

Prepared by

Catherine Berris Associates Inc. and Dillon Consulting Limited June 7, 1999

Mr. Jean Lamontagne Parks and Recreation City of Surrey 7452 – 132nd Street Surrey, B.C. V3W 4M7

Dear Jean,

Re: Blackie Spit Park Master Plan

We are very pleased to submit our final version of the Blackie Spit Park Master Plan. We are also providing full-size colour rendered plans and illustrations, and digital files of the plan and the report.

Our team has enjoyed working with you on this project. We particularly appreciated the insight and commitment of the Steering Committee. We look forward to the future implementation of the Master Plan.

Sincerely, CATHERINE BERRIS ASSOCIATES INC.

Catherine Berris, MCIP, BCSLA President

ACKNOWLEDGEMENTS

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1.0 INTRODUCTION

1.1 Context and Purpose of the Project

Blackie Spit Park is unique as a municipal park because of its size, the richness of the habitat in and near the park, the history of the area, and the diversity of recreational uses within the park. It is also one of Surrey's only ocean-front parks (refer to Figure 1). The recreational uses include a swimming club, a sailing club, beach use, community gardens; and extensive walking, cycling, nature appreciation, and interpretation. Blackie Spit is one of the best bird-watching areas in Canada. The park also offers panoramic views of the ocean and mountains.

Blackie Spit provides vital habitat for a wide variety of aquatic and terrestrial flora and fauna in intertidal, spit, tree/shrub, and old-field areas. The intertidal shoreline is red-coded by the Fraser River Estuary Management Program (FREMP) because of its high value to juvenile salmonids. The importance of the wide variety of habitat types provided by Blackie Spit is reflected in the large number of species of plants and animals found on site.

A significant amount of work has been completed and is underway regarding the study area. In 1997, Ken Summers' prepared the *Blackie Spit Wildlife Habitat Management Plan* which provides a detailed habitat assessment and recommendations for habitat enhancement. The Surrey Planning and Development Department have been undertaking a Crescent Beach Land Use Study, and the Engineering Department have contracted a study regarding the stabilization of Crescent Beach, as well as a drainage assessment of the Ocean Bluff area.

This project was initiated because Blackie Spit Park had never had a formal Master Plan adopted. Park development and management were conducted on an ad hoc basis in response to specific needs or community requests.

The importance of Blackie Spit as wildlife habitat, combined with its extensive recreational use, has resulted in interactions between humans and wildlife. The Blackie Spit Master Plan is intended to provide guidance with respect to park design, development, enhancement, and restoration, so that the park can be managed for a balance between recreational users and natural ecosystems.

1.2 Project Objective

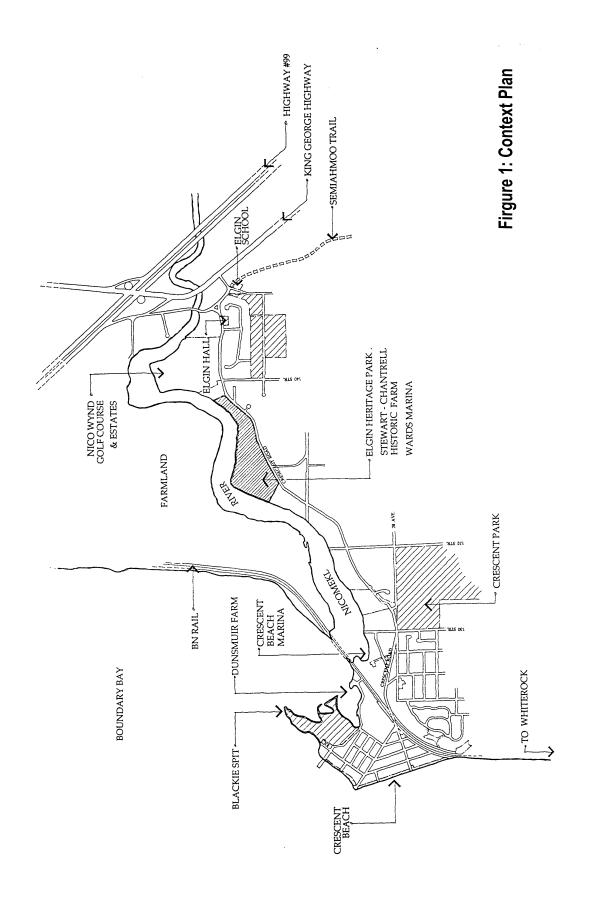
The objective of this project was to develop a long-term Master Plan which will:

- set an overall vision and goals and objectives for the park,
- provide recommendations for the protection, enhancement and management of the park's natural resources,
- provide opportunities for active and passive recreational uses which will be sensitive to the resources, and
- be developed in collaboration with city staff, a Steering Committee, and the public.

1.3 Planning Process

A Blackie Spit Park Master Plan Steering Committee (SC) of key interest groups was established to guide the decision-making process. The following were the major steps in the process:

- start-up meeting and site walk with SC and other community members,
- · contacts with interest groups,
- site inventory and analysis,
- development of draft issues, program, park vision and objectives, and plan options,
- meeting with SC to select preferred option,
- · preparation of draft Master Plan,
- public open house to review plan and management recommendations (see Appendix A),
- meeting with SC to revise plan and management recommendations based on public input,
- preparation of draft Master Plan document,
- meeting with SC to review need for final changes,
- preparation of final Master Plan document and provision of hard copy and digital product to Surrey.



2.0 SITE INVENTORY

2.1 History

Historically, the Blackie Spit Park area was entirely tidal, except for the spit, which was smaller than its current size. Early in the century, the central and southern portions (now called the Dunsmuir Farm) were dyked. In 1963 and 1970, the lower reaches of the Nicomekl River were dredged and the dredged sand and fine silt were dumped on Blackie Spit.

