

Brownfields Case Studies

Sp'akw'us Feather Park Remediation



Source: Bennett Land Surveying Ltd

The Squamish Newport Beach during the early stages of the Sp'akw'us Feather Park construction.

PROJECT SUMMARY

Sp'akw'us Feather Park sits at the southern tip of the Squamish peninsula in British Columbia and is a key component of the Oceanfront Squamish redevelopment project¹. After various remediation efforts, which included a four-year, \$40-million campaign, the District of Squamish acquired ownership of the land and created a masterplan for revitalization². After partnering with developer Matthews West and Bethel Lands Corporation in 2013, the Oceanfront Squamish redevelopment project began³. The completed 11-acre park marks the first milestone in the 20-year redevelopment plan. Sp'akw'us Feather Park was opened to the public in August of 2024 and features various facilities and amenities which include a playground, gardens, beaches, and open green spaces⁴. The park was awarded with the Partnerships and Community Engagement Award by the Canadian Brownfields Network in 2024.

Site Characteristics

Sp'akw'us Feather Park is located at the most southern segment of the peninsula and it provides citizens with direct local access to the head of the UNESCO Biosphere reserve of Howe Sound⁵. The newly accessible park—which was opened to the public in August of 2024—boasts 11 acres of natural community gathering space filled with various amenities⁶. The park also serves as an

access point to Squamish's expansive outdoor recreation network, with nearby trails connecting to the town's first-rate hiking, biking, and climbing routes⁷. Sp'akw'us Feather Park is less than a ten-minute car or bike ride from the downtown core and is easily accessible via Loggers Lane or Cleveland Avenue.

QUICK FACTS

Project Location

37321 Galbraith Ave
Squamish, BC, V8B 0R2

Project type

Multi-Use Public Park Land Development

Site size

11 hectares

Land uses

Parks, Public Spaces, and Community Facilities

Keywords/special features

Chlorine contamination, community gathering space, wind sports beach, recreation area, local art, waterfront

Website

<https://www.exploresquamish.com/things-to-do/areas-lakes-parks/spakwus-feather-park/#:~:text=About%20the%20Park,shoreline%20planting%20and%20intertidal%20habitat.>

Developer

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Please Note:

Case studies were prepared as a course assignment by students enrolled in PL8312/PLE854: Brownfields & Sustainable Development, School of Urban and Regional Planning, Toronto Metropolitan University (Winter 2025). Information for the case studies was obtained from online sources, available reports, and, in some cases, site visits and direct communication with stakeholders. If you are aware of any errors or updates to the case studies, please contact chris.desousa@torontomu.ca.

The opinions expressed in this case study are those of the authors only and do not represent the opinions and views of either Toronto Metropolitan University, the School of Urban and Regional Planning, or the Canadian Brownfields Network.



History

The redevelopment of Sp'akw'us Feather Park, formerly known as Newport Beach, was awarded with the Partnerships and Community Engagement Award at the 2024 Brownie Awards for the partnership between Matthews West and the Skwxwú7mesh Úxwumixw (Squamish Nation)⁸. However, many years of dedicated labour were required in order to achieve this milestone. The southern region of the peninsula used to be owned by BC Rail but was leased to Nexen, a Canadian oil and gas company⁹. The location became a chlor-alkali plant that produced bleaching agents for the pulp and paper industry. This facility also produced caustic soda and hydrochloric acid that was released into the surrounding area, contaminating the land¹⁰. The plant operated from 1965 to 1991, releasing an estimated 150 tons of chlorine per day during peak operation¹¹.

For many years, industrial activity on the site prevented the Squamish community's access to the waterfront, which was particularly harmful to the Indigenous residents as the shoreline and water held cultural significance¹². In 1999 the Province of British Columbia demanded the remediation of the site to restore the community's access to the waterfront. Nexen undertook the remediation project which ended with an ownership transfer to the District of Squamish in 2004. Subsequently, a third of the site was issued a Certificate of Compliance for residential use in 2005 and the remaining land of the 59-acre area was issued with an Approval-in-Principle which mandated continuous, long-term monitoring¹³. The development of Sp'akw'us Feather Park was top priority because it was needed to achieve the certification that would allow development on the rest of the oceanfront¹⁴. In partnership with the Squamish Oceanfront Development corporation, the District of Squamish created a redevelopment masterplan following their acquisition of the land. In October 2013, Matthews Southwest Developments and Bethel Lands Corporation were chosen as the developers of the Oceanfront Lands¹⁵. Another ownership transfer occurred in February of 2016 which commenced the 20-year redevelopment plan¹⁶.

