

APPENDIX D: ARCHAEOLOGICAL ASSESSMENT



**Beachcomber Regional Park
Archaeological Overview Assessment
Nanaimo Regional District**



Prepared on Behalf of:

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Cover photo: Beachcomber Regional Park, view north from west beach

Management Summary

This report presents the results of an archaeological overview assessment of Beachcomber Park, which is located 7 km east of the City of Parksville, south of Cottam Point on the east shores of Northwest Bay, and within the Regional District of Nanaimo (RDN). The AOA was completed by Ursus Heritage Consulting Ltd. at the request of the RDN, who manages the park.

The AOA was initiated as part of the RDN's development of a Park Management Plan, and no development is proposed for the park at this time. The study area is located within the asserted traditional territory of the Snaw-naw-as First Nation. Archaeological site DhSb-25 is located within the park boundaries.

Acknowledgements

Ursus would like to thank Lesya Fesiak, Parks Planner for the Regional District of Nanaimo for the opportunity to conduct this study. Ursus would also like to thank the Snaw-Naw-As First Nation for the opportunity to work within their asserted traditional territory. Ursus would also like to thank DJ Sampson from the Snaw-Naw-As First Nation for his hard work and sharing his knowledge. Ursus acknowledges and thanks Tal Fisher at the Archaeology Branch for his support with the project.

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1.0 Introduction

This report presents the results of an archaeological overview assessment (AOA) of Beachcomber Park, which is located 7 km east of the City of Parksville, south of Cottam Point on the east shores of Northwest Bay, and within the Regional District of Nanaimo (RDN) (Figure 1). The AOA was completed by Ursus Heritage Consulting Ltd. (Ursus) at the request of the RDN, who manages the park.

The AOA was initiated as part of the RDN's development of a 10 year Park Management Plan, and no development is proposed for the park at this time. The purpose of the management plan is to determine future park needs in terms of visitor safety and enjoyment, ecological protection, and annual maintenance costs.

The study area is located within the asserted traditional territory of the Snaw-Naw-As First Nation. Protected archaeological site DhSb-25 is located within the park boundaries.

The AOA study consists of desktop review of the archaeological, ethnographic, historic, and environmental literature in addition to an analysis of biophysical, topographic, and satellite imagery data pertaining to the study area and surrounding region. To supplement the findings of the AOA desktop review a preliminary field reconnaissance (PFR) was undertaken to provide detailed in-field observations to more accurately assess the archaeological potential within the park. The objectives of the AOA and PFR are to:

- Identify areas within Beachcomber Regional Park with the potential to contain archaeological sites; and
- Recommend the need and appropriate scope of future archaeological research within the Park.

The assessment described in this report is concerned with the identification and management of archaeological sites. An archaeological site is any location that contains the remains of past human activity. Examples of archaeological sites include habitation sites, stone tool manufacturing and maintenance sites (lithic scatters), food storage or roasting pits, burials, fish weirs, rock art, and trails.

This report provides background data regarding the context of the research in terms of its biophysical and cultural setting, describes the objectives of the research, describes the methodology of the research, presents the results of the fieldwork, and provides recommendations regarding the need and appropriate scope of future archaeological research for the park.

2.0 Methodology

The current AOA was conducted in accordance with the *British Columbia Archaeological Impact Assessment Guidelines* (Apland and Kenny 1998) issued by the Archaeology Branch at the Ministry of Forests, Lands, and Natural Resource Operations (Archaeology Branch). For the current project the AOA involved:

- A review of pertinent regional archaeological, historical, ethnographic, geological, and biophysical literature;
- A review of the park's biophysical and topographic characteristics;
- An evaluation of the previous impacts to the natural landscape of the park; and
- An evaluation of archaeological site potential.

2.1 Literature Review

Background data concerning known archaeological sites in the study area was obtained from the BC Remote Access to Archaeological Data (RAAD) database at the Archaeology Branch. Archaeological, ethnographic, historic literature pertaining to the study area was gathered from a variety of institutions including: (1) the libraries at the University of Victoria, University of British Columbia, and Simon Fraser University, (2) The Provincial Archaeological Report Library, and (3) the Ursus Heritage library collections. Both published and unpublished resources and reports relevant to the study area were examined.

