

Technical Review: Impacts of the Proposed Aquarium Revitalization and Expansion on Stanley Park (September 2006)

AMOUNT OF LAND REQUIRED FOR EXPANSION

Today:

When the Aquarium opened in 1956, it covered about 0.13 hectares (0.33 acres) of land in Stanley Park. The Aquarium was expanded 8 times in the last 50 years. Today, the Aquarium occupies 1.2 hectares (2.9 acres) in Stanley Park (outlined in blue on the map).

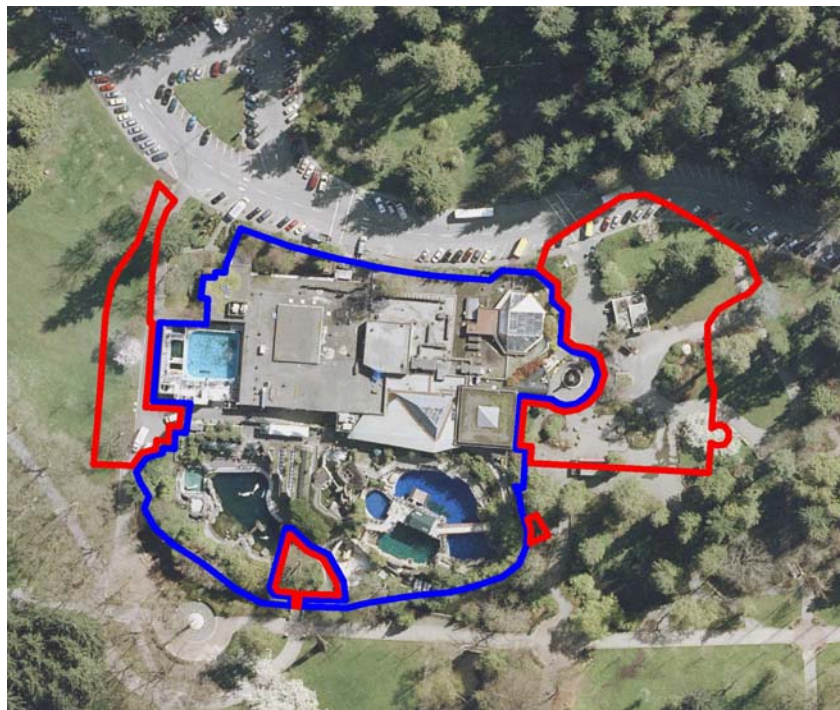
Proposal:

The proposal would increase the Aquarium's footprint to 1.8 hectares (4.4 acres), an addition of 0.6 hectares (1.5 acres) or a 50% increase (outlined in red on the map).

Evaluation:

The Park Board has been and is very cautious about removing portions of Stanley Park from the public domain (either by fully restricting public access or requiring a fee for entry).

The evaluation depends on the value assigned to the land in question: whether it is believed that Stanley Park is better served by having the land kept as publicly-accessible open space, or by having the land incorporated as part of a successful educational and tourist institution.



IMPACT ON TREES

Today:

There are currently 84 trees with diameters greater than 20 cm (8 inches) within the Aquarium and the area surrounding the Aquarium. There are 52 conifers and 32 deciduous trees. The oldest tree is a Western Red Cedar that is more than 200 years old.

Proposal:

The proposal would retain 52 trees (including the 200+ year old Western Red Cedar) and require the removal of 32 trees (shown in red on map).



Tree Category	Retained	Removed
Conifers with tree diameter of 20 to 30 cm (8 to 12 inches)	2	13
Conifers with tree diameter of 30 to 60 cm (12 to 24 inches)	8	2
Conifers with tree diameter greater than 60 cm (24 inches)	27	0
CONIFERS -TOTAL	37	15
Deciduous with tree diameter of 20 to 30 cm (8 to 12 inches)	6	10
Deciduous with tree diameter of 30 to 60 cm (12 to 24 inches)	6	5
Deciduous with tree diameter greater than 60 cm (24 inches)	3	2
DECIDUOUS -TOTAL	15	17

Evaluation:

The Park Board aims to protect as many trees as possible for any project in Stanley Park.

Although many deciduous trees are present, the overall sense of the place near the Aquarium is that of a 'West Coast forest'. Because the proposal avoids all of the conifers with a diameter greater than 60 cm (24 inches), including the 200+ year old Western Red Cedar, this would assist in maintaining the sense of a 'West Coast forest'. Park Board staff note that many of the conifers proposed to be retained are immediately adjacent to construction zones and therefore would require tree-protection fencing. However, experience has shown that tree survival under these conditions is challenging.

Overall, 23 of the 32 trees that would be removed have diameters between 20 and 30 cm (8 and 12 inches), and 9 of the 32 trees have diameters greater than 30 cm (12 inches). Experience has shown that transplanting trees is not always successful, with diminishing results as the size of the tree increases. New trees can be planted to replace the trees that would be removed.

IMPACT ON GREENSPACE

Today:

The zone surrounding the Aquarium has a significant amount of public greenspace, including lawn and areas with trees and plantings.