In 1974, a local Crescent Beach committee proposed that the Dunsmuir Farm, together with Blackie Spit and the adjacent foreshore lands, be established as a regional park. In the years after that, several proposals were made for development on Blackie Spit and adjacent lands.

The GVRD subsequently provided funding for two studies: a *Foreshore Study* by White Rock, and the *Ocean Shorezone Study* by Surrey. Around the same time (late 1970s), Surrey Council proposed yet another dredging of the lower Nicomekl with massive dumping of the dredgeate on Blackie Spit. A major protest was launched by several local groups, but the decision was made to dredge. A concession by Surrey Council was to give high priority to designating Blackie Spit as a park.

Several optional plans for the park were developed. In 1978, a bylaw was put in place to reserve Blackie Spit as a park. A motion to prohibit vehicular traffic on the spit was defeated. In the following years, several more plans for the park were developed. One of them was incorporated into a Crescent Beach Official Community Plan in 1981. However, the park plans were not formally adopted, and no budget was allocated to the park. It wasn't until 1997 that the park was officially designated as such.

2.2 Context and Existing Park Facilities and Use

Blackie Spit Park site is on the southwest corner of Mud Bay on the east side of Boundary Bay, at the mouth of the Nicomekl River. The park includes Blackie Spit, and the land to the south and west of the spit (refer to Map 1: Existing Park Use and Context Plan). The upland areas are adjacent to an intertidal marsh and mudflats.

The park is bounded by water on the north and east sides. To the southwest, it is bordered by a residential neighbourhood, part of the community of Crescent Beach. The park is linked to Crescent Beach via a major pedestrian promenade along the shoreline. A pier, located at the end of Wickson Road between the Crescent Beach promenade and Blackie Spit Park, is used extensively by residents and visitors for viewing, swimming and crabbing. The southeast side of the park is bounded by a railroad track and more houses.

The focal point of the park is Blackie Spit itself. The spit is mostly undeveloped, with one major pedestrian access route and one minor path along it. There are panoramic ocean and mountain views from the end of the spit.

The "new" dyke is used for major pedestrian access between the spit and the eastern portion of the park. In the eastern part of the park, the remnants of an old oyster company add historic interest to an area dominated by intertidal mudflats and wildlife. There are numerous minor trails around the site, including trails along the "old" dykes. These are being washed away by erosion, and in several places are only passable at low tide.

There is one area with active uses within the park. These include:

- a swimming club which has a swimming pool, 4 tennis courts, a small building and portable toilets, and
- a sailing club with a building, an exterior shower, and a storage area for sailboats. A boat ramp near the sailing club provides access across the beach to the water for small boats. It is used by members of the sailing club and the general public. In addition to small non-power boats, sea-doos are sometimes launched on the ramp. Use of the ramp can cause congestion in the area, and the ramp is too short for effective use at low tide.

The west portion of the park is called the Wickson area. A large property belonging to the Wickson family was subdivided into 7 lots in the early 1990s. These lots were filled, and a road and cul-de-sac were installed with utilities (i.e. water, sewer and electric services). The Crescent Beach community launched a strong protest to the development of this area, and in 1996 the City of Surrey purchased 5 of the lots. The 2 remaining lots are still owned by the Wicksons. One is vacant and the other is occupied by an old character house.

The park entry is off of McBride Avenue. It is not well marked. There are extensive areas of gravel for parking near the clubs and extending onto the spit. These are not well defined, though attempts have been made to define some of them with boulders around the perimeter.

In the southern portion of the park, there is a community garden. It includes 104 plots and a storage shed. It is managed by a local group and has an active membership, and a waiting list.

The primary uses of Blackie Spit park are strolling, dog walking, and wildlife viewing, particularly bird-watching. The project Steering Committee indicated that most people who use the park appreciate the environmental values and outstanding views. The active uses centred around the swimming club and sailing club also figure prominently in the activities of the park during the summer. Other activities are related to the ones mentioned and include: beach use, bicycling, boating, and fishing off the pier. Horseback riding takes place occasionally.

2.3 Soil and Vegetation Resources

Blackie Spit Park falls within the Fraser Lowlands Ecosection of the Lower Mainland Ecoregion of the Georgia Depression Ecoprovince (Demarchi, 1996). The topography is rolling in the areas of the dredge fill, and gently sloping in the intertidal and old field areas. The only steep slopes are on the sides of the dykes.

One-third of the approximately 34 ha site is upland habitat, including 2.3 ha of old field, 2.1 ha of sparsely vegetated dune, a 2.2 ha sandy spit, and 4 to 5 ha of mixed vegetation, ranging from moist soil plants to trees and shrubs (Summers, 1997).

The vegetation and habitat of the site is directly related to tidal levels and former dredging operations that piled dredgeate around the site at different times (refer to Map 2: Soils and Vegetation Plan). For this study, Blackie Spit was divided into habitat or vegetation zones based on existing information (Ken Summers Biological Services 1997; City of Surrey 1998), air photos, and the results of site visits. Following are details regarding each of the habitat zones:

Intertidal Area, Intertidal Marsh and Mud Flats

Intertidal habitat along the eastern edge of Blackie Spit is characterized by muddy substrate over sand. The vegetation consists of brackish water species such as American glasswort (Salicornia virginica), sea arrow-grass (Triglochin maritimum), salt grass (Distichlis spicata), and orache (Atriplex patula). The higher beach areas are characterized by species such as silver burweed (Ambrosia chamissionis), American searocket (Cakile edentula), dune ryegrass (Elymus mollis), mud rush (Juncus geradii), Pacific silverweed (Potentilla pacifica), and gumweed (Grindelia intergrifolia). As reported in Ken Summers Biological Services (1997), the rare seaside fiddleneck (Amsinckia spectabilis), was also found in very low numbers in this habitat type, although the exact location was not identified.