2.2 Review of Topographic and Biophysical Information

Topographic information was obtained from: (1) 1:50,000-scale National Topographic Series Maps, (2) 1:20,000 TRIM Maps, and (3) satellite imagery obtained from GoogleEarth. In addition to identifying topographic and landscape features satellite imagery also provided information regarding the location of buildings and infrastructure and level of disturbance over the landscape. In addition to the review of regional biophysical literature, further information was obtained from Biogeoclimatic Maps and associated Biogeoclimatic Classification report (Meidinger and Pojar 1991).

2.3 PFR Field Methodology

The PFR field survey consisted of a 2-person field crew traversing the Park area, focusing efforts on moderate to gently sloped terrain, beach areas and the intertidal. Ground surfaces and exposures along the trails were intensively examined for the presence of artifacts, cultural materials, and other evidence of past human settlement and land use. Mature trees were examined for cultural modifications. The landscape was examined for archaeologically significant landforms (such as naturally level benches, terraces and/or promontories) and earthworks (such as depressions, mounds, cairns and defensive structures). As well, previous impacts to the natural landscape that have resulted from development activities such were also examined and evaluated. Shell midden exposures were photographed, described in notes and GPS coordinates were recorded for locations outside or in close proximity to the registered site boundary.

2.4 Archaeological Site Potential Assessment Methodology

The archaeological site potential assessment process considers a number of criteria in order to establish potential ratings for a given piece of landscape. This AOA employs a three-tiered rating system with low,

moderate, and high potential values assigned based on topographical and biophysical characteristics coupled with the examination of a number of cultural and archaeological criteria.

A correlation exists between particular biophysical characteristics and the incidence of archaeological sites. The presence of particular biophysical characteristics can be used to predict the likelihood of a location being used prehistorically. Generally, people gravitate toward areas with access to water, shelter, and food and raw material resources, seeking out locations that are relatively level, well-drained, solar aspect, and provide a good vantage point. As such the biophysical characteristics that are considered are:

- Presence and nature of water features;
- Wildlife and fish values;
- Slope, aspect, and topography;
- Presence of bedrock exposures, karst, talus, or boulders suitable for rock art locations, caves, rock shelters, or lithic raw material sources;
- Vegetation and forest cover composition and age.

Archaeologically it is important to not only examine these biophysical characteristics as they appear currently but to also consider the changes in these biophysical characteristics over time, from the Late Pleistocene through to the Holocene.

Further to the biophysical characteristics, a number of cultural and archaeological criteria are considered in order to further refine the archaeological site potential assessment included:

- Connection of study area to Snaw-Naw-As First Nation's traditional use localities, oral history, and/or known traditional place names;
- Proximity of property to previously recorded archaeological sites;
- Prehistoric settlement and resource use of the region with a specific emphasis on the nature and characteristics of archaeological sites in Snaw-Naw-As First Nation's traditional territory;
- Level and type of past historic land use and the resulting impacts;
- The previous archaeological experience of the researcher.

3.0 Study Area & Background Research

Beachcomber Regional Park is a one acre (0.4 hectare) park managed by the Regional District of Nanaimo. It was established in 1955 by the Beachcomber Park Association and was gifted to the RDN in 1988. The park is situated 7 km east of the City of Parksville on Beachcomber Peninsula, south of Callam Point on Northwest Bay. It “is a sparsely developed park intended to provide safe, low-impact public access to the sensitive coastal ecosystems within the park” (RDN website).

As Beachcomber Regional Park is a small one acre area, for the background review the study area includes Northwest Bay and adjacent coastal settings.

3.1 Physiographic and Environmental Setting

Located on the south and eastern part of Vancouver Island Beachcomber Regional Park is within the Georgia Depression Ecoprovince. This ecoprovince is a significant basin that includes the southeastern Vancouver Island Ranges and the Nanaimo Lowlands in the west, the Strait of Georgia, Gulf Islands and Strait of Juan de Fuca in the middle, and the Georgia Lowlands and the Fraser Lowlands in the east. The majority of the modern population of British Columbia is settled in the Georgia Depression Ecoprovince (Demarchi 2010).

