximately 35,000 outdoor swims annually. Part of its success is due to the condition of many other pools in the area, the newness of the facility has drawn some users from other facilities to the Hillcrest Centre.

Social Inclusivity

PEOPLE WITH DISABILITIES

- Wheelchair accessible facility
- Elevator
- Aquatic pool lift
- Aquatic wheelchairs
- Zero-entry pool and ramp access
- Accessible change rooms

LGBTQ/2S

This facility is designated as a pilot facility for new policies from the 2014 TGVIWG Report and includes the following alterations:

- Installation of new, universal signage for all single stall washrooms + change rooms
- Recent renovations have been undertaken to change "family" change rooms into universal change area

SENIORS

- Most popular times to visit are early morning and early afternoon
- Majority participate in Aquatic Fitness or hot facilities
- Facility offers Mild Aquafit and Range of Motion Aquafit courses
- Number of seniors visitors appears to be slowly increasing

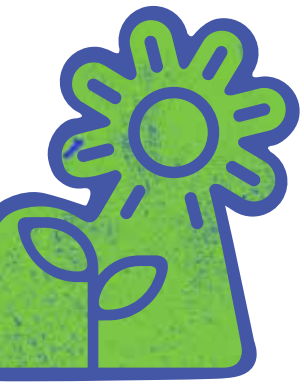
Well Being

- Sauna
- Outdoor pool
- Whirlpool
- Steam room
- Weight/fitness centre

Connection to Nature

With its location adjacent to Queen Elizabeth park, Hillcrest is surrounded by green space. The facility takes advantage of this with both views and direct connections to the outdoors.

- Large amounts of glazing allows both natural light and views into the natatorium spaces
- Outdoor pool and spray park area adjacently connected



Sustainability

CONDITION AND LIFECYCLE

Hillcrest is anticipated to have a 50 year lifecycle. It was constructed with UV water sterilization. As it is a new facility there are currently no issues with building maintenance and no elements are beyond their lifespan.

ENERGY USE

Use Per Swim		Use per Area		Totals	
Energy Use /Swim (kWh/swim)	GHG / Swim ($kgCO_2e$/swim/yr)	Energy Use Intensity ($kWh/m^2/yr$)	GHG Emissions Intensity ($kgCO_2e/m^2/yr$)	Total Energy (kWh/yr)	Total GHG ($kgCO_2e/yr$)
19.76	2.03	1086.87	111.67	13,323,911	1,369,000

GHG = Annual Green House Gas Emissions measured in kilograms of CO_2 equivalent

Swim Number Data from 2014 annual numbers; Energy and GHG data from 2016 Q2 (Apr 2015-Mar 2016)

Other uses in facility that will impact total energy use: Rinks, gymnasiums, fitness centres, multi-purpose rooms will all impact overall energy use.

Final Observations

Hillcrest is the newest aquatic facility operated by the VPB, and is the only city-wide destination scale aquatic facility in the City of Vancouver providing a large variety of amenities in aquatic experience. As such, it experience by far the greatest number of annual visits in 2014 – nearly 1.5 times that of Killarney, the next most well-used facility. The number of annual visits in 2014 was more than the annual visits of Templeton, Britannia, Kensington, Kerrisdale, and Lord Byng pools combined. The subsidy per swim based on the most up-to-date information is the third lowest in the system.

The range of pool amenities and water features, combined with the fact that it is the largest and newest facility all contribute to its ongoing success as a destination pool and the most significant aquatic facility in the system.

Kensington
Neighbourhood Indoor Aquatic Facility
1979

Pools

15 m

4 lane leisure tank (133 m^2 water area)
whirlpool (13 m^2 water area)

Amenities

**

sauna
weight room/fitness centre (251 m^2 small in-facility)

Swims (2014)

98,463

200,000 planned target capacity (For a new or upgraded neighbourhood pool. Due to its components and a capacity of 130, it will not be able to achieve this target. The facility is successful in terms of participation and operating costs.) See Figure 15.
Total visitors 2010: 136,749 + 64,044 fitness participants

Aquatic Experiences

- 3,762 scheduled annual operating hours (2016)
- Mix of drop-ins, aquafit, lessons and some rentals
- Registration levels drive programs and emphasis is on seniors', babies and young families
- Due to the intimacy of the pool, most sessions are designated as public sessions and no lane swimming is available
- Lessons are very popular
- Water temperatures are deliberately set higher than typical facilities of this nature, which enables adapted aquatic classes to be held

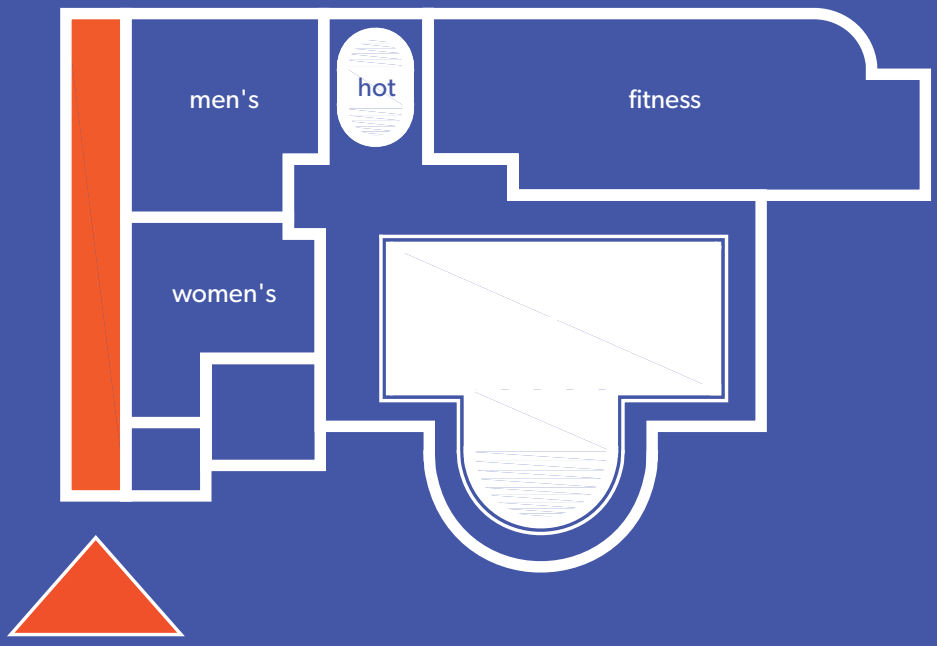
Operating Budget (2014)

Revenues	$508,079
Costs	$583,331
Subsidy	$75,252
Recovery Rate	87%
Participant Swims	98,463
Cost/Swim	$5.92
Revenues/Swim	$5.16
Subsidy/Swim	$0.76

*expenditures excludes utilities (water, sewer)

"The hot tub and sauna are slightly warmer than normal, it is a successful heavily used aspect of the facility."

— From 2016 Pool Programmer Survey



Legend

- public space
- pool
- entrance

Community Building

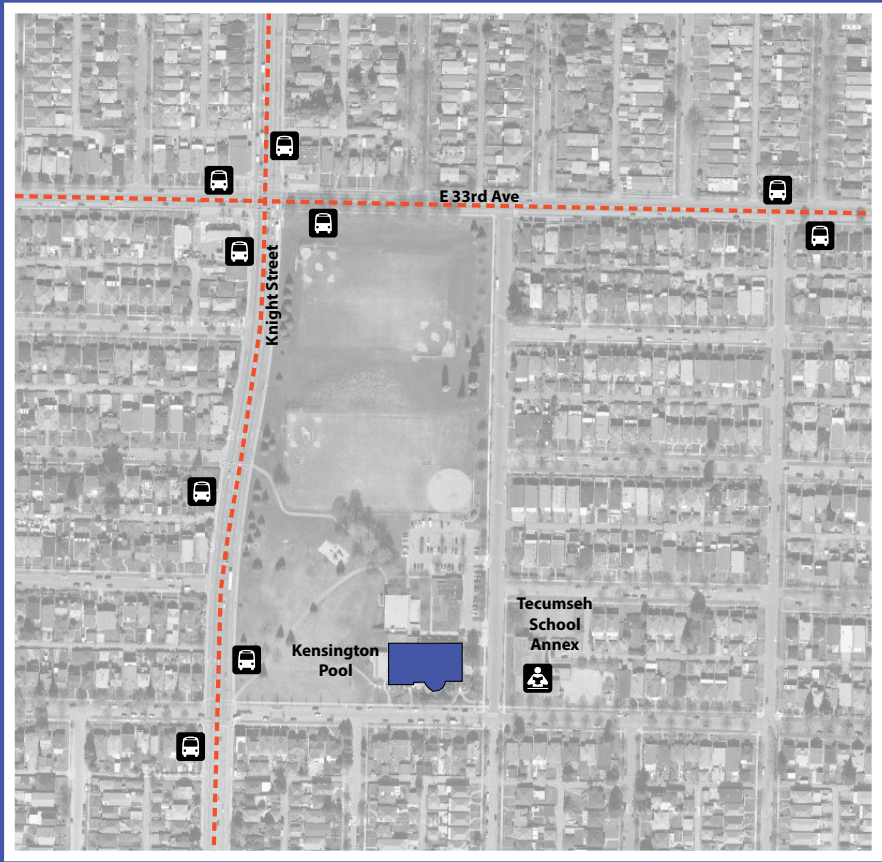
CONTEXT

Kensington Pool is located in the Kensington-Cedar Cottage community and is surrounded by six neighbouring community areas with Grandview-Woodland to the north, Riley Park to the west, Sunset and Victoria-Fraserview to the south, and Renfrew-Collingwood to the east.

The 2011 population of the Kensington-Cedar Cottage area was 47,470 with the majority being in the 40-64 year range closely followed by the 20 to 39 year range. English and Chinese are the predominant mother tongues and more than 50% do not drive to work.

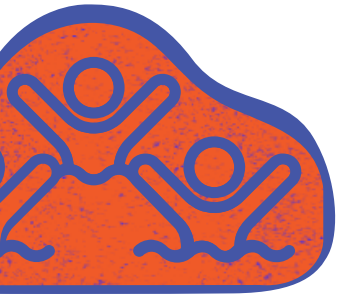
*population and demographic data extracted from 2011 census

Site Context



"The depth and length of the pool does not allow us to teach all swimming levels."

— From 2016 Pool Programmer Survey



> **"Additional deck space or utilizing the outdoor space to allow year round usage would increase socializing area."**
>
> — From 2016 Pool Programmer Survey

SITE

- In Kensington Park at Knight Street and E37th Avenue
- Set back from travel routes on a prominent hill with a view of the city and north shore mountains
- Kensington Park has significant green space, play fields, a playground and a new skate park

Relationship to other facilities / amenities

- Connected to a small community centre, Kensington Pool is close to Tecumseh, MacKenzie and McBride elementary schools, and library
- Nearest pool facilities are Hillcrest Community Centre complex to the west (approximately 2.5 km), and the Killarney Complex + pool to the southeast (approximately 3 km)
- Trout Lake Community Centre and Ice Rink to the northeast (approximately 2 km)

Transit & Bike Accessible

- Located on bus routes and bikeway

COMMUNITY AMENITIES

Is it part of a larger community centre?
Kensington Pool is a part of the Kensington Community Centre. The connected community centre provides dance, seniors centre, pottery, preschool. There is an adjacent park containing sports fields and a skate park.

Other Community Uses of the Facility?
The pool contains a small fitness centre, sauna, and whirlpool.

IMPACT OF EXTERNAL / REGIONAL FACILITIES

The opening of Hillcrest in August 2010 appears to have had an impact on participation and has drawn users away from the facility.

Social Inclusivity

PEOPLE WITH DISABILITIES

- Wheelchair accessible facility but no ramp access into pool

The main pool is kept at a slightly warmer temperature than normal (31°C) which staff indicated is imperative during adapted aquatic lessons (2016 Pool Programmer Survey)

LGBTQ/2S

The recommendations made in the 2014 TGVIWG Report are tested out at pilot locations and have not been implemented at this facility.

SENIORS

- Mornings before noon are most popular times
- Limited space is an issue, seniors don't tend to visit crowded facilities
- There is no seniors specific programming, but they do offer Aquafit shallow classes
- Whirlpool + sauna are most popular amenities
- Number of seniors is increasing moderately in part due to the warmer water temperature

> "The warmer water is an asset in encouraging parents and toddlers, infants and younger children to want to participate in swim lessons."
>
> — From 2016 Pool Programmer Survey

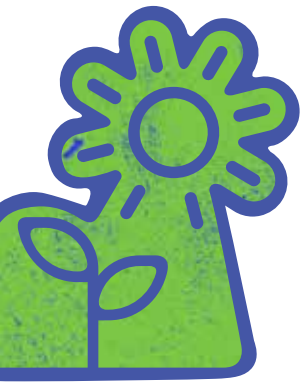
Well Being

- Aquafit classes and swim lessons for all ages and levels
- Sauna
- Whirlpool
- Weight room
- The 2016 Survey indicates that around 50% of the patrons exclusively use the hot-tub and sauna amenities

Connection to Nature

- Natatorium contains windows and natural light
- Adjacent to large park space
- Adapting outdoor space to be utilized year round was a priority expressed in the 2016 Pool Programmer Survey

> "There is an outdoor space for people to gather and hang out."
>
> — From 2016 Pool Programmer Survey



Sustainability

CONDITION AND LIFECYCLE

Built in 1979 the building is a heavy concrete structure and is very robust. Typical of a building of this vintage, systems are reaching the end of their lifecycle. Two UV water sterilization units, heat recovery on ventilation systems and two new condensing boilers were recently installed to replace old equipment.

Elements beyond life span:

- Exterior stucco on metal studs
- Plumbing fixtures
- Corrugated metal deck roof
- Interior doors + frames
- Drywall on wood or metal studs
- Ceramic tile finishes
- Built up roof coverings

ENERGY USE

Use Per Swim		Use per Area		Totals	
Energy Use /Swim (kWh/swim)	GHG / Swim ($kgCO_2e$/swim/yr)	Energy Use Intensity (kWh/m^2/yr)	GHG Emissions Intensity ($kgCO_2e$/m^2/yr)	Total Energy (kWh/yr)	Total GHG ($kgCO_2e$/yr)
19.56	2.53	657.77	85.04	1,925,946	249,000

GHG = Annual Green House Gas Emissions measured in kilograms of CO_2 equivalent

Swim Number Data from 2014 annual numbers; Energy and GHG data from 2016 Q2 (Apr 2015-Mar 2016)

Other uses in facility that will impact total energy use: Connected to community centre which may impact overall energy consumption.

Final Observations

Kensington is the most cost effective pool in the Vancouver Park Board system, largely because it is operating at or above its capacity and because it focusses on skill development, one of the most cost effective of all aquatic service categories. Recommended upgrades to the facility from the 2011 study - improved accessibility to the pool and change rooms - have not been carried out, leaving Kensington with poor overall accessibility.

Kerrisdale
Neighbourhood Indoor Aquatic Facility
1955, RENOVATED 1996

Pools

30 m

6 lanes (326 m^2 water area)
1 m diving board
Small slide

Amenities

*

Swims (2014)

99,306

200,000 planned target capacity (for a new or upgraded neighbourhood pool. Kerrisdale is not currently able to meet this target.) See Figure 15.

Total visitors 2010: 102,142 participants; 39,459 lessons; 56,205 public/fitness

Aquatic Experiences

- 4,418 scheduled annual operating hours (2016)
- Majority of use is lessons and aquafit plus public swims
- Registration levels drive programs but time and space are very limited
- Demand for lessons and lengths and aquafit exceed time available

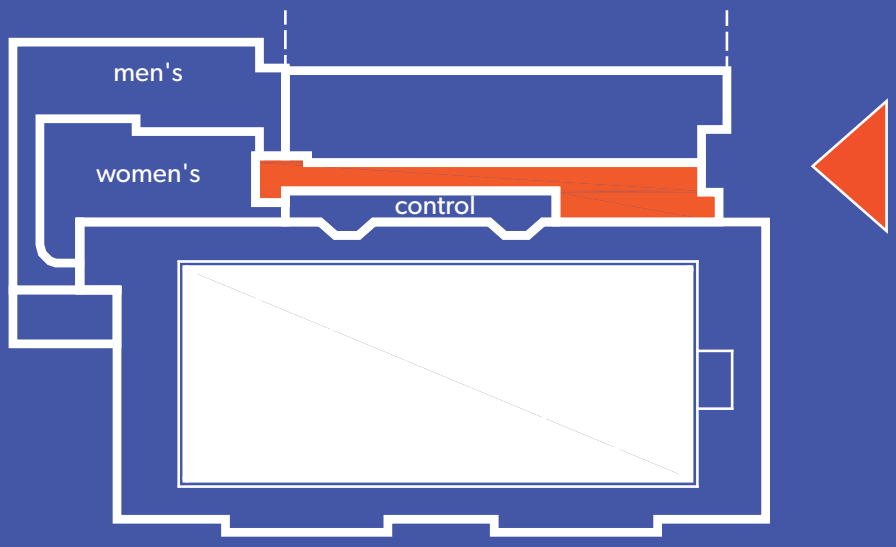
Operating Budget (2014)

Revenues	$431,690
Costs	$781,372
Subsidy	$349,682
Recovery Rate	55%
Participant Swims	99,306
Cost/Swim	$7.87
Revenues/Swim	$4.35
Subsidy/Swim	$3.52

*expenditures excludes utilities (water, sewer)

"Most people are community members and they know our programs well."

— From 2016 Pool Programmer Survey



Legend

- public space
- pool
- entrance

Community Building

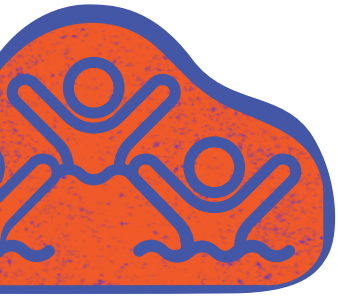
CONTEXT

Serves primarily the Kerrisdale neighbourhood in the southwest portion of the City as well as the surrounding communities of Marpole and Oakridge to the east and Shaughnessy, Arbutus Ridge and Dunbar Southlands to the north and west.

The 2011 population of Kerrisdale was 14,735 with the majority in the 40 to 64 year range followed closely by the 20 to 39 year olds and 19 and under. English is by far the primary mother tongue, followed by Chinese. 25% do not drive to work. Kerrisdale is generally perceived as an affluent area; however, the number of renters is significant. The surrounding communities add to about 82,735 people, again primarily in the 40 plus year range followed very closely by the 20 plus year olds and then the under 19 years group.

*population and demographic data extracted from 2011 census

Site Context



SITE

- Located at W 42nd Avenue and West Boulevard in the heart of Kerrisdale
- Within a complex of community recreation facilities surrounded by Kerrisdale Centennial Park. The park has a plaza, gardens, and a playground

Relationship to other facilities / amenities

- Initially an outdoor pool, now covered with a fabric roof structure.
- Part of building complex with community centre, library and seniors centre
- Two secondary schools are nearby
- Two blocks from ice arena and large Kerrisdale Park
- Maple Grove Outdoor Pool is approximately 1 km to the west
- There are no indoor pools within a 3 km radius of Kerrisdale Pool
- Many patrons use Lord Byng Pool when this facility is closed

Transit & Bike Accessible

- Adjacent to village business district and transit routes

> **"The best solution to increase the average duration of visits to the pool facility would be to add a whirlpool and/or sauna."**
>
> — From 2016 Pool Programmer Survey

COMMUNITY AMENITIES

Is it part of a larger community centre?
Kerrisdale Pool is located within the Kerrisdale Community Centre. There is an adjacent Vancouver Public Library branch. The Community centre contains uses such as a youth centre, seniors' centre, playground, games room, gymnasium, and fitness centre. They are also affiliated with the nearby Kerrisdale Cyclone Taylor Arena and the outdoor Maple Grove Pool.

IMPACT OF EXTERNAL / REGIONAL FACILITIES

The South Slope YMCA is close by. Both UBC and the Jewish Community Centre draw lesson participants who cannot be accommodated at Kerrisdale. Richmond's Watermania draws a significant number of participants.

Social Inclusivity

PEOPLE WITH DISABILITIES

- Wheelchair accessible facility

> **"An universal changeroom is desirable ."**
>
> — From 2016 Pool Programmer Survey

LGBTQ/2S

The recommendations made in the 2014 TGVIWG Report are tested out at pilot locations and have not been implemented at this facility.

SENIORS

- Late mornings and early afternoons most popular time to visit due to class offerings.
- Amount of senior visitors remains relatively constant
- No hot pool/sauna amenities mean seniors only come for classes and events.

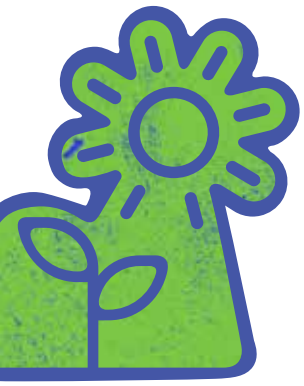
Well Being

- Facility offers aquafit classes
- 2016 Programmer Survey indicated that most patrons who visit the facility leave quickly after their swim as there are no sauna or steam room amenities in the facility

> **"The least successful aspect would be the fact there are no hot baths (sauna, steam room and/or whirlpool)."**
>
> — From 2016 Pool Programmer Survey

Connection to Nature

- Translucent ceiling provides ambient natural light
- Adjacent to Kerrisdale Park
- Although the facility provides no glazing or views to the outdoors, the translucent ceiling provides a lot of natural light and ambiance into the space and enhances the swimming experience. (2016 Pool Programmer Survey)



> **"Even though "the tarp" creates challenges to maintain the air quality, green house effect, and water temperature. It is my favourite part of the pool. It brings in a lot of natural light and makes the pool unique."**
>
> — From 2016 Pool Programmer Survey

Sustainability

CONDITION AND LIFECYCLE

Kerrisdale was built in 1955 and is past the end of its lifecycle.

Elements beyond life span:

- Built-up roof coverings
- Concrete slabs-on grade
- Concrete block basements
- Concrete structural frame
- Wood structural frame
- Exterior doors and windows
- Structural wood roof framing
- Corrugated wood metal deck roof
- Reinforced concrete roof slabs
- Exterior stucco on metal studs
- Drywall on wood or metal studs
- Interior doors + frames
- Ceramic Tile finishes
- Plumbing fixtures

ENERGY USE

Use Per Swim		Use per Area		Totals	
Energy Use /Swim (kWh/swim)	GHG / Swim ($kgCO_2e$/swim/yr)	Energy Use Intensity ($kWh/m^2/yr$)	GHG Emissions Intensity ($kgCO_2e/m^2/yr$)	Total Energy (kWh/yr)	Total GHG ($kgCO_2e$/yr)
33.25	4.73	511.33	72.79	3,301,656	470,000

GHG = Annual Green House Gas Emissions measured in kilograms of CO_2 equivalent

Swim Number Data from 2014 annual numbers; Energy and GHG data from 2016 Q2 (Apr 2015-Mar 2016)

Other uses in facility that will impact total energy use: Connected to community centre.