Cleanup

In order to satisfy the remediation order by the Provincial government, Nexen undertook a four-year, \$40-million decontamination process. The company had to adhere to the protocols and



Source: Royal BC Museum, 1988

Industrial booming grounds of the Squamish waterfront.

requirements set by British Columbia's Ministry of Environment (MOE). The MOE oversees the identification and remediation of brownfield sites through the Environmental Management Act (EMA), Contaminated Sites Regulation (CSR), and Hazardous Waste Regulation (HWR)¹⁷. By the end of the campaign, the company was able to wash 24,000 tons of soil and recover 3 tons of mercury, shipping 150,000 tons of contaminated soil to the West Edmonton Landfill for further processing¹⁸. Their efforts gained them a Special Environment Award by the Minister of Environment in 2004¹⁹.

the land in 2004, they were burdened with the task of sourcing infill that would replace the contaminated soil that had been shipped away. The original plan was to acquire suitable soil from a site 15 kilometres away, necessitating 20,000 truckloads of material to be shipped, which would have generated 300,000 kilograms of greenhouse gas emissions from the trucks²⁰. Fortunately, a more sustainable source was found in the nearby Mamquam Blind Channel. After testing sediment from the nearby ocean channel and verifying that the soil fulfilled purity standards, the foundation of Sp'akw'us Feather Park was successfully situated²¹.

After the District of Squamish acquired ownership of



Source: John Buchanan

Sp'akw'us Feather Park amidst the waterfront remediation process.

Planning and Redevelopment Process

The park is part of a bigger-scope redevelopment of the previously zoned Industrial land. Oceanfront Squamish aims to transform the brownfield into a sustainable, diverse, and historically grounded community²². The Squamish District established the Squamish Oceanfront Development Corporation (SODC) to oversee the site's master plan, Sub Area plan, and community envisioning process²³. The Sub Area Plan (SAB) for the peninsula—which was completed in 2010—designates Sp'akw'us Feather Park as 'Parks, Public Spaces, and Community Facilities' land use, but the greater site area is mixed-use²⁴. The greater Oceanfront Squamish redevelopment site is comprised of various employment, commercial, residential, and educationally zoned lands²⁵. Community Engagement started in 2007 following the creation of the SAB, where phase one first introduced planning studies to the public²⁶. In 2008, phase two included four community stakeholder workshops and an Open House to identify key project priorities, followed by another Open House in 2009 to finalize the development plan²⁷. The Skwxwú7mesh Úxwumixw (Squamish People) played a significant role throughout the consultation period to ensure the park's design would be an image of their culture, stories, and knowledge²⁸. Environmental consultation was also a priority, as teams of ethnobotanists and toxicologists were heavily involved in the project's efforts²⁹.

The park itself was constructed in three phases. The first phase, scheduled for 2012, focused on developing the sub-tidal and intertidal elements, including the construction of the eastern (main) headland, the intertidal wetland, and the environmental upland features. The second phase, planned for 2013, concentrated on completing the western shoreline. It involved finishing the remaining intertidal wetland and upland riparian areas³⁰. The final phase involved completing the coastal riparian habitat planting and the upland park landscaping. In order to ensure a safe redevelopment process, the undertaking was performed honouring three existing Risk Management Plans: the Protocol for Excavation and Soil Management, the Post Remediation Monitoring Program, and the Management of Mercury Contaminated Sediment³¹.

Although Matthews West Developments acquired the oceanfront lands in 2016, construction did not begin until 2017³². Stantec's environmental services team would become a partner on the project, helping to provide an environmental site investigation and a risk assessment study on human and ecological health to address any lingering contamination³³. Other stakeholders in the project included Nch'kay staff, board members, and Nation Council members who helped develop a roadmap for the Cheekye Oceanfront space.

The key challenges of the project were in its remediation efforts which focused on eliminating the potential of civilian exposure to mercury in the environment. This was done through using the scientific methods of tracking, predicting, and mapping the area's mercury contamination³⁴. This process involved risk assessments, researching environmentally protective management plans, and scientific investigations to restore the site ecologically and culturally³⁵.

Sp'akw'us Feather Park is the first completed development in the Oceanfront's master plan, but the park's terrain will be the connecting piece to a flexibly walkable, mixed-use neighbourhood. The company behind the park plans to further develop its commercial and residential buildings to house an extra 6,500 residents and provide 2,500 new jobs³⁶. The development plan will include additional parks, trails, and public spaces to create a viable and vibrant community rooted around this oceanfront community gathering space.

Design Features and Sustainability

Sp'akw'us Feather Park features various facilities and amenities, including multiple public beaches, gardens, open green spaces, and a play area for children³⁷. The lawn area is designed for a sound stage that will accommodate community gathering and other events, while the cultural gardens are also designed for outdoor classes³⁸. Surrounding the park is a multi-use path and a bike lane along the road³⁹. Along with bike racks and washroom facilities, scattered throughout the park are various art installations made by local Indigenous artists like James Harry and Maskull Lassere, recognizing Indigenous ties to the restored land⁴⁰.