The sea levels along the northwest coast of North America have undergone dramatic changes since the last glacial maximum. The sea level histories of specific regions vary as there are many forces that influence sea level. The variation along the coast generally reflects a similar timeline in response to the formation of ice sheets, ice load, and melting and retreating of ice sheets.

Vancouver Island was still ice free when much of the mainland coast was already bearing glacial ice of the Cordilleran Ice Sheet. Vancouver Island was covered in ice near the end of the Pleistocene during the Fraser Glaciation, between 20,000 and 15,000 years ago. Ice sheets formed on the Vancouver Island Ranges and the Coastal Mountain Range, coalesced in the Georgia Strait basin, and moved southward and southeastward past what is now Victoria, escaping into the ocean by flowing westerly through Juan de Fuca Strait or southerly through Puget Sound into Washington, reaching the Seattle area about 17,400 years ago (Shugar et al 2014). During the process much of the lowland was flooded after bearing the weight of the ice load (Demarchi 2010). Vancouver Island was submerged between 150 – 300 m below sea level under the weight of the ice. The ice sheets carved their mark into the landscape, creating u-shaped valleys, steep coastal fjords, and striations in the bedrock. At low tide striations on the exposed bedrock at Beachcomber Bay demonstrates the direction of a northwest flowing lobe of glacial ice.

Temperatures warmed causing the ice to melt and retreat, allowing the land mass to rebound and expose portions of the landscape that had previously been submerged. By 15,700 years ago, the Vancouver and Victoria areas were ice free and by around 10,000 years ago, the ice cover along the coast was similar to what it is today (Clague and James 2002). The study area was free of ice, and likely habitable, by approximately 10,500 years ago.

3.2 Biogeoclimatic Classification, Flora and Fauna

The southeastern portion of Vancouver Island (including the study area), the Gulf Islands and a sliver of the mainland coast are part of the Coastal Douglas-fir (CDF) biogeoclimatic zone (Meidinger and Pojar 1991). Warm, sunny summers and mild, wet winters are typical of this zone; this is in part due to protection from the rainshadow of Vancouver Island and the Olympic mountains, and warm air from the Pacific Ocean.

The CDF supports a varied forest cover of Douglas-fir (*Pseudotsuga menziesii*), western redcedar (*Thuja plicata*), Grand fir (*Abies grandis*), western flowering dogwood (*Cornus nuttallii*) and (less frequently) Garry Oak (*Quercus garryana*) and arbutus (*Arbutus menziesii*). Within the CDF zone, Garry oak ecosystems occur in sites characterized by particularly shallow, dry and/or rocky soils. The typical CDF ground cover includes salal (*Gaultheria shallon*), dull Oregon-grape (*Mahonia nervosa*) and Ocean Spray (*Holodiscus discolor*), Twinflower (*Linnaea borealis*), Bracken Fern (*Pteridium aquilinum*), Starflower (*Trientalis borealis*), Vanilla Leaf (*Achlys triphylla*), and various mosses (Demarchi et al 1991).

The black-tailed deer (*Odocoileus hemionus*) is the most common large ungulate although the Roosevelt Elk (*Cervus canadensis roosevelti*) were local residents in the past. Black bear (*Ursus americanus*) and cougars (*Puma concolor*) also inhabit this zone but frequent areas with less human activity. Recently, the grey wolf (*Canis lupus*) has invaded Vancouver Island, entering the CDF in search of deer but are less common in urbanized areas. Many waterbirds spend the winter months nesting in this zone, locating themselves in estuaries and shelters waters. Mature forests in the CDF, although rare, provide important habitat for many additional species of birds (Demarchi et al 1991).

