PASS CREEK REGIONAL PARK MANAGEMENT PLAN









Prepared For: Regional District of Central Kootenay

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ACKNOWLEDGEMENTS

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DISCLAIMER

The content of this Management Plan was informed by public consultation/stakeholder involvement, the direction of a RDCK Project Resource Team, available background studies/data and by a brief ecological overview site visit of the park. Due to the inherent problem with brief overview inventories, additional work should be undertaken to garner a thorough species list and to comprehensively understand the potential impacts of the proposed Design Concept on the ecology of the park. Use of or reliance upon conclusions made in this document is the responsibility of the party using the information. The advice of relevant professionals (engineers, lawyers, etc.) should be sought. Neither Ecoscape Environmental Consultants Ltd., Juliet Anderton Consulting Inc., project partners, nor the authors of this report, are liable for accidental mistakes, omissions, or errors, as best attempts have been made to verify the accuracy and completeness of information presented.

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Chapter 1 - Introduction

1.0 Introduction

Pass Creek Regional Park (Pass Creek) is a frequently visited and picturesque park northwest of Castlegar, British Columbia within Electoral Area J in the Regional District of Central Kootenay (RDCK). Norns Creek (aka Pass Creek) runs through the 35.2 hectare (86.9 acre) park, and in summer months visitors can expect the park to be lively and active with people swimming, camping and hiking on upland trails. Annual community festivals are celebrated at the park and the park's sport fields are host to organized sporting events.

The park and surrounding area is also vitally important to wildlife. The park provides critical habitat for both rare and common species alike. Much of the park area is made up of a Black Cottonwood riparian ecosystem that straddles Norns Creek. Over the years, the footprint of this rare ecosystem has been reduced. Maintaining the integrity of the remaining habitat is critically important, not only for upland wildlife, but also to ensure the functionality of Norns Creek, which is thought to be one of the most important spawning tributaries to the lower Columbia River.

Pass Creek Road and Norns Creek physically divide the park into three distinct sections. Historically, the RDCK has directly managed the park area east of Norns Creek, including the campground, the sports fields, the swimming pond and some hiking trails. A number of community groups (e.g. Lions Club) have over time, contributed to the development of visitor facilities. In this section of the park, the RDCK contracts out the campground operations and the maintenance of the grounds. Since 1995, the west side of the park has been leased to the Pass Creek Regional Exhibition Society (PCRES). Exhibition facilities have been developed by the Society, funded through grants, event revenues and volunteer contributions. The northeast section of the park, east of Pass Creek Road remains in a natural state.

In 2014, the RDCK initiated the development of the 10-Year Park Management Plan for Pass Creek. The Management Plan is set out within this document and will guide future development, operations, investments and decision-making for the park (see Appendix A for a Summary Table of the Management Plan). The Management Plan was approved in the summer of 2015, following a presentation to the Castlegar and District Community Recreation Commission and the RDCK Board of Directors (TBD).

The Management Plan was prepared by a consulting team composed of Ecoscape Environmental Consultants Ltd. and Juliet Anderton Consulting Inc. – with direction from the RDCK Development Services and Community Services Departments. The development of the Management Plan was shaped by a number of factors, including:

- feedback gathered through the public involvement process
- current and historic park uses
- a site-specific environmental overview
- regional bylaws and provincial regulations affecting the use of the land, and
- research on best practices in park management

The Management Plan document begins with a brief description of the park and by identifying management challenges. Management challenges are described by a number of categories including: the environment, visitor safety and risk management, maintenance and operations, park aesthetics,



cohesion and utility, and regulation and enforcement. A long range vision and a set of 10-year management goals follows, providing direction to the priorities of the Management Plan and serving as a reference for future decisions that will be part of the ongoing operation of the park. The vision statement,

Pass Creek Regional Park is a diverse multi-use park, vital to the quality of life of the local community and beyond. The Park balances recreational uses that support healthy lifestyles, while protecting the long term sustainability of Norn's Creek and the park's ecosystems.

provides the essence of the Management Plan objectives.

Appendix B provides a summary of the Public Involvement Process, including participating organizations, questionnaire results and comment theme outcomes. Key identified themes included:

- develop the park as a valued community asset
- improve the quality of park facilities
- protect the park's natural environment and wildlife habitat
- maintain trails and enhance trail connections
- Support equestrian users

The park Design Concept provides high level direction to parking improvements and visitor staging areas on both the east and west sides of the park. It presents opportunities to provide a physical connection between the two sides of the park, both through a short-term pedestrian route along Broadwater Road and by a long-term option to connect the two sides with a pedestrian bridge over Norns Creek. The concept design looks to reduce environmental impacts by better defining the Norns Creek riparian setbacks and limiting future park development within this area. Other improvements include a formalized trail network and signage plan.

Beyond direction to physical improvements, the Management Plan also provides strategies and actions for the on-going operation and maintenance of the park. Management Zones have been designated to provide direction to the use and management of specific geographic areas, and recommendations have been set out to pursue important initiatives with other government bodies and interested organizations, as well as to provide avenues for continued public involvement.

The Plan concludes with a preliminary Implementation Plan, outlining the priorities necessary to implement the Park Design Concept and to undertake park operations over a 10-year period. Preliminary cost estimates are provided; however, it should be noted that figures will become more precise as additional information is gathered on implementation activities. The total estimated 10-year capital and operating costs for Pass Creek is approximately \$1,045,900. The Implementation of these works over the timeline specified is dependent on staffing capacity and on the availability of funding.

1.1 Park Context

1.1.1 Park Location and Description

Pass Creek is located north of Broadwater Road in the community of Robson, adjacent to Castlegar, British Columbia. The park is located in Electoral Area "J" and borders Electoral Area "I" of the Regional District of Central Kootenay (RDCK). The main parcel of the 35.2 hectare (86.9 acres) park straddles Norns Creek (aka Pass Creek). The creek effectively separates the west and east sides of the park. The main access to the east side of the park is from Parkside Road (from Broadwater Road and Bay View Road). The west side of the park is accessed from Relkoff Road (also connecting to Broadwater Road). A third undeveloped park area occurs northeast of Pass Creek Road. The park is designated as a Multiple Purpose Park, which is defined within the Official Regional Parks Plan (Bylaw 2044) as a park that accommodates a wide range of recreational opportunities.

The park falls under the governance of the Castlegar and District Recreation Commission. Outdoor recreation facilities on the east side of the park include a campground, a day use area, a swimming pond, beach, a baseball diamond and a field hockey/soccer field and trails. The day use area can be that can be booked for weddings, picnics or family events. The west side of the park is leased to the Pass Creek Regional Exhibition Society. Over the past 20 years, the exhibition facilities have been developed by the Society and the grounds have been maintained by volunteers. Events such as the fall fair, horse show, Bluegrass festival, and dog show are held annually at the exhibition grounds.

Land uses surrounding the park area are largely rural or residential in nature. The park area east of Pass Creek Road shares its eastern boundary with a large parcel of Provincial Crown Land. The park areas east and west of Norns Creek are bordered by public roadways and private land.

The park is within the asserted First Nation territories and consultation areas of Adams Lake Indian Band, Akisqnuk First Nation, Ktunaxa Nation Council, Lower Kootenay Band, Lower Similkameen Indian Band, Neskonlith Indian Band, Okanagan Indian Band, Okanagan Nation Alliance, Osoyoos Indian Band, Penticton Indian Band, Secwepemc Nation, Shuswap Indian Band, Splats'in First Nation, St. Mary's Indian Band, Tobacco Plains Indian Band, and Upper Nicola Band.



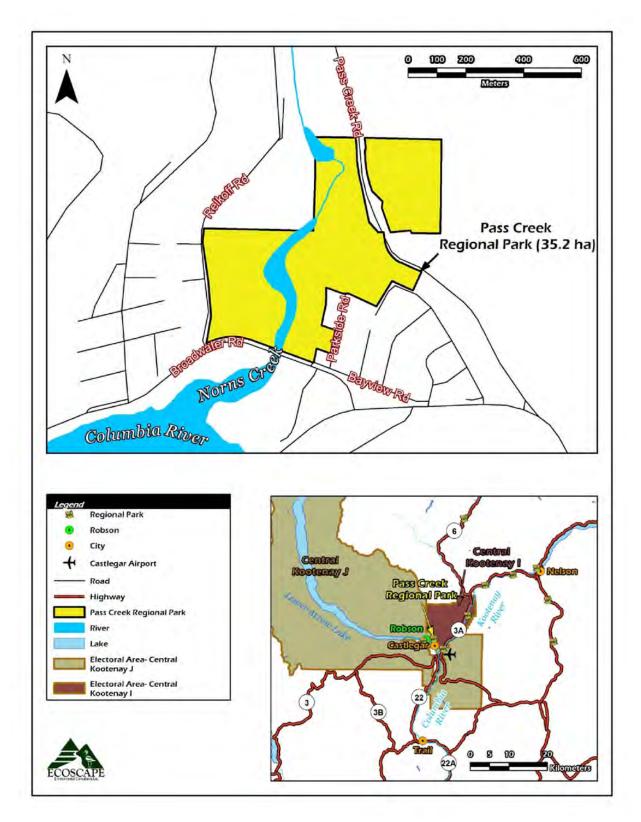


Figure 1.1 Park Location



1.1.2 Environmental Features

The following sections describe the environmental values of the park, including the current ecological condition, an overview of species at risk, ecosystems and environmental sensitivities. The information is largely derived from existing background information, online resources and from recent site visits. A detailed biophysical inventory has not been completed for the park.

Existing Ecosystems

Pass Creek Regional Park is generally characterized as a young to mature mixed woodland. There are nine coniferous trees species within the park, with the most prevalent being lodgepole pine, Western red cedar and interior Douglas-fir. Broadleaf trees include trembling aspen, paper birch, and black cottonwood. The park occurs within the Dry Warm Interior Cedar — Hemlock (ICH dw) biogeoclimatic zone which is described by the Biogeoclimatic Ecosystem Classification (BEC) program (Braumandl and Curran 2002). This zone typically occurs on the valley bottoms; has soils that dry out during the summer and a winter snowpack that is shallow and of short-duration.