The children's play area is another example of the redevelopment project's commitment to Indigenous representation and partnership. The playground was designed in collaboration with Indigenous youth and retells Skwxwú7mesh Úxwumixw stories of the land⁴¹. This feature was spearheaded through the partnership with Elder Bob Baker, who envisioned a space for local children to enrich their cultural ties by engaging with traditional practices⁴². Through support from project developer Matthews West, students from St'a7mes School collaborated with the architects and playground builders to incorporate Indigenous life stories into the layout of the play area⁴³. Construction utilized historically significant Indigenous materials like yellow cedar and recruited community carvers Matthew Baker and his son Liam Baker⁴⁴. The playground features various signs with QR codes which play audio of the students explaining the symbols and legends⁴⁵.



Completed playground designed with Indigenous artists and youth.



A 2019 photo of the Lac-Megantic derailment site showing the removal of many buildings and lack of redevelopment.

Sp'akw'us Feather Park is designed with various sustainability measures that ensure its longevity. The effects of climate change through sea level rise are considered throughout the construction and planning process; the beach is raised with ample backshore and a 15 metre setback from HWM with 2100 SLR buffer is mandated as a part of the Squamish Marine Coastal Flood Protection⁴⁶. In order to stabilize the foundation of the peninsula after the soil replacement, a seismic berm was installed⁴⁷. The project's ethnobotanist also enlisted the help of the Squamish Nation with the park's ecological restoration efforts⁴⁸. A major accomplishment of this partnership was the construction of a root garden that is capable of capturing tidal debris and feeding perennial roots⁴⁹. This not only preserves the cultural knowledge of traditional Indigenous practices but also strengthens the coastal foundation⁵⁰.

Financing

The Squamish Oceanfront Development Corporation secured their brownfield remediation funding from various stakeholders. These included the province of British Columbia, which helped finance environmental investigations, subsequently getting them grants from the Green Municipal Fund to decommission the plant and greenlight the safety of the blue barn located on the site⁵¹. A total of \$495,968 in government grants was received in addition to the District of Squamish's \$8 million five-year loan agreement that would fund environmental cleanup and investigation studies⁵².

Beyond remediation efforts, the financial contributions to the project came from both public and private investment. In the 2025-2029 Squamish Financial Plan, the park is expected to cost \$500,000 in 2025, with \$495k of the funding sources being included in the development cost charges bylaw alongside the Oceanfront Development Cost Charge Front, and Development Cost Charge Bylaw, while the last \$5000 is being sourced from reserves⁵³.

The project's construction is expected to generate over \$680 million in total revenue output⁵⁴. In comparison, the broader economic impact is projected to exceed \$6 billion over the next 30-year period⁵⁵. Federal tax revenues from the park are projected at \$18.7-\$26.4 million, with the province receiving \$14.9-\$21.3 million and the District of Squamish \$4.7-\$6.0 million on an annual basis that will be reinvested into community services and infrastructure⁵⁶. Sp'akw'us Feather Park's completion represents a key step in advancing the socio-economic growth and economic development of the Squamish Nation, all the while ensuring land development reflects and remains rooted in the values and culture of the Skwxwú7mesh⁵⁷.

Benefits and Lessons Learned

The remediation of Squamish Feather Park demonstrates the long-term value of developing contaminated brownfields into economically and socially beneficial sites. The cleanup process

taught the team the most efficient ways to sample sediment in the area, resulting in their preference for using divers instead of barge-based drill rigs for sediment sampling⁵⁸. Leaning towards cost-effective and flexible approaches improved precision in processes like sediment sample collecting and ultimately helped the project remain within its budget and time frame⁵⁹. Treatment systems for reducing the site's contamination levels were more efficient than the team had initially anticipated, further speeding up the remediation process. Ultimately, staffing considerations behind the project were one of the biggest challenges the developers had to face, as re-deploying staff for time-intensive tasks like funding applications or regulatory reporting would require more administrative workforce planning and an effective allocation of resources to prevent interruptions in the workflow⁶⁰.

Conducting historical site analysis, interviewing individuals who used to occupy the space, as well as continuously facilitating pollution assessments were all integral to the remediation approach the development took on, allowing the project to efficiently find contaminated spots and have successful regulatory approvals that resulted in stakeholders supporting the redevelopment efforts and feeling assured of any future environmental liabilities⁶¹. Despite tight funding deadlines and high remediation costs, strategic financial planning and early funding application preparations kept the project on track to attract new businesses with the long-term financial benefits anticipated for the park⁶².

Endnotes

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