

Kitsilano Beach 2023

Site Information and Background:

General Information:

Name: Kitsilano Beach

Location: 1305 Arbutus St, Vancouver, BC V6J 5N2

Year of Identification: 2023

Responsible Authority: Vancouver Coastal Health

Monitoring Points: See Figure 1

Waterbody Information:

Waterbody type: Ocean Inlet

Watershed: See Figure 2

Annual Precipitation for Watershed (mm): between [1200 – 1600 millimeters a year](#)

Surrounding Land Use: List all that apply below

- Residential
- Recreational
- Urban
- Forest
- Commercial

Kitsilano is named after Squamish chief August Jack Khatsahlano. The area has been home to the Squamish people for thousands of years, sharing the territory with the Musqueam and the Tsleil-Waututh Peoples. All three Nations moved throughout their shared traditional territory, using the resources it provided for fishing, hunting, trapping and gathering. As a product of the federal government's 1911 amendment to the Indian Act, it made it legal to remove Indigenous people from reserves within an incorporated town or city, without their consent. The residents of Sen'ákw in Kitsilano were offered a small amount of money and forced to leave.

Afterwards in the early 20th century, Kitsilano was a popular location for bathhouses and swimming.

It was later transformed into a recreational beach and park, with improvements in the 1930s, including the construction of a saltwater swimming pool.

Today Kitsilano Beach is primarily used for recreational purposes, including sunbathing, swimming, picnicking, and beach sports.

The adjacent areas are a mix of residential, commercial, and institutional land uses. Which include:

- Kitsilano Yacht Club
- Polar Bear Swim (December)
- The Boathouse Restaurant
- Soccer Tots Vancouver
- Jervis Pump is around the corner at sunset beach

Upstream Pollution Risks:

There is an industrial area upstream West of False Creek. Other than that, the watershed goes through main residential and commercial areas.

[One pervasive concern](#) is from car tires. 6PPD, a common tire rubber preservative, is identified to be responsible for mass deaths of Coho salmon returning to streams to spawn.

Potential Sources of Pollution:

1. Microbiological Hazard Assessment

There is a Combined Sewer Outlet (CSO) located nearby at Kitsilano Point, which could cause high levels of contamination after heavy rainfall, such as the months of November to January. All of the residences nearby are on the city's sewer system and so there are no individual septic systems causing pollution. These sewer systems would not empty into the Inlet under normal circumstances.

Dogs are not allowed on the beach itself, but they often appear in the surrounding park area. Fecal residue is usually not apparent.

Overall Risk from Microbiological Hazards:

Combined Sewer Overflows (CSOs): **MEDIUM**

- There is a CSO located nearby: Arbutus #10 Combined Sewer Outlet Owned by City of Vancouver North of the Beach at Kits Point (See Figure 3)
- but there is such frequent exchange of water due to the currents in the area that pollution is not likely to linger.

Stormwater drains/discharges: **MEDIUM**

- Storm Sewer outfalls are along the beach and there is also a large one nearby at Sunset Beach

Septic waste systems: **LOW**

- All nearby residences and industry are on the city's sewer system, so there are no individual septic systems nearby

Stormwater runoff from agricultural areas: **LOW**

- There is not much in the way of agriculture nearby

Stormwater runoff from areas receiving sewage sludge: **MEDIUM**

- The Jervis Pump Station Water Treatment plant is nearby at Sunset Beach

Stormwater runoff from beach and surrounding area: **MEDIUM**

- The beach and surrounding area are quite populated, and so there is a risk of contamination

Birds: **LOW**

- Not much bird activity
- unlikely habitat for geese - the primary bird of concern for water quality

Pets: **LOW**

- The park is a popular place to bring dogs, but they are not allowed in the water

Other wild animals: **LOW**

- There are a few harbor seals and river otters nearby, along with sea stars, sea cucumbers, and other marine life.

2. Chemical Hazards

There is an industrial area nearby along Burrard Street and W Georgia. Runoff from these sites, and wastewater, could cause oil, heavy metals, and other harmful pollutants to be present in the water at the park.

Kitsilano Beach is also located near urban residential housing, which could contaminate the beach water with runoff. This is likely to contain oil, fertilizer, pesticides, and potentially other harmful chemicals. The park that the beach is located in is also likely subject to pesticides and fertilizer application.

Overall Risk from Chemical Hazards:

Commercial/Industrial discharges: **MEDIUM**

- Runoff from all the nearby industry would cause harmful chemicals such as oil, and heavy metals, to enter the water. However, due to the tidal current in the area, contaminants are not likely to sit in the beach area for long periods of time.

Motorized Watercraft: **LOW**

- The beach swimming area is closed to motorized watercraft, and the immediate surrounding area seldom has large vessels.