Final Observations

At 61 years old, Kerrisdale is the oldest pool in the system. It is outdated and has very few amenities and is likely beyond its operation lifespan. It operates at an average of 50% capacity - the second lowest efficiency pool in the Park Board system with the second highest subsidy per swim. Kerrisdale was noted in the 2011 study as a priority for replacement.

Killarney
Community Indoor Aquatic Facility
2006

Pools

25 m

6 lanes (326 m^2 water area)
15 m leisure tank (260 m^2 water area)
whirlpool (34 m^2 water area)
1 m spring board
3 m diving platform
lazy river and spray features
giant water slide
sloped, beach-style entry

Amenities

****

steam room
weight room (in adjacent community centre)
universal change rooms

Swims (2014)

460,225

400,000 planned target capacity (exceeded) See Figure 15.

Total visitors 2010: 556,789 visits (72,680 of these were spectators); 484,109 swims; 102,000 lessons; 26,900 rentals

Aquatic Experiences

- 4,807 scheduled annual operating hours (2016)
- Public swim all days (except Sat/Sun 10-1:30 pm)
- Majority of use is recreational, followed by aquafit and lessons, then rentals
- Registration levels drive programs, increased life guarding and instructional programs for future employees
- Entire facility is wheelchair accessible, healthy choices for snacks
- The facility draws a high number of spectators

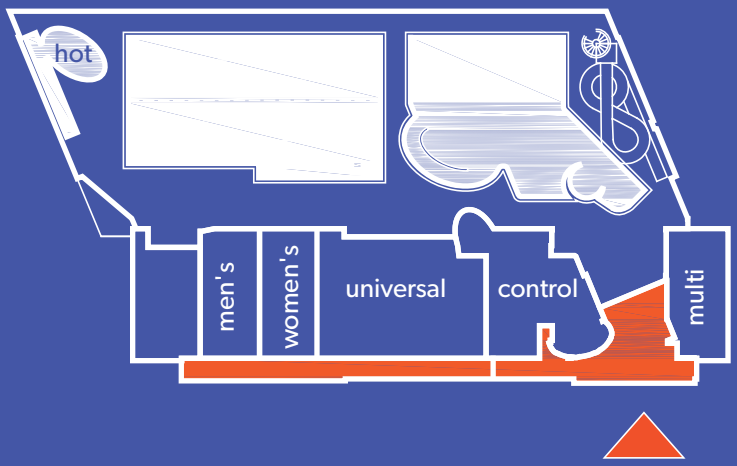
Operating Budget (2014)

Revenues	$1,143,842
Costs	$1,888,142
Subsidy	$744,300
Recovery Rate	61%
Participant Swims	460,225
Cost/Swim	$4.10
Revenues/Swim	$2.49
Subsidy/Swim	$1.62

*expenditures excludes utilities (water, sewer)

"Favourite aspect of the pool is the leisure pool - the swimming lessons and kids having fun."

— From 2016 Pool Programmer Survey



0 5 10 15 20 25m

Legend

- public space
- pool
- entrance

Community Building

CONTEXT

Serves surrounding communities of Killarney, Victoria-Fraserview, Renfrew-Collingwood, Kensington- Cedar Cottage. The leisure component also draws participants from other areas of the City and the region (Burnaby).

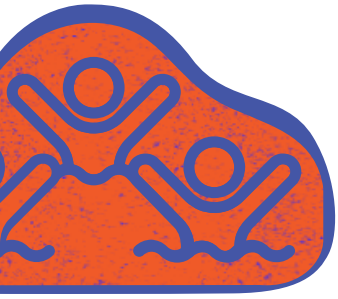
The 2011 population of surrounding communities was approximately 126,725, balanced over age groups with slightly more 40 to 64 yrs, followed by 20 to 39 years and 19 & under. Primarily English and Chinese as the mother tongue. More than 31% do not drive to work. Densification of the East Fraser lands will increase area population.

*population and demographic data extracted from 2011 census

Site Context

"People stay anywhere from 20 minutes to 4 hours depending on the amenities they are using"

— From 2016 Pool Programmer Survey



> **"Changes that would make the facility more successful would be larger deck space with more seating, larger change area with secure storage, larger leisure pool with more features and amenities such as saunas, steam rooms and water features."**
>
> — From 2016 Pool Programmer Survey

SITE

- Adjacent to Killarney Secondary School and Community Centre
- Within Killarney Park, which has playground, picnic, fields, and mountain views

Relationship to other facilities / amenities

- Connected to Community Centre and Ice rink
- 2 secondary and 7 elementary schools use the facility
- Closest library is Champlain Heights
- Metrotown theatres and mall are 3 km away
- Closest indoor pools are Renfrew (approximately 3 km to the north) and Kensington (approximately 3 km to the west)

Transit & Bike Accessible

- On transit bus route, easy transfer access from SkyTrain

COMMUNITY AMENITIES

Is it part of a larger community centre?
Killarney Pool is part of a complex containing pool, rink, and community centre facilities. The community centre offers computer lab, games rooms, youth centre, concession, dancing courses, and fitness centre. There is an ice rink facility connected to the centre and outdoor sports fields and tennis courts surround the facility.

IMPACT OF EXTERNAL / REGIONAL FACILITIES

South Slope YMCA and Jewish Community Centre are in the geographic community area; Burnaby's Bonsor Pool is close by. Burnaby's Central Park Pool is operated May - September and attracts summer patrons away from the facility. Bonsor is an aging facility but is currently going through renovations to upgrade some of its facilities and amenities, including its fitness centre. Life guarding and leadership programs attract many regional participants.

Social Inclusivity

PEOPLE WITH DISABILITIES

- Wheelchair accessible facility
- Sloped, beach-style entry

LGBTQ/2S

This facility is designated as a pilot facility for new policies from the 2014 TGVIWG Report and includes the following alterations:

- Change stalls changed from "family" to "universal"

SENIORS

- No seniors specific programming, but most popular uses are length swimming, spa and aquafit
- Early mornings are the most popular time to visit
- Language barrier and accessible features are potential issues/ barriers to use

Well Being

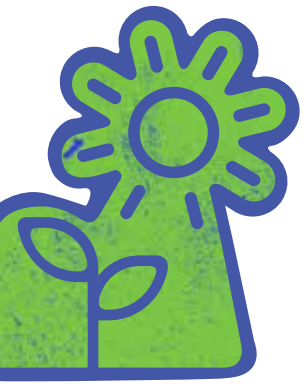
- Facility and pool accessible to people with disabilities
- Fitness centre adjacent
- Steam room

The pool area itself is quite simple, however the facility has a direct connection to the larger community complex that provides well rounded indoor and outdoor amenities such as sports fields, an ice rink, fitness and dance spaces to complement the pool and steam room.

Connection to Nature

- Views to the North Shore mountains
- Expansive glazing in natatorium to provide views and natural light
- Adjacent to large park space with field and track amenities

Although the pool contains only conditioned swimming spaces, the expansive glazing with panoramic views enhances the indoor aquatics experience.



Sustainability

CONDITION AND LIFECYCLE

Construction was completed on this new facility in 2006. Killarney is at the beginning of its lifecycle and has 40 or more years of lifecycle remaining. UV water sterilization was recently added to the facility (2016) to benefit the air quality and reduce future maintenance to the building envelope.

> **"The most urgent needs for replacement / renovations are the maintenance of bubbling tiles and expansion joints, and deck seating."**
>
> — From 2016 Pool Programmer Survey

ENERGY USE

Use Per Swim		Use per Area		Totals	
Energy Use /Swim (kWh/swim)	GHG / Swim ($kgCO_2e$/swim/yr)	Energy Use Intensity ($kWh/m^2/yr$)	GHG Emissions Intensity ($kgCO_2e/m^2/yr$)	Total Energy (kWh/yr)	Total GHG ($kgCO_2e$/yr)
15.78	1.78	786.50	88.49	7,261,738	817,000

GHG = Annual Green House Gas Emissions measured in kilograms of CO_2 equivalent

Swim Number Data from 2014 annual numbers; Energy and GHG data from 2016 Q2 (Apr 20 15-Mar 2016)

Other uses in facility that will impact total energy use: Connected to community centre, fitness centre and rink.

Final Observations

Killarney is one of the newest facilities providing patrons with a spacious layout, ample natural light, and a range of amenities. It's co-location with community amenities help to give the facility the second highest annual number of visits. Its popularity is reflected in its operating efficiency, which according to sales records exceeded 100% of its capacity in 2014.

Lord Byng
Neighbourhood Indoor Aquatic Facility
1974

Pools

25 m

6 lanes (340 m^2 water area)
Diving board
Rope swing
Small slide
whirlpool (11 m^2 water area)

Amenities

**

sauna
weight room/fitness centre (small in-facility)

Swims (2014)

112,089

200,000 planned target capacity (For a new or upgraded neighbourhood pool.) See Figure 15.

Total visitors 2010: 111,237 visits (2,167 spectators); 109,070 swims; 26,954 lessons+programs; 20,046 rentals

Aquatic Experiences

- 4,807 scheduled annual operating hours (2016)
- Majority of use is lessons, swim club, rentals and length swimming
- Registration levels drive programs but time and space are very limited

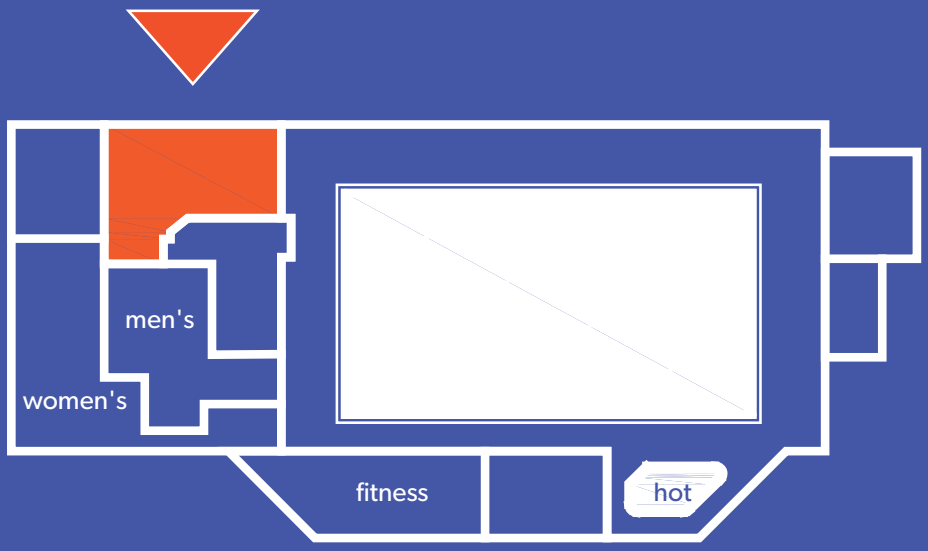
Operating Budget (2014)

Revenues	$472,038
Costs	$713,341
Subsidy	$241,303
Recovery Rate	66%
Participant Swims	112,089
Cost/Swim	$6.36
Revenues/Swim	$4.21
Subsidy/Swim	$2.15

*expenditures excludes utilities (water, sewer)

"The skylight lets natural light in, giving the facility an outdoor feel."

— From 2016 Pool Programmer Survey



Legend

- public space
- pool
- entrance

Community Building

CONTEXT

Lord Byng primarily serves the West Point Grey neighbourhood as well as the surrounding communities of Kitsilano and North Dunbar.

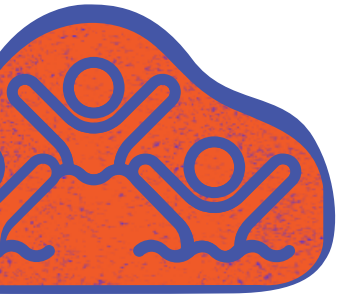
The 2011 population of West Point grey was 12,795 with the majority being in the 40 to 64 year range followed closely by the 20 to 39 year-olds. English is by far the primary mother tongue. 37% do not drive to work. Higher income area. The surrounding communities add about 62,000 people, again primarily in the 40 plus year range followed very closely by the 20-plus year-olds.

*population and demographic data extracted from 2011 census

Site Context

"A lot of patrons lounge on the pool deck, or hang out in the sauna or whirlpool."

— From 2016 Pool Programmer Survey



SITE

- Situated on School Board property, next to fields and schools
- The closest park is Trimble

Relationship to other facilities / amenities

- Adjacent to Lord Byng and Jules Quesnel schools
- Close to 10th and Alma shopping area
- West Point Grey Community Centre is in the neighbourhood
- There are no indoor or outdoor pool facilities within a 3 km radius of Lord Byng

Transit & Bike Accessible

- Transit routes within 3 blocks, en-route to UBC campus

> **"Getting better fitness equipment will draw more people in to use all the amenities at the facility and keep them longer at the pool."**
>
> — From 2016 Pool Programmer Survey

COMMUNITY AMENITIES

Is it part of a larger community centre?
Lord Byng is associated with the West Point Grey Community Centre, but is not adjacently located to that facility.

Other Community Uses of the Facility?
Small Fitness centre/weight room in the facility.

IMPACT OF EXTERNAL / REGIONAL FACILITIES

Jericho Hill and UBC are in the area and draw participation for preschool lessons and fitness and length swimming. Both École Jules Quesnel Elementary and Lord Byng Secondary are located directly adjacent to the pool.

> "We run a lot of lessons and rentals, it would be nice for patrons to change in a clean and inviting change room."
>
> — From 2016 Pool Programmer Survey

Social Inclusivity

PEOPLE WITH DISABILITIES

- Wheelchair accessible facility
- Aquatic pool lifts
- Aquatic wheelchairs

LGBTQ/2S

The recommendations made in the 2014 TGVIWG Report are tested out at pilot locations and have not been implemented at this facility.

SENIORS

- The number of seniors at Lord Byng remains relatively constant. A high percentage of visitors are seniors due to the facility's location and the fact that it is a quiet pool
- Aquafit classes are the most popular times, as well as group fitness classes in the fitness centre.
- The whirlpool and fitness centre are the most popular amenities

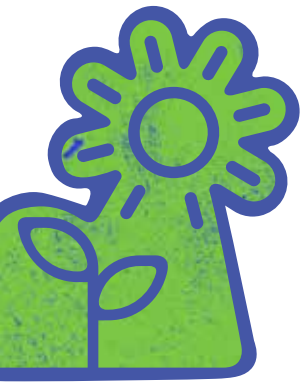
Well Being

- Fitness centre located within facility that provides classes, and personal training
- Sauna
- Whirlpool

Connection to Nature

- Skylights provide natural light
- Adjacent park and outdoor sports fields

Although the facility does not provide views to the outside, the staff survey indicated that the skylight provides lots of natural light, especially when the sun is shining, giving the facility an outdoor feel.



Sustainability

CONDITION AND LIFECYCLE

Built in 1974, the building is approaching the end of its lifecycle. However, this has been extended by recent envelope replacement and the addition of new boilers.

Elements beyond life span:

- Exterior doors + windows
- Structural wood framing
- Exterior stucco on metal studs
- Plumbing fixtures
- Corrugated metal deck roof
- Interior doors + frames
- Drywall on wood or metal studs
- Ceramic tile finishes
- Built up roof coverings

ENERGY USE

Use Per Swim		Use per Area		Totals	
Energy Use /Swim (kWh/swim)	GHG / Swim ($kgCO_2e$/swim/yr)	Energy Use Intensity (kWh/m^2/yr)	GHG Emissions Intensity ($kgCO_2e$/m^2/yr)	Total Energy (kWh/yr)	Total GHG ($kgCO_2e$/yr)
14.65	2.12	1164.31	168.79	1,641,678	238,000

GHG = Annual Green House Gas Emissions measured in kilograms of CO_2 equivalent

Swim Number Data from 2014 annual numbers; Energy and GHG data from 2016 Q2 (Apr 2015-Mar 2016)

Final Observations

Lord Byng is outdated and is one of the oldest, non-renovated facilities in the system. It performs in the mid-range of subsidies and operating capacities when compared to other pools within the VPB system. The 2011 study recommended combining fitness uses with this facility and considers exploring a relationship with the schools to increase usage numbers.

Renfrew
Neighbourhood Indoor Aquatic Facility
1963, RENOVATED 1970 + 2005

Pools

25 m

6 lanes
1 m spring diving board
Bubble pit
Small slide
whirlpool

Amenities

****

sauna
weight room/fitness centre (small in-facility)
universal change rooms

Swims (2014)

204,110

200,000 planned target capacity (For a new or upgraded neighbourhood pool. Renfrew has exceeded this target in 2014.) See Figure 15.

Total visitors 2010: 136,759 participants

Aquatic Experiences

- 3,906 scheduled annual operating hours (2016)
- Mix of drop-ins, aquafit, lengths, lessons, and rentals
- Registration levels drive programs but time and space are limited - lessons are usually full
- Serves all ages and ethnic groups in the community
- Specialty programs for groups such as seniors
- Program priorities reflect an emphasis on public access and recreational drop-in

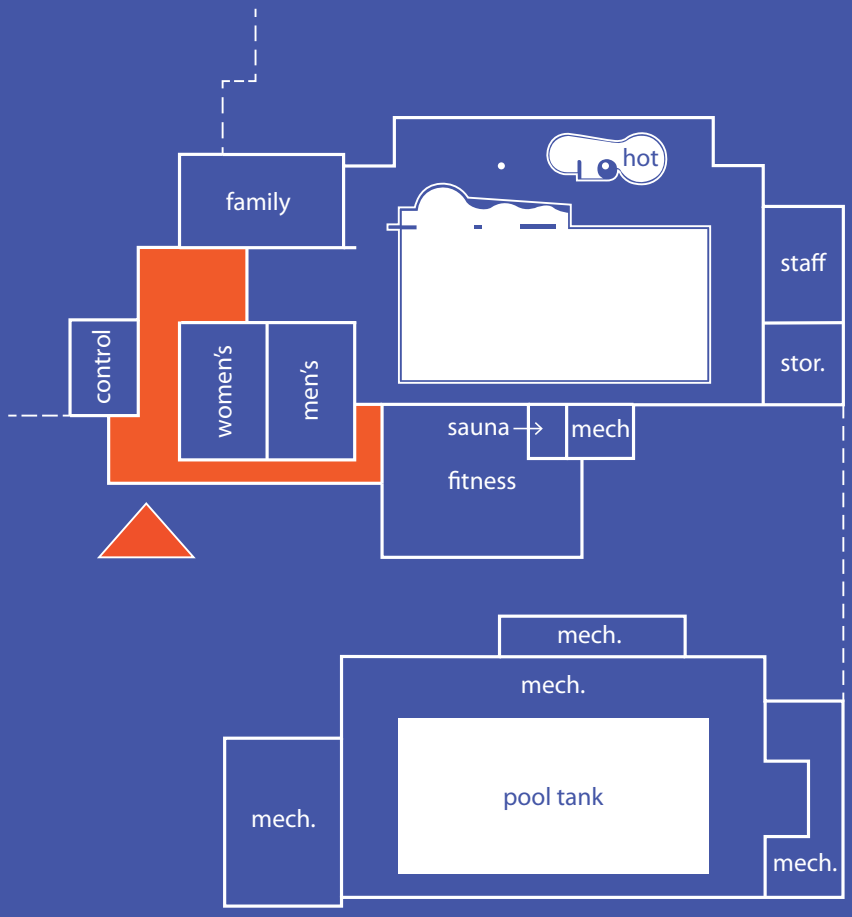
Operating Budget (2014)

Revenues	$859,400
Costs	$1,064,490
Subsidy	$205,090
Recovery Rate	81%
Participant Swims	204,110
Cost/Swim	$5.22
Revenues/Swim	$4.21
Subsidy/Swim	$1.00

*expenditures excludes utilities (water, sewer)

"Designs in the future need to realize that people do not just swim, they lounge and socialize."

— From 2016 Pool Programmer Survey



Legend

- public space
- pool
- entrance

Community Building

CONTEXT

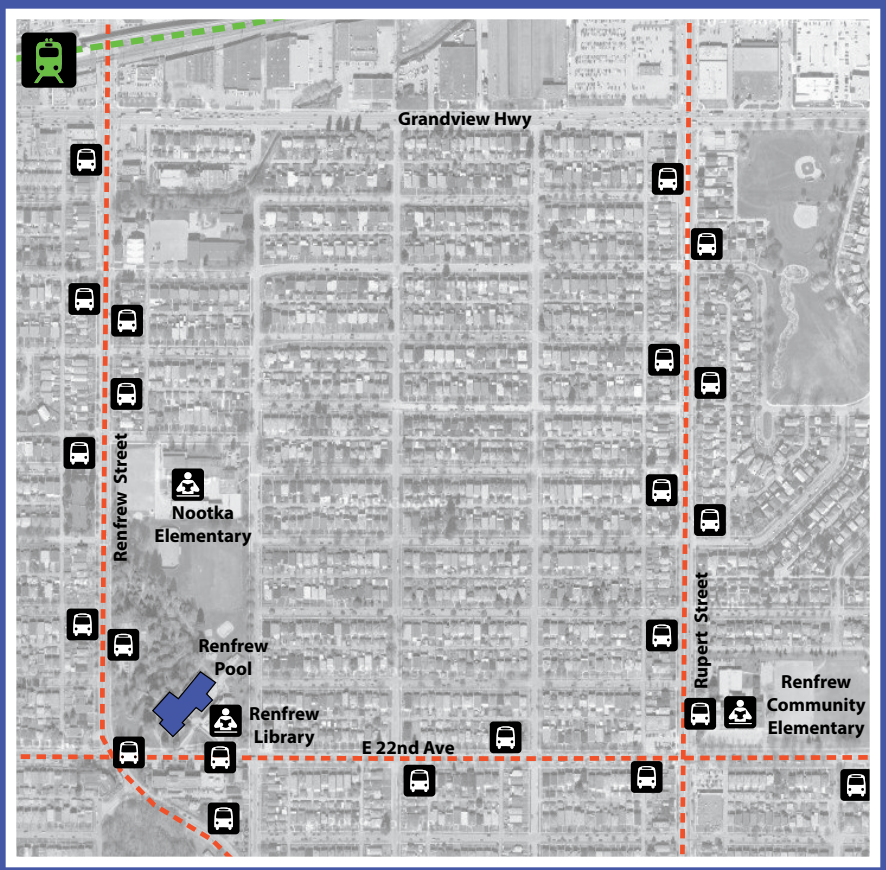
Renfrew Pool is located in the Renfrew-Collingwood community which borders Boundary Road and Burnaby on the east and is surrounded by five neighbouring community areas—Hastings- Sunrise to the north and Killarney to the south.

This area is home to the city's highest population of children and youth along with the fastest growing seniors population. Numerous languages are spoken throughout the community and a number of cultural events highlight the ethnic diversity of the residents.

The 2011 population of the immediate Renfrew-Collingwood area is 50,505 with the majority being in the 20 to 64 year range. Chinese was the predominant mother tongue followed by English. More than 35% did not drive to work.

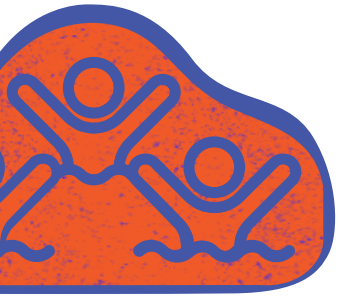
*population and demographic data extracted from 2011 census

Site Context



"We are a traditional box design, but adding water features and figures allows for different users."