The intertidal waters and mudflats provide important foraging and resting habitat for large flocks of shorebirds (e.g., plover and dunlin) during spring and fall migrations, and for waterfowl (i.e., species of ducks and geese) and other waterbirds (e.g., loons and grebes) throughout the winter period. This area also includes estuarine habitats associated with the Nicomekl River, a major salmon producer of the Lower Mainland. As such, foraging and rearing habitats of the intertidal and estuarine areas of the park are particularly important for out-migrating salmon smolts produced in the Nicomekl watershed.

The high tide levels are as follows. Caution should be used in comparing these numbers with the contours on the site plan, since it is not certain if the same datum (0 level) was used on the base plan:

- Average high tide = 1.43m GSC (Urban Systems 1998 Draft Data)
- Higher-high water level = 1.65m GSC (Hay & Company 1998 Draft Data). A higher-high water tide generally occurs once or twice annually.
- Extreme water levels; 2.65m GSC (10year), 2.78m GSC0 (50 year), and 2.84m GSC (100 year) (Hay & Company 1998 Draft Data). Extreme water levels consist of tide, external pressure surge and wind setup, but do not make allowances for wave setup. For example the wave run-up value for a 1m wave on a sand beach with a slope of 1:20 is approximately 0.4m (Hay & Company, Pers. Comm.).

Modern Dredgeate with Grassland Community

These areas are located on the spit and in the central portion of the park. The predominantly sandy areas are characterized by a variety of grasses and forbs such as plantain (*Plantago lanceoata, P. major*), tansy (*Tanacetum vulgara*), and tansy ragwort (*Senecio jacobaea*). The spit community is generally more advanced than the central dune community.

The dredgeate areas provide good habitat for northern alligator lizards (*Elgaria coerulea*), and two species of garter snakes: common (*Thamnophis sirtalis*) and northwestern (*T. ordinoides*). In addition, the western garter snake (*T. elegans*) is expected to occur in these areas.

Modern Dredgeate with Grassland and Scrub

The community is similar to the one described previously with the exception of the presence of shrubs and/or trees which have colonized these areas. Invading woody plant species include red alder (*Alnus rubra*) and Scotch broom (*Cytisus scoparius*).

Older Dredgeate with Upland Community

This area is characterized by more upland species including trees and shrubs such as alder and broom. This area generally has better soil development than adjacent modern dredgeate areas.

The wooded areas likely provide habitat for tree (Hyla regila) frogs as well as for several bird and mammal species.

Older Dredgate with Lowland Community

This lowland area is restricted to a small area west of the new dyke. The vegetation community inhabiting this area is dominated by common horsetail (*Equisetum arvense*), reed canary grass (*Phalaris arundinacea*) and other moist soil grasses and forbs. Scattered cottonwoods were also observed in this area.

The lowland habitat provides breeding habitat for native amphibians such as tree frogs and potentially red-legged and early in the season when they are flooded.

Old Dyke Upland Community

The old dyke system runs for the most part along the eastern edge of the park along the tidal flats. The slopes are vegetated with species such as broom and Himalayan blackberry (*Rubus discolor*). Deciduous tress such as alder and old orchard trees (e.g. pear, apple) are also found along the dyke habitat.

Wooded areas provide nesting, perching and foraging habitat for numerous bird species including several passerine species. A list of abundant or common passerine species at Blackie Spit is provided in Ken Summers Biological Services (1997).

Old Field

The old-field habitat is generally comprised of reed canarygrass, pasture grasses, and forbs. This habitat area is restricted to the immediate area surrounding the Dunsmuir Farm and Community Gardens. Isolated trees and/or shrubs are also found in this area including pine (*Pinus contorta*), and elderberry (*Sambucus racemosa*).

Grass-field habitat provides feeding habitat for raptors such as bald eagles (*Haliaeetus leucocephalus*), red-tailed hawk (*Buteo jamaicensis*), and northern harriers (*Circus cyaneus*). The field habitat supports populations of voles (*Microtus townsendii*) and moles (Coast mole *Scapanus orarius*). Small mammals such as voles are an important food source to other birds such as great blue herons and mammals such as coyotes.

Freshwater Aquatic Habitat

Freshwater aquatic habitat is restricted to the large drainage ditch that runs along Dunsmuir Road and south of the new dyke. The channel drains a considerable area of the Crescent Beach community located southwest of the park. Aquatic vegetation in the ditch consists primarily of submerged macrophytes such as narrowleaf pondweed (*Potamogeten* spp.).

The ditch is designated as Class A(O) on the City of Surrey Stream Classification System mapping, indicating the ability or potential to provide overwintering habitat for salmonids. It is unclear whether salmonids are capable of unrestricted movement between Mud Bay and habitat provided in the ditch system. Large schools of juvenile fish were observed in the ditch during site visits although the species were not identified. No fish collections were undertaken as part of the Master Plan project. It is likely that the ditch provides habitat for threespine stickleback (*Gasterosteus aculeatus*), as well as bullfrogs (*Rana catesbeiana*). Muskrats (*Ondatra zibethicus*) have also been observed in the ditch.

Water movement between the ditch and the estuary is controlled by the Maple Pump Station and a steel floodbox. The 900mm floodbox permits gravity discharge to Mud Bay at low tides. The pump station operates using a single Johnson pump (15Hp vertical propeller type) with a maximum capacity of 107 L/s (Urban Systems, 1998 draft data).