Proposal:

The proposal would remove about 0.54 hectares (1.34 acres) of greenspace (outlined in red on the map) due to the expansion of the Aquarium, the reconstruction of the public open spaces, the public washrooms and the food service building, and the provision of replacement parking spaces along Avison Way.

Evaluation:

The Park Board aims to minimize the loss of greenspace for all projects in Stanley Park.

Of the greenspace, half is currently lawn, and the other half is currently areas with trees and plantings. About 60% of the greenspace would be used for Aquarium buildings and pools. About 40% of the greenspace would be used for the public open spaces (which will have hard surfaces), public washrooms and the new food service building.



IMPACT ON FREE PUBLIC VIEWING OF AQUARIUM ANIMALS

Today:

There is currently one free public viewing area located along the major north-south pathway, south of the Japanese War Memorial. The public can presently view both beluga whales (above-water) and seals (above-water and underwater). The public viewing area is 23 metres (75 feet) in length.

Proposal:

The proposal would provide three free public viewing areas, including two that would offer underwater viewing. The Aquarium has stated that the public viewing areas would have a combined length greater than the existing public viewing area.

Evaluation:

The last time the Aquarium had a major expansion requiring additional land in Stanley Park (which occurred when the current beluga whale pool was added in the early 1990s), the Park Board required that the current free public viewing area be added as a form of compensation or mitigation for restricting access to an area of the park that previously had been available to the public.

Because the proposal involves a major new expansion into Stanley Park, there should be an increase in the number and size of the free public viewing areas. The proposal meets this expectation.

IMPACT ON SALMON HATCHERY

Today:

The salmon hatchery is currently located in the former bear exhibit south of the Aquarium, more than 20 metres (65 feet) away from the stream. Located on a minor pathway, the hatchery is fully enclosed in a windowless structure and inaccessible to the general public.

Proposal:

The proposal would move the salmon hatchery in a new building located adjacent to the Aquarium and the “informal plaza”. The hatchery would be accessible to both the Aquarium visitor and the public in the park.

Evaluation:

The proposed new hatchery would be in a more central and visible location and adjacent to the salmon stream. The salmon hatchery could be designed such that the public gets to see both above water and underwater.

IMPACT ON SALMON STREAM

Today:

A 300 metre (1,000 feet) stream runs parallel to the main pathway connecting Coal Harbour to Burrard Inlet, with the stream ending near the Aquarium. In 2000, the first 150 metres (500 feet) up from Coal Harbour was constructed as a salmon-bearing stream. The fish-bearing portion of the stream ends 150 metres (500 feet) south of the Aquarium.

Proposal:

The proposal would modify the upper 150 metres (500 feet) of the stream so that it would become fish-bearing. The proposal would link the stream to the new salmon hatchery.

Evaluation:

The extension would provide a good opportunity for the public to view and learn about a salmon stream in an accessible location. The construction project, however, would be challenging because it is in the middle of an environmentally-sensitive area.

IMPACT ON PUBLIC OPEN SPACES

Today:

There is currently about 0.5 hectares (1.3 acres) of public open space near the Aquarium entrance, some with soft surface (lawn and trees) and some with hard surface (concrete or asphalt). The public open spaces provide visitors with places for activity and places for relaxation. A central feature in the open space is the sculpture entitled “Killer Whale” by Haida artist Bill Reid. There are also benches, tables for eating, public washrooms, areas for portrait artists and buskers, and substantial vegetation.

Although the public open spaces work relatively well today, they are not developed to their fullest potential because they were created in a piecemeal fashion. Some spaces were added when the Aquarium opened in the 1950s, while others were added after the Stanley Park Zoo closed in 1990. This has led to a layout that is not well integrated with its surroundings.

Proposal:

The proposal would create two public open spaces: a formal plaza as a forecourt to the Aquarium, and an informal plaza in a more natural setting adjacent to the stream. Each is about 0.12 hectares (0.3 acres), for a total of about 0.24 hectares (0.6 acres).

Evaluation:

Since the Stanley Park zoo closed in 1990, the Park Board has had a desire to reorganize these open spaces to provide better hierarchy and clearer functions to the various spaces.

The two public open spaces included in the proposal would be centrally located (one facing the Aquarium entrance, the other near the stream and a major pedestrian pathway). They would be clearly oriented to pedestrians since they are located away from the road (Avison Way). They would also have a good relationship with adjacent buildings, pathways and the surrounding forest, trees and stream.

The public open spaces would have clearer functions than the current layout, with the formal plaza being the forecourt to an important civic building and the informal plaza being the quieter place to sit in a more natural setting.

Although the proposed public open spaces have clear advantages when compared to the present spaces, the overall amount of open space would be reduced in size.

IMPACT ON FOOD SERVICES OUTSIDE THE AQUARIUM

Today:

There is currently a Park Board food concession located in trailer, just west of the Aquarium entrance. The concession is small and only offers take-out food and drinks. There is no indoor or covered seating.

Proposal:

The proposal would create a larger food service building that would offer take-out food and restaurant-style service. There would be both indoor and outdoor seating, with a portion of the outdoor seating under a canopy.

