



January 29, 2018

MEMO TO : Park Board Commissioners
FROM : Dave Hutch - Manager, Planning and Research
SUBJECT : **VanSplash: Vancouver Aquatics Strategy - Supplemental Memo**

Dear Commissioners,

Subsequent to the Park Board Committee meeting held on December 11 & 12, 2017, where Commissioners heard from speakers with interests in the Vancouver Aquatics Strategy, staff are providing this memo to address some of the issues and questions raised.

In an email dated January 5, 2018, Commissioners were asked to provide questions to staff, by January 10, 2018, on topics for which they would like to receive more information. Staff received questions from two Commissioners, which are covered on pages 13-21 of this memo.

BACKGROUND & CONTEXT

Vision to Implementation

VanSplash: Vancouver Aquatics Strategy sets a thoughtful path forward for the renewal and growth of the Park Board's aquatic system for the next 25 years. As managers and stewards of a system that provides over 2 million healthy and restorative experiences in our pools annually - one that defines Vancouver as an active, highly liveable coastal city - a city-wide long-range plan is imperative to ensure that quality and capacity is sustained now and into the future as Vancouver's population continues to grow and evolve.

As a long-range plan, VanSplash is based on the best information and data, public input, and planning best-practices that are available at this time. The strategy is a projection of where we think Vancouver aquatics needs to be in 25 years.

The strategy's key role is in laying out a vision -- a vision of a future of aquatics in Vancouver that is inclusive and innovative, and one that supports personal and community well-being. The high-level 10-year implementation plan proposed in the strategy is the roadmap for the early years of this vision. The myriad of renewals, retrofits, and new facilities that will achieve this vision will take time. The vision is the starting point. This has been the Park Board's experience in the past: in the late 1990's, the vision of a diverse city-wide serving facility that offered a broader range of aquatic services under one roof was first discussed. This vision was formalized in the 2001 Park Board Aquatic Strategy, and eventually, in 2010, the Hillcrest Aquatic Centre opened to the public.

The strategy is also developed with the full understanding that each of the proposed implementation components, if approved at the strategy level, will be thoroughly vetted through detailed analysis, planning, design, public engagement, and Board process to ensure its relevancy and responsiveness to aquatics in Vancouver at that time. Again, the vision is a collection of discreet moves that will be tested in detail over the implementation - and much



will be learned through this process, just as much has been learned with the opening of Killarney and Hillcrest.

Planning for Future Investment

The implementation of the VanSplash vision will bring many benefits and comes with a considerable cost -- the rough order of magnitude estimates for the first 10 years are in the \$150-200M range. The City is currently initiating the 10 year Capital Strategic Outlook process and the 2019-2022 Capital Planning process -- a comprehensive process under which the various service groups across the city bring forward their priorities for integration into the process and ultimately the dollars that are allocated to make projects real. The completion of VanSplash is aligned with the beginning of this process. This timing was intentional and strategic and was done to ensure that the Park Board would be prepared with a thorough and defensible plan of its priorities for integration into these important capital planning processes.

Traditional capital funding is not the only potential source to realize Vancouver's aquatic future; Vancouver's current era of rapid redevelopment has the ability to provide further resources in areas of growth in the city. There is also currently momentum with senior levels of government to partner in the funding of community facilities -- being equipped with a plan ensures that the Park Board is prepared when these opportunities arise.

Drivers of Aquatic Use

As outlined in the Final Strategy, there are six primary drivers of aquatic use:

- drowning prevention;
- fitness / wellness;
- socialization;
- fun, relaxation / diversion;
- competition and training; and
- other factors (such as recovering from a medical event, volunteering or getting a job).

All of the above need to be considered in planning, developing, and managing aquatic services and, as anticipated, staff heard from a diversity of respondents representing interests across these six primary drivers.

Public Feedback & Engagement

At the Park Board Committee meetings held on December 11 & 12, 2017, the Board heard from a group of impassioned residents with genuine concerns regarding the potential loss of small-scale neighbourhood pools. At the same time, a number of questions were asked and assertions made.

Throughout the development of VanSplash, staff had more than 7,000 interactions with stakeholders and the public through in-person events and via TalkVancouver surveys. There was also significant reach on social media (including more than 200 tweets, resulting in 200,000 impressions), and the promotion of the process through a broad range of mediums (see question/issue 3). The strategy was developed in consideration of the voices heard through those processes.



ISSUES / QUESTIONS

Raised at Park Board Meetings in December 2017

1. *Concerns that HCMA is in conflict of interest as both aquatic system planners and architects.*

The City of Vancouver legal documentation and procurement process for Requests for Proposals requires full disclosure of any and all conflicts of interests, as well as built-in compliance checks to vet any potential conflict of interests. Neither Park Board nor City staff have concerns that a conflict of interest exists in HCMA leading the consulting work for VanSplash.

A recommendation from a consultant is always subject to Park Board senior leadership approval before it goes to the Park Board Commissioners for consideration. All of HCMA's recommendations were appropriately vetted by the project team, senior staff, and the General Manager to ensure consistency with senior leadership.

HCMA is a highly respected architectural firm bound by the professional and ethical standards of the Architectural Institute of British Columbia (AIBC) and a code of conduct. AIBC is the licensure agency for architects, including the Principals of HCMA.

Procurement followed best practices

- The Request for Proposals was publicly posted for 5 weeks;
- A cross-functional evaluation team comprised of both Park Board and City staff (Real Estate & Facilities Management), with the assistance of the City's Supply Chain Management Department, jointly evaluated submissions in accordance with the RFP criteria and the City's procurement policy.
- The RFP submission from HCMA was jointly submitted with Brian Johnson, of PERC/RC Strategies, a well-respected recreation planner. Since 1975, Brian has worked in more than 200 communities in Canada on over 500 consulting projects. He led the stakeholder consultation and authored significant sections of the current state analysis.
- When the Aquatic Strategy RFP was issued, it was determined that the successful proponent would not be excluded from any future procurement process for any related facility planning and/or design contracts. It was confirmed that it was not in either the Park Board's or the City's interest to limit competition and ability to select the most qualified and capable consulting firm for this, or future aquatic related projects. This is common practice -- current contracts related to Marpole Community Centre and Britannia Community Centre also do not exclude future, related, design contracts.
- If the Park Board wishes to award a contract to a consulting firm to undertake aquatic facility design work at a future time, it would of course be procured through a separate public competitive bid process.