Developed Areas

These areas include the Wickson lots, clubs, gravel parking, the Community Gardens, and the new dyke walkway. These areas have a range of vegetation types. The club and parking areas and the new dyke are relatively devoid of vegetation. They are bordered by the dredgeate communities. The Community Gardens has a unique type of garden vegetation which is attractive to insects and songbirds.

2.4 Wildlife and Fish

Information on the wildlife and fish of Blackie Spit Park can be found in the report by Ken Summers (1997). Some of the highlights of the species in the park are as follows:

- as many as 113 species of plants and vegetation, including rare plants such as the seaside fiddleneck,
- 6 herptiles species including frogs such as the native red-legged frog and tree frog, lizards such as the northern alligator lizard, and several species of garter snakes,
- 12 mammal species, including raccoon, oppossum, eastern cottontails, coyote, muscrat, coast mole, Townsend's voles, and deer mice; Harbour seals are also occasional visitors to the park,
- 193 bird species appear on lists of species seen in or from the park including great blue herons, shorebirds, passerines, and waterfowl; frequently observed raptors at Blackie Spit are bald eagles, red-tailed hawks, and northern harriers,
- fish and invertebrates such as several pacific salmon species, shellfish, and crabs (dungeness and red rock crabs).

2.5 Heritage Resources

Blackie Spit Park has a rich history, and there are remnants of previous development on the site that still exist today (refer to Map 3: Heritage Plan). These former uses included an old homestead, an oyster company, the Wickson house, a tidal pool, and Dunsmuir Farm, located just south of the Park property. The Wickson house and the Dunsmuir Barn still exist. Piles from the old boardwalk and oyster buildings still exist in the intertidal areas.

There is no information on First Nations use of the area. It was likely a high use location, but remnants of that activity probably have been covered over by dredging operations.

3.0 ANALYSIS

3.1 Summary of Park Issues

The following are issues related to the future of Blackie Spit Park which were identified in collaboration with the Steering Committee and interest groups, and site visits.

Environment

The identified issues are:

- minimizing the disturbance of birds, especially during critical periods, e.g. migration, nesting season
- balancing the interface among people, flora & fauna
- concern about the effects of unleashed dogs on wildlife, particularly birds, and plants
- protection of fish habitat of the foreshore and drainage ditch
- opportunity for habitat management and enhancement, e.g. old field habitat for birds
- no major built facility on the spit and intertidal areas of the park
- interest in enhancing native plant communities that promote wildlife habitat
- minimizing the garbage created by park visitors
- concern about the proliferation of invasive non-native plant species (e.g. Scotch Broom, Himalayan Blackberry)
- consider provincial regulations for planting on the dykes

Park Use

The identified issues are:

- interest in preserving the existing character of the site and fostering an image of a natural area
- need to accommodate the many walkers and bird watchers that visit the site
- balancing preservation vs. use objectives
- concern about parking requirements, configuration of parking, and alternative access to the site
- confusion and profusion of existing trails
- proliferation and lack of unity in existing signs
- unorganized fences in the park
- limitations of the boat launch, which is only practical for use by small boats at high tide current use by "sea-doos"; misleading sign in town; sailing club wants the boat launch improved
- concern about "sea-doos" and other motorized water craft, particularly noise, danger to swimmers, and lack of control over water area
- danger of currents to swimmers
- need to accommodate the requirements of the sailing club, swimming club and community gardens

- need for better connections to surrounding public land uses including Crescent Beach, marina, and potential long-term use of the railway
- interest in accommodating some type of concession stand, vendor, or portable cart, but limiting this type of park use to defined areas and small numbers
- desire for interpretive facilities on the site, but sensitively sited and designed interpretation
 to include natural resources, mountain views, and heritage interpretation of the site
 including the farming, industry, and First Nations uses of the site
- concern about horses using the site
- interest in limiting bicycle access to defined areas
- need to design and enforce prohibition of motorized vehicle use beyond roads and parking areas
- dislike of hard surfaces
- future use of Wickson property
- future of the pier, floats and piles
- future of the barn on Dunsmuir Farm
- use of the spit by local youth use is generally responsible
- need for major structures to be above floodplain level
- breaches in the old dikes and the desire by some to maintain these as trails
- parking at the corner of Crescent Road and Sullivan by park users
- potential for use of Dunsmuir Road as park access
- need to integrate with other Surrey studies currently underway
- need to integrate with public use regulations for Boundary Bay Wildlife Management Area

3.2 Analysis of Resources and Issues

To facilitate the analysis, the park has been divided into areas with similar characteristics (refer to Map 4: Resource Areas). The overall opportunities and constraints of each of these areas for park development are summarized in this section.

Spit



The spit has significant opportunities for walking and interpretation. The public and SC indicated an interest in keeping any development at ground level so as not to obstruct views. The beach on the west side is popular with dog walkers. The east side of the spit is highly environmentally sensitive. The current location of the minor trail is within the intertidal zone and needs to be moved if it is to remain. The ability to walk a loop on the spit is an important use feature.

There is little interest in modifying the vegetation on the spit, as the sandy barren character is part of the appeal, although broom could become a problem if it spreads.

Intertidal



The intertidal area is highly environmentally sensitive. No development should occur in this area. Birds and other wildlife in this zone are sensitive to human and dog intrusions, particularly during the fall and spring migration periods. These areas require minimal human disturbances and prohibition of dogs, along with a public education program to promote protection of the wildlife. Views of the area will be available from the minor path on Blackie Spit.

Tidal Pod



The tidal pod is the site of an old homestead, but the old dyke has been breached and the area is now tidal. It is a very interesting area with a mix of vegetation and cultural remnants and it is secluded. Casual exploration of the area is acceptable, but use should not be encouraged because the area has high environmental values.