Evaluation:

The Park Board is planning to replace the existing food concession. The new food service building would be larger, able to offer a wider range of food and drink to park patrons, and provide indoor and outdoor seating.

The food service building would be more appealing than the current trailer, and its location amidst the trees would provide a setting that is in character with Stanley Park.

IMPACT ON PUBLIC WASHROOMS

Today:

There is currently a public washroom located east of the Aquarium entrance, close to Avison Way. Although the facility has been refurbished, the building is old, dating from the 1950s.

Proposal:

The proposal would rebuild the washrooms closer to the Aquarium entrance.

Evaluation:

The new public washrooms would replace an aging facility and would place them in a more central location.

IMPACT ON PEDESTRIAN PATHWAYS

Today:

There is currently a grid of pedestrian pathways in the vicinity of the Aquarium, connecting to destinations such as the seawall, the transit bus loop, the Stanley Park Pavilion, Malkin Bowl, the Rose Garden, the Lumbermen's Arch, the Miniature Train and Brockton Oval. There are six pedestrian entries into the public open space located in front of the Aquarium.

Proposal:

The proposal would maintain the basic grid of pedestrian pathways, and would create two main entries into the public open space located in front of the Aquarium. The proposal, however, would cause the existing direct pedestrian connection from the Aquarium area to Brockton Oval (along a pathway called the Mallard Trail) to become indirect due to the presence of the new 'Southern B.C.' exhibit.

Evaluation:

The proposal would provide better orientation for pedestrians by directing them to two main entries near the Aquarium: one connecting to the pathway leading to/from the transit bus loop; the other facing Avison Way where many vehicles and tour buses park.

The proposal would lead to an indirect pedestrian connection from the Aquarium area to Brockton Oval, which can be mitigated by providing an enhanced sidewalk adjacent to the Aquarium and additional signage to direct pedestrians.

IMPACT ON VEHICULAR TRAFFIC AND PARKING

Today:

Vehicle access to the Aquarium is either via Park Drive, Avison Way or Pipeline Road, with parking lots located along these three roads. There are currently about 950 parking spaces within a 10 minute walk of the Aquarium.

Proposal:

The proposal would not alter existing vehicle access routes to the parking lots close to the Aquarium, but would result in the loss of about 20 to 30 parking spaces along Avison Way, which would represent a 2-3% decrease in parking supply.

Evaluation:

The Park Board aims to maintain or decrease the number of parking spaces in Stanley Park. Additional visitors to the park will be encouraged to carpool, take public transit, use tour buses, walk, bicycle or in-line skate. Key initiatives during the last decade include the relocation of the transit loop from Lost Lagoon to the area near the Stanley Park Pavilion, the Stanley Park shuttle during summer months, and improvements to the seawall for pedestrians, cyclists and skaters.

The Aquarium's transportation consultant has estimated that the proposed expansion would increase parking demand by 25 to 30 vehicles during peak periods, which could be accommodated in the existing parking lots located near the Aquarium because not all parking spaces (in particular, the parking lot located near the Service Yard) are fully utilized.

The proposal to maintain about the same number of parking spaces near the Aquarium as there is today is in keeping with the Park Board's transportation strategy for Stanley Park. As part of this project, transportation improvements should focus on non-auto modes, such as:

- providing lighting along the pathway connecting the Aquarium and the transit bus loop;
- providing improved signage along the pathways connecting the Aquarium and the parking lot located near the Service Yard; and
- providing an adequate number of bicycle racks at the Aquarium.

IMPACT ON VISITORS TO STANLEY PARK DURING CONSTRUCTION

Proposal:

The proposal would be constructed in two phases. The first phase would involve the construction of “Southern B.C.” exhibit and the addition to the Aquarium building. The second phase would involve the reconstruction of the “Northern B.C.” and “Arctic” exhibits and the extension of the salmon stream. Both phases involve construction below and above ground. Each phase is likely to take about 18 months.

Evaluation:

The first construction phase would be the most disruptive to visitors to Stanley Park. It would involve:

- closure of several pathways leading to the Aquarium;
- closing down significant portions of the existing public open space;
- demolition of the existing public washrooms;
- closure of the food concession; and
- a reduction in the number of parking spaces on Avison Way.

A series of temporary measures would be required for temporary pathways, alternate locations for portrait artists and buskers, portable toilets, and food and drink carts.

IMPACT ON PARK BOARD REVENUE DURING CONSTRUCTION

Proposal:

During the construction phase, the proposal would require the closure of the existing food concession, which is operated by the Park Board, and a reduction in the number of pay parking spaces, which is managed by a private company on behalf of the Park Board.

Evaluation:

The existing food concession generates about \$170,000 in net revenue to the Park Board. If the concession is closed for 18 months, this represents about \$300,000 in lost revenue to the Park Board.

About 100 parking spaces would be lost during the 36 month construction period. During shoulder and low seasons, visitors arriving by car would simply park further away, which would not affect revenue from pay parking. During peak summer season, when nearly 100% of all the parking spaces in the park are used, it could lead to a drop in pay parking revenue.