PUBLIC ENGAGEMENT

2. *Concern that response rate to TalkVancouver surveys was low and opportunities to provide comments were few.*

The VanSplash survey had one of the highest response rates in Park Board history:

- There were 4556 TalkVancouver responses in Phase 1 and 1,648 in Phase 2. This represents a high rate of engagement according to the City's public engagement team.
- VanSplash had the highest survey uptake across an entire project and Phase 1 had the second highest response rate on a single TalkVancouver survey (the Concession Study had an additional 91 responses, a total of 4,647 responses).
- The VanSplash survey response in Phase 1 was three times greater than the City's Places for People Downtown Strategy Survey in 2017. It is comparable to numbers on the City's Liquor Strategy Draft Recommendations, and higher than the Sign By-Law Review (which included a purchased sample) and Single Use Strategy.

10,000 comments received:

- Open-ended questions were included in both surveys with 10,000 qualitative responses reviewed, collated, and summarized in Phase 1 alone. A summary of open-ended responses for both Phases is included in the VanSplash Public Engagement Report.

3. *Concern over methods used to promote engagement and why OneCard holders were not sent notification emails.*

Engagement with the VanSplash Strategy was promoted extensively using a variety of tactics.

Park Board Digital Resources:

- **VanSplash e-blast** distributed to approx. 25,000 subscribers of the Park Board's recreation e-newsletter (July 2016); VanSplash was also featured in the August 2016 edition of the e-newsletter; both initiatives informed readers about VanSplash and encouraged the public to visit the VanSplash website, sign-up for the project distribution list and participate in the project surveys;
- **Over 3,000 email contacts** on distribution list, and e-blasts sent prior to and during Phase 2 engagement;
- **Notification to 15,000 TalkVancouver members** of survey and via its website;
- **City of Vancouver homepage** featured VanSplash banner during both rounds;
- **Click banner on ActiveNet website** and on swim registration pages (fall 2017);
- **Social Media:** Twitter (more than 200 tweets, resulting in 200,000 impressions), Twitter contests, Facebook (26 posts, resulting in more than 40,000 residents reached across both rounds), boosted city-wide Facebook ads in both English and Chinese (More detailed statistics available in Appendix A);
- **Project website direct link** was included on all Park Board pool websites.



Media:

- Coverage by 14 outlets of media launch event, including all major TV stations and print publications (Jul 2016);
- Advertising in local papers in English and Chinese (Jul 2016 & Sep 2017);
- 20 articles in 8 news sources (2016-2017);

Community and Facility Promotion:

- Two rounds of posters (English & Chinese) at all community (2016- 2017);
- Phase 2 flyers advertising events and surveys at all pools;
- VanSplash T-shirts provided to staff at all pools (Jul 2016);
- VanSplash themed Pride Parade float (summer 2017);
- Pride Parade banners at pools (fall 2017);
- In-person events and notification through stakeholders and user group contacts.

Regarding promotion to OneCard holders:

It has not been the Park Board's standard practice to send emails to OneCard holders due to the level of effort required to access and synthesize that database. Further, when the OneCard database was used in the past, concerns were raised by the public that the Park Board was violating Canadian anti-spam regulations. Thus, facility users are now encouraged to follow the Park Board on social media instead.

4. *Speakers suggested that stakeholder engagement did not include Vancouver Society for the Preservation of Outdoor Pools, Canadian Dolphin Swim Club, Nifty* Clothing Optional, Exceleation Triathlon and Multisport or Vancouver Pacemakers Masters (Templeton).*

Invitations to attend workshops were sent to representatives of Nifty* Clothing Optional, Exceleation Triathlon and Multisport, Dolphins, iDive and Dive BC, (all of whom spoke at the Dec 11/12 Committee meetings);

Dolphins, iDive and Dive BC sent delegates to the workshops. Nifty*Clothing Optional and Exceleation Triathlon and Multisport did not attend, despite being invited. It is possible that those clubs have not provided up-to-date contact information to their respective pool programmers;

VanSplash team reached out to pool user groups as well as a broad range of community interest groups, seniors organizations, CCAs, and City of Vancouver Advisory groups to widen input beyond pool users only; a list of groups who were invited and attended the workshops is included on pages 116 - 119 of the Public Engagement Report;

Invited all CCAs to stakeholder sessions. In Phase 1 engagement, 5 CCAs sent representatives in addition to several neighbourhood houses; in Phase 2, staff sought to increase numbers by not only sending invites via Community Centre staff liaisons but also

by inviting all CCA board members through the General Manager's office to a CCA specific event. 6 CCAs sent representatives.

Vancouver Society for the Preservation of Outdoor Pools

- The omission of the Vancouver Society for the Preservation of Outdoor Pools (VSPOP) from early VanSplash engagement was identified following the first round of engagement; their omission was an oversight - they were likely not on the original list of stakeholders as they are not connected to a specific pool programmer;
- VSPOP identified themselves to staff on February 15, 2017, and were subsequently provided with the opportunity to respond to the same questions asked of other stakeholder groups for inclusion in the consultation summary and analysis; VSPOP accepted the opportunity and submitted information for inclusion; they were included on all subsequent e-blasts.

5. *Locations for outreach events.*

Open house events at pools city-wide: As a City-wide strategy, each neighbourhood in the City is impacted - both those with and without existing and proposed pools. With finite resources for engagement, locations were selected to provide good geographic reach. Open house events were held at New Brighton, Kitsilano, Killarney, VAC and Hillcrest Pools.

Majority of input online: Open houses remain an opportunity for input; however the majority of our input is typically now received online. As such, we focused our outreach on drawing residents (pool users and non-users) across the city to fill-out two rounds of online TalkVancouver surveys. Posters were placed in English and Chinese at all community centres throughout the city (those with and without pools). Additional outreach methods are described in Question/Issue 3.

Special CCA session: A special session for the CCAs provided an opportunity for them to represent their members and communities more directly, including those unable to attend one of our sessions or complete the survey online.

6. *Concern that Chinese engagement was insufficient.*

Tactics used to engage the Chinese community surpassed those typically used during Park Board and City consultations; however, there is still room for improvement. The following was included in the process:

- Translated posters at all Community Centres in both phases;
- Translated hard copy surveys available at all Community Centres in Phase 1 and via immigrant service organizations;
- Chinese ads promoting open house and surveys in Ming Pao and Tsing Tao for both rounds of engagement;
- Translated Social media ads in both rounds;
- Media (including Fairchild radio in Phase 1);

- Translator made available at open house events and identified in materials.

INDOOR POOLS

7. *Questions raised that only neighbourhood scaled pools build community, and that seniors do not use the Park Board's larger facilities.*

Classification of Pools

The pool types referred to in the strategy (Destination, Community and Neighbourhood) speak to three levels of pool supply, rather than describing quality of experience or community building that occurs at a facility. Attributes such as community amenity are provided by all three pool types, not just the “Community” type.