— From 2016 Pool Programmer Survey



SITE

- At the south end of Renfrew Park, set back from the street and next to the ravine and greenway
- The park offers play fields, playground, picnic tables, wading pool, and lacrosse and ball hockey boxes
- The site has views of the park and mountains

Relationship to other facilities / amenities

- Connected to library and close to Nootka Elementary and Windermere Secondary schools
- Nearest recreation facilities are Hastings Community Centre, Kensington Community Centre and Pool (approximately 3 km to the west) as well as Trout Lake Arena and Killarney Community Centre, pool and ice rink (approximately 3 km to the south)

Transit & Bike Accessible

- Transit from Grandview Highway, Renfrew, and 29th Street and Nanaimo SkyTrain stations
- Located on and near a number of bicycle routes

"Pools that have a fitness centre available get more traffic as users like to do their 'one stop' shop. The better the gym, the more sauna and whirlpool users. If the size of our gym and sauna increase, we would see more users."

— From 2016 Pool Programmer Survey

COMMUNITY AMENITIES

Is it part of a larger community centre?
Renfrew Pool is a part of Renfrew Park Community Centre, which offers a games room, computer lab, and multi-purpose room in conjunction with the pool and its amenities.

Other Community Uses of the Facility?
Fitness centre, sauna and whirlpool in the pool.

IMPACT OF EXTERNAL / REGIONAL FACILITIES

The closest facilities are Trout Lake Community Centre and arena (2 km away).

Social Inclusivity

PEOPLE WITH DISABILITIES

- Wheelchair accessible facility
- Elevator
- Pool access ramp
- Aquatic wheelchairs

LGBTQ/2S

The recommendations made in the 2014 TGVIWG Report are tested out at pilot locations and have not been implemented at this facility.

SENIORS

- Aquafit classes attract senior visitors
- Use of the facility by seniors is increasing slowly
- Fitness centre, hot tub and sauna are the most popular amenities

> **"The users of the gym may not always use the pool but they do use the sauna and whirlpool. These spaces need to be larger to cope with the demand."**
>
> — From 2016 Pool Programmer Survey

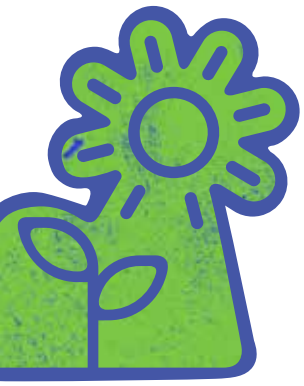
Well Being

- Sauna
- Fitness/Weights room
- Whirlpool

The Programmer Survey indicated that the majority of patrons come to use the hot pools before or after they swim, but the size of the amenities is too small for demand and is often overpacked. Users who do not use the pool, but just the fitness amenities will still use the sauna area.

Connection to Nature

The facility is located within Renfrew Community Park and sports fields and provides an expansive wall of glazing along the edge of the pool allowing direct light and a direct view of park trees, giving the facility and outdoor feeling.



Sustainability

CONDITION AND LIFECYCLE

Substantially renovated in 2005 the lifecycle of the pool and change rooms has been extended and will not likely require substantial investment for 20 years. UV water sterilization was added in 2006, improving the air quality substantially.

ENERGY USE

Use Per Swim		Use per Area		Totals	
Energy Use /Swim (kWh/swim)	GHG / Swim ($kgCO_2e$/swim/yr)	Energy Use Intensity (kWh/m^2/yr)	GHG Emissions Intensity ($kgCO_2e$/m^2/yr)	Total Energy (kWh/yr)	Total GHG ($kgCO_2e$/yr)
13.48	1.76	634.51	83.01	2,751,856	360,000

GHG = Annual Green House Gas Emissions measured in kilograms of CO_2 equivalent

Swim Number Data from 2014 annual numbers; Energy and GHG data from 2016 Q2 (Apr 2015-Mar 2016)

Other uses in facility that will impact total energy use: Community centre connected to pool facilities.

Final Observations

Renfrew has been renovated several times, including renovations to the pool tank and whirlpool replacement, fitness addition in 2005, and change room upgrades in 2010. Renfrew is operating successfully as a neighbourhood level pool and in 2014 operated with the second lowest subsidy per swim. It was the third most well-used facility in the system after Hillcrest and Killarney, respectively, and operates at 100% efficiency.

Templeton
Neighbourhood Indoor Aquatic Facility
1974

Pools

25 m

6 lanes (338 m^2 water area)
1 m spring diving board
Rope swing
Small slide
Leisure/teaching pool (42 m^2 water area)
whirlpool (17 m^2 water area)

Amenities

**

sauna
weight room/fitness centre (small in-facility)
universal change rooms

Swims (2014)

178,290

200,000 planned target capacity (For a new or upgraded neighbourhood pool. Templeton is not currently able to achieve this target.) See Figure 15.

Total visitors 2010: 174,209 participants

Aquatic Experiences

- 4,626 scheduled annual operating hours (2016)
- Mix of drop-ins, aquafit, lessons, swim club and rentals
- Registration levels drive programs but time and space are very limited
- Young families and older adults are the primary users
- Serves Chinese and Muslim community. Staff are friendly and can speak Chinese
- Aquatic programs are coordinated with neighbouring Renfrew and Britannia pools

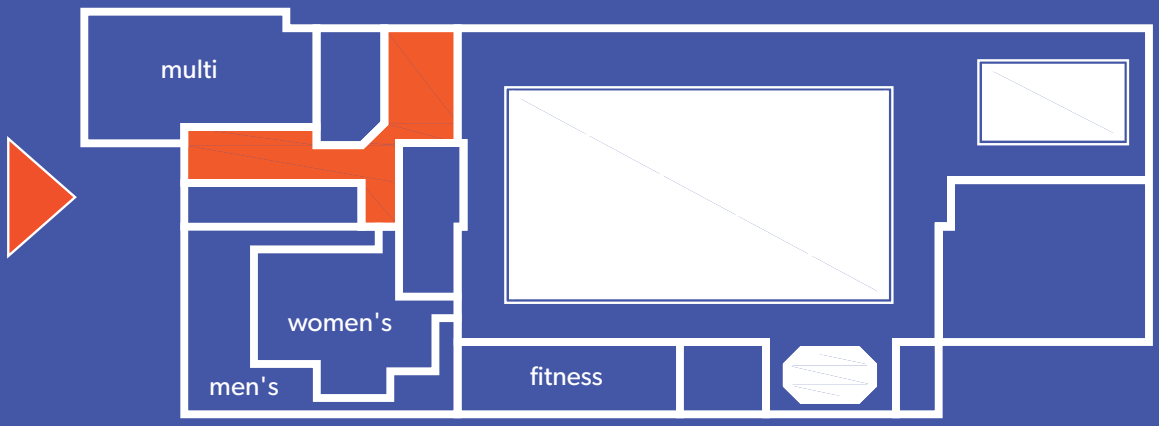
Operating Budget (2014)

Revenues	$340,032
Costs	$847,055
Subsidy	$507,023
Recovery Rate	40%
Participant Swims	178,290
Cost/Swim	$4.75
Revenues/Swim	$1.91
Subsidy/Swim	$2.84

*expenditures excludes utilities (water, sewer)

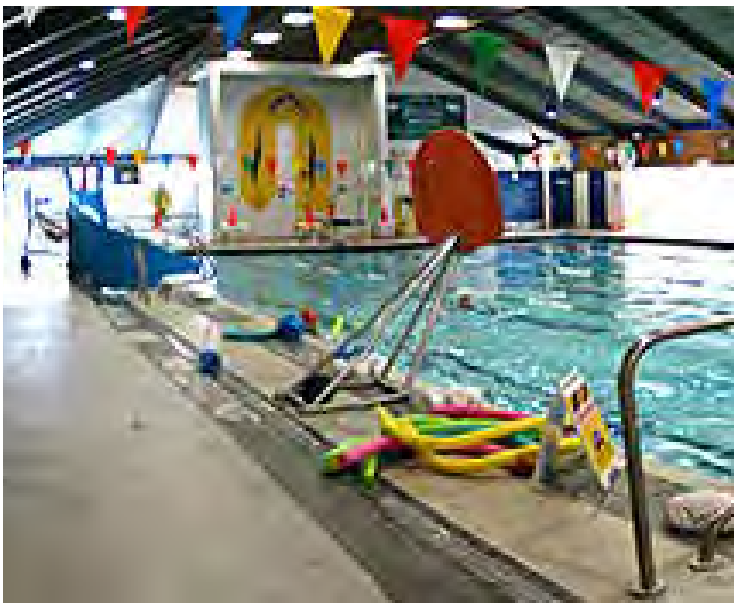
"Every space is well used: Sauna, whirlpool and fitness centre have the most complaints because customers find they are too small and crowded."

— From 2016 Pool Programmer Survey



Legend

- public space
- pool
- entrance



Community Building

CONTEXT

Templeton Pool borders the Hastings-Sunrise and Grandview- Woodlands community areas in the northeast corner of the city.

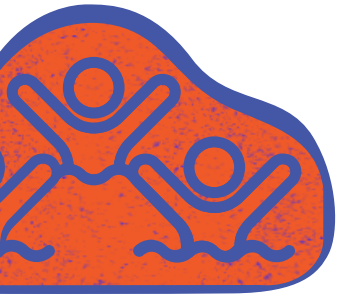
The 2011 population of the two major communities was 61,295 with the majority being in the 20 to 64 year range. English and Chinese are by far the primary mother tongues. More than 40% do not drive to work.

*population and demographic data extracted from 2011 census

Site Context

"Older people (50+) can be here for 2-3 hours because of activity combos: socializing, laps/sauna and whirlpool, waterfit and whirlpool."

— From 2016 Pool Programmer Survey



SITE

- Adjacent to Templeton Secondary School, just off a shared parking lot
- Next to play fields, playground, outdoor running track, and picnic area
- In residential area with views of the North Shore mountains.
- Limited parking

Relationship to other facilities / amenities

- Adjacent to Templeton Senior High
- 3 elementary schools are close by—Lord Nelson, Hastings, and MacDonald
- Library at Hastings (1 km away)
- Located between Hastings Community Centre to the east and Britannia Pool, which is approximately 1 km to the west of Templeton Pool
- New Brighton Outdoor Pool is approximately 2.5 km to the east
- Commercial Drive and Hastings St. shopping areas

Transit & Bike Accessible

- Transit from Hastings and Nanaimo routes.
- Located on Adanac bicycle route.

> **"People enjoy coming here because they can walk, it is not intimidating due to size, and it has everything you need; it is very community oriented."**
>
> — From 2016 Pool Programmer Survey

COMMUNITY AMENITIES

Is it part of a larger community centre?
Pool is set in a park near Templeton Secondary School.

Other Community Uses of the Facility?
There is a library and fitness centre/weight room. Older change spaces have been repurposed to contain a classroom space. It was also indicated that the facility makes an attempt to increase community connectivity by running events related to swim and fitness and connects with various community groups such as Kiwassa, Aboriginal Mother's Centre, and other Muslim women and youth groups. (2016 Pool Programmer Survey)

IMPACT OF EXTERNAL / REGIONAL FACILITIES

Eileen Dailly Pool in Burnaby draws participants from the community. Other regional facilities with specialty features such as waves or climbing walls attract participants from the community.

Social Inclusivity

PEOPLE WITH DISABILITIES

- Wheelchair accessible facility
- Aquatic pool lifts
- Aquatic wheelchairs
- Automated doors
- Portable pool stairs
- Accessible change rooms

> "Sauna, whirlpool and fitness centre have the most complaints because customers find that they are too small and crowded."
>
> — From 2016 Pool Programmer Survey

LGBTQ/2S

This facility is designated as a pilot facility for new policies from the 2014 TGVIWG Report and includes the following alterations:

- Installation of new, universal signage for all single stall washrooms + change rooms
- Invested time, staff and facility space to increase trans specific programming
- Change stalls from "family" to universal
- Added 2 stalls in men's change room for greater privacy

SENIORS

- Most popular times for seniors to visit are between 8:30 am - 2:00 pm
- Hot tub, sauna, swim lanes, fitness centre and outdoor area most popular amenities

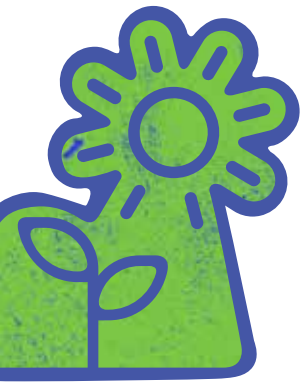
Well Being

- Fitness/Weights room
- Sauna
- Whirlpool

The sauna and whirlpool are one of the most used amenities, however due to their size they are often too crowded (2016 Pool Programmer Survey)

Connection to Nature

- Glazing in natatorium provides views to outside and greenery
- The facility is adjacent to a park and playground and runs various programs in addition to pool programming



Sustainability

CONDITION AND LIFECYCLE

Completed in 1974 the building is reaching the end of its lifecycle. However, new mechanical equipment in the form of a condensing boiler, solar panels, UV water sterilization for the hot pool, and heat recovery have extended the lifecycle. Given the small value of these upgrades relative to the present day value of the remaining building components the lifecycle extension is minimal.

Elements beyond life span:

- Exterior doors + windows
- Structural wood roof framing
- Exterior stucco on metal studs
- Plumbing fixtures
- Corrugated metal deck roof
- Interior doors + frames
- Drywall on wood or metal studs
- Ceramic tile finishes
- Built up roof coverings

ENERGY USE

Use Per Swim		Use per Area		Totals	
Energy Use /Swim (kWh/swim)	GHG / Swim ($kgCO_2e$/swim/yr)	Energy Use Intensity ($kWh/m^2/yr$)	GHG Emissions Intensity ($kgCO_2e/m^2/yr$)	Total Energy (kWh/yr)	Total GHG ($kgCO_2e$/yr)
14.60	2.10	1363.16	195.91	2,602,271	374,000

GHG = Annual Green House Gas Emissions measured in kilograms of CO2 equivalent

Swim Number Data from 2014 annual numbers; Energy and GHG data from 2016 Q2 (Apr 2015-Mar 2016)

Final Observations

Templeton is dated, and like the other older facilities in the system it is reaching the end of its lifecycle. It received the third highest subsidy per swim in 2014. The 2011 study recommended replacement with a higher profile community aquatic facility in the area with enhanced fitness services and leisure amenities to serve a broader cross section and to draw a higher number of participants.

Vancouver Aquatic Centre

Community Indoor Aquatic Facility (Unique)

1974

Pools

50 m

8 lanes (1,087 m^2 water area)
Rope Swing
Small Slide
Tot/leisure tank (66 m^2 water area)
Diving tank (231 m^2 water area)
1 m + 3 m spring diving
5 m, 7.5 m + 10 m dive towers
whirlpool (7 m^2 water area)

Amenities

***

sauna
bleachers/large seating area
weight room
universal change rooms

Swims (2014)

203,764

200,000 - 400,000 planned target capacity (Both residents in the area and downtown workers are regular participants.) See Figure 15.

Total swims 2010: 267,476

Aquatic Experiences

- 5,229 scheduled annual operating hours (2016)
- Majority of use is fitness/lap swimming, followed by aquafit and lessons, then rentals and recreational use
- Registration levels drive programs, increased life guarding and instructional programs for future employees
- Entire facility is wheelchair accessible, healthy choices for snacks
- Hosts diving, waterpolo and short course swim meets. The facility draws a number of spectators for diving competitions and also hosts casual spectators most times due to bleacher access

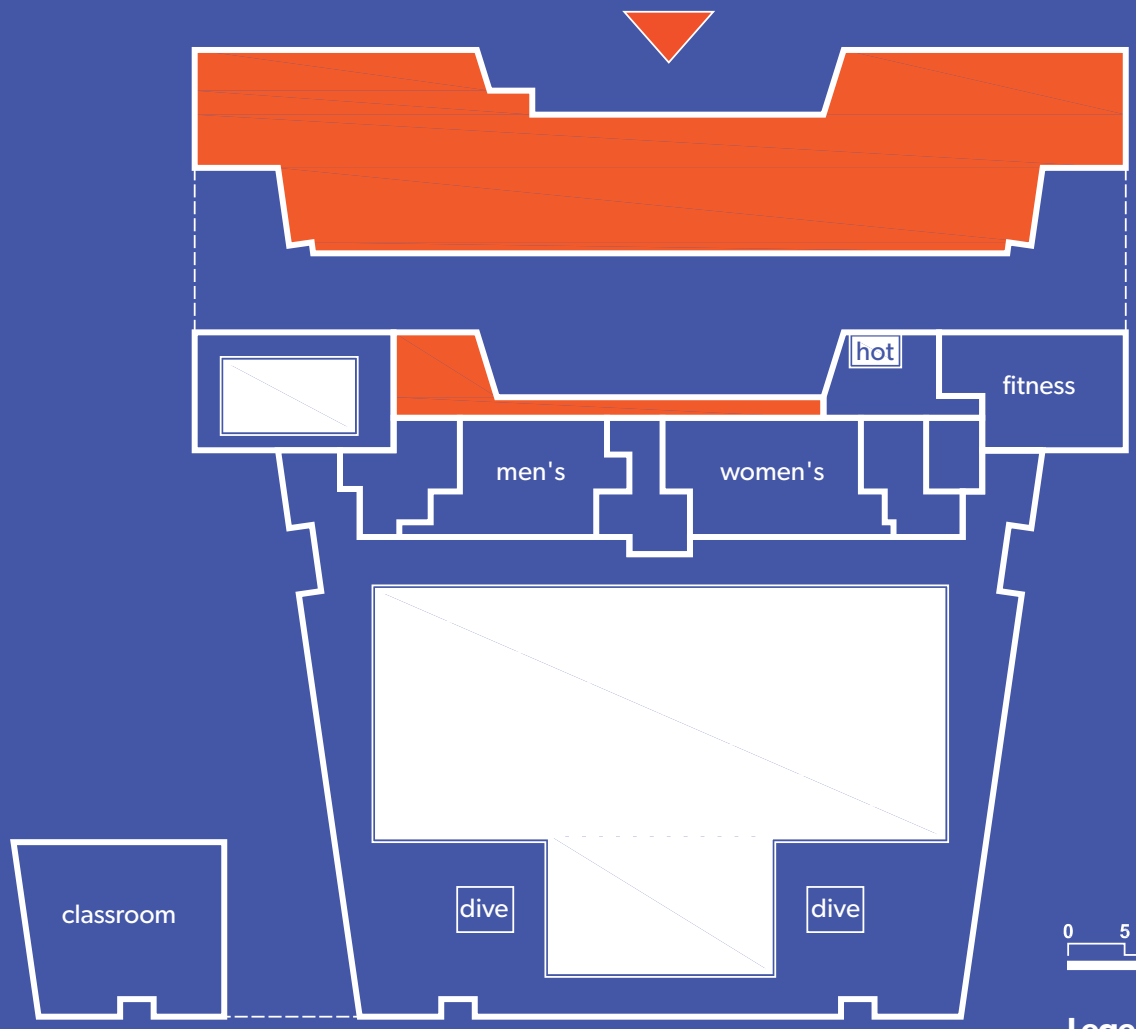
Operating Budget (2014)

Revenues	$1,143,952
Costs	$2,030,925
Subsidy	$886,973
Recovery Rate	56%
Participant Swims	203,764
Cost/Swim	$9.97
Revenues/Swim	$5.61
Subsidy/Swim	$4.35

*expenditures excludes utilities (water, sewer)

"It would be great to see a pool that caters more to clubs and teams."

— From 2016 Pool Programmer Survey



0 5 10 15 20 25

Legend

- public space
- pool
- entrance

Community Building

CONTEXT

Serves West End neighbourhood as well as Downtown residents and workers. Serves surrounding region as a diving competition facility.

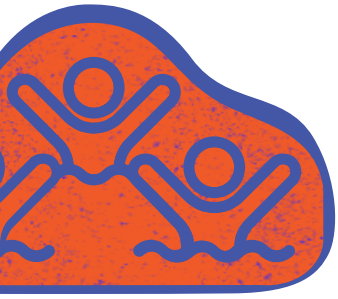
The 2011 population of surrounding communities was approximately 99,230, with the majority (48%) being in the 20 to 39 year age group followed closely by 23% in the 40 to 64 year range. Primarily English is spoken as the mother tongue. More than 64% do not drive to work. Downtown workers and visitors significantly augment these numbers.

*population and demographic data extracted from 2011 census

Site Context

"The facility is used by swim clubs for the 50 m pool. The dive tank is also popular because of it's 10 m platform."

— From 2016 Pool Programmer Survey



"Paid parking is one of the least successful aspects of the pool. Parking gets more and more restricted due to Burrard street construction."

— From 2016 Pool Programmer Survey

SITE

- Located in Sunset Beach Park
- On the waterfront, with beach, water, and park views

Relationship to other facilities / amenities

- On Beach Drive and Seawall and cycling route at Sunset Beach
- Playground, picnic, and concession nearby
- Closest community centres are Coal Harbour and West End (both 2 km away)
- There are no indoor pools within a 3 km radius of VAC
- Kitsilano Outdoor Pool is located approximately 1.5 km to the west, and Second Beach Outdoor Pool is approximately 2.5 km north and both are accessible to the VAC via the Seawall
- Adjacent to high rise residential and beach restaurant strip

Transit & Bike Accessible

- On bus route and ferry to Kitsilano, Granville Island , and Yaletown

COMMUNITY AMENITIES

Other Community Uses of the Facility?
Small fitness area, but facility mainly attracts lap swimmers, divers, and training clubs.

IMPACT OF EXTERNAL / REGIONAL FACILITIES

The new and updated downtown YMCA and YWCA attract residents as well as downtown workers. Memberships and facilities drive participation in private facilities, especially as the VAC is aging and offers few attractive amenities or opportunities. UBC's new aquatic facility opened in January 2017 and is an important amenity in the city for providing another 50 m tank. The 50 m length continues to keep participants returning to the VAC. Coinciding with the opening of Hillcrest Centre in 2010, the City of Vancouver eliminated all short-term free parking; all visitors to the VAC since then have been required to pay for parking. The net effect was that an adult visit to the VAC comparatively more than doubled in cost as the new Hillcrest facility offered free parking services.

Social Inclusivity

PEOPLE WITH DISABILITIES

- Wheelchair accessible facility
- Elevator
- Aquatic wheelchairs
- Aquatic pool lifts

LGBTQ/2S

The recommendations made in the 2014 TGVIWG Report are tested out at pilot locations and have not been implemented at this facility.