Ecosystem Mapping has not been completed for the park; therefore, Sensitive Ecosystem Inventory (SEI) mapping classifications that were undertaken for the Slocan Valley have been applied to this park (Durand 2013) (Figure 1.2). Using air photo interpretation, the park was divided into nine ecosystem polygons, which are inclusive of ten different ecosystem classifications. The ecosystem types include young mixed and broadleaf forest, riparian (high and medium bench, fringe, and river) that are associated with Norns Creek, a modified pond, and non-sensitive areas defined as disturbed or permanently developed/modified. The non-sensitive polygons include the developed areas within the park such as the recreational features associated with the fairgrounds (e.g. outdoor equestrian ring, stables), the field hockey/soccer field, baseball diamond and portions of the day use area and campground.

Although many of the ecosystems within the park are largely intact with a well-developed, native shrub and herbaceous understory, weed encroachment was noted in several locations. Of particular note was an infestation of Japanese knotweed (*Fallopia japonica*) that exists on the park boundary along Relkoff Road. Knotweed is known to spread rapidly through root systems that extend up to 20 m from the parent plant and can be particularly threatening to creek ecosystems.

A danger/wildlife tree assessment of the campground was last undertaken in June of 2014. Seventy-two black cottonwood and paper birch trees were assessed. Forty four of those trees were classified as having moderate wildlife value and 28 as having high wildlife value. Of the 72 assessed trees, nine were recommended for removal as they posed an immediate hazard to campers. A wildlife tree is any standing dead or live tree with special characteristics that provide valuable habitat for the conservation or enhancement of wildlife. The value of a tree as wildlife habitat depends on attributes such as structure, age, condition, abundance, species and surrounding habitat features (Wildlife Tree Committee of BC 2008).

Aquatic Resources

Norns Creek (Watershed Code: 300-639200) flows south through the park, effectively separating the east and west sides of the park. Approximately 300 m south of the park boundary, Norns Creek drains into the lower Columbia River. Norns Creek has been identified as one of, if not the most important tributary stream to the Lower Columbia River. It is a major spawning and rearing area for Rainbow Trout, Mountain Whitefish, and Kokanee (Thorley and Baxter 2012). Other species that reside in the creek include Brook Trout, Longnose Dase, Torrent Sculpin, Shorthead Sculpin (recently downgraded from endangered to threatened) and Westslope Cutthroat Trout. An impassable waterfall occurs upstream of the park, so fish spawning and rearing is limited to the lower 3 km of Norns Creek, highlighting the importance of a highly functional creek corridor within the boundaries of the park.

Habitat enhancement of Norns Creek within the park was undertaken between 1998 and 2001 to improve fish habitat for spawning and rearing. Improvements included the deepening of channel areas, placement of large woody debris, dissipation of stream energy to promote deposition of spawning-size gravel, and installation of rip-rap and bioengineering treatments to improve bank stability (Zimmer 2000, McCleary 1999). Unfortunately, high flows in the summer of 2012 resulted in the loss of bank rip-rap and damage or loss to fish enhancement structures within the park (Audy and Zimmer 2014). The Okanagan Nation Alliance has applied to the Fish and Wildlife Compensation Program to replace lost geo-fabric and rip-rap along the bank and to repair or replace fish habitat structures.

The cottonwood riparian ecosystem that is associated with Norns Creek is thought to be one of the rarest plant communities within the province (Egan et al. 1997). It acts as a transitional zone between aquatic and upland coniferous ecosystems and provides critical habitat for a wide range of plant and animal species, and adds to the overall biodiversity of the park. Norns Creek also acts as an important conservation area and movement corridor for wildlife. Wildlife movement from the northeastern park parcel and higher elevation Crown land to Norns Creek was especially apparent near Pass Creek Road. There are numerous game trails that extend downslope over Pass Creek Road.

The Provincial Riparian Areas Regulation provides guidance for the protection and enhancement of riparian areas. The regulation recommends a protection and enhancement area (SPEA) width of 30 metres from a creek's high water level, based on creek characteristics, such as streamside vegetation potential, creek channel width, and if the creek is fish bearing and permanently wetted.

Species At Risk

The potential for Species at Risk was determined through discussions with local biologists, by provincial data inquiry requests, online sources (i.e., BC Conservation Data Centre (CDC)) and is based on the availability of habitats to support important life functions such as breeding, migrating, feeding, resting and hibernating. The ecosystems within the park provide suitable habitat and may support several Species at Risk, including Lewis's Woodpecker (*Melanerpes lewis*), Western Screech-Owl (*Otus kennicottii macfarlanei*), Western skink (*Plestiodon skiltonianus*), Yellow-breasted Chat (*Icteria virens*), Great Blue Heron (*Ardea herodias*), Shorthead Sculpin (*Cottus confuses*) and Bull trout (*Salvelinus confluentus*).

Mature black cottonwood within the park provide valued habitat for Western Screech-Owl, Lewis's Woodpecker and the Great Blue Heron. Screech owl nests are located in natural cavities of live or dead



trees and are strongly associated with riparian woodlands dominated by black cottonwood, water birch and trembling aspen (COSEWIC 2012). A known Western Screech-Owl occurrence exists within the Norns Creek corridor, less than 2 km upstream of the park (CDC 2015). Similarly, the Lewis's Woodpecker prefers open woodland also dominated by riparian woodlands. Lewis's Woodpeckers are known to frequent the park and the CDC documents an occurrence that overlaps the park. Bull trout use Norns Creek as a spawning destination and the Yellow-breasted Chat frequents the riparian understory. Western skinks have been documented within the Castlegar area and may also use habitats within the park.

Environmentally Sensitive Areas

Environmentally Sensitive Areas (ESA) were determined and classified based on ecosystem polygons identified through preliminary Sensitive Ecosystems Inventory mapping for the Slocan Valley (Durand 2013). The ranking of ESA was completed based on ecosystem characteristics, including riparian contribution and wildlife habitat suitability. Professional judgment was also used to evaluate each ecosystem polygon based on criteria including: provincial status (i.e., Red or Blue listed), rare and endangered species observations or occurrence potential, landscape condition (i.e., connectivity, fragmentation), successional status, regional rarity and relative biodiversity. Each polygon was assigned a value rating based on the above criteria, which reflect the relative habitat condition (i.e., higher scores represent higher value). Ecosystem polygons were ranked using the environmental sensitivity classes described below:

- Very High: These areas represent extremely high ecological value and typically contain rare or critical habitat areas for sensitive or at risk species, undisturbed or pristine ecosystems and habitats, and biodiversity hotspots (e.g., wetlands, old growth forest). They substantially contribute to the regional habitat function and connectivity and are highest priority for conservation.
- High: These areas contribute to the regional biodiversity and connectivity of the surrounding landscape but lack critical habitats for at risk species (e.g., riparian areas, mature forest). Development should generally avoid these areas to conserve the important features or to allow potential progression to the Very High category (e.g., mature forest becoming old growth). Encroachment into these areas should be compensated for by restoration in other areas to work towards achieving a no net loss of High value habitats.
- Moderate: Ecosystems of moderate significance represent disturbed habitats or fragmented features with the potential to return to High value through natural succession (e.g., young or fragmented forest, degraded habitats). Moderate areas contribute to the diversity of the landscape; however, their condition and adjacency may limit significant function. These areas will benefit from restoration and enhancement activities which will facilitate succession to higher value habitats.
- Low: These areas contribute little to no value with regard to habitat diversity and have limited potential for supporting significant wildlife (e.g., heavily impacted or disturbed sites). Development is typically focused on these areas based on their limited contribution to regional biodiversity and limited capacity to return to high value through



natural succession. These areas may be restored through intensive remediation and management practices.

The ESA composition of the park is depicted on Figure 2.1 – *Ecosystem Classification and Environmental Sensitivity*. Riparian ecosystems cover 38.7% of the park and were classified as having Very High ESA value. A substantial portion of the park area (33.5%) is composed of woodland and pond ecosystems, which were classified as having High ESA. The remainder of the park (27.8%) was classified as having Moderate ESA value. These areas are associated with park infrastructure, including parking area, the campground, the sport fields and the fairgrounds.

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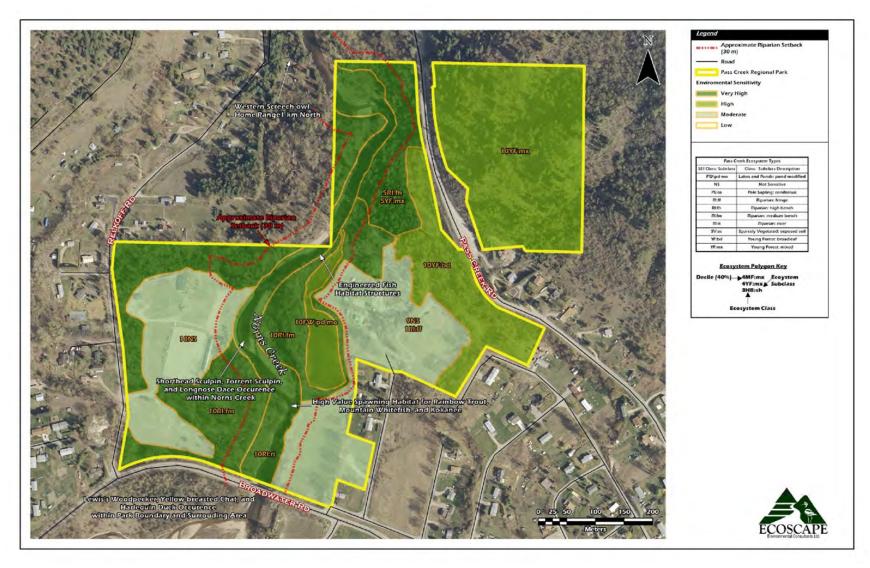


Figure 1.2 Ecosystem Classification and Environmental Sensitivity

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1.1.3 Park Infrastructure and Recreational Uses



Infrastructure and recreational features are summarized below for the eastern or western sides of the park. Figure 1.3 – *Park Uses and Existing Infrastructure*, shows an overview of the locations and types of infrastructure within the park.