As summarized on pages 18-19 of the VanSplash report, as well as in the Current State Report, each of these three levels of facilities provides different types of primary aquatic service. This table is replicated below in Figure 1. Each level of supply offers an increasing diversity of programming opportunities.

Larger pools provide more diverse programming to the community

Larger pools provide aquatic services that cannot be provided at neighbourhood or community scale pools, and provide diverse programming simultaneously. While they are also more economical to operate, the qualitative rationale is a primary driver in including them within our system.

LEVEL	DESCRIPTION + PROVISION STANDARD	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.	<ul style="list-style-type: none"> • Skill Development • Fitness Swimming
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.	<ul style="list-style-type: none"> • Skill Development • Fitness Swimming • Therapy and Rehab
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.	<ul style="list-style-type: none"> • Skill Development • Fitness Swimming • Therapy and Rehab • Recreational Swimming • Sport Training • Leadership Training • Special Events

Figure 1: Classification of Pools

Community Building occurs at pools both big and small

A number of delegates suggested that community building occurs only at smaller pools. However, aquatic staff, the public, and user groups state that community building occurs at all scales of pools. We heard this clearly from VAC sport user groups who spoke at the meetings in December 2017 (Dolphins, BC Diving, iDive), as well as throughout the project engagement.

Staff has observed that, beyond formal groups, regular visitors to Hillcrest include an ad hoc Chinese diving group of elder divers, families and seniors chatting in the hot tub, and a regular crew of people who spend hours on lounge chairs beside the hot tub and around the outdoor pool.

Willingness to Travel

The service radiuses assumed for each of these levels of supply throughout the Strategy (2-4km) are based off known “willingness to travel” to pools of the three different scales.

We know that in some cases these assumptions underestimate residents’ willingness to travel: many of Hillcrest Pool’s users travel from across the city, choosing it over closer, smaller facilities. Knowing that residents are willing to travel to Hillcrest points to the need for more facilities with diverse amenities so that residents will not need to travel as far to reach an aquatic facility that meets their needs.

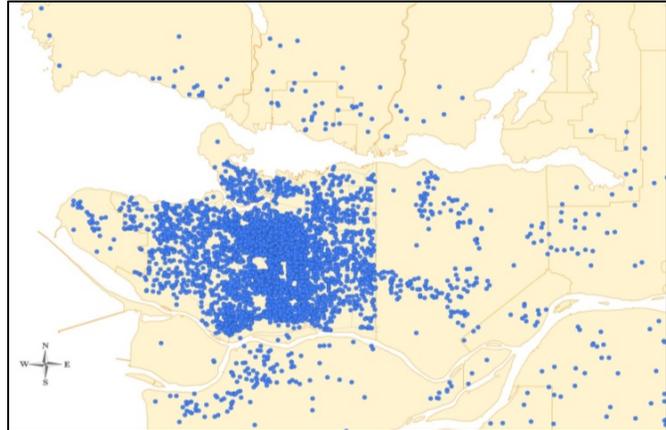


Figure 2: Visitation to Hillcrest Pool

A number of speakers referenced how busy Hillcrest is, and asked why the Park Board would consider building another similar pool. The popularity of Hillcrest only proves the need for more facilities with similar amenities. By building more facilities with this diverse programming we have an opportunity to attract users to other facilities to alleviate crowding at Hillcrest, inspire new users who currently stay away from Hillcrest because it is so busy, and reduce the travel time for many of our existing users.

Seniors not staying away from larger facilities

It has been argued that seniors are avoiding larger facilities. In 2016, Hillcrest had 134,285 visits by seniors¹. This is greater than the total use at Templeton¹, and greater than double the total use of Lord Byng¹. Hillcrest is thus clearly well-used by seniors.

8. Vancouver has fewer indoor pools than other major Canadian cities.

It is true that the Park Board operates fewer indoor pools than other major Canadian cities such as the City of Toronto and City of Montreal.

However, while Montreal and Toronto have more indoor pools, their residents are spread over significantly larger geographic areas. Figure 3 highlights that, of those cities compared, Vancouver has the **third best average catchment area per pool, implying shorter travel distances to a pool**, with numbers very close to Montreal and Toronto.

¹ drop in, pass and LAC (2016)

A usable comparison needs to consider the relative population (Toronto has 2.8M residents, Montreal has 1.7M residents, Vancouver has 650,000) and geographic size of Vancouver and these other cities (Vancouver is far smaller by area than Toronto and Montreal), which helps answer questions such as: on average, how far must residents travel to a pool; and, what is the total average capita (population) served by each pool?

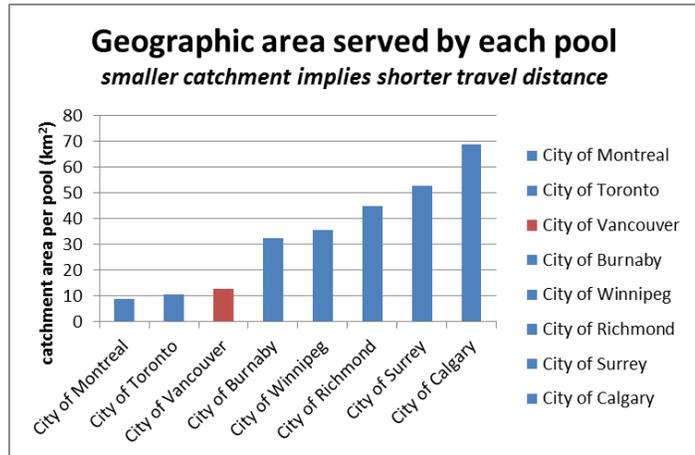


Figure 3: Vancouver’s smaller catchment per pool implies shorter travel distances for residents.

Figures 3 and 4 incorporate this information in order to compare Vancouver with major cities across Canada, and locally, to provide a fuller quantitative assessment. It utilizes current Park Board facility numbers (9 indoor pools).

Vancouver’s average capita per pool is 70,000

Figure 4 highlights that Vancouver’s total average capita (population) per pool is at approximately 70,000 residents, while cities such as Calgary, Richmond, and Surrey rely on an average capita per pool of up to and over 100,000 residents.

The comparisons to other cities’ pools do not consider important qualitative aspects of the aquatic systems and facilities (amenities, experiences, condition, hours of operation and degree of public access), size of facilities, or the programming that can be accommodated in each pool.