SENIORS

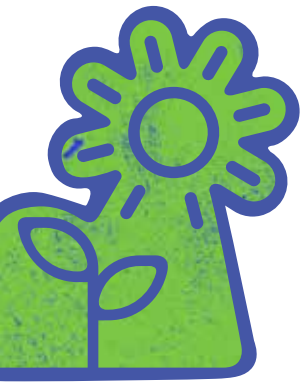
- No seniors specific programming, but seniors visit for aquafit classes offered throughout the day
- Aquafit, deepwater classes and lengths are the most popular classes
- Busyness of the pool when the clubs are using facilities may be a barrier to senior participation

Well Being

- Small whirlpool
- Small fitness facilities with outdoor component
- Facility mainly serves as a specialized facility for training and teams rather than a leisure facility
- Provides areas for structured swim clubs to meet and train with special amenities such as pool sizes and dive tanks not found at other facilities in the city

Connection to Nature

- No views from within facility except daylighting
- Adjacent to the water, seawall, used frequently by triathletes



Sustainability

CONDITION AND LIFECYCLE

The VAC was built in 1974 and is now at the end of its lifecycle. Of note are the precast wall panels and structure which are seismically problematic. The tank is also experiencing continued problems since the review in 2001. Some improvements to the mechanical system have been made since 2004 including heat recovery, 2 new boilers, and a new heat exchanger.

Elements beyond life span:

- Exterior doors + windows
- Structural wood roof framing
- Exterior stucco on metal studs
- Plumbing fixtures
- Corrugated metal deck roof
- Interior doors + frames
- Drywall on wood or metal studs
- Ceramic tile finishes
- Built up roof coverings

ENERGY USE

Use Per Swim		Use per Area		Totals	
Energy Use /Swim (kWh/swim)	GHG / Swim ($kgCO_2e$/swim/yr)	Energy Use Intensity (kWh/m^2/yr)	GHG Emissions Intensity ($kgCO_2e$/m^2/yr)	Total Energy (kWh/yr)	Total GHG ($kgCO_2e$/yr)
20.89	2.84	707.10	96.10	4,256,739	578,000

GHG = Annual Green House Gas Emissions measured in kilograms of CO_2 equivalent

Swim Number Data from 2014 annual numbers; Energy and GHG data from 2016 Q2 (Apr 2015-Mar 2016)

Final Observations

The VAC is in high demand for diving, synchro, water polo, and elite aquatic based training. However, given its large water area and the relatively small number of swimmers using it at any given time based on its deep water focus, it operates on average at approximately 25% of its operating capacity, making it the least efficient pool in the system by far. Given its low efficiency of use, it operates with the highest subsidy per swim—over three times the subsidy per swim of newer facilities like Hillcrest and Killarney. It is among the oldest pools in the system, and it is at the end of its lifecycle. The precast panel cladding system and the building structure were noted as problematic from a seismic perspective in previous reviews, and a new facility that addresses the current and emerging demands in competition and elite training, along with fitness and spa amenities, was recommended in the 2011 study.

Kitsilano
Community + Destination Outdoor Pool
1931, RENOVATED 1979

Pools

137.5 m

2-50 m lanes (4,713 m^2 water area)
Salt water
Zero-level entry
3 small slides

Amenities

***

Spray pad
Change area
Concession

Swims (2014)

173,442

2,400 current bathing load

Total visitors 2010: 128,038 participants; 3,074 lessons; 5,415 rentals

Aquatic Experiences

- 1,313 scheduled annual operating hours (2016)
- Primarily recreation, fitness, rentals and some lessons
- Limited programming
- Aquafit is very popular as are lessons for both adults and children.
- Pool is kept at 76°F compared with indoor pools which are generally kept at a water temperature of 82°F
- Salt-water pool provides benefits for buoyancy, assisting the lap swimmers that frequent the facility

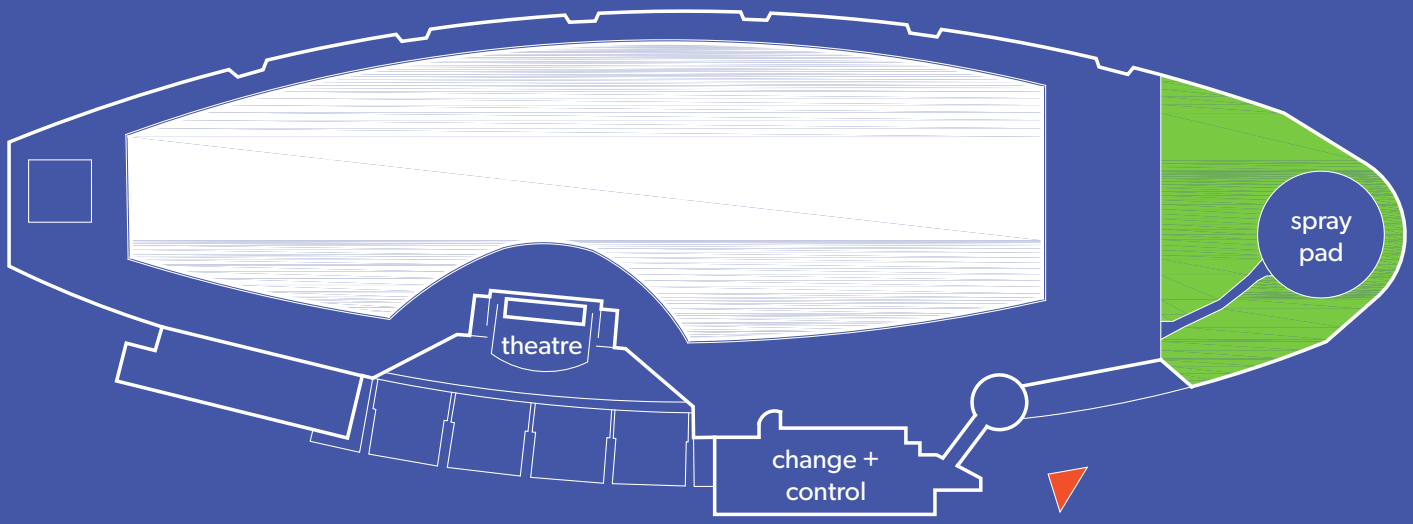
Operating Budget (2014)

Revenues	$687,039
Costs	$825,770
Subsidy	$138,731
Recovery Rate	83%
Participant Swims	173,442
Cost/Swim	$4.76
Revenues/Swim	$3.96
Subsidy/Swim	$0.80

*expenditures excludes utilities (water, sewer) + includes a portion of the centralized cost of administration for outdoor pools

"Length is the most appealing thing about this pool. People come to swim the 137.5 m length."

— From 2016 Pool Programmer Survey



Legend

- public space
- pool
- entrance
- green space

Community Building

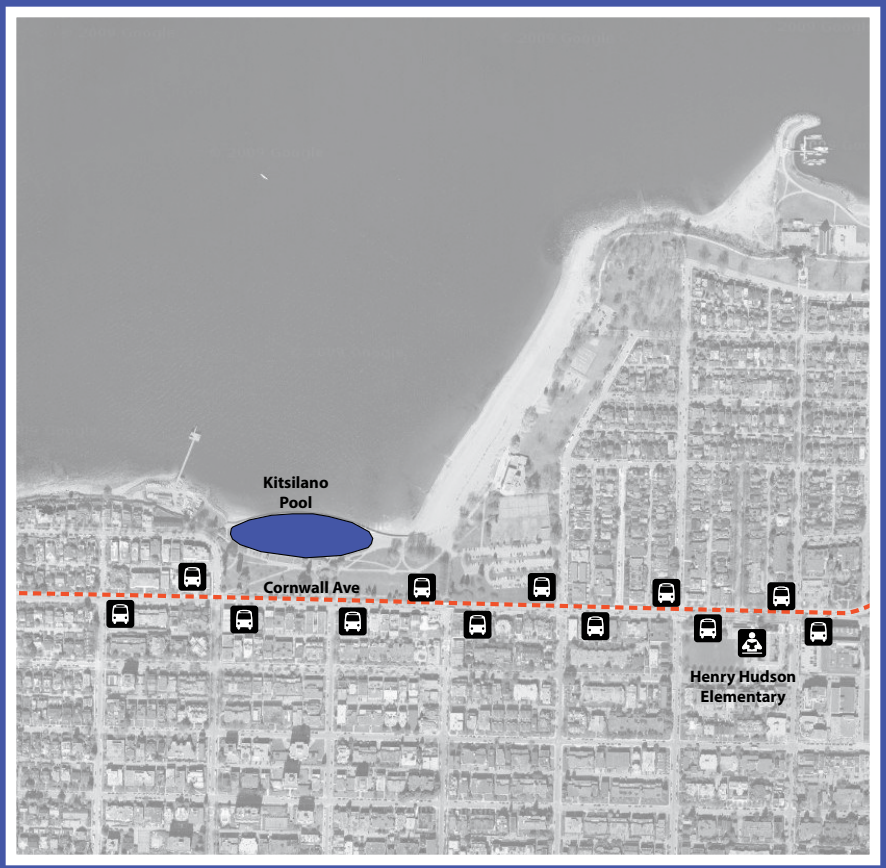
CONTEXT

Kitsilano Pool is both an important community and destination facility at Kitsilano Beach. The pool serves its community area, the city, region, and visitors.

In the community user group, the majority by far are in the 20-39 year age group, followed by those 40-64 years of age. The mother tongue is primarily English, with a mixed balance of other languages. Almost 50% walk, cycle, and use transit for work.

*population and demographic data extracted from 2011 census

Site Context



"The length is the most appealing thing about this pool. However the west shallows are not quite deep enough for activities."

— From 2016 Pool Programmer Survey

SITE

- Prime location on major city destination waterfront beach, with playground, picnic, and extensive grass areas
- Panoramic city, ocean, and mountain views

Relationship to other facilities / amenities

- On waterfront, adjacent to beach, spray park, playground, concession, and a restaurant
- Change rooms are inside enclosed pool area
- Off beach drive, tourist route, accessible by bus
- Pay parking
- The closest city pool is the Vancouver Aquatic Centre which is approximately 1.5 km to the east
- The closest outdoor pool is Second Beach which is located approximately 2.5 km directly north

Transit & Bike Accessible

- On high-profile cycling and walking route

COMMUNITY AMENITIES

Other Community Uses of the Facility?

Serves as a supplement to the popular Kits Beach located just east of the pool. Popular for both lounging and lap swimming due to the lane length.

IMPACT OF EXTERNAL / REGIONAL FACILITIES

The combination of a waterfront outdoor pool and beach is unique to Vancouver in the region. The pool serves as a destination for fitness and exercise. Patrons travel to the pool due to its length being ideal for lap swimming.

Social Inclusivity

PEOPLE WITH DISABILITIES

- Wheelchair accessible facility
- Aquatic wheelchairs
- Aquatic pool lifts

LGBTQ/2S

The recommendations made in the 2014 TGVIWG Report are tested out at pilot locations and have not been implemented at this facility.

SENIORS

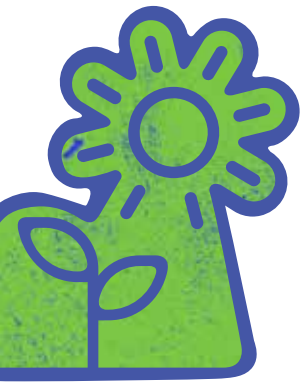
Part 2 (Seniors Survey) of the Pool Programmer Survey was not completed by this facility . It was indicated they are too busy a facility to cater to a specific group or demographic in the same way that indoor pools do.

Well Being

- Used for both lounging and training due to sloping beach entry and long lap length
- Most patrons visit the facility due to the location on the edge of English Bay and the length of the pool serving as a place for training and exercise

Connection to Nature

- Unparalleled views of the North Shore Mountains
- Unique siting at the edge of English Bay
- Located just west of one of the city's most popular beach destinations
- Adjacent to the popular seawall amenity



Sustainability

CONDITION AND LIFECYCLE

Kitsilano Pool was completed in 1979 and is in good condition for its age due to the over-built concrete structure. A new condensing boiler was installed in 2005 but has otherwise has had limited interventions.

Elements beyond life span:

- Exterior stucco on metal studs
- Plumbing fixtures
- Corrugated metal deck roof
- Interior doors + frames
- Drywall on wood or metal studs
- Ceramic tile finishes
- Built up roof coverings

ENERGY USE

Use Per Swim		Use per Area		Totals	
Energy Use /Swim (kWh/swim)	GHG / Swim ($kgCO_2e$/swim/yr)	Energy Use Intensity ($kWh/m^2/yr$)	GHG Emissions Intensity ($kgCO_2e/m^2/yr$)	Total Energy (kWh/yr)	Total GHG ($kgCO_2e$/yr)
14.70	2.35	411.38	65.83	2,549,712	408,000

GHG = Annual Green House Gas Emissions measured in kilograms of CO_2 equivalent

Swim Number Data from 2014 annual numbers; Energy and GHG data from 2016 Q2 (Apr 2015-Mar 2016)

Final Observations

Kitsilano Outdoor Pool is the most well used outdoor pool in the system with more than 3 times the annual swims to New Brighton Outdoor Pool. Its ocean-side location, combined with proximity to a dense residential neighbourhood, easy transit access, and vehicle parking may all contribute to its success. However, one of its most well-loved features is its 137.5 m lap lanes. Another very attractive and well-used feature of this pool is the grassy picnic area within the paid pool area which allows for groups and families to pack food and extend their stay. The 2011 Pool Assessment Study recommended extending this feature, and upgrading the change rooms to encourage greater user numbers.

Maple Grove
Community + Neighbourhood Outdoor Pool
1995

Pools

Leisure pool (1,220 m^2 water area)
Max depth 1 m (3.5 ft)
Zero-level entry
4 Feature fountains
Free-form
Mini island
Water basketball

Amenities

**

change rooms
cafe

Swims (2016)

26,398

1,400 bathing load (Due to wading pool nature and configuration of tank.)

Total visitors 2010: 47,000 participants

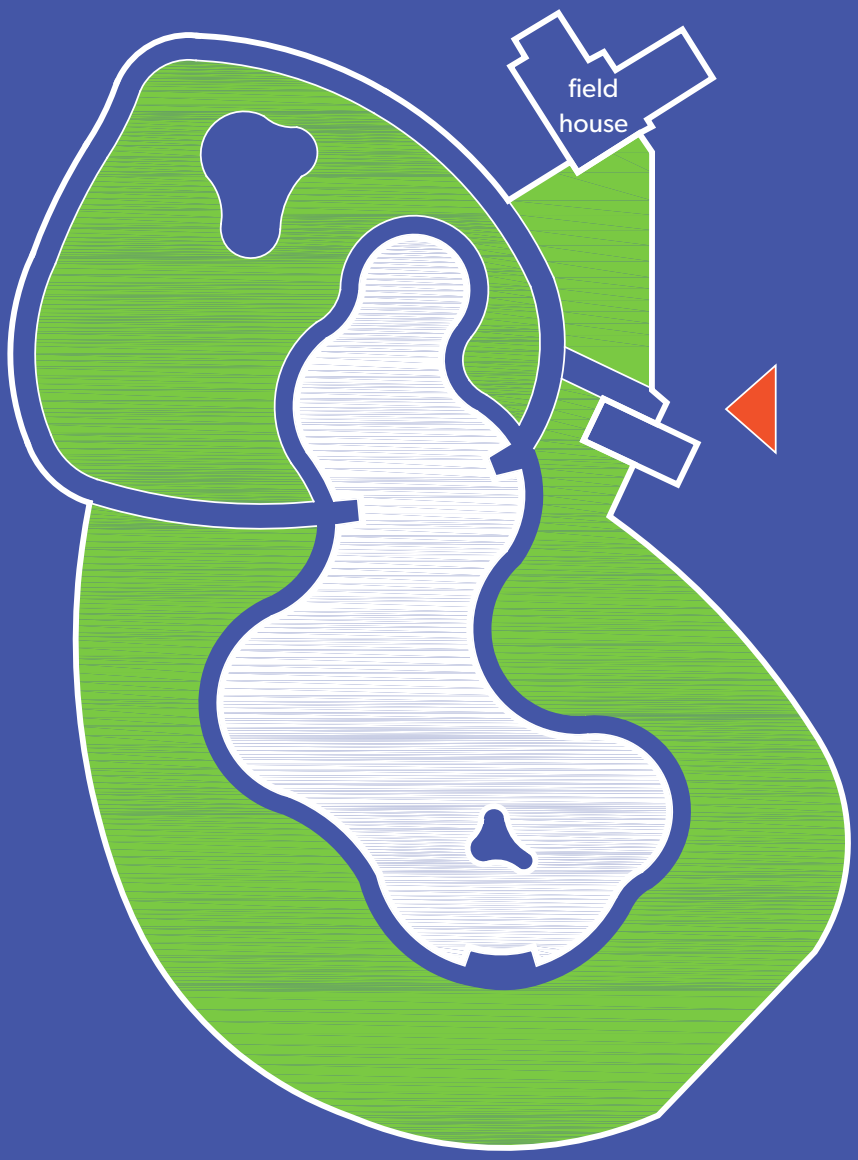
Aquatic Experiences

- 680 scheduled annual operating hours (2016)
- Primarily recreation, and lessons
- Popular venue for large children's groups, birthday parties, and day camps as well as family/company picnics
- Limited programming—families stay and picnic for the day. Fun days and music in the park enhance the experience

Operating Budget (2014)

Revenues	$101,406
Costs	$148,751
Subsidy	$47,345
Recovery Rate	68%
Participant Swims	N/A
Cost/Swim	N/A
Revenues/Swim	N/A
Subsidy/Swim	N/A

*expenditures excludes utilities (water, sewer, hydro + natural gas) + includes a portion of the centralized cost of administration for outdoor pools



0 5 10 15 20 25

Legend

- public space
- pool
- entrance
- green space

Community Building

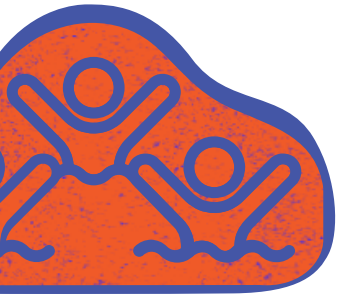
CONTEXT

The pool is located in Maple Grove Park in a single family residential neighbourhood. The facility serves the Kerrisdale community area and the wider city.

In the Kerrisdale community area, age groups are balanced with the majority in the 40-64 year range. The mother tongue is primarily English, closely followed by Chinese. More than 25% walk, cycle, and use transit for work.

*population and demographic data extracted from 2011 census

Site Context



SITE

- Large park in residential neighbourhood
- Out of the way quiet location
- Pool enclosure includes large grass area for picnics and lounging
- Adjacent to playground, picnic, and play fields

Relationship to other facilities / amenities

- Concession and caretaker on-site just outside the fence perimeter
- Limited parking on the street
- 3 elementary schools and a library are nearby
- The closest city pool and community centre is Kerrisdale (approximately 1 km to the east)

Transit & Bike Accessible

- 3 blocks from bus stop
- Just off cycling route

COMMUNITY AMENITIES

Is it part of a larger community centre?
Stand-alone outdoor pool located in a park.

IMPACT OF EXTERNAL / REGIONAL FACILITIES

The outdoor children's leisure/wading pool and park experience is unique and draws residents from the community and from across the Lower Mainland.

Social Inclusivity

PEOPLE WITH DISABILITIES

- Wheelchair accessible facility

LGBTQ/2S

The recommendations made in the 2014 TGVIWG Report are tested out at pilot locations and have not been implemented at this facility.

SENIORS

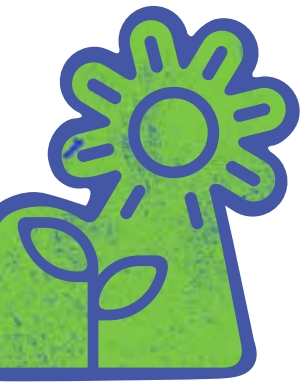
- Seniors usually visit as "babysitters"
- Grass area is the most popular for family visits
- Difficult for seniors to sit on the ground (e.g. picnics)
- Limited shaded areas prevent them from visiting during hotter weather

Well Being

Maple Grove Pool is an outdoor facility that offers a family and child oriented park wading pool. While it does not offer formalized sauna amenities, it contains grass park space around the pool allowing for relaxation, social gathering, and leisure.

Connection to Nature

- Outdoor pool
- Large amounts of green space surrounding pool deck
- Beach-like entry integrates pool with lounging, socializing and non-traditional water usage



Sustainability

CONDITION AND LIFECYCLE

Completed in 1995 this pool has many useful years left in its lifecycle, but will require ongoing maintenance to achieve its maximum lifespan.

Elements beyond life span:

- Built-up roof coverings (change area)

ENERGY USE

Use Per Swim		Use per Area		Totals	
Energy Use /Swim (kWh/swim)	GHG / Swim ($kgCO_2e$/swim/yr)	Energy Use Intensity ($kWh/m^2/yr$)	GHG Emissions Intensity ($kgCO_2e/m^2/yr$)	Total Energy (kWh/yr)	Total GHG ($kgCO_2e$/yr)
20.00	3.26	306.99	50.00	528,019	86,000

GHG = Annual Green House Gas Emissions measured in kilograms of CO_2 equivalent

Swim Number Data from 2016 annual numbers; Energy and GHG data from 2016 Q2 (Apr 2015-Mar 2016)

Final Observations

Maple Grove usage rates are not tracked, but, with the lowest capacity of the four stand-alone outdoor pools, this facility is often close to capacity during hot summer weekends. The extensive sloped grass areas for picnics and gatherings with a variety of opportunities for shade provided by mature trees, along with a low entry fee, make this pool a favourite. Its shallow depth and large zero-entry make this pool very popular among families with young children, which sets it apart from the other outdoor pools in the system. Some key elements that are lacking in this facility are change rooms and convenient washroom facilities.