Stormwater runoff from urban areas: **MEDIUM**

- Due to all of the urban residential housing in the area, and that Kitsilano Beach is located at a low point, runoff is likely to contaminate the water.

Stormwater runoff from areas subject to fertilizer application: **MEDIUM**

- Both the park itself and the residences nearby would likely be areas where fertilizer is applied, and runoff from these areas would contaminate the water at the beach.

Stormwater runoff from areas subject to pesticide application: **MEDIUM**

- Both the park itself and the residences nearby would likely be areas where pesticides are applied, and runoff from these areas would contaminate the water at the beach.

3. Other Biological Hazards

Occasionally Burrard Inlet can be affected by a red tide algae bloom, which can be encouraged by nutrient loading in the water body through things like fertilizer and other nutrient rich run-off. While the red tide is not directly harmful to humans, eating shellfish affected by it can lead to paralytic shellfish poisoning (PSP).

Overall Risk from Other Biological Hazards:

Seasonal Ride Tide: **LOW**

- Burrard Inlet is not affected by red tide more than once every few years

4. Physical Hazards and Aesthetic Considerations

Kitsilano beach is characterized by a long stretch of sandy beach, next to a walkway path and park, including recreational facilities such as a playground, basketball court and tennis court. On the south end there is an outdoor pool. The beach has a gradual incline into the water. There are large rocks that can be found along the north end of the upper beach and in the water, as well as areas along the rest of the beach near the storm water drains.

Because the beaches are frequently used, it is not uncommon to find litter on the beaches. Most of this litter is food wrappers, cups and lids, napkins, etc. It likely comes from people eating on the beach, and leaving their waste behind. While there are many trash cans on site, close to the sandy beach area.

Overall Risk from Physical Hazards:

Strong current: **HIGH**

- There is a strong current just offshore that could drag unprepared swimmers and other recreational water users. While the immediate area of the beach is relatively sheltered, it does not extend far beyond the swimming area.

Steep inclines: **LOW**

- The beach itself is usually shallow and gradual.

Large rocks: **MEDIUM**

- There are large rocks in the water, making the ground uneven. They are easy to see when the water is clear, but harder to notice when the water is cloudy.

Marine plants: **LOW**

- There are pieces of algae floating in the water, but not much washed up onshore.

Litter on beach: **MEDIUM**

- Food wrappers and other waste from consumables can be readily found tucked away on the beach.

Floating debris: **LOW**

- There are only natural materials found floating on the water's surface, such as a few feathers and algae. These are small and pose no risk.

Broken glass/sharps: **LOW**

- Some broken glass was found on the beach, but much of it was eroded away to dull sea glass.

Facilities and Provisions:

Facilities:

Toilets: 1 Washroom each for male and female on main beach; another washroom on the north side at Hadden Park

Showers: 1 Changeroom each for male and female

Drinking Water Fountains: 2

Litter Bins: Approximately 15

Recycling Bins: Approximately 8

Access for Persons with Disabilities: Beach Wheelchair ramp

Safety Provisions:

Lifeguard Station: 1

Life Saving Equipment: not outdoors

Emergency Telephone: N/A

First Aid Station: Yes inside The Beachhouse Restaurant

Beach Postings/Suitability for Swimming:

Swim at Own Risk; Shellfish Area Closed Due to contamination (See Figure 4)

Emergency Contact Information: N/A

Other Information:

Reporting Mechanisms:

VCH

- (604) 736-2033 - Lower mainland
- <https://www.vch.ca/en/service/public-beach-water-quality#short-description--13871>

City of Vancouver Lifeguards

- 3-1-1
- 604-873-7000

Where to find the water quality results:

VCH

- (604) 736-2033 - Lower mainland
<https://www.vch.ca/en/service/public-beach-water-quality#short-description--13871>
- Swim Guide
<https://www.theswimguide.org>

- Swim Drink Fish Website

<https://www.swimdrinkfish.ca/vancouver-hub-results>

Contact Details for EHSS information:

Kyle Chen

Email: kylechen@swimdrinkfish.ca

Appendix:

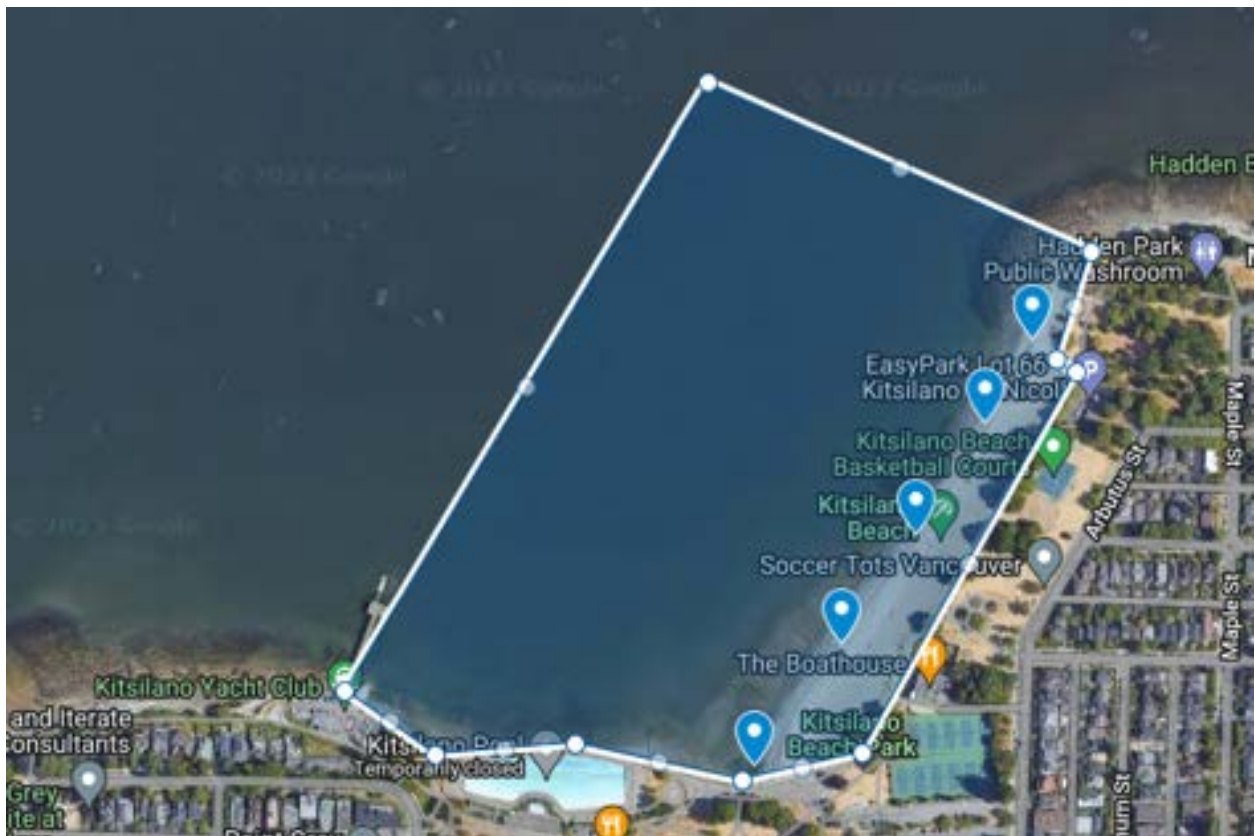


Figure 1: Map displaying the sampling points of the site. Photo Credit to Google Maps