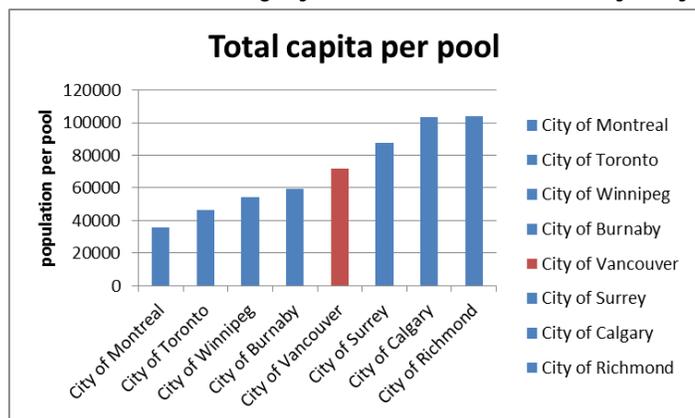


Figure 4: Vancouver has approximately 70,000 residents per pool.

9. *Role of operating expenses in VanSplash.*

Public aquatic facilities can transform communities. Despite their high cost, almost all municipalities invest heavily in them because of their significant benefits. Prudent planning must consider the financial capacity to handle an expansion of the system and ability to also operate older, less efficient pools.

The cost to operate an indoor pool varies depending on age, condition, amenities, and whether the pool is co-located with other recreation facilities. In 2017, approximate gross annual operating expenses were \$918,000 for Lord Byng Pool and \$950,000 for Templeton Pool². The revenues accrued at facilities help to offset, or subsidize, the gross operating expenses.

It should be noted that operating cost was only one consideration in developing the strategy. Others informed the principles, goals and vision -- shown on page 52 of the VanSplash Report -- included aspects of social inclusion, community and personal well-being, accommodating the growing and aging population and providing a range of vibrant aquatic experiences, accessible to all.

10. *Clarification on process regarding proposed Connaught Pool.*

The *proposed pool at Connaught Park would be constructed as part of a renewed arena and/or community centre.* Preliminary test-fit exercises determined that the facility could be integrated with only partial community centre renewal if desired, or as a full community centre rebuild. All test-fit options were undertaken with the key principle of no net loss of park space.

The strategy proposes undertaking the planning work on both a new pool at Connaught and a renewed pool at the Vancouver Aquatic Centre at the same time in order to ensure that all users and potential users are adequately considered. While the strategy focuses on sport training at Connaught, consideration could be given to retaining some distinct sport training functions (i.e. diving) at a renewed Vancouver Aquatic Centre. This planning approach maintains flexibility.

The strategy recommends shifting the sport focus to Connaught and opening the new pool at Connaught prior to renewing the Vancouver Aquatic Centre in order to maintain pool access for the public at large, and for athletes who utilize the specialized sport facilities at the Vancouver Aquatic Centre. Construction of a renewed Vancouver Aquatic Centre would likely take approximately two years.

² These figures include the direct expenditures in Park Board for the 2 pools, plus allocated costs for centralized aquatics and management expenditures, plus utilities per REFM (water, sewer, natural gas & electricity).

These do not include revenue or any other REFM major maintenance costs not charged directly to Park Board accounts.



OUTDOOR POOLS

11. Vancouver has fewer outdoor pools than other major Canadian cities.

As referenced in question 8, it is also true that the Park Board operates fewer outdoor pools than other major Canadian cities such as the City of Toronto and City of Montreal.

Capacity for outdoor swimming on par or greater than other cities:

- From a quantitative perspective, this direct comparison does not consider the relative population or geographic size of Vancouver and these other cities, which helps answer questions such as: on average, how far must residents travel to a pool; and, what is the total average capita (population) served by each pool?
- The number of outdoor pools in the City of Vancouver is lower than in other urban centres in Canada, however, two of the Park Board's 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. Kitsilano Pool has the equivalent capacity of fifteen 25m outdoor pools.

The comparisons that have been made to other cities' pools do not consider important characteristics of the aquatic systems and facilities (size, amenities, experiences, condition, hours of operation and degree of public access) or programming that can be accommodated in each pool, as well as climate conditions and access to natural beaches and lakes.

Vancouver's lifeguarded beaches see in excess of 3 million visitors a year, significantly contributing to the capacity for outdoor swimming, and contributing greatly to Vancouver as a world-class coastal city.

12. Concerns that staff and consultants overlooked or ignored strong rationale and community support for an outdoor pool at Mount Pleasant Park throughout the VanSplash Strategy development.

Need for Mount Pleasant Pool Assessed:

- In 2015, staff studied the test fit or feasibility of an outdoor pool in Mount Pleasant Park prior to the completion of a system wide aquatic study. The study determined that while it is possible to locate a 25m fitness oriented pool in the park, the conclusion of the report was that Mount Pleasant Park did not meet the criteria for a pool location as outlined in the 2001 Strategy and 2011 update, and it was therefore not identified as a short term action.
- Upon review of outdoor pool need across the City, VanSplash analysis determined that the Mount Pleasant neighbourhood is not located in a prioritized geographic gap. Further to this, the Mount Pleasant neighbourhood is park deficient with limited green space opportunities, so the addition of any additional structure on existing parkland should be carefully considered, especially one with only seasonal use as it would come at the expense of green space. The park's limited green space is well used and the majority of it would need to be removed to accommodate a pool.



Lack of public feedback on need for pool in Mount Pleasant:

Speakers suggested there is significant demand for a pool in this neighbourhood. However, while the VanSplash team received input on the Mount Pleasant Pool from the Vancouver Society for the Preservation of Outdoor Pools, Mount Pleasant Community Centre Association, and the Mount Pleasant Neighbourhood House (which was represented at a Phase 1 stakeholder workshop), **less than 2 per cent of survey respondents requested a pool in Mount Pleasant.** Speakers argued that there is synergy between an outdoor pool and the adjacent school; however, the majority of our outdoor pools have only a 1 month of overlap with the school year.

13. *What differentiates Hillcrest and Maple Grove outdoor pools from wading pools?*

Although wading pools and leisure pools such as Maple Grove and Hillcrest share some commonalities in the categories of aquatic services that they provide such as recreation and socializing, water orientation (introduction to water/teaching children to overcome fear of water) and thermal respite, these are better achieved in our leisure pools. Leisure pools are deeper than wading pools and provide more diverse opportunities, including swimming lessons. They have been designed as more dynamic, interactive spaces, well connected to adjacent open space or lounging areas for parents.

Unlike our wading pools, our leisure pools are universally accessible. Maple Grove consists of a freeform pool shape with zero depth entry to a maximum depth of 3'8", whereas wading pools are filled to a maximum depth of 0.5". Maple Grove's pool volume is greater than all of Vancouver's wading pools combined.

COMMISSIONER QUESTIONS Submitted for this Memo

INDOOR POOLS

14. *Are usage statistics available that describe facility repeat usage? e.g. How many times does a Hillcrest user use Hillcrest per week, per month; How many times does a Byng user use Byng per week, per month?*

Figure 5 illustrates the frequency of use of flexipass and LAP pass holders. It compares average attendance frequency at the Hillcrest, Killarney, and Lord Byng pools, highlighting that there are no significant differences in the patterns of attendance for regular users of Hillcrest and Lord Byng pools. Regular users at Killarney appear to visit the pool most frequently of the three facilities.