New Brighton
Community Outdoor Pool
1936, RENOVATED 1973

Pools

55 m

6-25 m lanes (1,725 m^2 water area)
50-m swim configuration
Small slide
Zero-level entry

Amenities

**

change rooms
concession

Swims (2014)

56,348

1,200 bathing load

Total visitors 2010: 48,223 participants; 43,717 recreation; 2500 lessons; 935 rentals

Aquatic Experiences

- 853 scheduled annual operating hours (2016)
- Primarily recreation, lessons, and rentals
- Limited programming

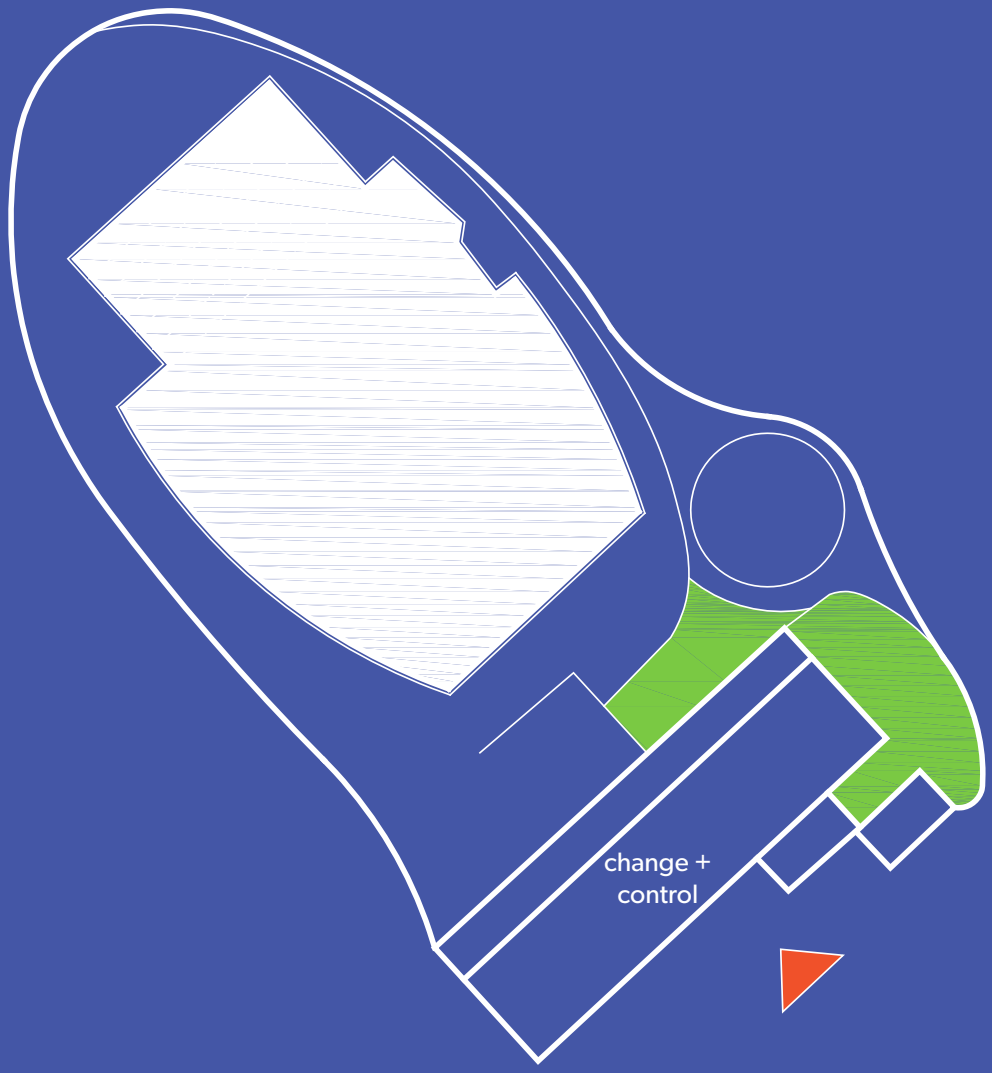
Operating Budget (2014)

Revenues	$161,305
Costs	$383,321
Subsidy	$222,016
Recovery Rate	42%
Participant Swims	56,348
Cost/Swim	$6.80
Revenues/Swim	$2.85
Subsidy/Swim	$3.94

*costs excludes utilities (water, sewer) + includes a portion of the centralized cost of administration for outdoor pools

"People love having something to do other than just swim."

— From 2016 Pool Programmer Survey



0 5 10 15 20 25

Legend

- public space
- pool
- entrance
- green space

Community Building

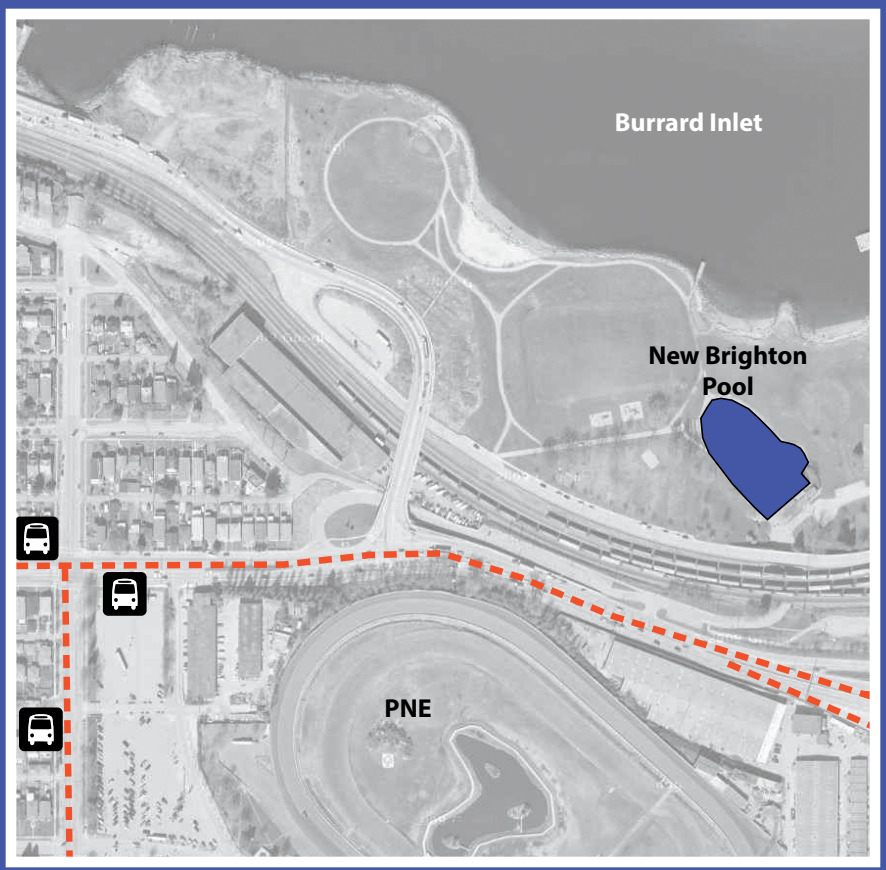
CONTEXT

The pool is located along the waterfront within New Brighton Park as part of the Hastings-Sunrise neighbourhood. The facility serves its community area as well as the wider city, North Shore, and Burnaby region.

In Hastings-Sunrise, age groups are balanced with the majority in the 40 to 64 year range, followed by the 20 to 39 year range. The mother tongue is primarily English, closely followed by Chinese. More than 30% walk, cycle and use transit for work.

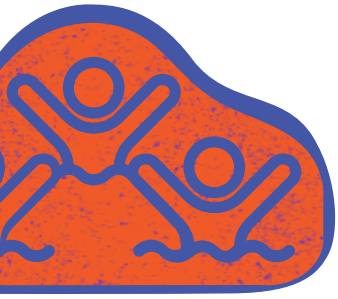
*population and demographic data extracted from 2011 census

Site Context



"My favourite place is the bigger slide. People love to have something to do other than just swim."

— From 2016 Pool Programmer Survey



SITE

- Out-of-the-way location set back from the waterfront at Burrard Inlet and next to industrial granary and port
- Views of ocean and North Shore Mountains
- Playground, picnic, soccer fields, and tennis courts

Relationship to other facilities / amenities

- Concession and caretaker on site
- Limited fenced area with wading pool just outside the perimeter
- The closest city pool is Templeton (approximately 2.5 km to the south-west)
- Closets community centre is Hastings, about 3 km away
- Near Hastings Park and PNE
- Limited parking removed from facility

Transit & Bike Accessible

- 3 blocks from bus stop
- Just off cycling route

> **"More parking is needed in the area. It definitely restricts pool patronage."**
>
> — From 2016 Pool Programmer Survey

COMMUNITY AMENITIES

Is it part of a larger community centre?
Outdoor pool facilities located in park

IMPACT OF EXTERNAL / REGIONAL FACILITIES

The outdoor waterfront park experience is unique and draws community area residents and those in-the-know from around the Lower Mainland.

Social Inclusivity

PEOPLE WITH DISABILITIES

- Wheelchair accessible facility
- Aquatic wheelchairs
- Ramp access

LGBTQ/2S

The recommendations made in the 2014 TGVIWG Report are tested out at pilot locations and have not been implemented at this facility.

SENIORS

Part 2 (Seniors Survey) of the Pool Programmer Survey was not completed by this facility. It was indicated they are too busy a facility to cater to a specific group or demographic in the same way that indoor pools do.

> **"A hot tub would increase length of stay, and increase social interaction."**
>
> — From 2016 Pool Programmer Survey

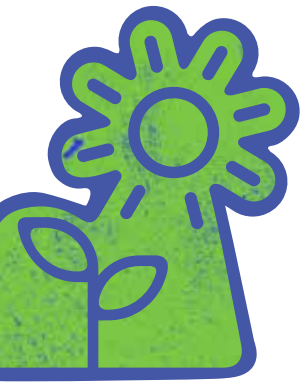
Well Being

- Basic changing facilities
- Lack of hot tub
- Not many 'play' features for kids and young families

Connection to Nature

- Located just off of Burrard inlet in New Brighton Park
- Expansive views of the North Shore Mountains
- Lack of green space within pool area
- Trees on the south side of the pool provide shading

> **"Trees provide shade on the south end of the pool. Actually there have been complaints about too much shade."**
>
> — From 2016 Pool Programmer Survey



Sustainability

CONDITION AND LIFECYCLE

Completed in 1973 this pool is nearing the end of its lifecycle and will require ongoing maintenance. The concrete deck surrounding the pool has become very pitted due to pressure washing.

Elements beyond life span (change area):

- Exterior doors + windows
- Structural wood roof framing
- Exterior stucco on metal studs
- Plumbing fixtures
- Corrugated metal deck roof
- Interior doors + frames
- Drywall on wood or metal studs
- Ceramic tile finishes
- Built up roof coverings

> **"People want grass inside the pool area. Complaints about too much concrete."**
>
> — From 2016 Pool Programmer Survey

ENERGY USE

Use Per Swim		Use per Area		Totals	
Energy Use /Swim (kWh/swim)	GHG / Swim ($kgCO_2e$/swim/yr)	Energy Use Intensity (kWh/m^2/yr)	GHG Emissions Intensity ($kgCO_2e$/m^2/yr)	Total Energy (kWh/yr)	Total GHG ($kgCO_2e$/yr)
18.21	2.77	468.02	71.17	1,025,897	156,000

GHG = Annual Green House Gas Emissions measured in kilograms of CO_2 equivalent

Swim Number Data from 2014 annual numbers; Energy and GHG data from 2016 Q2 (Apr 2015-Mar 2016)

Final Observations

New Brighton, in spite of offering amenities similar in nature to Second Beach Pool, sees almost half the number of users annually. A barrier to usage for this facility may be a lack of easy access; it is not a walkable distance from the surrounding residences, is not well served by transit, and offers insufficient parking. The facility also suffers from lack of green space within the paid-zone, which differentiates it from the other three facilities. The 2011 Pool Assessment Study recommended adding spray features in the shallow area, extending the grass area and addressing the lack of parking as means of increasing use at this facility.

Second Beach
Community + Destination Outdoor Pool
1934, RENOVATED 1995

Pools

110 m

3-50 m lanes (3,400 m^2 water area)
Zero-level entry
1 small slide, 2 feature slides

Amenities

***

change rooms
concession

Swims (2014)

86,621

2,700 bathing load (In summer there are volume, not capacity line ups.)

Total visitors 2010: 82,464 participants; 80,000 rec + fitness; 700 lessons; 1,740 rentals

Aquatic Experiences

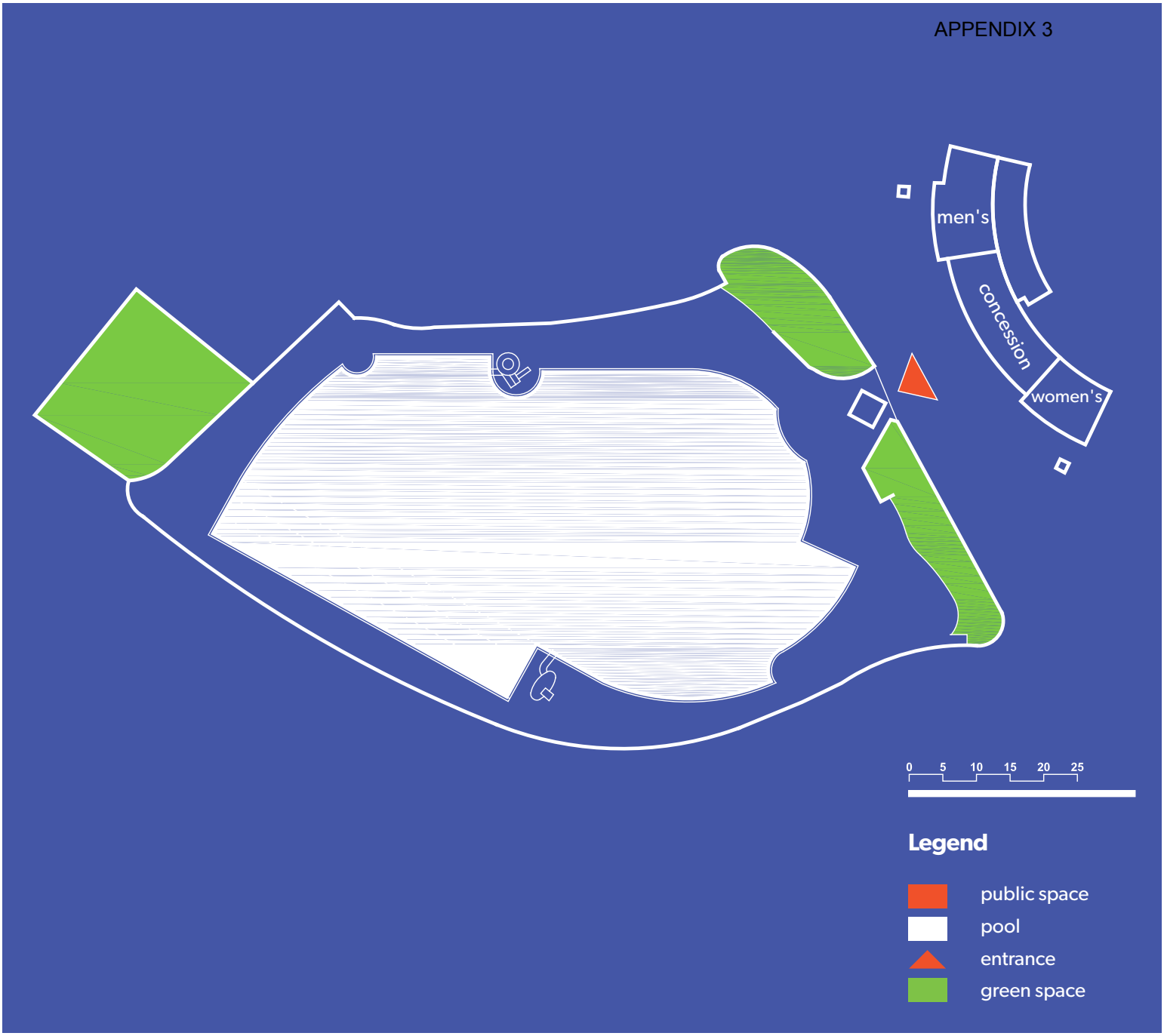
- 853 scheduled annual operating hours (2016)
- Primarily recreation, fitness, rentals, and some lessons
- Limited programming

Operating Budget (2014)

Revenues	$215,800
Costs	$474,036
Subsidy	$258,236
Recovery Rate	46%
Participant Swims	86,621
Cost/Swim	$5.47
Revenues/Swim	$2.49
Subsidy/Swim	$2.98

*costs excludes utilities (water, sewer, + hydro) + includes a portion of the centralized cost of administration for outdoor pools

> **"The vastness of the pool makes you feel that you have room to swim."**
>
> — From 2016 Pool Programmer Survey


men's
concession
women's
0 5 10 15 20 25
Legend
public space
pool
entrance
green space

Community Building

CONTEXT

West End/Downtown community and destination facility in Stanley Park that serves the community area, city, region, and visitors.

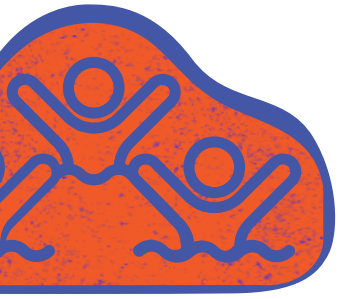
In the community user group the majority, by far, are in the 20-39 years range followed by the 40-64 years range. The mother tongue is primarily English with a mixed balance of others. More than 65% walk, cycle, and use transit for work.

*population and demographic data extracted from 2011 census

Site Context

"There is space to sit on pool deck. However, there is minimal shade provided by the trees at the east end."

— From 2016 Pool Programmer Survey



SITE

- Prime location in major destination park
- On waterfront with beach, playground, and picnic facilities
- City, ocean, and mountain views

Relationship to other facilities / amenities

- On waterfront, adjacent to beach and concession
- Change rooms are out of enclosed area
- Off Park Drive and tourist route
- Pay parking
- 2 to 3 km distance to library, recreation facilities, shopping area, etc.
- The closest city pool is the Vancouver Aquatic Centre approximately 2.5 km to the south

Transit & Bike Accessible

- Accessible by bus
- On high profile cycling and walking route

> **"The deck is quite small. Not a lot of room so it is quite crowded."**
>
> — From 2016 Pool Programmer Survey

COMMUNITY AMENITIES

Is it part of a larger community centre?

A stand-alone outdoor pool that is located just off of the Stanley Park seawall. There are no other nearby built facilities, but it is connected to various bike trails, walking trials, and park space surrounding the facility.

IMPACT OF EXTERNAL / REGIONAL FACILITIES

The combination of a waterfront outdoor pool and beach is unique to Vancouver and the region.

Social Inclusivity

PEOPLE WITH DISABILITIES

- Wheelchair accessible facility
- Aquatic wheelchairs
- Ramp access
- Potential difficulty in wayfinding due to change rooms being located outside fenced pool area

LGBTQ/2S

The recommendations made in the 2014 TGVIWG Report are tested out at pilot locations and have not been implemented at this facility.

SENIORS

Part 2 (Seniors Survey) of the Pool Programmer Survey was not completed by this facility. It was indicated they are too busy a facility to cater to a specific group or demographic in the same way that indoor pools do.

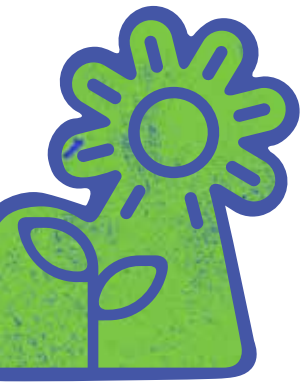
Well Being

The facility's location on the seawall exposes it to many types of visitors who are visiting the water's edge and Stanley Park to the north of the pool. However, the pool itself does not offer any spa or relaxation amenities. Staff have indicated that there is minimal space (especially green space) within the pool boundary for lounging, with the potential to expand west during busy times. There are limited amenities such as change facilities and deck showers. However the view and proximity to the water's edge creates a desirable aquatic experience.

Connection to Nature

- View towards Kitsilano, UBC, and harbour
- Connection to Stanley Park, seawall, forests, and trails
- Located just off of water's edge

The 2016 Pool Programmer Survey indicated that there is a lack of green space. Currently a small patch of grass on the west side of the pool exists, however it is only accessed by a small gate and staff indicated it is a barrier to patrons.



Sustainability

CONDITION AND LIFECYCLE

Second Beach Pool was completed in 1995 and has many years left in its lifecycle. It is generally in good shape and has had a new boiler, circulation pump and sand filter recently installed. The change room areas are outdated and run down, leading to accessibility and inclusivity difficulty.

Elements beyond life span:

- Built up roof coverings (change area)

> **"Moving the fence west to take in a permanent piece of grass. Extend the wind barrier on the south fence. A hot tub would increase the stay."**
>
> — From 2016 Pool Programmer Survey

ENERGY USE

Use Per Swim		Use per Area		Totals	
Energy Use /Swim (kWh/swim)	GHG / Swim ($kgCO_2e$/swim/yr)	Energy Use Intensity (kWh/m^2/yr)	GHG Emissions Intensity ($kgCO_2e$/m^2/yr)	Total Energy (kWh/yr)	Total GHG ($kgCO_2e$/yr)
19.21	3.46	468.83	84.53	1,663,883	300,000

GHG = Annual Green House Gas Emissions measured in kilograms of CO_2 equivalent

Swim Number Data from 2014 annual numbers; Energy and GHG data from 2016 Q2 (Apr 2015-Mar 2016)

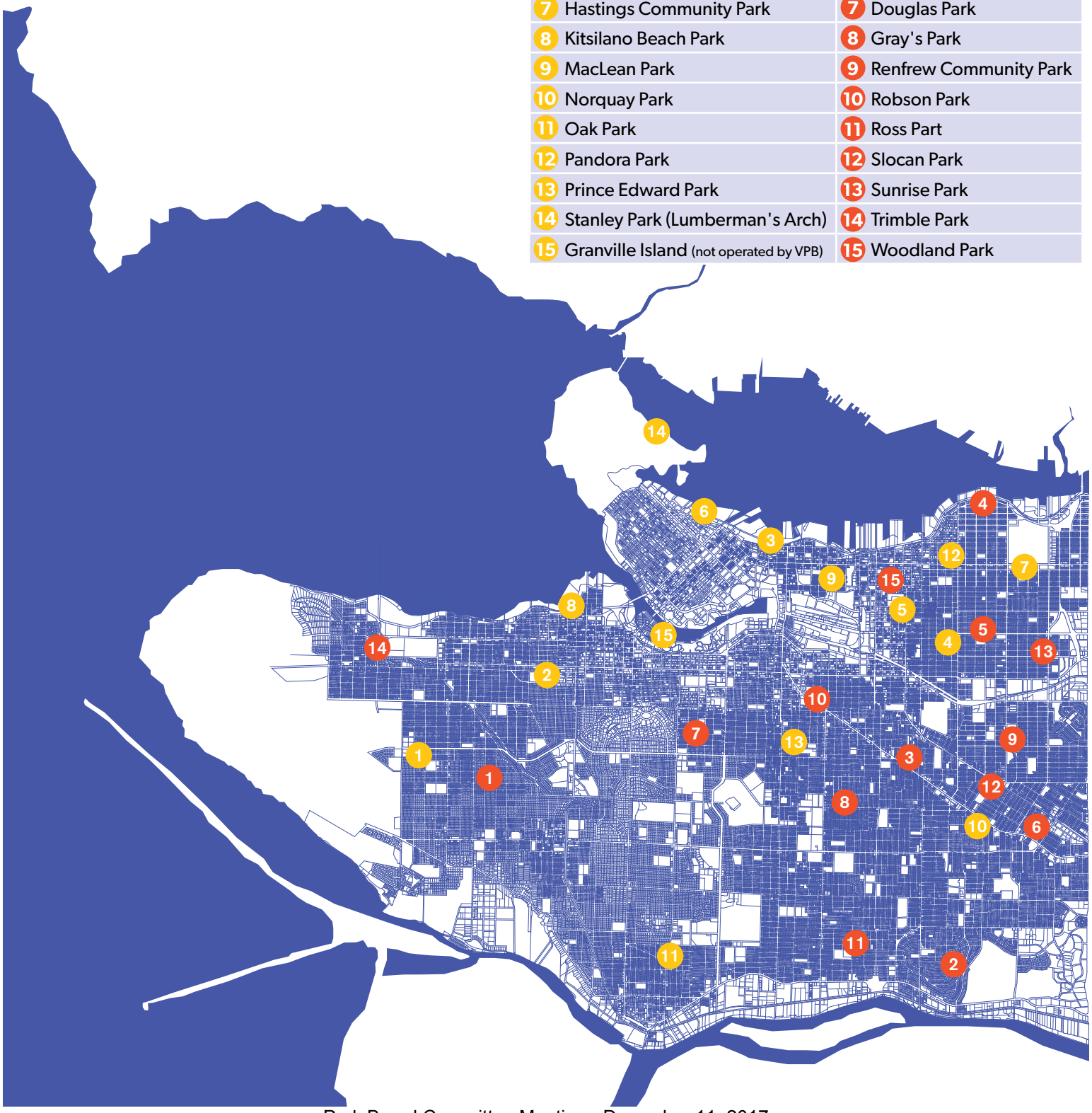
Final Observations

Second Beach is the second most popular outdoor pool in the system, but still sees less than half the usage of Kitsilano Outdoor Pool, and is the least efficient in terms of capacity by a slight margin (12% of its capacity is used annually, compared to Kitsilano, which operates at 17%). Its location, which offers unique views of the ocean and adjacency to beaches and parks, may suffer slightly from lack of easy access. While adjacent to the seawall, it is not well served by transit and parking can be a challenge in the summer months. The 2011 Pool Assessment Study recommended upgrades to the change rooms and extensions to the green space within the paid zone.