Farm Slough



The farm slough is another intertidal area which is highly sensitive environmentally. The area also provides excellent opportunities to appreciate the history of the area. No development should occur within the area because the birds and other wildlife are sensitive to human and dog intrusions, particularly during the fall and spring migration periods. The best location for viewing this area is Oyster Factory Point.

Oyster Factory Point



Oyster Factory Point is the location of the former oyster factory. Remnants of the piles still exist, extending across the farm slough. This vantage point offers views across the intertidal marsh and north over Mud Bay. Opportunities exist to upgrade the walking surface and to provide interpretive signage.

Grassy Pod

The grassy pod is one of four original areas enclosed by dykes. The dyke around this area is still intact and the grasses are well established. As such, this is a good area for informal viewing of Mud Bay and Farm Slough. High levels of use should be discouraged because of the proximity of this area to sensitive environmental resources.

Railroad Edge



The railroad edge is a large embankment which encloses the park and limits access to the east. One informal trail exists from the tracks into the park. The primary access to the east is through an underpass near the water. This is proposed as a future pedestrian access from the marina. When that connection occurs in a formal way, it will be necessary to upgrade the connection to the dyke within the park. If the railway track is ever converted

to a trail (as some have suggested), it will be necessary to provide a connection from that trail to the park.

Community Gardens



The community gardens are a well established facility. There are no compelling reasons to change this portion of the park. Access to the gardens is via a gravel road on the southeast border of the park. The road is gated, and only members of the community gardens have a key. There is an interest in improving the surface of the gravel road to make it better for pedestrian, bicycle and wheelchair access.

Old Field



The old field outside the community gardens is characterized by two different types of vegetation. The southern part has 25 to 50 cm high grasses and a ground thatch up to 15 cm deep. These characteristics provide ideal breeding conditions for small mammals such as voles. The northern section is comprised of tall dense reed canarygrass, which typically supports few small mammals. Opportunities exist to renovate the northern section and develop

habitat that will support small mammals and hedgerows to support passerines, raptors and other birds of prey (per Summers 1997).

Open Sandy



The open sandy area is very barren because there is very little organic material in the soil. There are opportunities for habitat enhancement in this area.

Scrub



The scrub area is dominated by large shrubs and trees. Visibility is limited from within the area and there is a large amount of broom. This area could benefit from thinning to improve visibility, and revegetation with more appropriate species.

Lush Scrub



The lush scrub area is unique because of the moistness and the enclosed character of the landscape. The vegetation and the path through this area should be protected.

Cottonwood Glades



The upland community in this area is dominated by large cottonwoods. These provide an interesting character which is a contrast with the rest of the park. The trees also provide a buffer for adjacent residents. The primary opportunity in this area is protecting the cottonwoods and the habitat to the degree possible.

Clubs



The club area is a developed landscape which has evolved over time. The impression of the area from

the public portion of the park is small buildings in a sea of gravel.

There are opportunities to improve the character and functioning of this area



by defining walkways and bicycle parking, and adding plantings to define spaces, provide shade, and add interest and greenery.

Gravel



The large gravel parking areas are also lacking in spatial definition and character. Delineation of the edges and addition of plantings could significantly improve these areas. The gravel extends onto Blackie Spit quite far. Although people enjoy the ability to park and view the ocean, many feel that more of the spit should be reclaimed for quiet pursuits and environmental resources.

Grass



Dune grass area, open, backdrop to beach, needs protection, provide access paths to avoid trampling of grasses

Beach

The beach within the park is relatively small. As such, it is a place where people sometimes find seclusion, and where there are conflicts between different types

of users at the busiest times. The most important needs are the exclusion of motorized craft, and improvement of the ramp for use by small non-motorized boats.

Wickson Lots



The landscape in the Wickson lots is very stark because of the raised mowed grass and lack of any other vegetation. There is a significant opportunity to develop a park-like attractive landscape in this area which can provide viewing and picnicking opportunities and shade. Because it is the only part of the park with services, the opportunity also exists to develop washroom facilities in this location. Other possibilities for this area include an interpretive centre

and/or concession building, change rooms and shower facilities, or the development of a node or gathering spot (e.g. deck/patio or seating area).

Pier



The pier at the end of Wickson Road is an important activity node. It provides excellent viewing opportunities and the chance to be over the water. During the planning process for this park, a float connected to the pier was removed. The Steering Committee expressed an interest in having the float replaced.

4.0 MASTER PLAN

4.1 Vision and Objectives

The vision for Blackie Spit Park is as follows:

 To protect the long-term environmental integrity of Blackie Spit while providing opportunities for community and nature-based uses.

The objectives for the park are to:

- provide a park with the predominant character of a "nature park",
- protect environmentally sensitive resources such as special habitats; unique vegetation;
 birds, other wildlife and fish species; and heritage and cultural resources,
- provide opportunities for passive recreational use, interpretation and education,
- support community uses within the park, including the swimming club, sailing club and community gardening activities, and
- organize facilities to better define use patterns and to minimize the potential for conflicts between facilities/activities and natural resources.

4.2 Program

This section outlines the activities and facilities that have been identified as desirable program elements.