East Side

Historically, the east side of the park has been developed and managed for recreation. It includes two active playing fields (baseball diamond and field hockey/soccer field), a campground, a swimming pond and beach, a playground,

day use picnic areas, parking area, park gates, hiking trails and interpretive signage. A park services building includes an office, a kitchen, showers and washrooms. The swimming pond is a big draw for locals and campers within the park, especially young families. The pond is the key attraction within the day use area. The campground and recreational facilities were originally developed by the RDCK in partnership with the Selkirk Lions Club. There are 30 camp sites, that include a fire pit, concrete pad and picnic table. The campground is contracted to a private operator.

West Side

Infrastructure on the west side of the park includes a bandstand, a concession, pit toilets and an 80×25 foot pavilion. A 12×80 foot building was also subsequently built to display horticultural exhibits during the fall fair and is used for storage during the remainder of the year. There are pit toilets with no septic system on site.

The west side of the park also includes an outdoor riding arena, visitor grandstands, horse stalls and an area cleared for periodic, event-based overnight camping. A day use area, consisting largely of grass, is available south of the arena. This area is used as parking for major events, including: the Fall Fair, the annual Bluegrass Jamboree, the annual Kootenay Kennel Dog Show and a regional horse show. Large storage/shipping style containers are also located at the north end of the property.

1.1.4 Existing Approach to Park Management and Operations

The park services are provided directly by the RDCK in combination with a variety of service delivery models such as contracts, partnerships, volunteers and in kind contributions. On the east side of the park the campground contract includes operating the campground and associated buildings, and also includes responsibility for maintaining the two sports fields – soccer field and the ball diamond. Weed control and fertilization is contracted to an outside service provider. RDCK staff book the soccer and ball diamond to community groups.

On the west side of the park ongoing maintenance activities include: lawn mowing and weed cutting, watering of grounds, building repairs and maintenance, setup and take down of events such as the fall fair, coordination of organizations that rent the grounds and security at exhibition grounds (i.e. opening and locking gates).

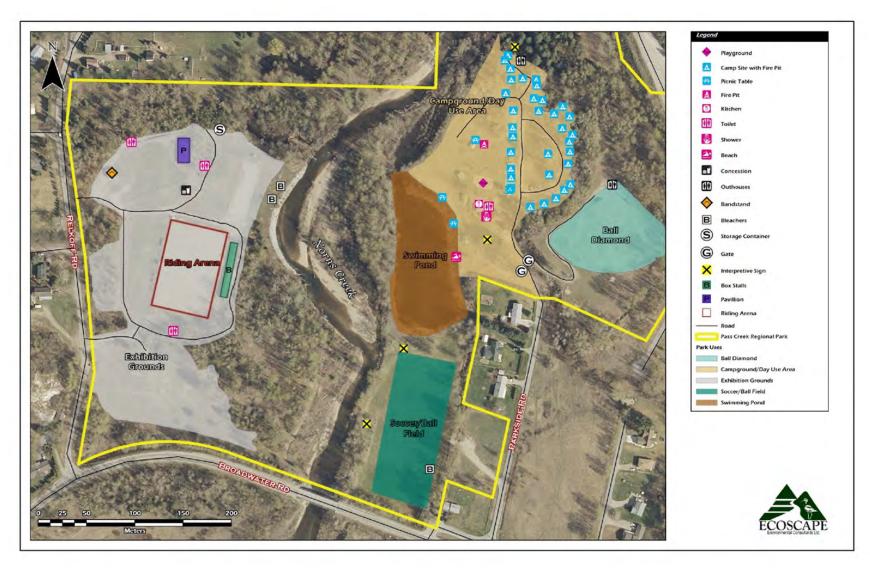


Figure 1.3 Park Uses and Existing Infrastructure

Chapter 2 - Management Challenges

2.0 Introduction

In the development of the Pass Creek Management Plan, a number of management challenges have been identified. The following sections provide a brief summary of some of the key challenges.

2.1 Environment

Removal of Riparian Vegetation and Encroachment of Norns Creek

There is an inherent conflict between managing the park as an active recreational destination (e.g. sports fields, large events, campground, etc.) and maintaining the park's natural riparian ecosystem for optimal creek functioning and as wildlife habitat. Community concerns were expressed regarding the destruction of a portion of the rare cottonwood riparian ecosystem for the development of horseshoe pits (Redfern 2011). Additionally, the necessary and regular removal of danger trees (typically black cottonwood and paper birch) within the campground, raises the need for a tree replacement program to ensure that the rare riparian habitat within the Norns Creek corridor is maintained over the long term. There is also a tendency for storage of equipment, vehicles and manure within proximity of Norns Creek.

Norn's Creek Bank Damage

High creek flows in the summer of 2012 resulted in the loss of bank rip-rap along the western side of Norn's Creek and damage/loss to fish enhancement structures within the main channel of the creek (Audy and Zimmer 2014). If the bank is not repaired and stabilized, it is likely that further bank loss will occur during periods of high flow (e.g. freshet) and may negatively affect fish spawning and rearing habitat. If climbed upon, damaged fish structures also have exposed stakes and wood debris that may be hazardous to park visitors. Signage exists that warns of the hazard and encourages people to stay off the structures.

Intensive Use by Park Visitors

Intensive recreational use by park users has the potential to affect the biological biodiversity of the park and the protection of key habitat known to support plants, vertebrates and invertebrates at risk of becoming locally or globally extinct. The identification of park management zones is important to focus recreational activities to particular locations and to maintain native habitats for species at risk.

Swimming Pond Impacts on Fish

There is an existing water licence (#27918, issued 13 March 1963) to divert water from Norns Creek to a swimming pond, and works were undertaken in the early 2000s to retrofit the pond to reduce impacts on fish (pers. comm., Cary Gaynor, RDCK). The pond has an inflow and outflow at the north end. This prevents fish from becoming trapped in the shallow, warm water of the pond. There is also a culvert at the south end of the pond that facilitates drainage of the pond after the peak season. Rainbow trout are known to frequent the diversion channel, and spawning redds (nests) were documented within the channel in May of 2015. There is also a sign on the foot bridge at the north end of the pond that indicates that kokanee also spawn within the channel. Because kokanee spawn in late summer and their eggs remain in the substrates until the following spring, flows within the diversion channel should be maintained throughout the year. Other considerations regarding the pond include the need to potentially retrofit the pond liner, as the pond does not hold water as well as it has in the past (pers. comm., Cary Gaynor, RDCK). A well may also be needed to recharge the pond or culvert may be needed

om A

to bring water down to the pond. There may also be a benefit of enhancing spawning gravels within the diversion channel. Although there is currently suitable spawning habitat for both rainbow trout and kokanee, there are areas within the channel that are predominately fine sediment and are not suitable.

Beaver Impacts

Resident beavers have been known to modify the diversion channel that directs flow from Norns Creek to the swimming pond, resulting in an altered flow regime and the need for regular removal of woody debris. A beaver management program is likely warranted, which may include trapping and/or the relocation of problem beavers, as necessary.

Invasive Weed Encroachment

The mixed use of the park leads to the potential for weed establishment and encroachment from recreational and agricultural areas into native habitat locations. Non-native plants are well established within the park. Active weed management is necessary to adequately control invasive plants.

Need for a more Formalized Trail Network

The establishment of new unsanctioned trails can result from park users taking shortcuts, rather than staying on designated routes. The shortcuts then get established, and it becomes difficult to discern between sanctioned and unsanctioned trails. There are several concerns with regards to ever-expanding trail networks. First, trail development often leads to the establishment of introduced and invasive plants. As the density of trails expands over relatively small areas, individual plant invasions can meld together; completely displacing the native plant community. Second, trails on steep sloped areas act to facilitate the movement of water and can become hotspots for down cutting and erosion. Finally, trails can also negatively impact local wildlife, often times resulting in a reduction of species richness and abundance.

Trails within the east side of the park are generally limited to a small, un-formalized trail network that extends north of the campground providing access to Norns Creek and the wooded area between the creek and Pass Creek Road. There are a couple of locations within this trail network where there are parallel, redundant trails; one of which should be decommissioned. Trail development on the west side of the park is very limited. There is one road that extends from the developed areas of the park to the edge of the creek.

Off Leash Dogs

Uncontrolled off-leash dogs can cause numerous problems including harassment of wildlife, disruption of ground level nesting birds, spread of invasive plants, trampling of native vegetation, degradation of aquatic ecosystems, and conflicts with other park users. The two biggest environmental concerns with off-leash dogs are the potential for conflicts with wildlife and the attraction of dogs to wetland areas. Deer, coyotes, marmots, ground squirrels, and snakes, to name a few, will attract dogs and cause stress to the wildlife and potentially lead to injury of either the wildlife or the dog. Dogs are also often drawn to creeks and other open water areas. These sensitive ecosystems are particularly at risk from erosion, compaction, trampling, and water quality degradation from dog activity.

Human/Wildlife Conflict

Human/wildlife conflict is defined as any interaction between wildlife and humans which causes harm, whether it's to the human, the wild animal, or property. Human-wildlife conflict is most likely to occur in late spring/early summer during dispersal and nesting seasons. Within the park, wildlife actively

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moves across Pass Creek Road between the northeastern parcel of the park and Norns Creek, and thus there is a high potential for conflict with vehicles. Education and signage that informs the public and park users of appropriate behavior when encountering wildlife may be key to reducing conflict. Other potential sources of conflict include the lack of bear proof garbage cans, presence of escapee fruit trees on the west side of the park and the fact that Norns Creek is an active spawning creek.