Spray Parks + Wading Pools

The following pages contain a local map and overview of the park for each of the spray and wading amenities.

VPB Spray Parks	VPB Wading Pools
1 Chaldecott Park	1 Balaclava Park
2 Connaught Park	2 Bobolink Park
3 CRAB Park at Portside	3 Brewers Park
4 Garden Park	4 Burrard View Park
5 Grandview Park	5 Clinton Park
6 Harbour Green Park	6 Collingwood Park
7 Hastings Community Park	7 Douglas Park
8 Kitsilano Beach Park	8 Gray's Park
9 MacLean Park	9 Renfrew Community Park
10 Norquay Park	10 Robson Park
11 Oak Park	11 Ross Part
12 Pandora Park	12 Slocan Park
13 Prince Edward Park	13 Sunrise Park
14 Stanley Park (Lumberman's Arch)	14 Trimble Park
15 Granville Island (not operated by VPB)	15 Woodland Park



Spray Parks

1 Chaldecott Park

Chaldecott offers a combination of large playing fields and smaller play areas; large old cedar trees shelter the playground area and rustle moodily on breezy days. During the summer, the spray park is a popular attraction for children of the neighbourhood.

2 Connaught Park

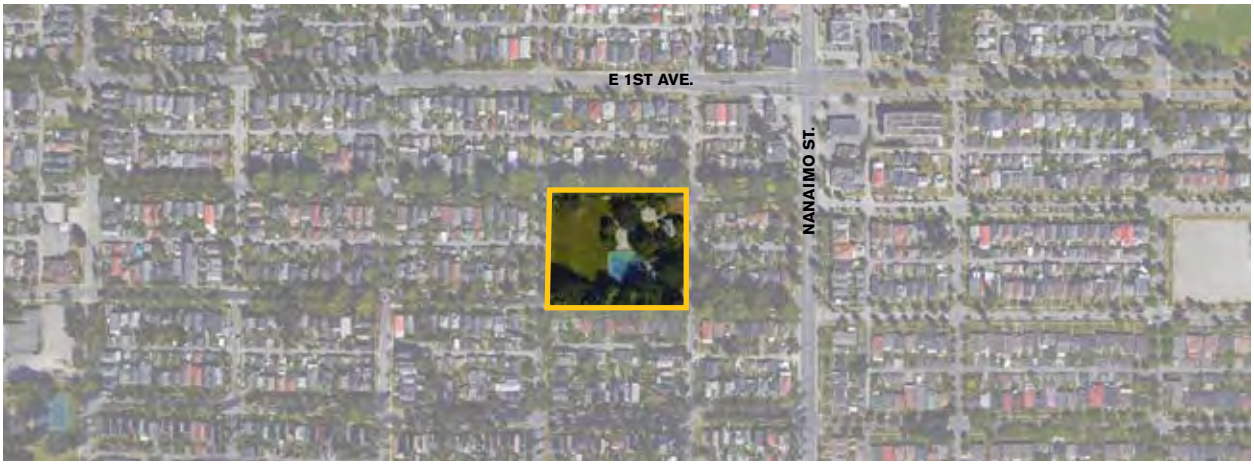
This busy park is lined with fantastic oak and catalpa trees, the latter decorating the fields with their exotic flowers in early summer. This is an excellent place to enjoy one of the shaded benches, whether watching kids in the spray park, resting, or observing a game of soccer or softball.

3 CRAB Park at Portside

From atop a grassy knoll or the small pier jutting into Burrard Inlet, this is a great place to get a close look at Vancouver's working port with views of the colourful shipping containers, cruise ships, heliport, and SeaBuses. Arriving from the Main Street overpass, two Chinese lion statues frame views of the peaks of the Lions; several more beautiful and moving monuments and sculptures can be found throughout the park.

4 Garden Park

Garden Park is tucked into a quiet but friendly neighbourhood and surrounded by stately street trees. Neighbours of the park enjoy chatting in the shade, sitting on one of the curved seats surrounding the children's spray park, or playing tennis on the courts.



5 Grandview Park

Always bursting with activity, Grandview Park is often the site of community activities that range from picnics and plays to festivals and concerts. In 2011, the park was upgraded with a new playground, pathways, stage, sport court, field house with accessible washrooms, lawns, gardens, and restored cenotaph area. The informal seating along Commercial Drive is well used. The park now has a large open grass area and beautiful, well-maintained maple trees that will continue to provide shade for the renewed park. The playground has several fun features including a very large boulder that allows children to climb up one side and down into a net on the other, a log 'table' which comes from a 537-year-old cedar tree that blew down in Stanley Park, and a sandbox with water that serves as a spray park. The sport court was built specifically to bike polo specifications—the first one in Vancouver.

6 Harbour Green Park

With rolling lawns and appealing views, Harbour Green Park seems to float at the edge of Coal Harbour. The park can be accessed from the seawall or from its grand Bute Street entrance, where a spectacular water feature doubles as a summer spray park. This elegantly detailed park is a great place to enjoy the sea air, watch the float plane arrivals and departures, and enjoy the adjacent restaurant.

7 Hastings Community Park

As one of Vancouver's oldest parks, Hastings Community Park boasts a wealth of activities for children and adults alike. Grand old trees create restful sitting spaces throughout. In the summer, shrieks from the nearby Pacific National Exhibition create a festive atmosphere in the park. The new children's spray park is a highlight.

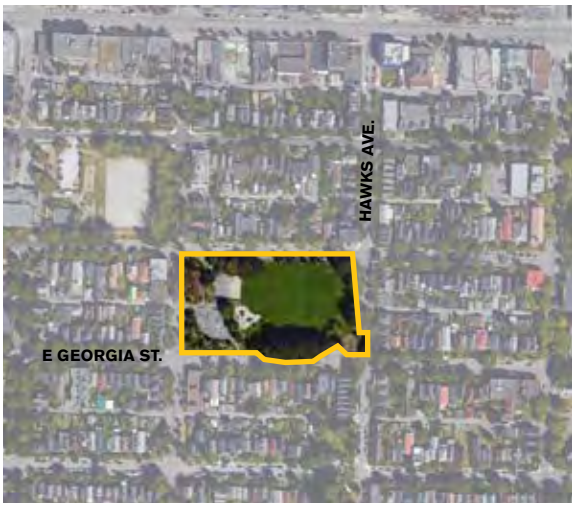
8 Kitsilano Beach Park

This very popular park boasts clean sand beaches, beautiful views of English Bay and downtown Vancouver, a restaurant, and wide lawns perfect for throwing a Frisbee or relaxing in the sun. The outdoor pool has the distinction of being Canada's longest at 137 m.

A playground is the park's newest feature. The city's largest fully accessible playground is a legacy of the Vancouver 2010 Olympic and Paralympic Winter Games. New play opportunities such as sand play table, rotating climber, and saucer swings, and spray park have been included to ensure universal access and encourage imaginative play, sensory experiences and fun for children of all ages and abilities. A wheelchair accessible surface also allows parents and caregivers with physical disabilities access to the playground.

9 MacLean Park

Surrounded by colourful houses and filled with the laughter of kids at the spray park or playground, MacLean reflects the sense of the surrounding community. The sweetgum trees lining the park put on a beautiful display in autumn.

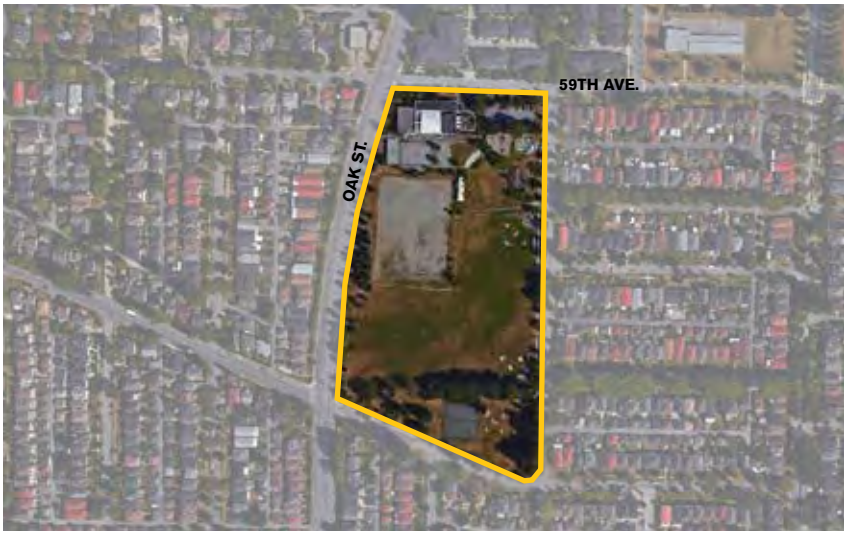


10 Norquay Park

Norquay Park is a popular spot on jogging routes, for tai chi, or for relaxing in the sunshine. The northern portion of the park was redesigned in 2011. New features include a rain garden which filters runoff from the new water spray park recharging the groundwater and providing water for landscape plants during the summer, a playground, sport court, tai chi area, pedestrian paths, benches, and mosaics created by local artists and residents.

11 Oak Park

With an outstanding number of recreation opportunities, Oak Park is a lively and welcoming place. It also offers many winding paths throughout the park, picnic areas, and some wonderful trees. The spray park is a big attraction for children in hot weather.

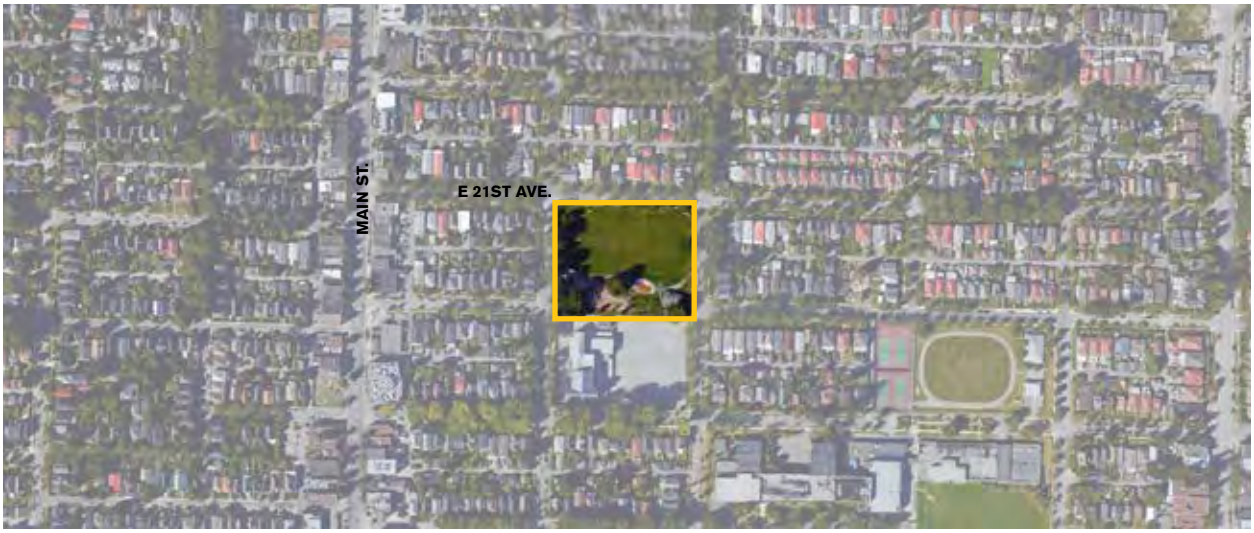


12 Pandora Park

Pandora's terraces create several spaces including open grass fields, a spray park, shaded walks and playground, and tennis courts. Old stone walls and stately trees surround the park.

13 Prince Edward Park

Prince Edward Park's play areas overlook an open grassy field, perfect for a game of soccer or for throwing a Frisbee, or playing in the spray park. Relax on a bench or meet with neighbours for an evening stroll around the park.



14 Stanley Park (Lumberman's Arch)

Located on the edge of the water in Stanley Park, there is a large spray park area for children with a nearby concession and paid parking.

Wading Pools

1 Balaclava Park

This expansive park, located in a quiet neighbourhood, is a pleasant place for walking or jogging, or families to enjoy the wading pool. Balaclava's grassy fields are frequented by sports teams, neighbours, and children alike.

2 Bobolink Park

Bobolink's quiet location and perimeter pathways make it a wonderful place for a stroll. The open fields are perfect for flying a kite or throwing a ball, and the playground area is popular with younger children, including a wading pool.

3 Brewers Park

Brewers is a diverse park terraced into three areas. A playing field, tennis and basketball courts, and a grassy area with playground and wading pool are separated by tree-lined walkways and stepped planting. This is a good place to visit if you want to relax in the shade, play a game of tennis, or push your kids on the swings.

4 Burrard View Park

This charming and welcoming park is home to the beautifully restored St. James' Cottage Hospice. Burrard View has ample space for throwing a ball, playing tennis, visiting the wading pool, or going for a stroll; the original cottage foundations are now grassy platforms for picnicking and contemplating the views of Burrard Inlet and the North Shore.

5 Clinton Park

Grassy slopes guide you into Clinton, a welcoming park with playing fields, a playground, and a wading pool. This is also a wonderful place to bring a lunch and sit at one of the shaded picnic tables, or to stroll down the tree-lined central pathway.

6 Collingwood Park

Collingwood Park is a well-loved community park that is often filled with activity. The park offers green fields that are perfect for relaxing or playing at any time of the year, and pathways that are pleasant for an evening stroll. For children, the playground and wading pool are especially popular destinations.

7 Douglas Park

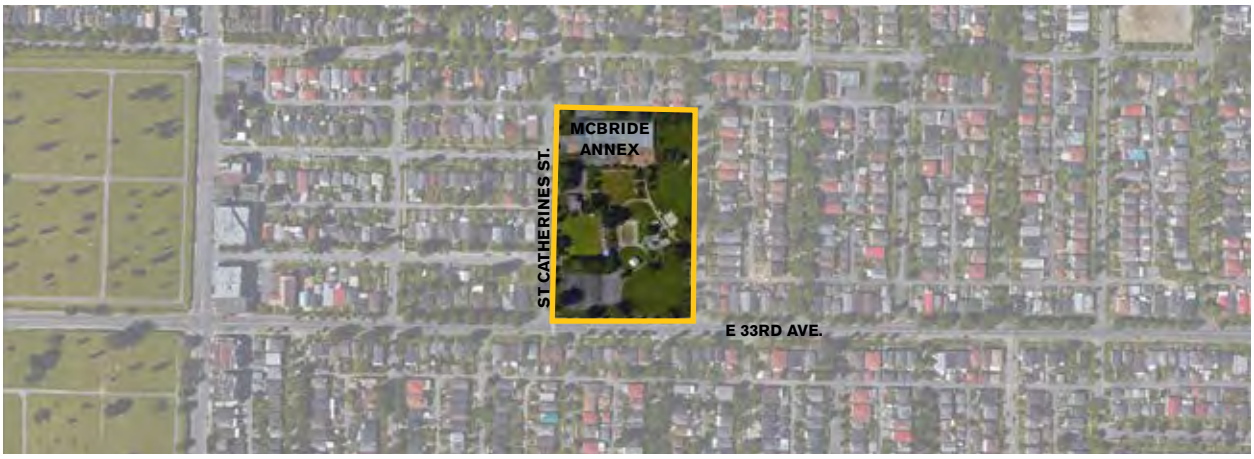
Douglas Park offers ample open fields, community center, wading pool, and playground area, all popular destinations. The main tree-lined promenade is a pleasant place to sit and take in views of the entire park.

8 Falaise Park

With four adjacent sections, Falaise Park stretches into the surrounding community. The rolling slopes are pleasant to walk, with tree-framed views of Vancouver and Burnaby available from nearly all corners of the park. A baseball field and wading pool are recreational activities located in the park. The slopes that afford the expansive views also provide prime sledding ground for winter fun.

9 Grays Park

The winding paths of this charming park lead to a surprising variety of pleasant spaces, including lawns, a bowling green, gardens, playgrounds and wading pool, quiet seating areas, and sports courts. The picnic shelter and arbours offer opportunies for relaxation.



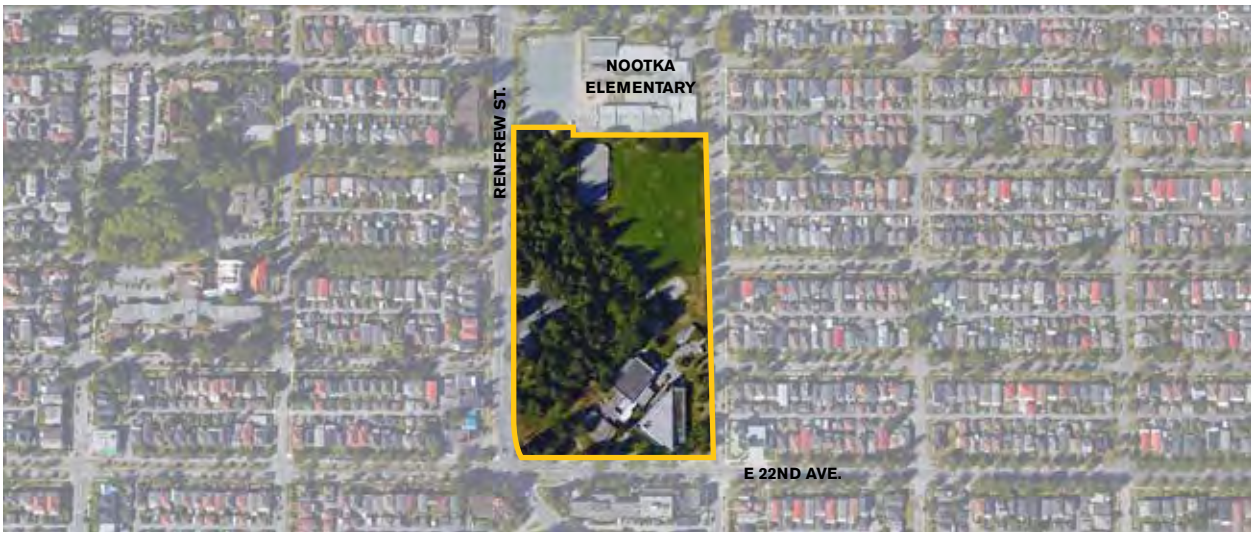
10 Memorial South Park

This large park is enjoyed by sports teams and neighbours alike. The formal tree-lined entry leads to the war memorial that gives the park its name; the track beyond is a popular place to exercise and socialize. The pond is a quiet place to watch the dragonflies and ducks; another water feature is the wading pool.

A lit synthetic turf field and a nearby running track opened in mid-2011. The nearby track was upgraded from a cinder track to a six-lane, rubberized surface, the first with low level lighting in the Vancouver park system. Users include local residents who walk around the track and students from several elementary and secondary schools. The oval inside the track is used by both cricket and ultimate teams.

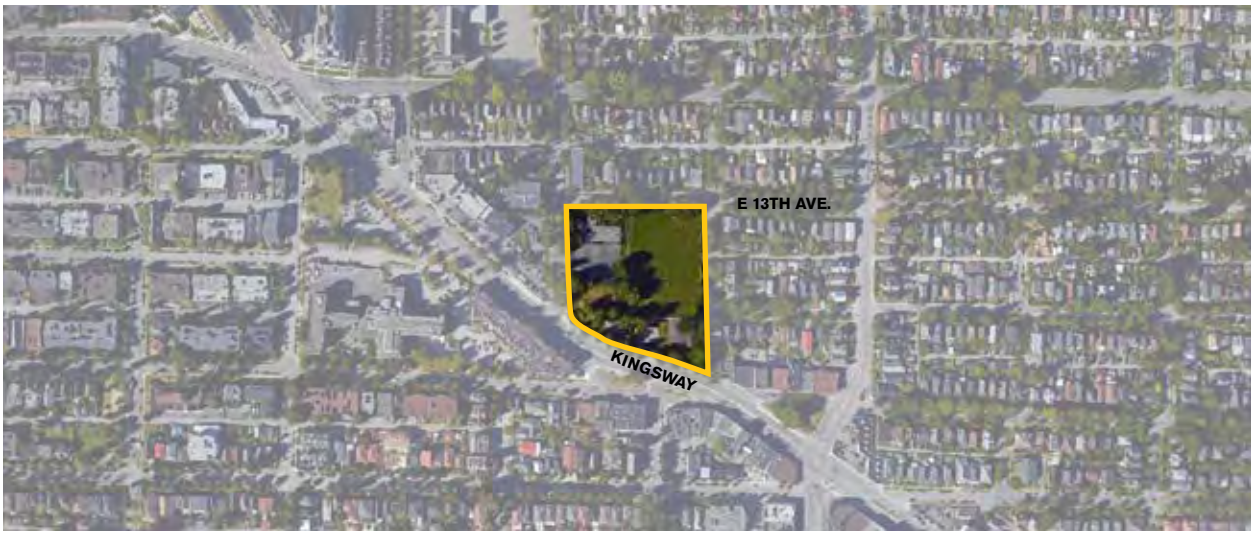
11 Renfrew Community Park

Renfrew Park is a hub of activity, boasting many recreational opportunities. Choose to visit the library or community centre, play softball, splash in the wading pool, or walk the winding paths along Still Creek, a part of the park that is surprisingly secluded and peaceful for such a busy area.



12 Robson Park

Robson Park is a gateway from a busy road into a colourful neighbourhood. Stroll past the lovely community gardens, or bring a blanket, relax on the grass, or wade in the pool. The park is named for the Honourable John Robson, Premier of British Columbia at the time of Vancouver's incorporation.



13 Ross Park

Ross Park's trees and rolling lawns create a space that is enjoyed by many people for tai chi, relaxing and chatting with friends, or going for a stroll. The picnic shelter is a cozy place for a leisurely lunch or for taking cover from the rain. Visitors can also enjoy the beauty and bounty of a fruit tree orchard, which was planted in the spring of 2011.

14 Slocan Park

Whether sitting near the playground and enjoying the subtle scent of the linden trees in late spring, walking the lantern-lined mosaic path, or playing soccer, Slocan Park is an enjoyable place to be. Another striking feature in this park is the eagle totem pole standing guard near the SkyTrain station entrance and the children's oriented fun wading pool.

15 Sunrise Park

Balanced atop a hill at one of the neighbourhood's highest points, the slopes of Sunrise Park offer appealing views of Capitol Hill, Burnaby Mountain, and, of course, a special sunrise. The open and inspiring setting is also great for a variety of outdoor sports and visiting the wading pool.