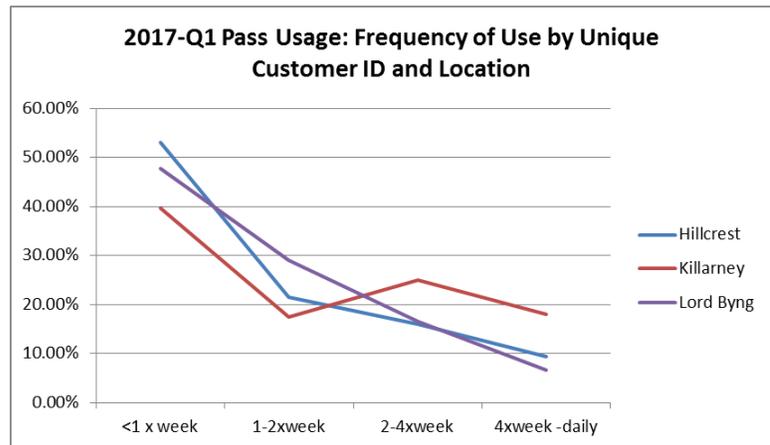


Figure 5: Frequency of use at Hillcrest, Killarney and Lord Byng Pools.

15. *Can we set some kind of goal around saving existing pool stock as always the greenest building is the one already built?*

Aquatic facilities are complex buildings with very unique features. While some types of existing buildings can be retained over the long term, aquatic facilities are challenging.

Whereas it makes sense to retain some types of buildings longer than predicted life, not all buildings can be retained indefinitely based on these factors:

- condition of the structure;
- quality and condition of the building envelope;
- energy performance of the building;
- ability to improve the building performance with renovations or upgrades;
- seismic status of the building, level of the capital and day to day maintenance investment required; and
- adequacy of the space for the function and service it serves and so on.

The City of Vancouver's Asset Management Program is a tool used to assess the performance of our 650+ buildings based on the above criteria. Public structures that contain assembly occupancies are held to higher standards of building performance, accessibility and occupant life safety. Many of our older structures simply cannot feasibly be upgraded to meet current standards and targets.

16. *What is the opportunity to renovate and restore destination VAC (a) and existing Neighbourhood pools (b), can these pools reduce energy costs through solar geothermal etc. (c), including the possibility of improvements to VAC to allow for sanctioned competitions (a)?*

As mentioned above, aquatic facilities are very complex buildings with very unique features. The primary feature, the pool tank, is very difficult to retrofit as the integrity of the tank is essential to its performance. Modifications are hard to achieve and potentially more costly than to rebuild.

Replacements can be designed to allow an old pool to remain in operation while the new one is built, whereas major renovations require extended pool closures. Costs for construction tend to be of better value for new builds as there are fewer additional costs due to unforeseen site conditions.

Many of our existing pools are nearing the end of their functional lifespans, necessitating replacements, as detailed below.

a. What is the opportunity to renovate/restore the Vancouver Aquatic Centre to allow sanctioned competitions?

The Park Board has significantly invested in this building over time, however the building is reaching its end of life and the functionality of programs is not being fulfilled. More programming could be achieved in a redeveloped facility.

As described below, a retrofit on the scale needed to address the concerns at VAC would result in an approximately 2 year service interruption to programs that currently use the facility, and would cost as much or more than a new facility that would better meet current and future service needs.

An Asset Management Program for the City of Vancouver and Park Board buildings was developed in 2013 to inform decisions for building renewal, renovations, additions, seismic upgrades, capital maintenance and ongoing maintenance. The Asset Management Program is a holistic program used to identify upgrade and renewal priorities. It is based on a number of criteria including service delivery needs, location, facilities condition, seismic condition, emergency planning needs, sustainability goals, hazardous materials, accessibility & inclusivity, heritage, and other city policies. **Based this analysis the VAC is considered at end of life and further investment in renovation or restoration is not justifiable.**

The building is recommended for redevelopment based on:

- **Seismic program recommendations;** the VAC was built in the 1974 under an earlier version of the building code with much less stringent seismic requirements than current code. The structure is considered at risk of failure during a seismic event under current codes. While the City has performed some structural upgrades throughout the life of the building to improve compliance with building code advances, further upgrades to be fully compliant with current seismic building code

requirements would be prohibitively expensive. The high cost to upgrade is in part due to the unconventional design of the structure.

- **Accessibility / inclusion** - zero depth entries, shallower water for toddlers, pre-schoolers, and adaptive aquatics are all features of modern aquatic facilities that reflect the diverse needs of the full spectrum of swimmers. Many of the pools in Vancouver's system, including VAC, are square tanks with minimum 3 foot depth and were designed for lap swimming only. The definition of a public swimming pool has evolved dramatically from the days where lap swimming and competition were the drivers of design. Many of the existing facilities utilize wheel chair lifts and ladders, whereas newer facilities include zero depth entries where visitors with mobility challenges can easily enter the water with their mobility aids, if desired. This allows a more dignified option for entering the pool, and allows greater independence for those who would like it.
- **Green and sustainable goals** -The VAC is the fifth worst building out of the 560 rated in terms of GHG generation in the City/Park Board portfolio. A retrofit of the entire mechanical system and building envelope with improved insulation and air tightness would improve this performance, but costs would not be recoverable or justifiable in this project if not undertaken as part of a facility rebuild due to other existing deficiencies.
- **Service delivery needs** - Vansplash review: existing VAC attempts to serve the sports community and downtown residents - two large groups that necessitate more programmable time/pool capacity and different pool amenities.
- **Retrofitting the pool** for sanctioned competitions would require a number of building changes, including increasing pool depth to 1.35m and providing additional deck space. There is no feasible way to increase the depth of a pool basin within an existing building, and VAC lacks the space to extend the deck dimensions. There are additional practical limitations to deepening the basin on this site due to high water table.

The Park Board has done an excellent job of maintaining VAC, built in 1974, including timely upgrades, but core elements are aging and cannot be effectively replaced except at an inordinate cost. Note that by comparison, the old UBC pool was built in 1978 and was recently replaced.

b. What is the opportunity to renovate and restore the existing neighbourhood pools?

As referenced in the Committee meeting presentation on December 11, 2017, upgrades for programming specialization at Kensington Pool are recommended, and a similar approach could be applied to neighbourhood facilities such as Lord Byng and Templeton once additional facilities have been built. Note that while the Kensington Pool upgrades needed to meet the recommendations are minor, the extent and nature of upgrades for the latter two pools is unknown.