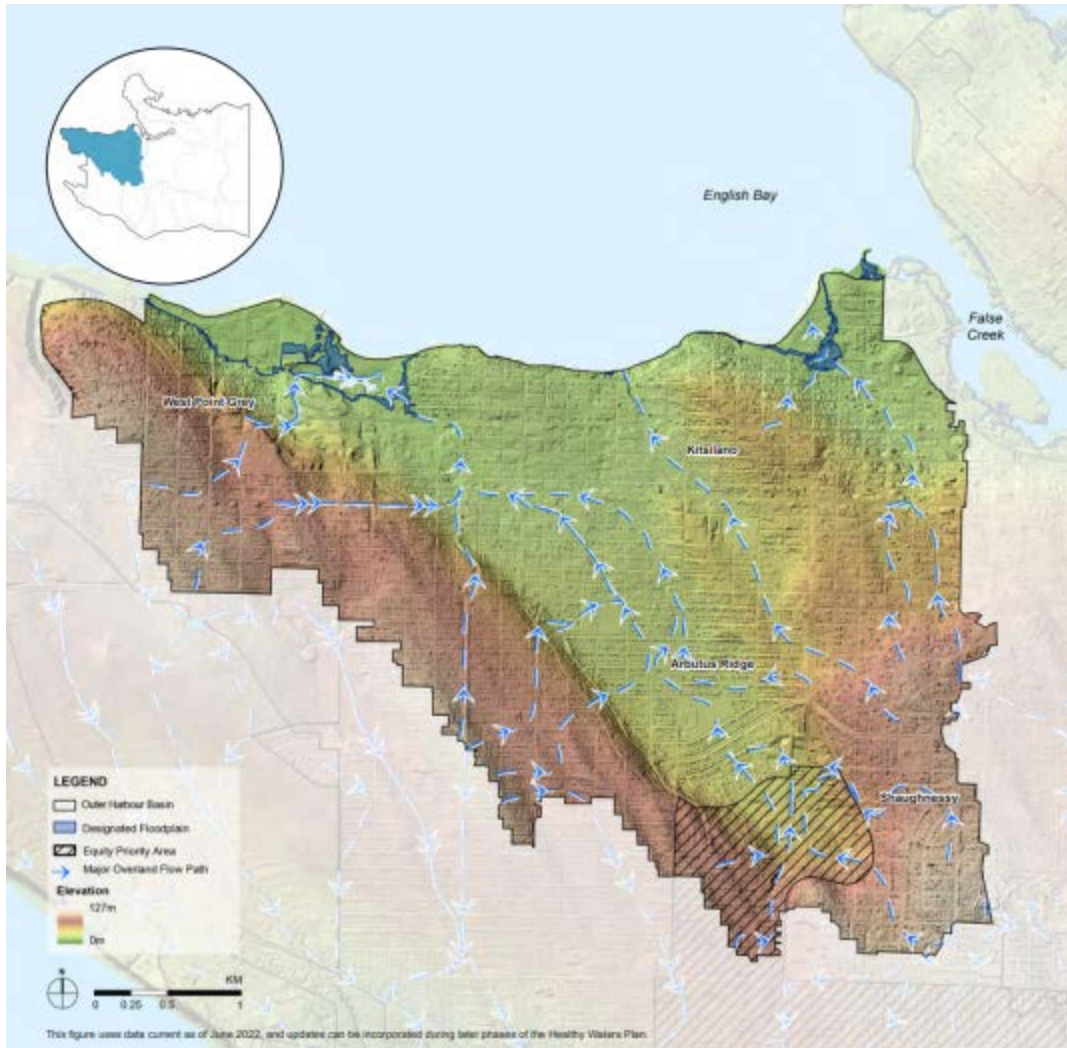


Figure 2: Map of watershed for the site (Taken from the City of Vancouver Basin Characterization Maps)

<https://vancouver.ca/files/cov/basin-characterization-maps-low-res.pdf>

Vancouver and Metro Vancouver's Stormwater and Combined Sewer Outfalls

Healthy Waters Plan - Paper #2 Aquatic Health

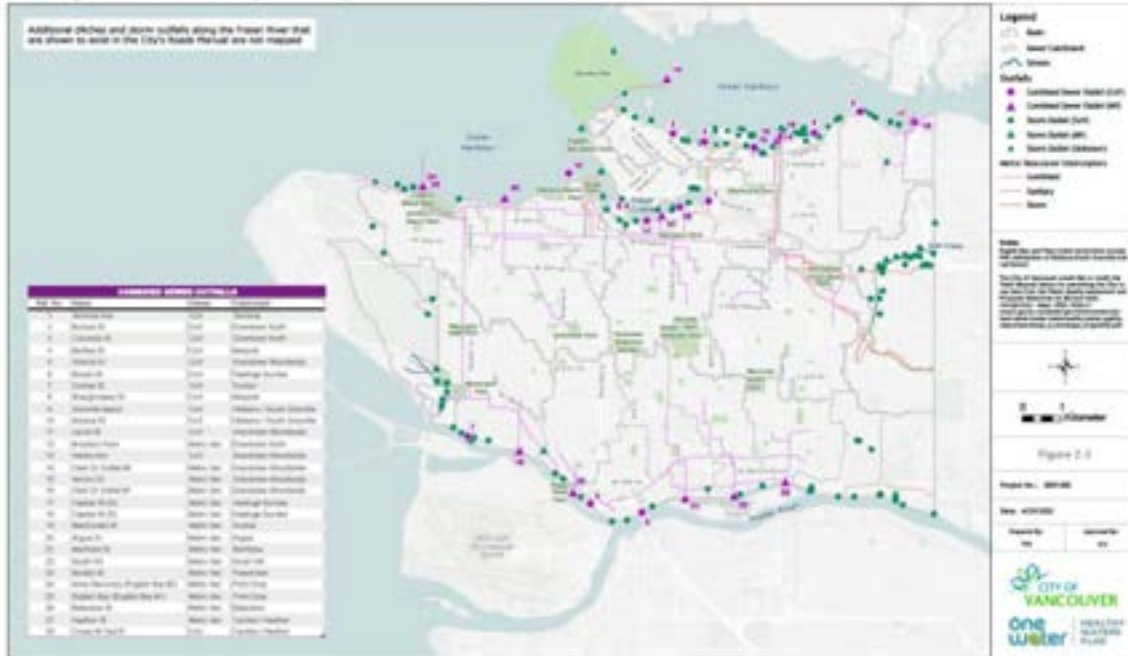


Figure C-2. Vancouver and Metro Vancouver's Stormwater and Combined Sewer Outfalls

Figure 3: Map of Sewer Outlets for Vancouver (Taken from the City of Vancouver Basin Characterization Maps)

<https://vancouver.ca/files/cov/basin-characterization-maps-low-res.pdf>



Figure 4: Beach Postings