16 West Point Grey Park (Trimble)

High above English Bay, the views from West Point Grey Park are long and inspiring. Grand trees reach skyward, providing shade for the large playground that is almost always occupied by happy children visiting the wading pool. Ample sports fields appear to go on forever as they stretch out to join the views of English Bay and the North Shore.

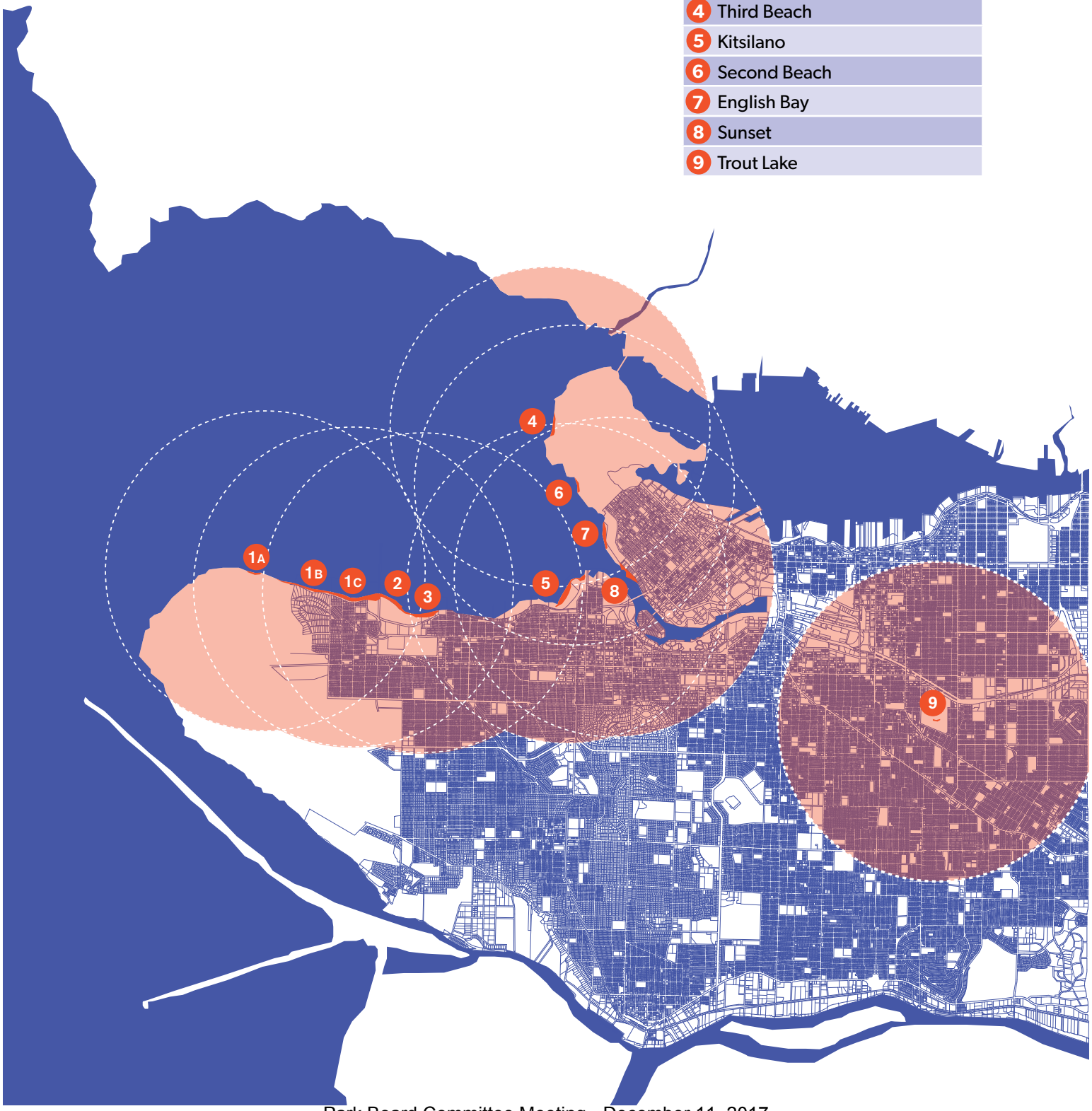
17 Woodland Park

Woodland Park is an attractive combination of large open spaces and small garden and recreation spaces such as a wading pool. The playground areas and fieldhouse are sheltered by tall, old trees; be sure to see the unique totem garden, a collection of native planting, First Nations totem pole, and contemporary sculpture.

Beaches

The following pages contain a local map and overview of amenities for each of the nine beaches managed by the VPB.

Public Beaches
1A Spanish Banks (Extension)
1B Spanish Banks (West)
1C Spanish Banks (East)
2 Locarno
3 Jericho
4 Third Beach
5 Kitsilano
6 Second Beach
7 English Bay
8 Sunset
9 Trout Lake



1A Spanish Banks Extension

Spanish Banks Extension is a small sandy area located to the west of Spanish Banks West. It is connected to the Spanish Banks Beach system by a series of trails and a park space.

Visits (2010)

68,095

98,265 VISITS (1999)

*observed beach use

Amenities

- On the Seawall system
- Barbeques permitted
- Free parking
- Seasonal lifeguards
- Dog off-leash area
- Kiteboarding launch zone (nearby)

1B Spanish Banks West

Located along Northwest Marine Dr west of Tolmie St, Spanish Banks Beach is composed of three distinct sections, east, west, and extension. At low tide, the water is one kilometre off shore.

Visits (2010)

346,815

212,300 VISITS (1999)

*observed beach use

Amenities

- On the Seawall system
- Designated quiet beach (amplified sound is not permitted)
- Concession
- Public washrooms
- Barbeques permitted
- Picnic tables
- Volleyball courts (8)
- Dog off-leash area
- Free parking
- Seasonal lifeguards

1c Spanish Banks East

Located along Northwest Marine Dr west of Tolmie St, Spanish Banks Beach is composed of three distinct sections, east, west, and extension. At low tide, the water is one kilometre off shore. East Beach is located directly adjacent to Locarno beach, which is just to the east.

Visits (2010)

329,900

287,940 VISITS (1999)

*observed beach use

Amenities

- On the Seawall system
- Concession
- Public washrooms
- Barbeques permitted
- Picnic tables
- Eight volleyball courts
- Free parking
- Seasonal lifeguards

2 Locarno

Locarno Beach is on the west side of Jericho Park on Northwest Marine Dr between Discovery St and Tolmie St. Locarno Beach is a sandy beach with stands of tall evergreen trees nearby. Locarno beach is directly adjacent to Spanish Banks East, and only a few minutes west of Jericho Beach.

Visits (2010)

329,900

216,082 VISITS (1999)

*observed beach use

Amenities

- On the Seawall system
- Designated quiet beach
- Concession
- Public washrooms
- Volleyball courts (6)
- Picnic tables
- Swimming raft
- Free parking
- Seasonal lifeguards

3 Jericho

Jericho Beach is on the north side of Jericho Park at the west end of Point Grey Rd between Wallace St and Discovery St. The east side of the beach caters to swimmers and the west side to sailboats and windsurfers. This beach is located only a few minutes east of Locarno Beach and Spanish Banks Beaches.

Visits (2010)

195,570

144,195 VISITS (1999)

*observed beach use

Amenities

- Concession
- On the Seawall system
- Public washrooms
- Playing fields
- Tennis courts
- Picnic tables
- Swimming raft
- Pay parking
- Seasonal lifeguards
- Beach wheelchair
- Sailing centre
- Youth hostel

4 Third Beach

Located at Ferguson Point in Stanley Park, Third Beach is a naturally sandy beach surrounded by trees that shield dippers and tanners from urban noise. This is a great beach for quiet bathing, picnics, and watching sunsets.

Visits (2010)

253,160

293,300 VISITS (1999)

*observed beach use

Amenities

- On the Seawall system
- Concession
- Public washrooms
- Barbeques allowed
- Seasonal lifeguards
- Pay parking

5 Kitsilano

Kitsilano Beach, also known as "Kits" Beach, is located on Cornwall Ave at the north end of Yew St. The Seawall runs along side the beach and Kitsilano Pool is at the west side. This beach recorded the highest number of visits of all public beach amenities in both 1999 and 2010 recorded beach usage numbers.

Visits (2010)

525,905

630,995 VISITS (1999)

*observed beach use

Amenities

- On Seawall system
- Concession
- Public washrooms
- Tennis courts
- Basketball courts
- Playground
- Swimming raft
- Seasonal lifeguards
- Pay parking
- Restaurant

6 Second Beach

Second Beach in Stanley Park is located at the junction of Stanley Park Dr and North Lagoon Dr next to Second Beach Pool, an ocean-side heated, outdoor pool. Barbeques can be used at nearby Ceperley Meadow and a picnic shelter can be reserved for private gatherings.

Visits (2010)

396,645

342,476 VISITS (1999)

*observed beach use

Amenities

- On the seawall system
- Concession
- Public Washrooms
- Playground
- BBQs allowed
- Picnic shelter
- Seasonal lifeguards
- Heated outdoor pool

7 English Bay

English Bay Beach, also called First Beach, is located along Beach Ave between Gilford St and Bidwell St. The Stanley Park Seawall, a popular running and biking route, runs along the east side of the beach. In 2010, this beach recorded the third highest number of visits, and was only around 1,000 visits behind Second Beach.

Visits (2010)

395,281

594,120 VISITS (1999)

*observed beach use

Amenities

- Concession
- Restaurant
- Public washrooms
- Beach umbrella and chair rentals
- Kayak rentals and storage
- Seasonal lifeguards
- Swimming raft with large slide
- Two sand volleyball courts
- Beach wheelchair
- Pay parking
- On the seawall system

8 Sunset

Located at the mouth of False Creek, on Beach Ave between Bute St and Thurlow St, Sunset Beach is a less populated beach close to the West End and downtown Vancouver. It is close to the Vancouver Aquatic Centre and has access to the False Creek Ferry pier.

Visits (2010)

173,290

187,700 VISITS (1999)

*observed beach use

Amenities

- On the Seawall system
- Concession
- Public washrooms
- Designated quiet beach
- Access to the False Creek Ferry pier
- Pay parking
- Seasonal lifeguards

9 Trout Lake

Trout Lake Beach is a fresh water beach at the south end of Trout Lake in John Hendry Park at Victoria Dr and East 19th Ave.

Visits (2010)

125,010

55,897 VISITS (1999)

*observed beach use

Amenities

- Swimming raft
- Play fields
- Concession
- Public washrooms
- Picnic area
- Barbeques permitted
- Seasonal lifeguards
- Dog off-leash area at the north end of the lake
- Free parking

Appendices

A

Summary of Annual Uses for Pools
Appendix A

Indoor Pools

VANCOUVER INDOOR POOLS: CARD SCANS 2009-2014

	2009	2010	2011	2012	2013	2014
Britannia Community Centre + Pool	78,310	59,445	43,282	90,079	79,686	81,176
Templeton (Hastings Community Centre)	111,339	111,153	97,397	108,858	105,100	104,702
Hillcrest Centre	NA	102,900	307,769	328,572	350,727	348,529
Kensington Community Centre + Pool	58,110	60,762	56,492	55,784	55,500	58,875
Kerrisdale Community Centre Complex	48,401	46,095	42,747	43,244	41,738	44,841
Killarney Community Centre, Rink + Pool	213,549	233,342	233,532	262,211	263,922	259,001
Renfrew Park Community Centre + Pool	62,941	77,125	120,739	125,479	128,896	126,552
Riley Park Community Centre	94,331	63,488	N/A	N/A	N/A	N/A
Vancouver Aquatic Centre	137,470	136,151	125,059	131,003	123,577	115,862
West Point Grey Community Centre (Lord Byng)	341,86	44,882	39,543	45,784	49,141	45,588

VANCOUVER INDOOR POOLS: POS DROP-INS 2009-2014

	2009	2010	2011	2012	2013	2014
Britannia Community Centre + Pool	19,945	15,604	10,363	23,644	22,647	26,543
Templeton (Hastings Community Centre)	18,863	20,406	27,055	25,412	28,799	22,563
Hillcrest Centre	N/A	96,917	236,945	235,898	228,321	242,599
Kensington Community Centre + Pool	13,787	15,017	12,581	10,649	10,068	4,746
Kerrisdale Community Centre Complex	11,792	9,058	5,989	5,958	5,041	5,916
Killarney Community Centre, Rink + Pool	130,055	129,636	84,583	80,710	74,227	73,282
Renfrew Park Community Centre + Pool	9,610	12,922	13,927	11,696	10,078	10,164
Riley Park Community Centre	16,158	10,105	300	N/A	N/A	N/A
Vancouver Aquatic Centre	11,6517	68,988	52,344	47,416	54,235	42,385
West Point Grey Community Centre (Lord Byng)	14,130	15,629	12,118	12,627	13,502	12,060

VANCOUVER INDOOR POOLS: PROGRAM VISITS 2009-2014

	2009	2010	2011	2012	2013	2014
Britannia Community Centre + Pool	16,236	17,613	13,005	13,959	17,442	19,080
Templeton (Hastings Community Centre)	20,151	18,234	18,198	18,144	18,513	18,963
Hillcrest Centre	NA	35,415	81,387	125,361	90,801	82,503
Kensington Community Centre + Pool	25,569	28,188	23,994	25,101	24,831	24,984
Kerrisdale Community Centre Complex	39,168	40,590	35,874	34,011	33,633	36,009
Killarney Community Centre, Rink + Pool	103,041	105,714	99,243	103,977	97,047	96,066
Renfrew Park Community Centre + Pool	23,328	41,571	71,028	59,814	61,605	55,008
Riley Park Community Centre	29,268	11,565	NA	NA	NA	NA
Vancouver Aquatic Centre	29,862	30,861	28,251	29,565	26,424	29,709
West Point Grey Community Centre (Lord Byng)	20,655	25,362	24,165	22,086	23,337	27,711

VANCOUVER INDOOR POOLS: RENTAL SWIMS 2009-2014

	2009	2010	2011	2012	2013	2014
Britannia Community Centre + Pool	840	0	0	4,784	6,720	8,384
Templeton (Hastings Community Centre)	0	9,840	26,704	28,880	32,076	32,062
Hillcrest Centre	2,660	2,620	1,380	960	600	600
Kensington Community Centre + Pool	6,438	6,648	7,918	11,018	7,764	9,858
Kerrisdale Community Centre Complex	9,566	13,112	13,308	12,746	12,312	12,540
Killarney Community Centre, Rink + Pool	27,890	29,950	29,996	30,950	27,611	31,876
Renfrew Park Community Centre + Pool	0	5,888	8,110	6,668	7,823	12,386
Riley Park Community Centre	29,216	24,022	0	0	0	0
Vancouver Aquatic Centre	19,238	31,476	29,366	15,874	16,568	15,808
West Point Grey Community Centre (Lord Byng)	33,910	69,050	39,406	25,636	30,330	26,730

VANCOUVER INDOOR POOLS: TOTAL SWIMS 2009-2014

	2009	2010	2011	2012	2013	2014
Britannia Community Centre + Pool	115,331	92,662	66,650	132,466	126,495	135,183
Templeton (Hastings Community Centre)	150,353	159,633	169,354	181,294	184,488	178,290
Hillcrest Centre	NA	237,852	627,481	690,791	670,449	674,231
Kensington Community Centre + Pool	103,904	110,615	100,985	102,552	98,163	98,463
Kerrisdale Community Centre Complex	108,927	108,855	97,918	95,959	92,724	99,306
Killarney Community Centre, Rink + Pool	474,535	498,642	447,354	477,848	462,807	460,225
Renfrew Park Community Centre + Pool	95,879	137,506	213,804	203,657	208,402	204,110
Riley Park Community Centre	168973	109180	NA	NA	NA	NA
Vancouver Aquatic Centre	303,087	267,476	235,020	223,858	220,804	203,764
West Point Grey Community Centre (Lord Byng)	102,881	154,923	115,232	106,133	116,310	112,089
Totals	1,623,870	1,877,344	2,073,798	2,214,558	2,180,642	2,165,661

Outdoor Pools

SAFARI CARD SCANS

	2009	2010	2011	2012	2013	2014
Kitsilano Beach	68,862	55,267	56,646	62,155	78,867	82,049
Mount Pleasant	2,237	N/A	N/A	N/A	N/A	N/A
New Brighton	7,197	5,928	4,937	5,941	8,099	8,588
Second Beach	17,278	13,870	12,344	13,289	15,359	14,620
Totals	**95,574**	**75,065**	**73,927**	**81,385**	**102,325**	**105,257**

POINT OF SALE DROP-IN SWIMS

	2009	2010	2011	2012	2013	2014
Kitsilano Beach	86,122	63,352	65,427	66,690	77,982	85,193
Mount Pleasant	30458	N/A	N/A	N/A	N/A	N/A
New Brighton	55,543	39,126	31,927	35,828	37,960	43,030
Second Beach	72,072	65,479	57,849	59,554	74,548	70,691
Totals	**244,195**	**167,957**	**155,203**	**162,072**	**190,490**	**198,914**

SWIMS ASSOCIATED WITH PROGRAM REGISTRATION

	2009	2010	2011	2012	2013	2014
Kitsilano Beach	3,550	3,510	3,700	4,320	5,690	5,500
Mount Pleasant	2,660	N/A	N/A	N/A	N/A	N/A
New Brighton	2,670	2,660	2,570	2,910	3,100	3,300
Second Beach	480	880	780	700	880	450
Totals	**9,360**	**7,050**	**7,050**	**7,930**	**9,670**	**9,250**

RENTAL SWIMS

	2009	2010	2011	2012	2013	2014
Kitsilano Beach	N/A	1,080	560	670	670	680
Mount Pleasant	NA	NA	NA	NA	NA	NA
New Brighton	N/A	1,090	1,100	940	1,120	1,430
Second Beach	N/A	720	240	310	540	860
Totals	**NA**	**2,890**	**1,900**	**1,920**	**2,330**	**2,970**

TOTAL SWIMS

	2009	2010	2011	2012	2013	2014
Kitsilano Beach	158,534	123,209	126,333	133,835	163,209	173,422
Mount Pleasant	35355	N/A	N/A	N/A	N/A	N/A
New Brighton	65,410	48,804	40,534	45,619	50,279	56,348
Second Beach	89,830	80,949	71,213	73,853	91,327	86,621
Totals	**349,129**	**252,962**	**238,080**	**253,307**	**304,815**	**316,391**

Pool Programmer Surveys
Appendix B

In 2016, Pool Programmer Surveys were sent to each indoor and outdoor facility. The following is a summary of the questions and answers for each facility that responded to the survey. The *Public Engagement Report* contains a detailed breakdown Part 2 of the Pool Programmer Survey that related specifically to seniors use and programming.

BRITANNIA *SENIORS SURVEY IN PUBLIC ENGAGEMENT REPORT	
What is the estimated average duration of stay? (Do people lounge on the pool deck, read books, or do they come to swim and leave immediately)?	The estimated average duration is 1.5 hours. Not too many people lounge on the pool deck and read books. They will swim and use the hotspots (sauna, steam, whirl), then leave.
Is there (answer where applicable): • Space to Sit on pool deck • Public space to observe • Place to gather, meet or hang-out For outdoor pools: • Space to sit in the shade? • A nearby washroom? • Concession	There is space to sit on the pool deck to observe. We provide chairs and tables.
Are there any people visiting that do not appear to be swimming (for example people observing lessons, or people lounging and using spa or sauna only)? If so, what would the % of those be?	There are some parents/caregivers observing lessons on the pool deck. We have a number of patrons that use hotspots only and do not swim. 10%.
What would you say is the most successful space or aspect of the pool? (A particular hotspot/an amenity that is heavily used)	The main pool would be the most heavily used.
What is your favourite place/aspect of the pool, and why?	The main pool with slide, swinging rope and diving board. Love to watch the kids enjoy their aquatic experiences.
In your opinion, what is the least successful space/aspect of the pool, and why?	Our aquatic lift is seldom used. We don't have many patrons that require the use of the equipment.
In your opinion, what are the most urgent things for replacement/renovations, and why?	Full renewal, it is an aging facility.
Any other observations	None
Do you see any changes that could be made in your pool facility that would improve social interactions, or increase the average duration of stay?	Spruce up the lounge/observation area, new chairs and tables, add a television?

HILLCREST *SENIORS SURVEY IN PUBLIC ENGAGEMENT REPORT	
What is the estimated average duration of stay? (Do people lounge on the pool deck, read books, or do they come to swim and leave immediately)?	Yes – I would say up to 2 -2.5 hours
Is there (answer where applicable): • Space to Sit on pool deck • Public space to observe • Place to gather, meet or hang-out For outdoor pools: • Space to sit in the shade? • A nearby washroom? • Concession	We have chairs and tables set up on the deck and we have loungers outside. Our public viewing area is on the deck – we have no viewing from the facility lobby. Most of the meet and hang out is on the deck or in the large hot tub. We do not have any shade outside except for a few tables with umbrellas. There is one washroom cubicle located by the outdoor pool and there isn't access to the concession from the outdoor pool unless you go into the facility lobby.
Are there any people visiting that do not appear to be swimming (for example people observing lessons, or people lounging and using spa or sauna only)? If so, what would the % of those be?	I would say we have a number of people who come and watch lessons – during the lesson time there are an average of 15-20 people sitting in chairs watching the lessons who do not swim.
What would you say is the most successful space or aspect of the pool? (A particular hotspot/an amenity that is heavily used)	I would say that each space is successful for different things. The pools are used for swimming, diving, floating, lessons, fitness classes, play etc. The hot spots are used for relaxation and socializing. The pool is very well laid out and popular. The only thing that I would add is additional washrooms at the east end of the building (hot spots and outdoor pool)
What is your favourite place/aspect of the pool, and why?	It is very pretty – nice colors, nice light, nice ambiance…. etc
In your opinion, what is the least successful space/aspect of the pool, and why?	The pool is too narrow – 1 lane is only 2 m wide which is too narrow for safe length swimming. The outdoor pool is too small.
In your opinion, what are the most urgent things for replacement/renovations, and why?	The facility is only 6 years old – so I would say nothing
Any other observations	-
Do you see any changes that could be made in your pool facility that would improve social interactions, or increase the average duration of stay?	-

KENSINGTON *SENIORS SURVEY IN PUBLIC ENGAGEMENT REPORT	
What is the estimated average duration of stay? (Do people lounge on the pool deck, read books, or do they come to swim and leave immediately)?	Average estimate 2-4 hours with many regulars staying 5-8 hours. Many stay for this duration and spend majority of their time between hot tub, sauna and lounge on deck chairs with a minimal swimming in the pool. Other come in and swim a few laps, do some water exercise then use heat areas (hot tub/ sauna) then leave. While others only come for Aquafit classes, hot tub/ sauna then leave within the hour to two hours.
Is there (answer where applicable): • Space to Sit on pool deck • Public space to observe • place to gather, meet or hang-out For outdoor pools: • Space to sit in the shade? • A nearby washroom? • Concession	Limited space on deck however we do have a bench on deck and a few lounge chairs. Limited observation space on deck, small area is marked that permits shoes on deck. Mainly used during swim lessons for parents to observe their children. There is an outdoor space/ patio for people to gather and hang out but only entrance is from pool deck. No exterior entrance.
Are there any people visiting that do not appear to be swimming (for example people observing lessons, or people lounging and using spa or sauna only)? If so, what would the % of those be?	Yes, there are parents that come during lessons to observe swimming lessons. Lots of people come and use hot tub and sauna only. 50% + of patrons only use hot tub and sauna.
What would you say is the most successful space or aspect of the pool? (A particular hotspot/an amenity that is heavily used)	Hot tub/ Sauna. Pool temperature is 31 degrees C, warmer than normal.
What is your favourite place/aspect of the pool, and why?	The warmer water is an asset in encouraging parents and toddlers, infants and younger children want to participate in swim lessons. The size of the pool and water temperature is also wonderful when teaching adapted aquatic lessons.
In your opinion, what is the least successful space/aspect of the pool, and why?	The depth and length of the pool does not allow us to teach all swimming levels.
In your opinion, what are the most urgent things for replacement/renovations, and why?	Lockers, floor tiles, lighting All these items are aging and contribute to the satisfaction of the patrons. There is always complaints about cleanliness of the change room. Having the smaller 1x1 inch tiles makes it increasingly difficult to clean compared to having bigger size tiles. Less dirt trapped in the grouting. Aging lockers are also an issues as repair cost are high and increasingly frequent.
Any other observations	-
Do you see any changes that could be made in your pool facility that would improve social interactions, or increase the average duration of stay?	Updating change room would greatly improve patrons satisfaction. Additional deck space or utilizing the outdoor space to allow year round usage would increase the sitting/ socializing area.