As illustrated above in the discussion regarding VAC, the Asset Management Program is a tool used to assess when a facility reaches end of life. Generally, our older pools were built under older building and health codes, and will consistently under-perform in terms

of energy use, accessibility, pool regulation conformance, and seismic performance. Those pools were built when community needs and aquatic priorities were vastly different than they are today, and will likely be very expensive or physically impossible to upgrade to an acceptable standard that can accommodate current and future needs.

Ultimately, the conversation around renovating or upgrading facilities deemed “end of life” will be one around prioritization. We will need to ask which other project or projects should be delayed or cancelled to balance the higher cost of upgrading, maintaining and operating an older facility that will most likely still not meet current needs or standards.

From a broader perspective, new or expanded facilities are needed to meet the following requirements:

- **Programming diversity**

Residents have indicated that they want diverse aquatic experiences including fitness swimming but also more opportunities for leisure and play, health, wellness and therapeutic use. Precedent shows this is best achieved through facilities with more than one pool tank that can accommodate multiple uses at one time, which allows staff to balance needs/demands for concurrent programming such as public swim, rentals, lane swimming, lessons of all ages, and seniors mobility programs. A busy neighbourhood pool with one tank is much less able to offer such concurrent programming. The challenge of competing interests may not have been fully tested recently at facilities that are less busy, such as Lord Byng.

- **A need for increased capacity**

Recognizing the rapid increase in swimming participation following the most recent pool construction, the strategy increases the Park Board’s target capacity to recognize an anticipated increase in swimming by the existing population. Limited availability of swimming lessons (limited by our system’s capacity), is one of the primary complaints that the Recreation Department receives via 311. User groups have also identified the limitations in available pool time. The City’s population is growing, so we also need to expand our system’s capacity to accommodate new residents.

- **Continuing to maintain and upgrade the existing pools may result in increased usage, but will not solve issues of capacity or provide the diversity of experiences sought by residents**

Looking at technical capacity alone, were the Park Board to not construct or expand any pools beyond their existing size, **we would need to not only continue maintaining our existing pools, but also build up to an additional 8 neighbourhood pools** to meet the recommended indoor swimming capacity. This would require retrofits to 8 additional community centres resulting in many construction projects and/or significant loss of park space, and would only serve fitness swimming needs rather than a broader range of swimming activities.



Recognizing the need for a hierarchy of facility sizes, two locations have been identified for destination scale pools, in order to accommodate the target programming and service catchment, both of which will necessitate a larger facility:

- The proposed Connaught pool would be sized to accommodate sports training and competition use that cannot be accommodated in a smaller facility.
- The proposed pool at the current VAC site will continue to serve the densest and fastest growing population in the City - requiring it to be a large facility, as the Park Board would have difficulty acquiring sufficient additional land in the downtown core for additional pools. It will be of similar scale to the one on site today, but designed and programmed to better serve downtown residents whose needs extend beyond fitness swimming.

c. Can these existing pools be renovated to reduce energy costs through solar geothermal etc?

Existing destination and neighborhood pools are very high in energy consumption and contribute significantly to the City's overall greenhouse gas (GHG) emissions. All eight indoor pools and three outdoor pools fall within the top twenty highest GHG generating facilities out of the City's portfolio of approximately 560 city owned facilities. As a result, retrofit or replacement of these facilities provides an opportunity to move the Park Board and City towards achieving Renewable City strategy goals.

Replacement of facilities provides the best opportunity to develop high performance buildings that operate using 100% renewable energy, and provide improved comfort and reduced operating costs.

Solar energy retrofits can provide some energy and GHG reduction impacts but take significant real estate with a clear south exposure, which is not available at many sites. As well, they can't provide sufficient heat for the building, pool, and showers in the winter. Retrofit of these facilities to achieve significant GHG emission reduction would require replacement of gas fired heating systems with geexchange, airsource, or heat recovery heat pump systems which are possible at some sites, but are very expensive because they require retrofit of entire pool and building mechanical systems, and run into practical limitations at some sites, such as VAC's limitations on geexchange opportunities due to high water table. Geexchange opportunities can also be limited on a site due to land requirements and soil conditions.

Major retrofits to reduce energy consumption and GHG emissions and improve occupant comfort should also include the retrofit of building envelopes to achieve much higher insulation and air tightness levels; however the expense and user impact during construction are likely not justified for older buildings with other major deficiencies. Replacement of facilities provides the best opportunity to efficiently develop high performance buildings that operate using 100% renewable energy, and provide improved comfort and reduce operating costs.

Staff continue to work with REFM to implement energy saving upgrades at the Park Board's outdoor pools.

17. *What impacts to the existing facility - or more specifically, existing programs currently offered - will be realized with proposed adaptive and therapeutic modifications to Kensington Pool?*

Improved access and therapeutic modifications to Kensington will make the pool more user-friendly and available for everyone, including people with cognitive and physical challenges. These changes will allow for more drop-in use and encourage those keen on adaptive lessons and other adaptive programs to utilize Kensington. With the proposed changes, more use of existing programs is predicated, so more programming will be required.

Additionally, as some adaptive programs and clients are best served without distractions, these programs and services would be scheduled at less busy times. The pool has the capacity for more use, but some of the more typical public use may be shifted to other facilities in order for Kensington to focus more on adaptive programming.

18. *Could you expand on the definition of Community-Plus pool? Is it solely a reference to capacity?*

Community-Plus relates to capacity, potential for programming, and relates back to the primary aquatic services categories (identified above in Figure 1).

The best example of a Community-scaled pool in the Park Board's system is Killarney. Community-scaled pools have more than one tank: one for fitness swimming (6 lanes, 25m) and another for leisure swimming (including leisure tank with zero depth entry and lazy river), as well as hot tubs.

Community-Plus implies a facility that is larger than Killarney (e.g. 8 lanes vs. 6), an expanded leisure tank with more features, and an expanded hot tub and other wellness, e.g. steam/sauna, but would be smaller than Hillcrest.

The design and programming could incorporate amenities for a range of activities, ages and abilities. All future facilities would be planned and designed with public input. If appropriate, any of these facilities could place increased design emphasis on serving a specific age or ability group, such as seniors as a core user group.



Figure 6: Penticton Aquatic Centre would be defined as a community-plus pool in the Vancouver system



19. Which VSB schools currently have swim teams utilizing PB pools? Has co-location/cost-sharing of a new pool facility at a VSB site been considered (similar to the models being considered for a track facility)?