Northwest Bay and the nearby waters are home to numerous sea mammals including, but not limited to, harbour seal (*Phoca vitulina richardi*), northern sea lion (*Eumetopias jubata*), California sea lion (*Zalophus californianus*), killer whale (*Grampus rectipinna*) and harbour porpoise (*Phocoena vomerina*). Fish species include dogfish (*Squalus suckleyi*), skate (*Raja binoculata*), Pacific herring (*Clupea harengus*), rockfish (*Sebastes spp.*), flounder (*Atheresthes stomias*), halibut (*Hippoglossus stenolepis*), sole (numerous species), ling cod (*Ophiodon elongatus*), dog fish (*Squalus acanthias*), hake (*Merluccius productus*) and several species of sea perch (Mitchell 1971). Five species of salmon also reside in the ocean and rivers surrounding the study area depending on the season which include Chinook (*Oncorhynchus tshawytscha*), chum (*O. keta*), Coho (*O. kisutch*), pink (*O. gorbuscha*) and sockeye (*O. nerka*).

The abundant marine resources available in this area also includes a wide assortment of shellfish but are not limited to, butter clam (*Saxidomus giganteus*), littleleneck clam (*Protothaca staminea*), horse clam (*Schizothaerus nuttalli*), basket cockle (*Clinocardium nuttalli*), mussel (*Mytilus edulis*), native oyster (*Ostrea lurida*), whelk (*Nucella sp.*), wrinkle purple (*Nucella lamellosa*), periwinkle (*Littorina sp.*), limpet (*Lottidae*), and acorn barnacle (*Balanus nubilis*).

3.3 Cultural Background

Understanding the traditional lifeways and land use systems of First Nations peoples is of crucial importance towards gaining an understanding of the archaeological record of this culturally and physiologically unique region. Sources of information on these peoples are generally derived from contemporary First Nation accounts of the past and the ethnographic record. Several caveats must be attached to the use of the ethnographic record to understand past lifeways. First, the historical context of the period, and second, the amount of exposure to these cultures that ethnographers experienced during the tenure of their research. In general, ethnographers spent relatively little time with First Nations, spoke with relatively few informants, and constructed their understandings of aboriginal lifeways within academic and political frameworks that were affected by a number of ethnocentric and colonial assumptions (see Klassen 2002 and Wickwire 2005 for a more detailed review of bias within regional ethnographies).

Northwest Bay (the study area) is within the traditional territory of the Snaw-Naw-As Nation and the Snuneymuxw First Nation. Communities from the north, K'omoks, Qualicum, We Wai Kai and Wei Wai Kum First Nations. K'omoks, Qualicum, Snaw-Naw-As, We Wai Kai and Wei Wai Kum First Nations likely utilized resources in this area too.

Snaw-Naw-As and the Snuneymuxw are both speakers of the Island Halkomelem language, a division of the Central Coast Salish culture group (Bouchard and Kennedy 1995; Suttles 1990; Thompson and Kinkade 1990). The Central Coast Salish occupied southern and southeastern Vancouver Island from Sherringham Point west of Sooke to Northwest Bay just south of Parksville, the Gulf and San Juan Islands, Howe Sound up to the Squamish and Cheakamus rivers, northwestern Washington State along the Juan de Fuca Strait, the lower mainland, and the lower Fraser Valley. While Central Coast Salish speakers of the Island Halkomelem occupied an area along the eastern coast of Vancouver Island from Northwest Bay in the north, southwards to Saanich Inlet.

The Snaw-Naw-As are collectively known as the Nanoose First Nation, the term Nanoose is actually the anglicized version of the Island Halkomelem name of the primary Snaw-Naw-As village *snew'néw'es*. *snew'néw'es* was located at the head of Nanoose Bay, the location presently utilized by the Nanoose Bay Pentecostal Camp. The Snaw-Naw-As people are the northernmost division of the Island Halkomelem language family.

The ethnographic literature specific to the Snaw-Naw-As is quite scarce. Most of the information regarding the history of the Snaw-Naw-As has come from a small number of historical documents and interviews with elders, specifically with Sam Bob, an ancestor of Nanoose Bob a former chief (Jeness 1936; Suttles (1987, 1990).