Activities

The identified activities are:

- walking and general viewing
- bird-watching and wildlife-viewing
- · beach activities and informal picnicking
- cycling
- leashed and unleashed dog walking
- non-motorized boating
- swimming
- tennis
- organized activities and tours
- community gardening
- fishing and crabbing
- interpretation and education

Facilities

The identified existing and future facilities are:

- swimming club with pool, clubhouse and tennis courts
- sailing club
- community gardens
- pier
- trails
- parking
- signage (interpretive and directional)
- · viewing facilities, e.g. deck, bird blind
- benches
- washroom facilities
- garbage facilities
- access control as required e.g., fences, bollards, rocks
- boat ramp for small non-motorized boats
- habitat features, e.g. bird houses, eagle perches

Additional potential future facilities are:

- information kiosk or interpretive centre
- temporary concession carts

4.3 Plan Features

The Master Plan is illustrated on Maps 5 and 6 and on Sketches/Sections. The following are the primary features of the Plan:

General

- Provide split rail fencing and explanatory signage around sensitive habitat. Simplify the fencing and signage currently in the park.
- Develop a comprehensive signage plan for the park. This will include directional signage, regulations (e.g. dog management plan, no motorized watercraft on boat ramp, no horses), and interpretive signage (explanations of bird and fish habitat, vegetation enhancement).
- Use limestone or gravel for major site trails, including the link between the park and Crescent Beach.

Parking

- Remove some parking from the spit and add the equivalent amount of gravel parking area southeast of the existing parking lot near the swimming club. Reuse the gravel from the removed lot to build the new one.
- Delineate parking aisles and edges of the parking lot with wood rails and rocks. Add "islands" of trees and shrubs within the parking lots for visual relief and to delineate parking spaces.

Restore existing parking area being removed by adding growing medium, grass and trees.

Wickson Property

- Provide a building with washrooms, showers, and change rooms, with optional interpretive centre expansion. Allow for a viewing deck facing the water. Because of the prominence of this location near the entry to the park, the building should be attractive and relate to the character and landscape of the park. The building is located on the Wickson lots because this is the only portion of the site above flood level, a requirement for this type of building. The dominant finishing material should be wood. An appropriate architectural concept would be a Crescent Beach "cottage". If a decision is made to install a "basic" park washroom building, it should be relocated to an edge of the parking lot where it will not be so obvious.
- Plant trees on the remainder of the site, including trees which could eventually serve as "eagle trees".
- Add 50mm thick organic growing medium to the surface of the Wickson area and reseed with a low maintenance grass.

Link to Crescent Beach

- Provide a major path from the Crescent Beach Promenade to the end of the parking lots near the spit.
- Provide an enhanced terminus at the end of the promenade including an information kiosk/gazebo, seating and trees.

Swimming Club and Sailing Club

 Keep existing facilities and do not provide for expansion. Provide plantings (trees, shrubs and ground cover), benches, bicycle racks, and better definition of pedestrian & bicycle areas.

Vehicular Park Entrance

 Keep the existing vehicle access from McBride Avenue only. Develop a sense of arrival at the entrance to the park with signage that relates to the Blackie Spit character.

Boat Ramp

Extend the boat ramp farther towards the water.

Spit Trails

 Retain the two trails on the spit (i.e. one major and one minor). Relocate the south end of the minor trail to a higher elevation above high tide.

End of Spit

 Provide a small interpretive feature (e.g. paving feature at grade identifying mountains in view). This may be a public art project.

Old Dykes

• Retain the southern old dyke and existing trail for public access as it is. Allow the northern dykes to naturalize (i.e. do not maintain them).

Site Trails

- Maintain existing trails except for those on the northern dykes.
- Develop a hierarchy of trails and offer public access throughout the site, including extension of the Crescent Beach promenade.
- Provide a major trail access under the railroad tracks near the marina.
- Improve the road surface near the community garden for trail use.

Lookout Point (old Oyster Factory Site)

• Keep the area in its current state with a minor upgrade of the walkway (i.e. loop trail) and small interpretive feature.

Vegetation Enhancement and Management

The vegetation in the park is primarily the product of undirected naturalization of a disturbed landscape. In some areas, it could be significantly improved to benefit habitat and public use (see Figure 2). The vegetation management recommendations have been adapted from the work of Ken Summers and are illustrated on Map 5. They are summarized as follows:

- Old Field Habitat Renovate the northern section of the old field by removing the reed canarygrass, installing appropriate growing medium, seeding with pasture grasses and planting with native vegetation.
- Hedgerow –Remove broom and other invasive species, add organic amendments to the soil (commercial compost or biosolids) and plant low-growing native species to improve bird habitat.
- Woodlot In some of the areas which already have trees, remove broom and other
 invasive species, add organic amendments to the soil (commercial compost or biosolids)
 and plant conifers and additional deciduous species to diversify the structure and species
 richness of the existing woodlot.
- Native Tree and Shrub Clumps In the scrubby area and in some sparsely vegetated
 areas, remove broom and other invasive species, add organic amendments to the soil
 (commercial compost or biosolids) and plant pockets of native shrubs with some small
 deciduous trees to diversify the structure and species richness (and to increase visibility
 in the scrubby area). Figure 2 provides an illustration of potential results.
- Wetland Enhancement In the drainage ditch between the dyke and Dunsmuir Farm, plant wetland species along the north bank near the water line to provide cover and food for waterfowl, muskrats and other aquatic wildlife.



Before



After

Figure 2: Example of Vegetation Enhancement

Broom Removal – Remove broom on Blackie Spit. It is desirable to remove broom
everywhere on the site, but resources and labour may prohibit that. The areas identified
in this section are the most important locations for broom removal, but if possible, efforts
should not be limited to those areas.

4.4 Management Guidelines

This section outlines a set of proposed management guidelines.

Dog Management Plan

Management of dogs is a critical issue in this park. A key recommendation is to implement and provide public education regarding the Dog Management Plan (refer to Map 7). The intent of this plan is to provide options for dog owners, while also protecting environmental resources. A summary of the plan is as follows:

- No dogs allowed in the environmentally sensitive areas.
- Dogs allowed in the central part of the park without leashes on a one-year trial basis.
- Dogs in all other portions of the park to be on leashes year-round.
- Dogs not allowed on the beaches in the summer (June 21 to September 21).