Encroachment and Dumping by Surrounding Residents

The park boundaries are not clearly defined and residential neighbors have encroached into the park in some locations. Activities include clearing of native vegetation, storage of personal items, and mowing of park vegetation. There is also the example of yard waste dumping that has resulted in an infestation of Japanese Knotweed, which can be detrimental to creek ecosystems.

Environmental Education

Pass Creek is an optimal park to host a wide range of environmental education initiatives. Characteristics such as proximity to city centre, existing developed areas within the park and a variety of existing ecological attributes make this park ideal for educating the public on the environment. Currently within the park there are a couple of informational signs highlighting the park's fish and tree species, but otherwise education in the park is largely absent.

2.2 Visitor Safety and Risk Management

Road Safety

There is currently no connection within the park across Norns Creek. The only access between the east and west sides is to walk or drive along Broadwater Road. The highways bridge on Broadwater Road has a pedestrian walkway but there are no connecting sidewalks along this road and it may be a safety concern, especially during times of high traffic.

Creek Safety

Norns Creek is a large enough creek that drowning and exposure are potential risks, especially for young children with little swimming experience. The swimming pond has been constructed to provide an alternative swimming location.

Hazardous Trees

The park includes black cottonwood and other broadleaf trees that may act as potential hazards, especially during periods of high wind. Large branches or whole trees can fall down and may be a threat to park users, especially overnight campers. The difficulty, however, is that many of these trees also provide valuable wildlife habitat. As an example, the Western screech-owl (*Megascops kennicottii macfarlanei*) is known to nest in black cottonwood, has been documented within close proximity to the park, and is a federally and provincially endangered species. Recommended mitigation measures include the regular monitoring of tree condition, removal of high risk trees and/or relocation of high risk campsites.

Public Safety During Large Annual Events

The large annual events that are held on the west side of the park attract thousands of park patrons. Recreational vehicles and camping are allowed to setup during these events, but parking also occurs

along the roads adjacent to the park. Getting in and out of cars along the active roadways presents some safety challenges.

2.3 Maintenance and Operations

Park Litter, Cleanliness and Dumping

Litter, including bottles and cans, is a challenge within the park, particularly during peak summer months when the volume of users is high. Despite the presence of garbage cans, garbage was encountered within the campground. Large items were dumped in the park (e.g. mattress, recliner, etc.) along Pass Creek Road.

Maintenance Resources and Aging Equipment

The park contains buildings, recreational infrastructure, and other access and service related infrastructure. Over time, buildings and infrastructure age, and are a challenge to upgrade and replace. On the west side of the park, for example, the bleachers have been noted as reaching the end of their life cycle and maintenance equipment, including a tractor with a front loader, has been identified for replacement. At least one of the pit toilets on the east side of the park, near the campground, was in dire need of servicing. A full infrastructure assessment has not been undertaken.

2.4 Park Aesthetics, Cohesion and Utility

As previously mentioned, the park is divided into three separate parcels. The east and west sides of the park are physically separated by Norns Creek, while the third undeveloped park area occurs northeast of Pass Creek Road. In addition to being physically separated, the east and west sides of the park have been operated for very different purposes. As a result, there is very little cohesion between the operations of the two sides and may require a re-evaluation of the terms of the lease agreement with the RDCK. Each side of the park evolved independently.

The west side of the park is typical of a private, rural property. There is no signage indicating that it is a part of Pass Creek Park and there are no established parking areas. A visitor to this side of the park might feel as if they are trespassing on private land. Yet, amenities within the west side of the park are truly unique. For example, the riding arena is available for equestrian users to practice techniques such as barrel racing or dressage, and the large bandstand and concession amenities make it an ideal location for outdoor summer concerts.

The east side of the park has at least three separate poorly defined parking areas off of Parkside Road. One parking lot services the soccer / field hockey field, another lot provides parking for the day use area and campground, and the last parking area is associated with the baseball field. There is no signage associated with these parking areas, and a park visitor may not even realize they are within Pass Creek Park.

In general, the existing signage within the park is poor. There is one park sign adjacent to Broadwater Road that tells park patrons where to turn to access the east side of the park. There are no park entry signs at either entrance on the west or east sides of the park, and there is no directional signage or park conduct signage. There are a few interpretive/informational signs that highlight the native trees and fish, as well as signs that warn of the hazards associated with the constructed fish habitat structures that occur within the main channel of Norns Creek.

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2.5 Regulation and Enforcement

Bylaw Staff – Currently there are no bylaw staff assigned to enforce park bylaws. Offences in the park include off leash dogs, alcohol consumption, unauthorized motorized access (damaging fields and parking areas) and littering/dumping.

Chapter 3 - Vision and Goals

3.0 Introduction

The long-term vision for Pass Creek Park explains the desired future condition for the park. The set of ten-years goals outline the purpose and direction of the Management Plan. The vision and goals were developed to focus priorities during the creation of the Management Plan and will be referred to as part of the on-going operation of the park. The outcomes of the public involvement process contributed significantly to the development of the vision and goals. Other significant factors in their development included environmental and other site-specific research, the current and historic park uses, and applicable local, provincial, and federal policy. Implementation of the vision and ten-year goals is achieved through the Design Concept, and through the Plan's direction to park maintenance and operations.

3.1 Long Term Vision Statement

The long term vision describes the aspirations for the park, beyond the ten-year scope of the Management Plan. The vision is designed to inspire and motivate those who have a role in the management and stewardship of the park.

Pass Creek Regional Park is a diverse multi-use park, vital to the quality of life of the local community and beyond. The Park balances recreational uses that support healthy lifestyles, while protecting the long term sustainability of Norn's Creek and the park's ecosystems.

3.2 Management Plan Ten-Year Goals

The Management Plan goals are designed to help those who have a role in the management and stewardship of the park to work towards achieving the vision. The goals have been developed with a ten-year scope in mind; however, many of the goals should be renewed in a similar form after the ten-year scope.

Goal 1 - Protect and Enhance Norns Creek Riparian Areas

Established a 30 metre setback to Norns Creek to protect and enhance the riparian areas. Future park development (e.g. permanent structures) will be limited within the setback area. Riparian enhancement will be the focus of this zone (native vegetation planting and restoration of disturbed sites).

Goal 2- Restrict further Encroachment of Recreational Use into Natural Areas

Establish Park Management Zones to guide future park development. Given the existing level of recreational use and disturbance within the park, the objective will be to limit and/or prevent further modification of natural areas.

Goal 3 – Maintain Critically Important Fish Habitat within Norns Creek

Actively monitor the creek corridor and park activities to ensure that the park is having a minimal impact. Possible threats include the introduction of fines via erosion from bank sloughing and trails, contaminated runoff from agricultural waste and use of herbicides, and removal of creek side vegetation. Reduce the potential for lost fish habitat by continuing to support bank rehabilitation work.

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Goal 4 - Protect Wildlife Trees while Considering Risks to Park Visitors

Define the monitoring program and signage for potential danger trees in the park and develop a Wildlife Tree Management Plan. Define the RDCK's approach to protecting wildlife trees and balancing tree protection with visitor safety. The plan should include the stratification of natural areas versus developed/activity areas and should include strategies to maintain high-value wildlife trees and plant future high-value trees.

Goal 5 – Identify and Improve Wildlife Corridors

Delineate areas along Pass Creek Road that are key for wildlife movement between the park parcels and install wildlife crossing signs.

Goal 6 – Monitor and Manage Invasive Plant Species

Work with the Central Kootenay Invasive Plant Committee to establish a monitoring and management program to reduce the overall impacts of invasive plants within the park.

Goal 7 – Enhance the Park as a Valued Community Asset

Undertake access, parking and signage improvements to create an inviting interface with public streets at the main entrances to the park. Create an inviting on-site parking and staging area (including park informational signage) on the west side of the park from the Relkoff Road access. Define a parking and staging area on the east side of the park, at the sports field entrance and undertake design improvements at the public parking areas adjacent to the Pass Creek campground and ball field. Signage at the parking and staging areas should welcome visitors and provide direction for moving about the park.

Goal 8 – Enhance Connectivity between the East and West Sides of the Park

Encourage the east and west sides of the park function as one by installing a pedestrian bridge across Norns Creek and by providing a safe pedestrian route along Broadwater Road. A pedestrian bridge may also allow for a more efficient movement of operational and maintenance activities.

Goal 9 – Seek Opportunities to Support Environmental Education

A bridge across Norns Creek could double as an observation platform to view spawning fish and may enhance the park as an environmental education destination. Consider opportunities to build an Environmental Education Centre within the park.

Goal 10 – Improve and Maintain the Swimming Pond for Public Recreation

Investigate options to restore and retrofit the swimming pond with a new liner to reduce water loss, reduce the need for greater water extraction from Norns Creek, and improve the ponds recreational value.

Goal 11 - Explore Options for the Campground

Given the inherent liability of the campground due to the potential for tree fall hazards, the campground operations should be assessed and audited to determine its community value. The area could potentially be repurposed for other daytime, lower risk community activities (e.g. Environmental Education Centre). Other options include the periodic closure or repurposing of the highest risk campsites.

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Goal 12 - Continue to Support and Enhance Community Events and Equestrian Uses

Explore ways to further develop the relationship with the Pass Creek Regional Exhibition Society and continue to support and enhance the community value of periodic and annual events on the west side of the park (i.e., Dog Show, Fall Fair and Agricultural show, Bluegrass Festival, Horse Show). Explore ways to further support the use of the park for equestrian purposes beyond the annual horse show and clinics.

Goal 13 - Undertake a Service Delivery Review

Undertake an overall Pass Creek Park service delivery review to assess and seek improvement on partnership agreements and contracts.

Goal 14 - Formalize the Existing Trail Network and Facilitate Inter-Regional Trail Connections

Conduct a trail assessment to identify where trail expansion would be beneficial, where trails should be decommissioned, and where trails should be better defined to provide connections between the park and other key community destinations.

Goal 15 - Support the Park as a Staging Area for the TransCanada

Consider signage that maps out inter-regional connections and how park trails align with the overall use of the TransCanada Trail. Build on the partnerships with Castlegar Friends of Trails and the Columbia Kootenay Trails Society to enhance trail connections beyond the borders of the Park.