Which VSB schools currently have swim teams utilizing PB pools:

- 36 out of 92 VSB Elementary Schools and 12 of 18 Secondary Schools utilize Park Board Pools. More details are included in Appendix B of this memo.
- School swim teams are often very short-term, typically formed just prior to school championships and often comprising students who already swim for recreational clubs. There are a number of schools that have swim teams, but don't have long-standing, organized swim practices. Common are a few training sessions, more as a means of getting-to-know each other. Further, from what we have observed, proximity to schools does have a minor effect on attendance, but participation is most dramatically influenced by opportunity and design for the public user. School use (i.e. a class or team) is often dependent on a teacher sponsor, especially as swimming is not incorporated into the BC Schools Curriculum.

Has co-location/cost-sharing of a new pool facility at a VSB site been considered (similar to the models being considered for a track facility):

- Pools have not emerged as a priority in conversations with VSB and they are withdrawing from such shared agreements (i.e. Britannia Community Centre Rink) to focus on their core mandate. VSB does not have an interest in building pools, or cost sharing with VPB/CoV. VSB recently transferred Britannia Pool operation to the Park Board.
- Current partnerships for joint development of synthetic turf fields sees the VSB contributing land, while the Park Board funds the development and maintenance of the fields. A similar agreement is likely to emerge for a shared track facility. The VSB does not contribute funding.

20. Are any costs available to upgrade/renovate Templeton and/or Byng to extend their operational life span (maintenance, not expansions)?

There is continuous investment in the maintenance and operation of our facilities, including Templeton and Lord Byng. Staff can report back with information on significant maintenance projects undertaken in recent years if useful to the Commissioners.

21. Is there any data available on transportation options of users at pools (e.g. car, transit, bike, walking...)?

The existing facility reviews, beginning on page 49 of the Current State Report, include an overview of the transit and cycling accessibility of each facility, as well as the relationship of the pools with other facilities and amenities. It does not speak to the frequency or type of transit, nor does it address parking. Staff can report back with this information if useful to the Commissioners.

OUTDOOR POOLS

22. Is it possible to have more info on some of the proposed innovative new ideas like the floating pool in False Creek, a natural pool perhaps at Trout Lake and the Fraser River with more details around energy options as well as more solid timelines?

A natural swimming pool, floating pool and swimming improvements to Trout Lake require further study to understand their full feasibility, constructability and energy performance in a Vancouver context. Staff have reviewed examples around the world, but would need more time to provide details. Staff would be pleased to undertake additional study to provide this information should the Board request it.

Swimming related improvements to Trout Lake require further study and would be integrated into the the completion of the John Hendry Master Plan and water quality work by the Park Board and City of Vancouver engineering and environmental services.

A natural outdoor pool along the Fraser River is contingent on determining an appropriate site and land acquisition; these pools require more land as they have both a swimming pool and a water filtration pond (filled with aquatic plants and gravels) and additionally changes to the rules governing pools would be required by the health authority. Initial conversations with health authorities have already occurred.

The feasibility of a floating pool would require further study to understand a number of specifics:

- Engineering/ environmental/ technical aspects i.e. tidal, exposure to storms, use of potable water
- Proximity to beaches
- Footprint (amount of water coverage and waterfront)
- Accessibility and on-land supporting components and land required
- Coordination with other planning processes i.e. NEFC
- Cost

The majority of natural pools are not heated, however water treatment and health and safety requirements need to be addressed. Depending on the location and specific program requirements, energy requirements and options vary significantly.

23. Could it be possible build new outdoor pools with some sort of retractable cover (like on cruise ships)?

A more detailed study would be required to determine the feasibility of the use of retractable roofs in a Vancouver context. Other initiatives that bring us closer to the goal of a convertible indoor-outdoor aquatic experience could include elements such as outdoor hot tubs at indoor pools, or sliding walls or partitions could be considered to deliver similar experiences. More study can be undertaken to determine the feasibility of this approach in our climate.



Retractable roofs were included in the Precedent Report, beginning on page 36. Both the BC Building Code (BCBC) and the Vancouver Building By-law (VBBL) require energy efficiency compliance paths. These energy efficiency compliance requirements do not outright prohibit the use of retractable roofs; however, they do make it quite complicated. A retractable roof is inherently less energy efficient and may not meet minimum energy efficiency performance as prescribed by current VBBL requirements.

A retractable roof could extend the length of an operational season for a primarily outdoor pool. However, pools that are operated in the winter require a highly insulated and airtight building envelope to reduce energy consumption and provide good thermal comfort, which would be very difficult and expensive to achieve with a retractable roof. A pool with a retractable roof is likely to perform poorly in terms of energy performance, thermal comfort, and humidity control in the winter. The Kerrisdale pool is a good example, where a poorly insulated and poorly air sealed bubble roof was installed over an outdoor pool to extend the operating range of the facility. Now the pool is operated all year, and suffers from lack of ability to be properly heated in winter, resulting in thermal comfort complaints, humidity problems, and high energy consumption and GHG emissions.

WADING POOLS AND SPRAY PARKS

24. Was there any consideration to retrofitting the Bloedel Conservatory fountain area to a splash park - it is now used as such in the summer but has considerable hazards to the users?

VanSplash establishes a framework for new spray parks that supports the integration of larger water features suitable for play and public space elements into destination and highly urban parks. Queen Elizabeth Park, as a highly used destination park, would be a good fit for a spray park. As a high level strategy, VanSplash does not propose specific locations for spray parks. This question will be considered in future planning work at Queen Elizabeth Park.

25. It was mentioned several times that wading pools exist in Toronto. Is this correct? If so, what's different that allows these to be operated?

The City of Toronto is also phasing out their wading pools as they no longer meet Ontario Health regulations. Although the regulations are different, Ontario also favours filtration and chlorination systems for pools (including wading pools). Toronto has taken a similar approach to older wading pools, with splash pads often installed as replacement facilities. In discussion with City of Toronto staff, Toronto's rate of conversion from wading pools to spray parks in recent years has been approximately 1-2 per year.



SUMMARY

In closing we would like to share with Commissioners a recent Globe and Mail article by Stephen Quinn from this past summer: [An ode to the public swimming pool and the nostalgia that comes with it](#). Through a narrative of Quinn's daily visits to Hillcrest Pool with his son, the article provides a vision consistent with what the public shared throughout VanSplash engagement process: everyone is welcome, community building is nurtured, and joy is sparked at Park Board pools of all sizes.

Regards,

A handwritten signature in black ink, appearing to read "D. Hutch".