The Snuneymuxw people are known as the Nanaimo people, “Nanaimo” is the anglicized version of Snuneymuxw. Snuneymuxw traditional territory is located on east central Vancouver island, extended from Five Finger Island off Horswell Bluff in the north, to Dodd Narrows in the south, including Gabriola Island and adjacent islands, and extended as far west as the inland mountains and the Nanaimo Lakes area (Bouchard 1992).

The Qualicum people are decedents of a group formally known as the Pentlatch (Puntledge is the anglicized version), the Pentlatch language was closely related to the K'omox. The Pentlatch language was last spoken in the 1940s and has since been considered an extinct language. Pentlatch, K'omox and Sechelt comprise the North Coast Salish division of the Northwest Coast Culture area and are part of the Central Salish branch of the Coast Salish division of the Salishan language family (Montler 1999, Suttles 1990).

The We Wai Kai and Wei Wai Kum Nations are members of the Southern Kwakiutl and speakers of Laich-wil-tach (also spelled Ligwilda'xw) a branch of the Wakashan Language group.

3.4 Previous Archaeological Research

Archaeological investigations and research have been ongoing on the central and southern east coast of Vancouver Island throughout the century. However, there has not been a significant level of documented archaeological investigations in the Snaw-Naw-As territory, especially in recent years. With the acceptance of a handful of cultural resources management investigations for developer site alterations.

The majority of the sites in proximity were recorded during a coastal survey in 1975. During this large scale survey numerous sites were identified and recorded along the East Coast of Vancouver Island (Murton & Foster 1975). DhSb-25 was first recorded during this study but was not subject to subsurface testing. The Provincial record for DhSb-25 is sparse; only the location and “subsurface shell midden” are provided. The site is comprised of two lenticular shaped polygons, one on the north and south facing, sandy beaches within the Park.

There are numerous registered archaeological sites near the study area (Figure 1). The sites nearby include shell middens (DhSb-7, DhSb-8, DhSb-9 DhSb-11, DhSb-15, DhSb-16, DhSb-18, DhSb-19, DhSb-22,

DbSb-23, DhSb-24, DhSb-32, DhSb-38, DhSb-42, DhSb-43, and DhSb-51), petroglyphs (DhSb-5), rock shelters (DhSb-33, DhSb-39), lithic scatters (DhSb-39, DhSb-50) and burial places (DhSb-1, DhSb-8, DhSb-11, DhSb-15, DhSb-18, DhSb-19, DhSb-21 and DhSb-27). The majority of registered sites are in coastal settings.

The areas in close proximity to the modern shorelines were used intensively by First Nations people, as they exploited the rich and abundant marine resources. Shell midden (shell rich deposits) is a waste product typical of a marine based diet. The vast majority of registered archaeological sites in the study area are shell middens located in coastal settings, this in part is due to the visibility of shell midden, the accessibility of coastal settings in modern times, the duration of sea level at comparable levels to modern times and the focus of research in shoreline settings. Central Coast Salish utilized inland resources but less intensively than those of coastal settings. Therefore, potential for archaeological sites is present above modern sea levels, including raised beaches and benches, created by fluctuating sea levels, specifically high water stands. Furthermore, there is potential for submerged archaeological sites reflecting past lower sea levels.

3.6 Expected Types of Sites

Based upon an examination of the regional archaeological record and the previously recorded sites in the study area the types of sites expected within the project area include lithic/artifact scatters, shell middens, burials, and historical. Culturally modified trees would be expected in the Northwest Bay area but are not reflected in the archaeological record; CMTs were likely destroyed during historic timber harvesting or by forest fire.



Photo 1. View west along the southern beach.



Photo 2. View south towards the north beach, standing on bedrock exposures.



Photo 3. View south along west beach.



Photo 4. View northwest showing undulating terrain in central lower portion of the Park.



Photo 5. View southwest showing view from upper benched area near Marine Way.



Photo 6. View west from southern vantage point, showing view to Parksville.

5.0 Recommendations

Based on the AOA results the following recommendations are presented:

- If any park improvements are planned for the lower portion of the park an Archaeological Impact Assessment (AIA) level study should be undertaken.