Goal 16 – Assess and Re-define Existing Approaches to Delivery of Services

Park services are currently delivered through a combination of providers, including a campground contractor, the Pass Creek Exhibition Society (PCES) and through RDCK staff. Park goals may be better achieved through alternative approaches to services delivery, operations and maintenance.

Goal 17 - Maintain Park Facilities to Good Quality Standards

Conduct an inventory and quality assessment of park infrastructure and prioritize necessary park improvements.

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Chapter 4 - Design Concept

4.0 Introduction

The Design Concept is one of the features of the Management Plan. It includes the Plan's direction to the management and use of specific areas through the establishment of park management zones and the development of a conceptual design concept for access and appropriate levels of recreational use. The Design Concept also includes the physical improvements necessary to support the design.

Like other components of the Management Plan, the Design Concept was developed to support the implementation of the vision and the 10-year goals. It reflects the direction of the public involvement process, consultation with the RDCK Project Resource Team, an understanding of the environmental values and the existing pattern of public use within the park.

4.1 Designation of Park Management Zones

There are features within the park that have varying degrees of sensitivity and importance. Given this, the park will be managed in such a way that provides a greater protection for sensitive ecosystems and focuses recreational activities to less sensitive locations where there is an existing level of disturbance. To achieve this, park management zones have been established. Management Zones include: 1) Special Feature, 2) Intensive Recreation, 3) Park Services and 4) Natural Environment.

Figure 4.1 – Park Management Zones, depicts the location of management zones within Pass Creek.

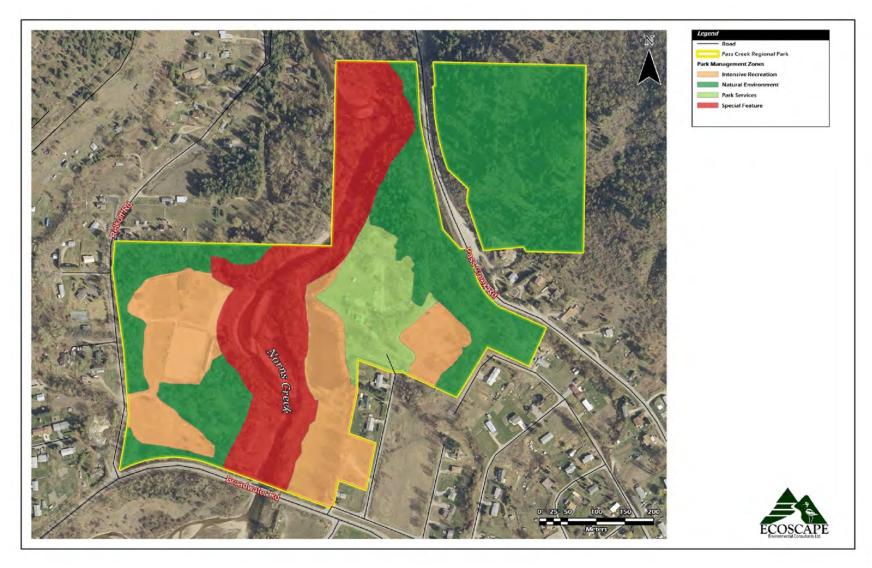


Figure 4.1 Park Management Zones

4.1.1 Special Feature

The Special Feature Zone consists of the Norns Creek corridor. Given the importance of Norns Creek as a tributary to the lower Columbia River, including critical spawning habitat for Rainbow Trout, Mountain Whitefish and Kokanee, the creek and the 30 m riparian setback has been set aside as a Special Feature Zone. The inclusion of the setback area within the Special Feature Zone highlights the significance of the surrounding creek side vegetation to the optimal functioning of the creek. The goal of the Special Feature Zone is to conserve the Norns Creek corridor, minimizing impacts from surrounding recreational uses and providing an opportunity to educate park users on the importance of Norns Creek.

The following considerations pertain to the Special Feature Zone:

- Ecological restoration should be the primary activity within this zone.
- Priorities areas for restoration include locations where creek side vegetation has been cleared or altered.
- Mature trees, including those that are dead and/or decaying (snags) should be left standing, unless they pose an immediate public safety hazard.
- To limit the need for hazard tree removal, trail development within this zone should be limited to a few narrow, single track footpaths.
- Recreation within this zone is limited to low impact walking and hiking on sanctioned trails only.
- Any unsanctioned, redundant trails within this zone should be decommissioned and any roads should be narrowed. Where unsanctioned access has degraded the natural condition, restoration efforts in conjunction with future access management should be implemented.
- Habitat enhancement opportunities (i.e. construction of nesting platforms, nest boxes, etc.) should be explored.
- The spawning channel function should be maintained.

4.1.2 Intensive Recreation

The Intensive Recreation Zone generally includes the baseball diamond, the field hockey/soccer field, the swimming pond area and the developed/cleared areas on the west side of the park.

The following considerations pertain to the Intensive Recreation Zone:

The areas within the Intensive Recreation Zone have been determined based on existing recreational activities and areas of disturbance. However, based on the intensity of use, it may be possible to return some areas within this zone to less intensive use. For example, the south field on the western side of the park is largely only used for parking during large annual events. Reducing the footprint of this field, by returning the eastern end of the field back to a cottonwood riparian ecosystem would be advantageous from an ecological perspective. This would require the establishment of parking alternatives during annual events. Alternative parking options may include parking on the east side of the park with either a shuttle service to the west side, or walking from the east side via a new pedestrian route over Broadwater Road or by a future bridge connection over Norns Creek. There is also a large open field on the east side of the park that may provide an

- optimal parking alternative. This parcel could be considered for future parkland acquisition.
- Despite the intensive recreational nature of this zone, it needs to be recognized that
 this zone occurs immediately adjacent to highly sensitive ecological areas and a
 'code of conduct' is necessary to minimize impacts. This concept applies not only to
 park users, but should also be considered in the maintenance of the grounds. As an
 example, the levels of use of potentially harmful chemicals, such as herbicides and
 pesticides, should be critically evaluated.
- Given that much of the Intensive Recreation Zone occurs within the natural flood bench of Norns Creek, it is important to maintain and restore adjacent vegetated areas wherever possible. The Intensive Recreation Zone should be evaluated to identify areas that can safely maintain native vegetation, including black cottonwood.
- Mature trees, including those that are dead and/or decaying (snags) should be left standing, unless they pose an immediate public safety hazard.

4.1.3 Park Services

The Park Services Zone includes the area on the east side of the park that is inclusive of the day use area, services for and the majority of the campground, and a day use parking lot. This location is intensely used for recreation, but has been identified as a Park Services Zone, as future park development or changes to service delivery, if deemed warranted, would likely occur in this area. The zone is already the hub for park operations, with a campground host, a kitchen and a washroom/shower facility.

The following considerations pertain to the Park Services Zone:

- Similar to the Intensive Recreation Zone, the Zone occurs immediately adjacent to highly sensitive ecological areas and a 'code of conduct' is necessary to minimize environmental impacts.
- Mature trees, including those that are dead and/or decaying (snags) should be left standing, unless they pose an immediate public safety hazard and are subject to the direction of the wildlife tree monitoring program.

4.1.4 Natural Environment

The Natural Environment Zone represents the remaining broadleaf and coniferous woodland that occurs throughout the remainder of the park. This zone is intended to protect provincially significant natural ecosystems for their intrinsic value, contribute to the park's biodiversity, and not be substantially influenced by recreational pressures. This zone includes the separate parcel that occurs northeast of Pass Creek Road. There are currently no sanctioned trails (only game trails) within this parcel and it is assumed that recreational development will be not be expanded into this area in the short term. A trail could be developed in the future to take visitors up to a view point that looks over the park and confluence.

The following considerations pertain to the Natural Environment Zone:

 Recreation within this zone is limited to low impact walking and hiking on sanctioned trails only.



- Any unsanctioned, redundant trails within this zone should be decommissioned.
 Where unsanctioned access has degraded the natural condition, restoration efforts in conjunction with future access management should be implemented.
- Native vegetation planting may be useful to speed up the process of trail decommissioning and to naturalize areas of enhanced disturbance.
- The Natural Environment Zone should be evaluated for non-native and invasive plant species, and a weed management strategy should be implemented.
- Mature trees, including those that are dead and/or decaying (snags) should be left standing, unless they pose an immediate public safety hazard.
- Habitat enhancement opportunities (i.e. construction of nesting platforms, nest boxes, etc.), especially for rare and endangered species, should be explored.

4.2 Permitted Uses

The management plan recommends the following permitted uses which will then be incorporated and regulated under the park regulation bylaw. Figure 4.2 - *Summary of Permitted Uses*, outlines the permitted activities that are slated to occur within each Management Zone.

Figure 4.2 Summary of Permitted Uses

	Management Zones			
Permitted Uses	Special Feature	Intensive Recreation	Park Services	Natural Environment
Parking		~	~	
Organized Sporting Events		~		
Organized Community Events / Special Uses*		~	~	
Hiking/Walking/Running	✓ *	~	~	~ *
Nature Appreciation	/ *	~	V	v *
Biking		~	V	
Geocaching	/ *	~	~	v *
Picnicking		~	~	
Cross Country Skiing	/ *	~	~	v *
Snow Shoeing	/ *	~	~	v *
On-Leash Dog Walking***	/ *	~	~	v *
Commercial Uses**		~	~	

^{*&}quot;Special Use" means any service, activity or event as defined and required by RDCK special use permit.

All other RDCK permitted uses/restrictions are consistent with the Regional Parks Regulation Bylaw No. 2173. Bylaws 2044 and 2108 provide additional information and guidance relevant to Pass Creek. Typical restrictions include:

- No alcohol
- No alteration to natural features
- Fires in designated areas only
- No fireworks
- No firearms
- No hunting/trapping
- Overnight camping in designated areas only
- Overnight parking in designated areas only
- No off-road vehicle use

^{**}Requires prior approval by RDCK. Permitted access is by foot only.