KERRISDALE *SENIORS SURVEY IN PUBLIC ENGAGEMENT REPORT	
What is the estimated average duration of stay? (Do people lounge on the pool deck, read books, or do they come to swim and leave immediately)?	People usually stay for an hour or two. As we do not have a whirlpool, Sauna or steam room, patrons usually come in for their swim and they would leave quickly after.
Is there (answer where applicable): • Space to Sit on pool deck • Public space to observe • Place to gather, meet or hang-out For outdoor pools: • Space to sit in the shade? • A nearby washroom? • Concession	There are lounge chairs on the west side of the pool. There is a bench along the South side of the deck. There is an observation area with glass. No direct access to the pool from observation area.
Are there any people visiting that do not appear to be swimming (for example people observing lessons, or people lounging and using spa or sauna only)? If so, what would the % of those be?	Very rarely as most people are community members and they know our programs well. Occasionally there are those who are new to the facility and wish to observe our program to decide if they want to join.
What would you say is the most successful space or aspect of the pool? (A particular hotspot/an amenity that is heavily used)	I would say the most successful piece of the pool is the fact that it is 30 meters instead of "standard" 25 meters. The fact that I have 5 more meters, while I have shallow activities, I still have a big space for the deep end
What is your favourite place/aspect of the pool, and why?	Even though "the tarp" creates challenges to maintain the air quality, green house effect, and water temperature….. It is my favorite part of the pool. It brings in a lot of natural light and makes the pool unique. Most frequent new visitors question, "does it open up like BC place?"
In your opinion, what is the least successful space/aspect of the pool, and why?	The least successful aspect would be the fact there is no hot baths (sauna, steam room and/or whirlpool). As we progress forward, an universal changeroom is also desirable
In your opinion, what are the most urgent things for replacement/renovations, and why?	We put in the request for an automatic door opener attached to the front desk buzzer system.
Any other observations	-
Do you see any changes that could be made in your pool facility that would improve social interactions, or increase the average duration of stay?	I would say to increase the average duration of stay would be to add a whirlpool and/or Sauna in the pool. Per person, it will add easily 15-30 mins depending on their personal preference.

KILLARNEY *SENIORS SURVEY IN PUBLIC ENGAGEMENT REPORT	
What is the estimated average duration of stay? (Do people lounge on the pool deck, read books, or do they come to swim and leave immediately)?	Ranging from 20 minutes to 4 hours for using various amenities. Both.
Is there (answer where applicable): • Space to Sit on pool deck • Public space to observe • Place to gather, meet or hang-out For outdoor pools: • Space to sit in the shade? • A nearby washroom? • Concession	 Yes Yes Yes
Are there any people visiting that do not appear to be swimming (for example people observing lessons, or people lounging and using spa or sauna only)? If so, what would the % of those be?	Yes Less than 10%, varying throughout the day, corresponding to programming.
What would you say is the most successful space or aspect of the pool? (A particular hotspot/an amenity that is heavily used)	Mixed usage Lazy river, hot tub, steam room in the evening Lane swimming throughout the day
What is your favourite place/aspect of the pool, and why?	Leisure pool – swimming lessons, kids having fun
In your opinion, what is the least successful space/aspect of the pool, and why?	Universal changeroom- PR correspondences due to misusage of the change room
In your opinion, what are the most urgent things for replacement/renovations, and why?	Air quality control/ circulation Minor maintenance such as bubbling tiles, caulking of the expansion joints Deck seating- deck chair
Any other observations	-
Do you see any changes that could be made in your pool facility that would improve social interactions, or increase the average duration of stay?	Larger deck space with more seating Larger changing area with secure storage Larger leisure pool with more features More amenities such as saunas, steam rooms, and water features

KITSILANO (OUTDOOR)	
What is the estimated average duration of stay? (Do people lounge on the pool deck, read books, or do they come to swim and leave immediately)?	3-4 hours You get both groups here
Is there (answer where applicable): • Space to Sit on pool deck • Public space to observe • Place to gather, meet or hang-out For outdoor pools: • Space to sit in the shade? • A nearby washroom? • Concession	Yes to all questions . However, there is minimal shade provided by the trees at the east end of the pool.
Are there any people visiting that do not appear to be swimming (for example people observing lessons, or people lounging and using spa or sauna only)? If so, what would the % of those be?	If people are visiting then they watch from up above the pool or they can watch from inside if they pay the entrance fee. No spa or sauna here. Maybe 5%
What would you say is the most successful space or aspect of the pool? (A particular hotspot/an amenity that is heavily used)	Its length and size .People come to swim the 137.5 m length.
What is your favourite place/aspect of the pool, and why?	The length is the most appealing thing about this pool.
In your opinion, what is the least successful space/aspect of the pool, and why?	The west shallows is not quite deep enough to do any real activity.
In your opinion, what are the most urgent things for replacement/renovations, and why?	Need for slightly deeper west end , hot tub, renovate the children's play area. Cashier should be looked at. And renovated. Can't serve patrons fast enough because of the layout.
Any other observations	A tot's slide for the shallows or maybe two – one for each end of the pool because it's so big. Put spikes on the top of the light poles to stop the birds from defecating on them and having the crap run down the poles. Looks unsightly. Take in the grass area at the west end of the pool.
Do you see any changes that could be made in your pool facility that would improve social interactions, or increase the average duration of stay?	Maybe provide lounge chairs other than the sitting chairs.

LORD BYNG *SENIORS SURVEY IN PUBLIC ENGAGEMENT REPORT	
What is the estimated average duration of stay? (Do people lounge on the pool deck, read books, or do they come to swim and leave immediately)?	Average Duration would be 2 hours, Yes. A lot of patrons lounge on pool deck or hang around sauna or whirlpool
Is there (answer where applicable): • Space to Sit on pool deck • Public space to observe • Place to gather, meet or hang-out For outdoor pools: • Space to sit in the shade? • A nearby washroom? • Concession	Yes, there are lounge chairs and benches to sit on Bleachers to observe and hang out Lobby to meet
Are there any people visiting that do not appear to be swimming (for example people observing lessons, or people lounging and using spa or sauna only)? If so, what would the % of those be?	Yes, people observing lessons, or people lounging and using spa or sauna only 30%
What would you say is the most successful space or aspect of the pool? (A particular hotspot/an amenity that is heavily used)	Both whirl pool and sauna are used frequently
What is your favourite place/aspect of the pool, and why?	The Pool is great when sun is out. The sky light lets the natural light in, giving the facility an outdoor feel. Whirl pool is clean and sauna is always at a good temp .
In your opinion, what is the least successful space/aspect of the pool, and why?	The fitness center. Too small, old equipment. Men's change room, looks old and grimy , need tile replacement Family Change room – To small can only allow one family at a time
In your opinion, what are the most urgent things for replacement/renovations, and why?	Men's change room tiles – old and grimy Fitness center equipment - old Family Change room – was originally the women's public wash room
Any other observations	We run a lot of lessons and rentals, It would be nice for the patrons to change in a clean and inviting change room. The women's change room was re-tiled with nice tiles.
Do you see any changes that could be made in your pool facility that would improve social interactions, or increase the average duration of stay?	Getting better fitness equipment will draw more people in to use all the amenities at the facility and keep them longer at the pool. Reno the men's change room will be aesthetically pleasing for patrons when they come visit the pool

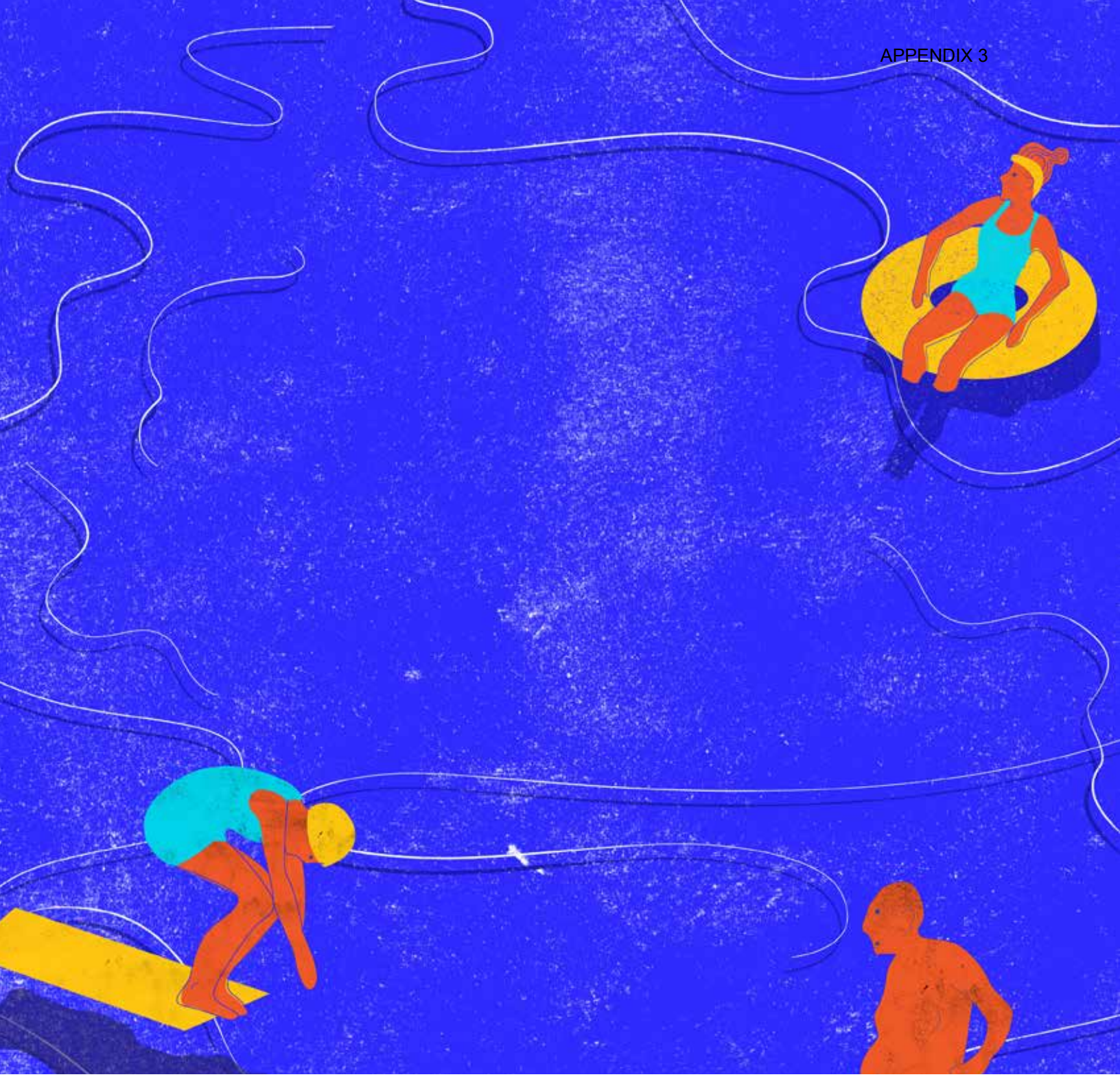
NEW BRIGHTON (OUTDOOR)	
What is the estimated average duration of stay? (Do people lounge on the pool deck, read books, or do they come to swim and leave immediately)?	2-3 hours You get both groups here
Is there (answer where applicable): • Space to Sit on pool deck • Public space to observe • Place to gather, meet or hang-out For outdoor pools: • Space to sit in the shade? • A nearby washroom? • Concession	Yes to all questions . However, there is some shade provided by the trees on the south end of the pool especially later in the summer when there is much shade. Actually there have been complaints about too much shade at this time of year.
Are there any people visiting that do not appear to be swimming (for example people observing lessons, or people lounging and using spa or sauna only)? If so, what would the % of those be?	If people are visiting then they watch from outside the pool or they can watch from inside if they pay the entrance fee. No spa or sauna here. Maybe 5% Higher when lessons on in the mornings
What would you say is the most successful space or aspect of the pool? (A particular hotspot/an amenity that is heavily used)	The shallow end because of the zero depth entry and the tot's slide.
What is your favourite place/aspect of the pool, and why?	The bigger slide. People love to have something to do other than just swim.
In your opinion, what is the least successful space/aspect of the pool, and why?	The old wading pool. Never used. Too shallow. Dogs a big problem when full.
In your opinion, what are the most urgent things for replacement/renovations, and why?	Fence is in bad shape. Take in a piece of grass at the west end of pool. People want grass inside pool. Complaint of too much concrete.
Any other observations	More parking is needed in the area. Definitely restricts pool patronage. More lockers and bigger ones. Can't even get a motorcycle helmet in one I'm told. Pool bottom is slippery in shallows. No grit in paint this last year just been told.
Do you see any changes that could be made in your pool facility that would improve social interactions, or increase the average duration of stay?	Maybe provide lounge chairs other than the sitting chairs. Limited space though. Hot tub would increase stay and increase social interaction.

RENFREW *SENIORS SURVEY IN PUBLIC ENGAGEMENT REPORT	
What is the estimated average duration of stay? (Do people lounge on the pool deck, read books, or do they come to swim and leave immediately)?	Majority of patron use hot spot before or after swim so the average stay would be an hour
Is there (answer where applicable): • Space to Sit on pool deck • Public space to observe • Place to gather, meet or hang-out For outdoor pools: • Space to sit in the shade? • A nearby washroom? • Concession	Space to Sit on pool deck - yes Public space to observe - yes Place to gather, meet or hang-out - yes
Are there any people visiting that do not appear to be swimming (for example people observing lessons, or people lounging and using spa or sauna only)? If so, what would the % of those be?	Yes, however not all of the patrons in the pool actually swim – there are quite a few that do other exercises. For this survey, I am counting everyone in the pool as a swimmer. During lessons, as high as 65%. The rest of the time, probably closer to 50% as our hot tub and sauna usually have as many patrons in them as are in the pool.
What would you say is the most successful space or aspect of the pool? (A particular hotspot/an amenity that is heavily used)	Hot tub and sauna. Our sauna is grossly undersized for the number of patrons that pack into it.
What is your favourite place/aspect of the pool, and why?	The water features at our pool. Yes, we are still a traditional box design but adding features and figures allows for different users.
In your opinion, what is the least successful space/aspect of the pool, and why?	The slide because of its location. Slides are usually just past the 5 foot mark or mid way along the wall of a lane. Because ours is at the end of the pool, we can rarely have it ope because it would mean that we would not be able to have the lane open for length swimmers at the same time.
In your opinion, what are the most urgent things for replacement/renovations, and why?	The sauna!!! As I said before, it is grossly undersized for the amount of users we get and therefore almost over utilized as patrons pack in standing room only. It makes it hard to keep clean and causes more wear and tear.
Any other observations	I think designs in the future need to realize that people do not just swim, they lounge and socialize. While we are only looking at the pools, the users at Renfrew often go between the gym and the pool. The users of the gym may not always use the pool but they do use the sauna and whirlpool. These spaces need to be larger to cope with the demand.
Do you see any changes that could be made in your pool facility that would improve social interactions, or increase the average duration of stay?	Pools that have a fitness center available get more traffic as users like to do their 'one stop' shop. The better the gym, the more sauna / whirlpool users. If the size of our gym and sauna increase, we would see more users.

SECOND BEACH (OUTDOOR)	
What is the estimated average duration of stay? (Do people lounge on the pool deck, read books, or do they come to swim and leave immediately)?	3-4 hours You get both groups here
Is there (answer where applicable): • Space to Sit on pool deck • Public space to observe • Place to gather, meet or hang-out For outdoor pools: • Space to sit in the shade? • A nearby washroom? • Concession	Yes to all questions . However, there is minimal shade provided by the trees at the east end of the pool.
Are there any people visiting that do not appear to be swimming (for example people observing lessons, or people lounging and using spa or sauna only)? If so, what would the % of those be?	If people are visiting then they watch from outside the pool or they can watch from inside if they pay the entrance fee. No spa or sauna here. Maybe 5%
What would you say is the most successful space or aspect of the pool? (A particular hotspot/an amenity that is heavily used)	The slides
What is your favourite place/aspect of the pool, and why?	The vastness of the pool makes you feel that you have room to swim.
In your opinion, what is the least successful space/aspect of the pool, and why?	Deck is quite small. Not a lot of room so it's crowded.
In your opinion, what are the most urgent things for replacement/renovations, and why?	Proper guard platform by turtle slide. Lifeguard cannot see kids coming up on the slide and they slide before guard can stop them. Thus many rescues here.
Any other observations	Move fence out at the west end to take in a permanent piece of grass. The fence is a barrier for people to using the grass area with such a small gate at the north end of fence.
Do you see any changes that could be made in your pool facility that would improve social interactions, or increase the average duration of stay?	Extend the wind barrier on the south fence. The clear plastic works very well in cutting the wind and green house gasses as well.. It does not spoil the view. Again, a hot tub would increase the stay.

TEMPLETON *SENIORS SURVEY IN PUBLIC ENGAGEMENT REPORT	
What is the estimated average duration of stay? (Do people lounge on the pool deck, read books, or do they come to swim and leave immediately)?	Yes – people - especially older people 50 + can be here for 2 to 3 hours because of activity combos: activity+socializing Laps/sauna and whirlpool or waterfit/whirlpool. Younger adults means they are here for their kids or their own fitness = one hour.
Is there (answer where applicable): • Space to Sit on pool deck • Public space to observe • Place to gather, meet or hang-out For outdoor pools: • Space to sit in the shade? • A nearby washroom? • Concession	While there is minimal deck space it is well used: Yes: Space to Sit on pool deck Yes: Public space to observe Yes: place to gather, meet or hang-out Plus there is a park and playground and an Activity room – I have 20 different programs I run in conjunction with HCA- some offered more than one time per week.
Are there any people visiting that do not appear to be swimming (for example people observing lessons, or people lounging and using spa or sauna only)? If so, what would the % of those be?	Yes – -Most parents do not get into the water/prefer to watch lessons. -Always people in sauna/whirlpool and fitness centre. Cannot give a good estimate.
What would you say is the most successful space or aspect of the pool? (A particular hotspot/an amenity that is heavily used)	Every space is well used: Sauna, whirlpool and fitness centre have the most complaints because customers find that they are too small/too crowded.
What is your favourite place/aspect of the pool, and why?	My favourite aspect is the size of the facility: people enjoy coming here because they can walk, it is not intimidating due to size, and it has everything you need – it is very community orientated - like the old TV show "Cheers" (where everybody knows your name)
In your opinion, what is the least successful space/aspect of the pool, and why?	It is challenging to be everything to everyone at the same time: there is not enough space at peak times to accommodate swim clubs, lessons and length swim public. Also, being an older facility it does not have the new shiny-ness - but we have done our best to keep it clean and happy – we have even repurposed older change rooms into a class room and a Universal Changeroom.
In your opinion, what are the most urgent things for replacement/renovations, and why?	The north east side of Vancouver needs a slightly larger pool – like Killarney or Hyde Creek in Poco….and would be very successful if joined physically with Hastings Community Centre (old building/lots of land) I program the Activity Room with HCA programs/joint
Any other observations	Yes – but this is quite open ended – call me if you have time.
Do you see any changes that could be made in your pool facility that would improve social interactions, or increase the average duration of stay?	Yes – If I had the time - I would have volunteers run a simple concession- and I am thinking about a book shelf…better furniture helps too. I have in the past – when I had to actually "program" – run special events/ customer appreciations/potlucks and Swim Arounds to increase community connectiveness and fitness. I have made the effort to connect with various community agencies to make sure their groups come and have a tour. Etc (Kiwassa/Aboriginal Mother's Centre/ Muslim Women/Youth Groups

VANCOUVER AQUATICS CENTRE *SENIORS SURVEY IN PUBLIC ENGAGEMENT REPORT	
What is the estimated average duration of stay? (Do people lounge on the pool deck, read books, or do they come to swim and leave immediately)?	Some will lounge on the deck chairs for an afternoon while others come for a swim workout or aquafit class and then leave Clubs also come and use the pool as well but the swimmer just stay for the duration of their time
Is there (answer where applicable): • Space to Sit on pool deck • Public space to observe • Place to gather, meet or hang-out For outdoor pools: • Space to sit in the shade? • A nearby washroom? • Concession	Deck chairs on the pool deck Bench around the pool deck Bleachers Small table and chairs to use Wifi or just to sit
Are there any people visiting that do not appear to be swimming (for example people observing lessons, or people lounging and using spa or sauna only)? If so, what would the % of those be?	Some just come to use the hot tub and sauna Some visitors drop by to view the facility as it is so close to the small ferry to Granville Island or Kits; tourist bus also stops by all the time Parents come during lessons or swim club practice; most sit in the bleachers or the pool benches. Some use the Wifi during this time
What would you say is the most successful space or aspect of the pool? (A particular hotspot/an amenity that is heavily used)	Pool itself; swim club usage as it is 50 metres Dive tank is also popular because of the 10 m Small teach pool for infants and toddlers
What is your favourite place/aspect of the pool, and why?	50 m tank
In your opinion, what is the least successful space/aspect of the pool, and why?	Paid parking; parking lot gets more and more restricted due to Burrard Street construction as well
In your opinion, what are the most urgent things for replacement/renovations, and why?	Pool itself is getting old; well used facility Would be great to see a pool that caters to swim clubs and teams; there is so much that can be done
Any other observations	Pool is very simple and caters more to clubs and length swimmers; not 100 % appealing for children (lessons, yes, but public swim no) as there are not a lot of features as compared to newer pools
Do you see any changes that could be made in your pool facility that would improve social interactions, or increase the average duration of stay?	Pool is used well for what it can offer; more fitness



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