The objectives of an AIA are to:

- Identify and evaluate archaeological sites;
- Identify and assess potential impacts to these sites as a result of the proposed development; and
- Recommend alternatives for managing adverse impacts.

An AIA requires a Heritage Inspection Permit issued by the Archaeology Branch, MFLNRO pursuant to Section 14 of the *HCA*. Based upon the results of the AIA, additional archaeological work may be required, including, but not limited to:

- Site conservation through avoidance by project redesign: this is the preferred archaeological site management tool, a cost-effective strategy recommended for long-term protection of significant sites or portions of sites threatened with destruction. This could entail, for example, relocating a proposed building to avoid identified archaeological sites;
- Mitigative data recovery: archaeological salvage excavations may be recommended for significant archaeological or historic sites or portions of sites threatened by the proposed development which cannot be protected by project redesign;
- Archaeological monitoring: this may be recommended to ensure that appropriate emergency impact management actions are available if unanticipated important archaeological materials or features are encountered.

Users of this report should be aware that even the most thorough investigation may fail to reveal all archaeological remains, including sites protected by the BC *Heritage Conservation Act*, that exist in an area. All users of this report should also be aware that: (1) archaeological remains in BC are protected from disturbance, intentional or inadvertent, by the *Heritage Conservation Act*; (2) in the event that archaeological remains are encountered, all ground disturbance in the immediate vicinity must be suspended at once; (3) it is the individual's responsibility to inform the Archaeology Branch, and appropriate First Nations as soon as possible, about the location of the archaeological remains and the nature of the disturbance; and (4) the *Heritage Conservation Act* may incur heavy fines and imprisonment for failing to comply with these requirements.

This study is concerned with identification of archaeological remains and impacts to archaeological sites within the subject property. It does not address potential for traditional use sites within the subject property. It is not the intent of this report to document First Nations' interest in the land. The study was conducted without prejudice to First Nations' treaty negotiations, Aboriginal rights, or Aboriginal title. For more information on this study, please contact the report author.

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July 13, 2017

Lesya Fesiak
Parks Planner
Regional District of Nanaimo

RE: Estimate for Archaeological Impact Assessment of Beachcomber Regional Park

Dear Lesya Fesiak,

Please consider this as Ursus Heritage Consulting Ltd.'s estimate for further work at Beachcomber Regional Park, including an AIA under a Section 14 Heritage Inspection Permit, and site monitoring under a Section 12 Site Alteration Permit. In absence of a specific project the estimate is provided for a two day AIA, the associated costs for the AIA are presented in Table 1 below. This estimate includes fees and expenses for the permit application, a two day field assessment, reporting and site form update. The AIA would be conducted with a four person crew.

Table 1: Estimated Fees and Expenses for AIA under Section 14 Permit

Task	Fees	Expenses	Subtotal
1. Client Liaison & Admin	\$150	-	\$150
2. Permit Application	\$710	-	\$710
3. Field Testing (2 days)	\$2980	\$300	\$3280
4. Reporting, Mapping & Analysis	\$3220	\$100	\$3320
Total GST not included			\$7460

The costs for follow up site monitoring under a Section 12 Site Alteration Permit are provided in Table 2. This table include costs for permit application, one day of monitoring, reporting and site form update.

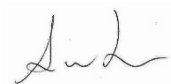
Table 2: Estimated Fees and Expenses for Monitoring under Section 12 Permit

Task	Fees	Expenses	Subtotal
1. Client Liaison & Admin	\$150	-	\$150
2. Permit Application	\$300	-	\$300
3. Field Monitoring (1 day)	\$1050	\$150	\$1200
4. Reporting, Mapping & Analysis	\$1910	\$100	\$2010
Total GST not included			\$3660

Please understand that this estimate will be adjusted when a specific project or development is proposed. For example, if the project would only impact a small area, the required assessment would be of a smaller scale and the estimate would be reduced accordingly.

We trust this information is sufficient for your current needs. Please do not hesitate to contact Ginelle Taylor should you have any questions or concerns regarding this cost estimate.

With respect,



Ginelle Taylor, BA, RPCA
Senior Archaeologist
Ursus Heritage Consulting Ltd.