 $[\]ensuremath{^{***}}\xspace$ Due to the ecological sensitivities in the park, off leash dog walking is not permitted.

 $[\]checkmark$ *On sanctioned trails only.

- No dumping or disposal
- No smoking
- No littering

It should be noted that due to the ecological sensitivity of Norns Creek, dogs must be kept on-leash.

4.3 Proposed Design and Infrastructure Improvements

Figure 4.3 – Design Concept, depicts the proposed design concept. The specific elements of the various design features are further described in the following sections. The Design Concept has been developed to address the management challenges identified in Chapter 2.

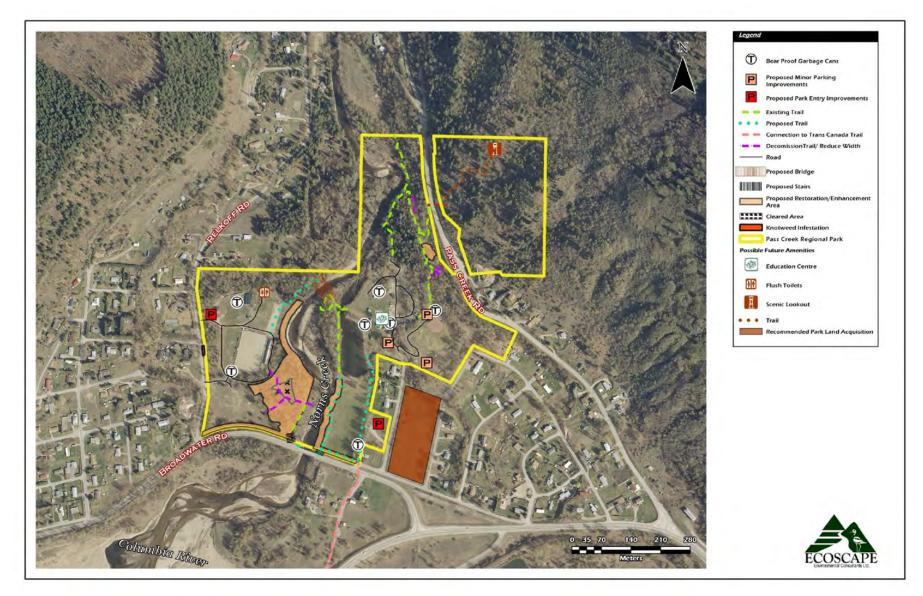


Figure 4.3 Design Concept

4.3.1 Improvements to Reduce Environmental Impacts

4.3.1.1 Recognize and Restore the Norns Creek Riparian Setback

Quality streamside habitat is essential for ensuring healthy fish populations, and given the importance of Norns Creek as a spawning tributary, park activities should respect the streamside protection and enhancement area, also identified as the Special Preservation Zone (Figure 4.1). Documented park activities within this zone that are potentially harmful include storage of equipment (e.g. vehicles and trailers), piling of agricultural waste (e.g. horse manure), native vegetation clearing and maintenance of the understory as turf.

The Management Plan identifies the following measures to reduce environmental impacts:

- No park related items should be stored within 30 metres of Norns Creek.
- No further park development (e.g. native vegetation clearing, construction of permanent structures) should take place within this zone without proper permitting, approvals and mitigation measures to reduce environmental impacts.
- Hazard trees that are removed from the 30 metre riparian zone are subject to the provincial tree replacement criteria outlined below.

Provincial Tree Replacement Criteria					
Diameter at Breast Height (DBH)	Replacement/Compensation Tree Requirements				
of Trees to be Removed	Quantity	Minimum Height			
DBH < 151 mm	2	1.5 m (or 4 shrubs)			
152 mm - 304 mm	3	1.5 m			
305 mm - 456 mm	4	2.0 m			
457 mm - 609 mm	6	2.0 m			
610 mm - 914 mm	8	2.0 m			
DBH > 914 mm	10	2.0 m			

Source: Department of Fisheries and Oceans Canada (2006), Ministry of Environment Lands and Parks (1996)

Activities within this zone should focus on ecological restoration.

Enhancement opportunities that will improve riparian function include restoring disturbed areas within 30 metres of Norns Creek, with a particular focus on the first 15 metres from the creek. Figure 4.3 – *Design Concept*, identifies proposed restoration and enhancement areas. They include:

- Native vegetation enhancement along the top of the rip rap slope along the western side of the park;
- Enhance and expand the cottonwood riparian ecosystem that exists southeast
 of the Intensive Recreation Zone and north of Broadwater Road on the western
 side of the park. This area has the largest contiguous cottonwood riparian
 ecosystem remaining within the park. It is an excellent location for black
 cottonwood replacement planting to offset hazard tree removals.
- Expand the cottonwood riparian fringe that exists between Norns Creek and the playing field and functionally connect this ecosystem with the fringe community that occurs west of the swimming pond.

- An additional area that occurs outside of the Special Preservation Zone is a clearing on the east side of the park. This location could also be used to offset hazard tree removals.
- Enhance the narrow strip of the remaining cottonwood ecosystem that separates Broadwater Road from the park. Planting within this area should occur on both the eastern and western sides of the park.

Enhancement of the cleared area currently used for horse trailer parking will result in lost parking for approximately twelve horse trailers. The access road along the south side of the horse stalls should be widened to ensure that trucks and trailers can drive by the horse stalls for easy drop off of horses and supplies. Festival exhibitors, especially those with livestock, should have priority parking on the west side so that they can ensure the safety and well -being of their animals. Additional parking should be identified on the east side of the park with an associated walking route or shuttle service to the west side.

4.3.1.2 Creek Bank Stabilization and Enhancement

High creek flows in the summer of 2012 resulted in the loss of bank rip-rap along the western side of Norn's Creek and damage/loss to fish enhancement structures within the main channel of the creek (Audy and Zimmer 2014). If the bank is not repaired and stabilized, it is likely that further bank loss will occur during periods of high flow (e.g. freshet) and may negatively affect fish spawning and rearing habitat. The Okanagan Nation Alliance (ONA) applied for and received \$30,490 from BC Hydro's Fish and Wildlife Compensation Program to work in partnership with the RDCK to replace geo-fabric and rip-rap along the west bank of Norns Creek and repair or replace fish habitat structures. Works are under underway and once complete, restoration of the native vegetation along the top of the rip-rap slope should be pursued (to a minimum of 15 metres). Recommended species include: lodgepole pine (*Pinus contorta*), Ponderosa pine (*Pinus ponderosa*), interior Douglas-fir (*Pseudotsuga menziesii* var. *glauca*), Douglas maple (*Acer glabrum*), black cottonwood (*Populus balsamifera* ssp. *trichocarpa*), trembling aspen (*Populus tremuloides*) and Western redcedar (*Thuja plicata*).

4.3.2 Improvements to Enhance Park Aesthetics, Recreation, Cohesion and Utility

4.3.2.1 Parking and Access

The main access to the east side of the park is from Parkside Road (accessed from Broadwater Road and Bay View Road) where two parking areas exist, one serving the campground and another serving the soccer and field hockey field. The west side of the park is accessed from Relkoff Road (also connecting to Broadwater Road). The Design Concept proposes access, parking and signage improvements at these main entrances to create an inviting interface as visitors approach the park, park their vehicles and become oriented to the park environment. From Relkoff Road, an inviting on-site parking area and visitor staging area (including park informational signage) should be created. Similarly the parking and staging area west of Parkside Road, at the sports field entrance, should be defined to provide a staging area to connect to park trails and provide parking for sporting events. Parking lots for the day use area and ball field could also be better defined to maximize vehicle parking. Hazard signage should also be posted in areas that are within striking distance of black cottonwood limbs. A Ministry of Transportation and Infrastructure Right-of-Way goes through the park's ball diamond. The RDCK should seek to acquire



this land.

No significant access improvements are proposed within the ten year plan to the third undeveloped park area at the northeast of Pass Creek Road. A low impact trail and signage could be considered to provide a route up to a lookout.

4.3.2.2 Swimming Pond

The swimming pond lacks the ability to retain water for a high quality swimming experience. Because the pond is central recreational feature of the park, it is recommended that a study be undertaken to assess opportunities to improve the quality of the swimming experience. Improvement may be needed to the pond liner. A well or a culvert may also be warranted.

4.3.2.3 Physical Connection between the East and West Sides of the Park

The east and west sides of the park are physically separated by Norns Creek. It is probable that park patrons visit one side or the other, but not both. The presence of the west side of the park for public use on a daily basis is also not well known or publicized. A physical connection between the two sides of the park will enhance the park's overall cohesiveness and functionality.

4.3.2.3.1 Pedestrian Access Along Broadwater Road

A short-term recommendation is to formalize a pedestrian walking route connecting the two sides of the park along Broadwater Road. To minimize vehicle / pedestrian conflict, two staircases should be constructed. One staircase should extend from the southwest corner of the soccer field up to Broadwater Road, with direct connection to the side walk along the bridge. The second staircase should be constructed at the southwest corner of the western park parcel (beyond the high water level of Norns Creek), and connect to a narrow walking trail that provides access to the festival activities. The specific locations of the staircases and trail should be determined with the goal of minimizing impacts to the environment. Signage should also be installed to inform park users of the pedestrian route.

The establishment of walking access between the two sides of the park may warrant a loop trail that will draw east side park users to the west side. Another added benefit is that festival attendees could park their vehicles on the east side of the park and safely walk to the west side, effectively reducing the need for parking encroachment into the Norn's Creek riparian setback area.

4.3.2.3.2 Pedestrian Access Via a Footbridge Across Norns Creek

Over the long-term, the feasibility of connecting the east and west sides of the park with a footbridge should be investigated. A bridge over Norns Creek would draw park visitors to the west side, it would encourage a sense of public space on both sides of the park, and it would provide a pedestrian friendly connection that avoids Broadwater Road. The bridge may also be instrumental in facilitating efficient movement of small maintenance vehicles to both sides of the park and it would provide a direct connection to flushing toilets on the park's east side. Finally, the bridge could double as an observation platform to view spawning fish. This, along with other park initiatives, has the potential to enhance the

park as a destination venue to educate local groups, including school classrooms and the public, on environmental education.