Other Management Recommendations

- Do not allow horses into the park.
- Bikes shall be allowed only on the major pathways.
- Promote non-motorized boating, and prohibit launching of motorized watercraft (including sea-doos) within Blackie Spit Park.
- Encourage local environmental/naturalist groups to be involved in broom removal and to undertake other portions of the vegetation management plan.
- Develop a Blackie Spit Management Committee to monitor the implementation of the plan and provide advice on long-term management. Request that the Management Committee review the dog management plan a year after its implementation.

4.5 Construction Staging and Cost Estimate

The following is a preliminary schedule of construction works and related costs. These costs are order-of-magnitude costs only, and will require refinement during preliminary and detailed design stages.

Possible Phase 1 Improvements

 Old field construction Washroom and shower facilities Wickson lots landscape Parking lot removal and landscape restoration 	\$250,000.00 \$ 20,000.00 \$ 20,000.00
New parking lot	
Fencing installations Total	
Possible Phase 2 Improvements	\$380,000.00
1 Ossible i nase 2 improvements	
Park entry signage	\$ 10,000.00
Parking lot refinements and landscape	
Swimming club entrance enhancements and landscape	
Promenade pathway construction	
 Construction of kiosk/gazebo and seating at the end of the promenade. 	
Vegetation enhancement (first part) Total	
Possible Phase 3 Improvements	
Improved boat launch	
Public art at end of Spit	
Trail upgrades	
Site signage	
Vegetation enhancement (second part)	
Total	\$210,000.00

APPENDIX A: RESULTS OF PUBLIC PROCESS

Public Meeting Questionnaire Responses

The following are the results of the questionnaires received from the public open houses. Comments are provided verbatim. Where more than one person said almost the same thing, the number in brackets indicates the number of responses.

What is your overall response to the draft park plan?

0 Strongly Opposed	1 Opposed	1 Neutral	13 Support	10 Strongly Support
1 Conditional Support	0 Not Sure			

Please provide comments on your overall response to the draft park plan?

- Very pleased with emphasis on maintaining natural untouched environment for most of area.
- This plan shows that all interest groups have been included in the planning process good work!
- This should help to preserve this very important wildlife habitat.
- Pleased to see dog control and reduced parking near spit end. Minimize # of trails.
- We are very pleased with the plan and we eagerly await its inception. Thank you to the committee and everyone involved for creating a plan that includes all interests and will help to protect the birds and their habitat.
- Great stuff.
- It addresses all the issues re: human and dog impacts on the wildlife and their habitat. Lets get it done! Great Stuff.
- Please keep as natural as possible with the birds being given the most consideration.
 The float should be retained as an integral part of pier and park. As well as recreational use.
- Overall I think it considers successfully all the aspects of the park. Though I wouldn't use
 it myself, I think a small picnic area with picnic tables could be incorporated on Wickson
 property. There is no picnic area at all at Crescent Beach.
- The "NEW PARKING" should be an extension to the "EXISTING PARKING" up to the end of the tennis area or even longer. There is hardly any vegetation. The new southern path starting in the middle of the EXISTING PARKING and ending at the trail should not be at all. It goes through a very bushy area where lots of the animals are living. There live herons, racoons, ducks and others. It was agreed to leave the park natural as is.
- We offer our thanks to all the people who have worked so hard to prepare this park plan.
 Blackie Spit Park is unique in the entire Lower Mainland and a wonderful place to enjoy nature!
- I approve of the plan provided you do not alter the appearance at Blackie Spit. Plant a
 few trees or seed some grass but leave it much as it is now. I walk there every day and
 enjoy it as it is.
- I agree with proposed plan on the condition that dogs on leashes with their "responsible" owners will be allowed to walk at all times of the day, all year long around the whole

perimeter of the Crescent Beach area including the Dike trail along the ditch, the trail across the dredge land and most importantly the park area which includes the promenade walkway along the "front" beach. Leashed dogs are not a threat to the environment or wildlife and are a valid form of recreation which should not be discriminated against. Just as smokers should be required to put their cigarette butts in the garbage cans and not the sand when children play; dog owners should clean up dog waste.

- I think it is good
- I do not think the "NEW" parking lot should abut the property on McBride (3116)
- This provides a framework for an appropriate development of the park
- My overall response to the Park Plan is Support, but I would sure like to see the Dyke Trail (the Trail abutting the farms or leading to drainage valve) continued over present pilings
- We think the most important emphasis should be on maintaining and enhancing the natural environment, giving birds, mammals and plants priority.
- I agree generally but question dogs off leash while at the same time recognizing the present bylaw cannot be enforced. It depends on the dog owners. Some are responsible and some not. The winter off leash area would disturb the birds. The summer off leash area is a compromise but Crescent Beach people aren't going to go to Dogwood. Leave the float off the pier.
- NO JET SKIS. If you are going to upgrade the boat ramp do it in a way that benefits the sailing club and not motorized boats, jet skis etc.
- Let's ban sea doos!
- Don't get rid of the Scotch Broom. Let's ban sea doos!! Way too noisy!!
- I would like to see some discussion regarding the banning of "Personal Watercraft" in these waters, especially with the proposed upgrading of the boat ramp.
- Here is the proposed walkway (photos provided with submission). In these blackberry
 bushes are living and feeding from (in fall) so many birds. Even in the grassy area on the
 ground are living many birds. Bushes for birds. Why not extend the old parking place?
 There is plenty of space directly behind the old parking place. (They provided sketches of
 two options for a parking lot.)
- Keep the floating pier attached to the free-standing pier. I encourage Parks Board to be given maintenance funds to keep the float there. Now that I think about it, the ocean view parking that we provide on the spit is very helpful for elderly people.
- I am opposed to the proposed changes to the usage of the Spit. I am specifically opposed to the "Dog Management Plan". Parking lots do not make adequate off-leash areas, particularly if they are paved. The plan also proposes to segregate the Spit into specified use areas and indicates that fences may be installed. Please do not waste my tax dollars on the installation and maintenance of these unnecessary obstacles. "Let it be". Blackie Spit is fine the way it is. There is room for unrestricted access for everyone down there. We do not need more rules. What is needed is more tolerance on the part of small, well organized and vocal self-interest groups who are determined to impose their values on the majority of us other responsible, taxpaying users.