Dave Hutch
Manager, Research and Planning
Vancouver Board of Parks and Recreation

DH/DS/KA/clc

Copy to: PB Senior Management Team
PB Communications



Appendix A: VanSplash Social Media Engagement

Round 1 Social Media Engagement - Jun 19 - Sep 30, 2016

Twitter

Engagement Breakdown	
Park Board Tweets	148
Total impressions from Tweets	138,268
Total engagements from Tweets	20,33
Link clicks	423
Replies	79
Retweets	206
Likes	236

Total mentions of VanSplash and #VanSplash on Twitter: 530

Total impressions earned from VanSplash and #VanSplash on Twitter: 6.6 million

Our Top Tweets

- 1) <http://vancouver.ca/parks-recreation-culture/vansplash-aquatics-strategy.aspx>
- 2) <https://twitter.com/ParkBoard/status/757606917250412545/photo/1>
- 3) <https://twitter.com/ParkBoard/status/762091056880054272/photo/1>
- 4) <https://twitter.com/ParkBoard/status/770758439207313408/photo/1>
- 5) <https://twitter.com/ParkBoard/status/756322958981955584/photo/1>

Facebook

Engagement Breakdown	
Park Board posts	13
Total reach from posts	35,395
Total impressions from posts	81,344
Average reach per post	2,732
Average impressions per post	6,257
Average clicks per post	68

Our Top Posts

- 1) <http://www.facebook.com/188729000229/posts/10157210007255230>
- 2) <http://www.facebook.com/188729000229/posts/10157223090545230>
- 3) <http://www.facebook.com/188729000229/posts/10157363177950230>
- 4) <http://www.facebook.com/188729000229/posts/10157352656235230>
- 5) <https://www.facebook.com/188729000229/posts/10157308317700230>

Instagram

Number of Park Board Posts: 19

Total Engagements: 709

Top posts:

- 1) <https://www.instagram.com/p/BJCVH8TAMO-/>
- 2) <https://www.instagram.com/p/BJs2IXmACxf/>
- 3) <https://www.instagram.com/p/BJluBbnl1i/>
- 4) <https://www.instagram.com/p/BIS0ljRA6KF/>
- 5) <https://www.instagram.com/p/BJbH2XjAPjk/>



Round 2 Social Media Engagement: Sep1 - Dec 31, 2017

Twitter

Engagement Breakdown	
Park Board Tweets	62
Total impressions from Tweets	79,432
Total engagements from Tweets	255
Link clicks	365
Replies	27
Retweets	108
Likes	120

Total mentions of VanSplash and #VanSplash on Twitter: 400

Total impressions earned from VanSplash and #VanSplash on Twitter: 2,466,083

Our Top Tweets

- 1) <https://twitter.com/ParkBoard/statuses/938091059569135616>
- 2) <https://twitter.com/ParkBoard/statuses/937792433223622657>
- 3) <https://twitter.com/ParkBoard/statuses/938213929838415872>
- 4) <https://twitter.com/ParkBoard/statuses/937820114854076417>
- 5) <https://twitter.com/ParkBoard/statuses/937866650921074688>

Facebook

Engagement Breakdown	
Park Board posts	13
Total reach from posts	7,248
Total impressions from posts	12,682
Average reach per post	602
Average impressions per post	976
Average clicks per post	21

Our Top Posts

- 1) <http://www.facebook.com/188729000229/posts/10159715944660230>
- 2) <http://www.facebook.com/188729000229/posts/10159338229675230>
- 3) <http://www.facebook.com/188729000229/posts/10159430073810230>
- 4) <http://www.facebook.com/188729000229/posts/10159416625635230>
- 5) <http://www.facebook.com/188729000229/posts/10159411809060230>

Appendix B: Vancouver School Board Use of Park Board Pools

POOL	School	Regular Use	Infrequent Use	
Britannia Pool	X'pey Elementary (prev. MacDonald)	Class use and lessons		
	Britannia Elementary	Class use and lessons		
	Admiral Seymour Elementary	Class use and lessons		
	Queen Victoria Annex Elementary	Class use and lessons		
	Grandview Elementary	Class use and lessons		
	Strathcona Elementary	Class use and lessons		
Lord Byng	Jules Quesnel Elementary	Class use and lessons		
	Lord Byng Secondary	Class use and swim team		
	Queen Mary Elementary	Class use and lessons		
	Prince of Wales Secondary	Class use and swim team		
	Lord Carnarvon Elementary	Class use and lessons		
	West Point Grey Academy (Independent)	School use and swim team		
	Queen Elizabeth Elementary	Class use and lessons		
	Lord Kitchener Elementary	Class use and lessons		
	Kensington Pool	Tecumseh Elementary	Class use and lessons	
		Alexander Fleming Elementary	Class use and lessons	
Vancouver Aquatic Centre (VAC)	Lord Roberts Elementary	Class use and swim team (Pacific Swim Academy)		
	King George High School		Class use	
	Elsie Roy Elementary	Class use and swim team (Pacific Swim Academy)		
	Westside Montessori (Independent)	Lessons		
	Hudson Out of School Care (Ind)		Class use	
	False Creek Elementary		Lessons	
Kerrisdale Pool	West End Montessori		Lessons	
	Point Grey Secondary	School use and swim team		
Templeton	Churchill Secondary	School use and swim team		
	Franklin Elementary	Class use and lessons		
	Templeton Secondary	School use and swim team		
	Chief Maquinna Elementary	Class use and lessons		
	Vancouver Technical Secondary	School use and swim team		
	Lord Nelson Elementary	Class use and lessons		
	Gladstone Secondary	School use and swim team		
	MacDonald Elementary	Class use and lessons		
	Britannia Secondary	School use and swim team		

POOL	School	Regular Use	Infrequent Use
	Hastings Elementary		Class use and lessons
	Notre Dame Secondary (Ind)	Class Use	
	Laura Secord Elementary		Class use and lessons
	Stratford Hall	Class Use	
Renfrew Pool	St. Joseph's (Ind)	Class use and lessons	
	Stratford Hall (Ind)	Class use	
	St. Mary's Elementary (Ind)	Class use and lessons	
	Westside Montessori (Ind)	Class use and lessons	
	Renfrew Elementary	Class use and lessons	
	Thunderbird Elementary	Class use and lessons	
	Vancouver Christian School (Ind)	Class use and lessons	
	Van Horne Elementary	Class use and lessons	
	Sir Charles Tupper Secondary	Class use	
	Sir Alexander Mackenzie		Class use
	General Brock Elementary	Class use and lessons	
	General Wolfe Elementary	Class use and lessons	
	Edith Cavell		Class use and lessons
Killarney Pool	Champlain Heights Elementary	Class use and lessons	
	Killarney Secondary	Class use and swim team	
	Waverly Elementary		Class use and lessons
	David Thompson Secondary	Class use and swim team	
	St. Mary's Elementary		Class use and lessons
	Captain Cook Elementary		Class use and lessons
	Weir Elementary		Class use and lessons
	Oppenheimer Elementary		Class use and lessons
	Kingsford Elementary		Class use and lessons