A main concern with the installation of a foot bridge (in addition to cost) is the potential impact that the bridge may have to the Special Preservation Zone and specifically to the Norns Creek Corridor. The location of the bridge must be carefully determined to both minimize the cost of construction (e.g. a narrow stream crossing point is more economical), and to minimize potential impacts to the environment. Preferably, the bridge should provide direct access to the

Intensive Recreation Zone on the west side of the park from a sanctioned trail location on the east side. Bridge/trail construction on the west side of the park within the cottonwood riparian ecosystem southeast of the Intensive Recreation Zone is not ideal, as this location has been slated for habitat restoration and as a location where replacement black cottonwood could be planted in lieu of those removed due to danger tree status. Figure 4.3 - *Design Concept*, depicts a recommended location for the bridge based on a rudimentary assessment. Cost implications are significant and it may be necessary to seek corporate and community partners to generate funds. The RDCK should undertake a study to explore and determine funding opportunities.

4.3.2.4 Trail Concept

A preliminary assessment of the existing trails within the park has been undertaken. However, trails and roads identified on Figure 4.3, are not necessarily inclusive of the park's entire trail network. A further refinement of Pass Creek trails is recommended. A document was created in the past to study the concept of a bridge. This document should be revisited and updated to include trails.

Trails within the east side of the park are generally limited to a small, un-formalized trail network that extends north of the campground providing access to Norns Creek and the wooded area between the creek and Pass Creek Road. There are a couple of locations within this trail network where there are redundant trails that should be decommissioned. Trail development on the west side of the park is very limited although there is driving access throughout, including one road that extends from the developed areas of the park to the edge of the creek. The footprint of this road, where it occurs within the riparian setback should be narrowed to a single walking path. There are no constructed trails within the north east park parcel although there are numerous game trails.

In addition to existing trails, Figure 4.3 shows preliminary locations where the trail network should be expanded. This includes defining trails adjacent to the soccer/hockey field and adding staircases (or switchback trails) to connect the east and west side of the park via Broadwater Road. To limit pedestrian time adjacent to Broadwater Road, two staircases (or switchback trails) should be

constructed to overcome the grade change between Broadwater Road and the east and west side of the park. One connection should extend from the southwest corner of the soccer field up to Broadwater Road, with direct connection to the side walk along the bridge. The second connection should be constructed at the southwest corner of the western park parcel to connect with a footpath that extends along the high water level of Norns Creek. The specific locations of these connections and trails should be determined with the goal of minimizing impacts to the riparian vegetation. Figure 4.3 also shows additional trail expansion that is necessary to connect the two sides of the park via a pedestrian bridge over Norns Creek.

Additional trail development within and adjacent to the park may be warranted to connect Pass Creek with other key community destinations and inter-regional parks. As an example, the TransCanada Trail extends along the Columbia River just south of the park, and Pass Creek is likely an optimal stopover for travelers using this trail. A partnership with Castlegar Friends of Parks and Trails should be pursued to formalize trail connections beyond the park's borders and to install signage that informs TransCanada Trail users of Pass Creek Park.

4.3.3 General Improvements

4.3.3.1 Bear Proof Garbage Facilities

To reduce the potential for human-wildlife conflict, the Management Plan proposes replacing all existing garbage cans with bear proof garbage and recycling bins.

4.3.3.2 Bleachers to View Events

Placement of additional bleachers along the soccer/hockey field may be useful to improve the spectator experience. The PCES has also indicated that the west side of the park is in immediate need of new bleachers for spectators to enjoy the larger annual events (.e.g. horse and dog shows).

4.4 Signage Plan

Increased signage in the form of entry, wayfinding, regulatory, informational/interpretive and boundary signs will be incorporated to further establish park rules and regulations and to enhance the user experience. Design standards for signage will be consistent with other RDCK parks.

The Signage Plan for the park includes, but is not limited to, the following:

- Welcome/Entry signs at the entrance to both the east and west sides of the park;
- Directional signs both outside and within the park;
- Regulatory signage within the day use and campground area;
- Interpretive/informational signs along a formalized trail network;
- Risk management signs for the creek and potential danger trees;
- Wildlife crossing sign on Pass Creek Road; and
- Boundary signs at key interface locations.

Figure 4.4 – Signage Plan, depicts the general locations of the identified signs.

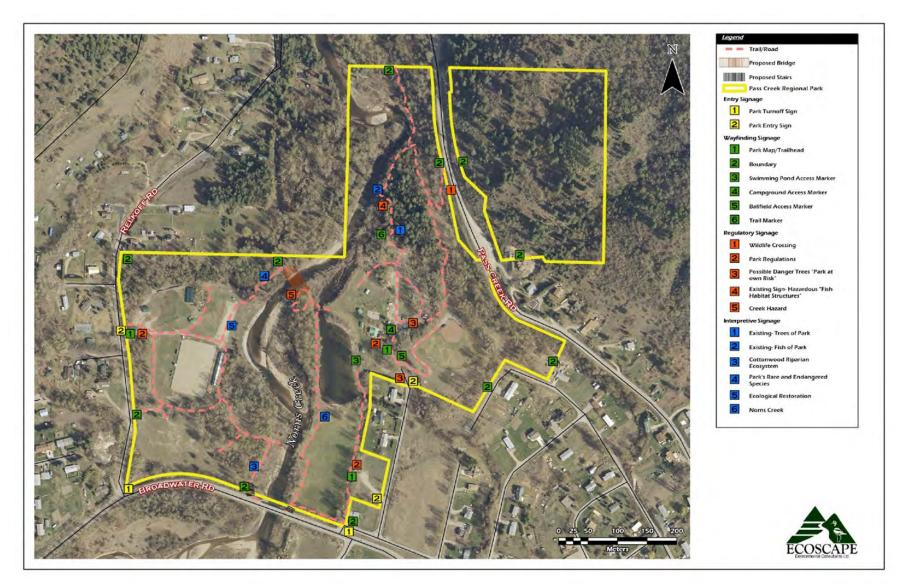


Figure 4.4 Signage Plan

Chapter 5 - Operations and Maintenance

5.0 Introduction

The operation and maintenance of Pass Creek will be centrally coordinated by the RDCK's Community Services Department in a manner that will be consistent with the vision, goals and overall direction of the Management Plan while the governance fall under the Castlegar Parks Commission. Maintenance activities will include a series of on-going responsibilities related to park facilities and infrastructure. Operational activities will include responsibilities such as issuing permits, enforcing bylaws, undertaking inspections, coordinating communications and monitoring plan implementation and the park's environmental health. One-time activities that fall within the scope of park operations (See Figure 5.1) will also be necessary as the Management Plan begins implementation. The responsibility of operations and maintenance rests with the Manager of Castlegar Recreation Complex and the Park Operation Supervisor. The Castlegar Recreation Complex provides maintenance support to other parks in the region, in addition to Pass Creek Park.

The Official Regional Parks Plan No. 2044, the Regional Parks Regulation Bylaw No. 2173, and the Kootenay-Columbia Rivers Official Community Plan Bylaw No. 1157 (Section 3.7 Parks and Recreation) contain policies that provide direction to regional park operations. The Parks Regulation Bylaw outlines the authority of the General Manager of Community Services, the Parks Operation Supervisor (or Authorized RDCK personnel) and members of the RCMP to enforce the provisions of that bylaw and issue tickets in accordance with the RDCK Municipal Ticketing Information Bylaw. Park operations and maintenance must also comply with the terms of local, provincial and federal regulations, policies and bylaws.

Public safety will be an important element of the RDCK's operational responsibilities. Although each visitor is responsible for his or her own safety while using parklands, the RDCK will be conscious to exercise its duty of care obligations.

The RDCK also places a high value on working with community organizations, interested individuals and park neighbours. The passion and enthusiasm of community organizations and volunteers could be employed for activities such as park patrols, visitor education, environmental monitoring, trail maintenance and invasive weed management. Community stewardship and community partnerships are addressed below to reflect the important role the community will play in park operations and maintenance.

The following sections of the chapter address key actions related to operating and maintaining the park and implementing the Management Plan. Figure 5.1 – Operational and Maintenance Responsibilities, summarizes the preliminary set of responsibilities that will need to be assigned and Figure 5.2 – Operational and Maintenance Strategies and Actions, outlines specific actions that will need to be undertaken.

Figure 5.1 Operational and Maintenance Responsibilities

- 19	are 3.1 Operational and Maintenanc	e nesponsibilities
	Operational Responsibilities – Ongoing	Maintenance Responsibilities – Ongoing
-	Plan implementation coordination	Parking areas upkeep
-	Bylaw enforcement	Grass and sports fields upkeep
-	Issuing permits	Playground upkeep
-	Overseeing park construction projects	Campground upkeep
-	Overseeing community stewardship projects	Washroom servicing
-	Overseeing educational programs	Garbage/recycling collection
-	Supporting philanthropic initiatives	- Trail upkeep
-	Staff communications	Signage upkeep
-	Intergovernmental communications	Invasive weed management
-	Public communications (website etc.)	 Snow plowing
-	Volunteer training and coordination	Security duties
-	Hazard tree assessments	Routine safety inspections
-	Contract Management	

One-Time Operations Initiatives

- Development of a High Level Regional Parks and Trails Strategy
- Park Service Review for Exhibition Grounds and Campground (east and west)¹
- Campground Cost, Benefit and Opportunity Study
- Swimming Pond Upgrade Cost Study
- Wildlife Tree Management Plan, Policy and Legal Advice
- Thorough Inventory and Assessment of Existing Infrastructure and Recreational Amenities
- Parking and Staging Area Detailed Designs
- Acquisition of Ministry of Transportation Right-of-Way (through Ball Diamond)
- Assessment of Adjacent Residential Encroachment
- Initiating a Volunteer Park Patroller Program
- East and West side trail connectivity study
- Five year plan review
- Ten year plan review

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¹ Given the presence of possible danger trees, the safety of overnight campers within the campground should be thoroughly assessed during the Campground Park Service Review.