Do you have any specific comments on any of the following items?

Vision and Objectives:

- Good (4)
- Well worded

- The park is geographically small area for too many activities or changes Support activities that protect habitat flyway with not too much structure.
- As a birder and a dog owner, I was pleased you provided for dog areas. Dog owners are after all about 50% or more of the people who use the area.
- Excellent!
- Maybe a lookout point at the end of the Spit.
- Is there truly unique vegetation on the Spit?
- End of Spit Why Bother, Leave as is
- Agree with vision
- I agree the vision is ok
- I agree with the objectives
- Good keep the wilderness as much as possible. "in wilderness is the preservation of the World" – Ralph Waldo Emmerson

Activities:

- Good (3)
- Good plans for dogs!
- Keep dogs on the west side of the trail out to the interpretive feature.
- Concerned about leashed dogs no enforcement is always a problem
- Re: dogs impose a stiff fine to [can't read remainder of sentence]
- I do wonder if the areas for sailing club, swimming club and community garden is too large an area for exclusive use of a small percentage of the users of the areas.
- The new site around the Wickson Place needs some beautification.
- Super!
- Walking and cycling, bird watching, leashed dog walking
- O.K.
- Non motorized boating I presume jet skies which should not be allowed anywhere
 in the village waterways or river. Organized activities and tours NO enough
 activities, etc. already
- Horses and horseback riding should be prohibited at any time.
- Reduce dog area
- Banning Jet-Skis would also be beneficial
- Glad to see that the spit stays essentially passive use. I would very much like to see an interpretive building attached to the proposed bathrooms.

Plan Features:

- New parking area south of existing may impact on residences can it be moved to extend east of existing by swim club?
- Interpretive info could be given out at parking area. Leave the spit for the wildlife. Read up at home!
- I hope the imposed trails will not be too wide. The proposed planting to make treed areas could be a security risk for walkers
- Regarding the path and dog walking area, please contact Argo at 538-6758.
- We object to the plan where it shows trees instead of parking near the fence; where
 parking is presently available; the loss of this space will be detrimental to those that are
 handicapped and elderly, some of whom cannot walk any significant distance. We are
 regular visitors to the Blackie Spit Park and see many elderly and handicapped people

who use this area to park in order to be close to the water's edge. Please reconsider and maximize this parking area for the above stated reasons.

- Move the parking area to south of swim club
- Washrooms. Yes! upgrade all dykes, more garbage cans.
- Pier, ramp and float should be retained, but upgraded
- Overall plan features are ok
- Retain the dock attached to the pier
- I disagree with the promenade continuing after it leaves the former Wickson property. The beach should look as natural as possible on the spit.
- I do not support the proposed habitat enhancement in the area where the beach grasses and other rare plants grow.
- I am in agreement with the draft plan but have a concern about the habitat enrichment which I explain below
- I support plan features
- Good
- Delighted to see the dog management plan will enforcement happen? At present people let their dogs do anything in the spit and no one stop them, despite the signs.

Management Guidelines:

- Like the restoration idea.
- Maintain vistas. Maintain and enhance any wilderness. Shore usage habitat for bird life
- [can't read beginning of sentence] technology to make this stopover for migrating (& resident) birds idyllic. No condos bordering this park. Thank you
- I think the planners should keep in mind at all times that this area is used by people from all over Surrey and the Mainland. All of those people should be considered, not just local residents.
- Great!
- Leave well enough alone.
- I believe that dogs should be allowed anywhere on a leash
- Dogs The "Strictly Enforced" signs are seldom enforced. Dogs run free early a.m. in the summer and the owners do not pick up after them. Winter months are better as not as many visitors! White Rock has it under control. Also no horses trotting amongst people, dogs, swimmers. Etc. – Trails for horses are in existence at top of hill. As is a dog park.
- Horses should be prohibited at all times.
- Respond to the majority views
- I believe that the scotch broom should not be removed since it is good looking and the birds like to eat the seeds. Perhaps controlling it would be better.
- Please keep in mind safety aspects for anyone walking, jogging, cycling alone in the
 park. Last year an attack on a high school girl happened in the afternoon when she was
 walking alone on 152nd Street past a wooded lot. She was dragged into the bushed and
 murdered. Therefore, I am requesting that the landscaping of Blackie Spit be done in
 such a way as to optimize the safety for people using the park (i.e., trees and shrubs that
 do not obstruct visibility).
- I agree with everything here but I have concerns about the soil enrichment harming the long beach grass that grows there. This kind of grass isn't seen much anymore and it would be a shame to lose it. I also hope the signage won't be overdone so that we no longer feel we are in a natural environment. I agree with the dog management plan.
- I think you should not get rid of Scotch Broom. I support the dogs leash free area. I support signage.

- I like the fenced "no dog" zone, but I really cannot support the proposed changes to the Flora in the sandy Scotch Broom and Beach Rose Zone
- The Blackie Spit Preservation Society would be an excellent group to give some management power to, in addition to Surrey City management personnel.

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