Figure 5.2 Operational and Maintenance Strategies and Actions

5.1.1 Roles and Responsibilities

Strategy 1 Provide clear definitions of roles and responsibilities for operational and maintenance needs.

Actions

- 1.1. Assign the responsibility for coordinating the overall implementation of the Management Plan to the RDCK General Manager of Community Services. Year 1
- 1.2. Outline the detailed list of operational and maintenance responsibilities; assign the staff members responsible for overseeing each, and providing guidance for service levels where appropriate. Year 1
- 1.3. Undertake an assessment of service delivery options through a Park Services Study for park maintenance and other services to determine the most efficient and effective approach to maintaining and providing services to the park as a whole. Year 2 Options could include:
 - Continuation of the lease with PCRES to host annual community events, but with additional financial support from RDCK to offset volunteered time that is no longer available.
 - RDCK maintain the PCRES grounds while the PCRES continues with their lease.
 - RDCK takes over the maintenance and operations of the west side of the park, as well as the hosting of annual community events.
 - RDCK hires an alternative private or public contractor to take over the hosting of annual events and/or regular maintenance and operations of the park.
 - Or continue with the current lease agreement with PCRES

Other elements of service delivery could also be assessed including the maintenance of campground and sports fields. It should be noted that if the PCRES is to continue as the operator, the RDCK should review and update the lease to reflect the approved management plan (including park zones, permitted activities, and any changes to the responsibilities of each organization), and increase oversight of park activities, including developing clear guidelines for hosting large public events. The guidelines document should provide details on a number of topics including: parking, washroom facilities, food preparation/sales, etc. The goal of this document is due diligence, alignment with provincial health regulations and to reduce RDCK liability.

5.1.2 Public Safety and Duty of Care

Strategy 2 Ensure due diligence is exercised in addressing public safety.

- 2.1 Continue public safety monitoring and regular assessments of hazard trees in recreational areas of the park (e.g., adjacent to parking, trails, camping areas, residential neighbours, etc.) and eliminate dangerous conditions in accordance with the direction established in the Wildlife Tree Management Plan (to be developed in Year 2). Post signage that warns of increased risk of tree fall during windy periods. Seek legal advice to reduce risks associated with the different options. Ongoing
- 2.2 Assess and audit the campground operations to determine its community value. Given the inherent conflict of the current campground location with potential hazards associated with black cottonwoods (e.g. limb breakage and tree fall), the area could potentially be repurposed for other daytime community activities that are of lower risk (e.g. Environmental Education Centre). In the short-term, it may be beneficial to close the highest risk campsites, especially when the campground is not at capacity and during periods of high wind. Other options that may be considered, is a reduction in the number of campsites, again excluding the high risk sites, or a repurposing of only

- the high risk sites to day use activities. Year 2
- 2.3 Encourage the Ministry of Transportation and Infrastructure to improve pedestrian connectivity between the park and the surrounding areas and to post warning signage to watch for wildlife crossing Pass Creek Road adjacent to the park. Short-term (years 1-3)
- 2.4 Post signage clearly stating that alcohol is only permitted in designated area and encourage the RCMP to implement enforcement programs to prevent impaired driving. Year 1
- 2.5 Ensure contact information is available to the public on signage at the park for users to report hazards, fire and other threats. -Year 1
- 2.6 Develop a schedule for RDCK park safety inspections. -Year 1
- 2.7 Adopt formal campground standards (e.g. BC Parks or Parks Canada) to minimize potential conflicts with wildlife, including the use of bear proof garbage and recycling bins throughout the park. Medium-term
- 2.8 Initiate an education program for park users to reduce the potential for human-wildlife conflict, including proper conduct if a bear or other potentially dangerous wildlife is encountered. – Medium-term
- 2.9 Monitor bear activity during the fruiting season to determine if the presence of escapee fruit trees (e.g. apple and cherry) on the west side of the park are acting as an attractant. - Ongoing

5.1.3 Park Etiquette and Bylaw Enforcement

Strategy 3

Educate park patrons about park etiquette and take enforcement action.

- 3.1 Develop a bylaw enforcement schedule detailing the time and frequency of bylaw inspections. Year 1
- 3.2 Target peak user days to host "friendly" park etiquette education sessions with patrons. Annually
- 3.3 Ensure that park signage and brochures are available and adequately convey park etiquette and park values, including: unique features, biodiversity, and at risk species. Short-term (years 1-3)
- 3.4 Inform campground users of the park's 'code of conduct' through distributed literature (e.g. brochure) and through in-person camp site visits by the park host. Educational topics include how to manage the campsite to reduce human-wildlife conflict, garbage and recycling procedures, campground rules, etc. Short-term (years 1-3)
- 3.5 Enhance awareness about invasive weeds through education of park neighbors and users and by increasing knowledge among facilities and operations personnel. – Shortterm (years 1-3)

5.1.4 Community Engagement

Strategy 4 Engage community stewardship, develop community partnerships and facilitate philanthropic initiatives.

Actions

- 4.1 Continue partnership with Okanagan Nation Alliance (ONA) to stabilize Norns Creek banks and explore opportunities in the park to interpret native culture and heritage. Ongoing
- 4.2 Continue to support ONA and other organizations that are keen to enhance environmental conditions within the park, as well as to seek additional funding for restoration activities. - Ongoing
- 4.3 Investigate educational partnerships with local school districts and other opportunities for the park to serve as a venue to connect the region's youth with the natural environment in a hands-on way. Years 3-4
- 4.4 Continue to update the RDCK website with information about the actions taken to implement the Management Plan. Ongoing
- 4.5 Support interested organizations in their efforts to raise funds for the implementation of the Management Plan by developing an annual set of priorities for projects that could be funded by philanthropic organizations. Annually
- 4.6 Engage interested groups to peruse stewardship projects within the park and initiate a Volunteer Park Patroller Program. Years 3-4
- 4.7 Continue communication with adjacent property owners and pursue future parkland donations. -Ongoing
- 4.8 Recognize the contributions of current and former community partners through use of strategically placed signage. –Years 3-4

5.1.5 On-going Park Monitoring

Strategy 5 Monitor ecosystem health, levels of recreational use, invasive species, and other park impacts.

- 5.1 Undertake regular inspections of restoration areas (including decommissioned trails) and make adjustments as necessary to ensure success. Ongoing
- 5.2 The effect of pond operations on Norns Creek should be reviewed by a fisheries biologist to ensure that current operations are having a minimal impact on fish. There may be a need to retrofit the inflow/outflow structure to maintain year-around flows through the diversion channel to mitigate the potential for lost kokanee eggs. Other investigations should identify if there is a need to replace the pond liner, if an additional water source is needed (e.g. well) and to evaluate if there is a benefit to enhance the diversion channel with spawning sized gravel. Year 3
- 5.3 Undertake a thorough inventory of existing infrastructure, equipment, and amenities that exist on both the east and west sides of the park. The goal of this assessment is to develop a detailed list of all existing equipment, along with its present condition, in order to prioritize replacement or repair. Year 2
- 5.4 Regularly monitor recreational uses to ensure they are consistent with the Management Plan goals. Ongoing
- 5.5 Schedule regular inspections along the park boundary and connecting trails to allow park operators to identify locations where encroachment is occurring, or where garbage is being deposited, etc. Park neighbours should be notified (as a first step) where their footprint is encroaching on the park. Ongoing
- 5.6 Continue a working relationship with the Central Kootenay Invasive Plant Committee (CKIPC) to most effectively manage invasive plants within the park. The Central Kootenay Invasive Plant Committee (CKIPC) is in the process of finalizing an invasive

species plant management strategy for the Central Kootenay region. The goal of the strategy is to provide a working framework for the coordination of invasive plant management. Of particular concern is the infestation of Japanese knotweed that is currently growing along the ditch adjacent to RelKoff Road (see Figure 4.3). Management of this infestation is a high priority, as well as to educate adjacent property owners on the potential impacts of this plant. - Ongoing

- 5.7 Develop a Wildlife Tree Management Plan, including the stratification of natural areas versus developed areas and strategies for allowance and/or creation of future high-value wildlife trees (see Ellis 2011). The restoration areas and park management zones identified within this document could be directly used for the Wildlife Tree Management Plan. Year 2
- 5.8 Develop a beaver management protocol, which may include trapping and relocation of problem beavers, if resident beavers continue to modify the diversion channel that directs flows from Norns Creek to the swimming pond. Year 2
- 5.9 Revisit the Management Plan after five years and ten years to ensure the management practices are working effectively and are aligned with the Management Plan goals. Years 5 and 10

5.1.6 Environmental Responsibility

Strategy 6 Ensure due diligence (from an environmental perspective), is exercised in the build out of the design concept.

<u>Actions</u>

- 6.1 Engage an environmental professional (e.g. Registered Professional Biologist) to conduct an environmental impact assessment and to obtain necessary provincial approvals for the proposed pedestrian bridge over Norns Creek. Year 10
- 6.2 Ensure that the Design Concept is constructed following best management practices and is consistent with the Provincial Develop With Care: Environmental Guidelines http://www.env.gov.bc.ca/wld/documents/bmp/devwithcare/ Ongoing
- 6.3 Encourage retention of the natural ground cover (including trees) to maintain the range of flora, fauna and community types. Ongoing

5.1.7 Environmental Education

Strategy 7 Explore ways to enhance environmental education initiatives within the park.

- 7.1 Investigate the feasibility and community interest of operating an Environmental Education Centre within the park. Years 9-10
- 7.2 Invest in short-term educational opportunities such as interpretive signage and reusable brochures to increase awareness of the park's ecology. Years 3-4
- 7.3 Explore other potential educational opportunities such as using a footbridge to also observe spawning fish. Years 9-10

5.1.8 Park's West Side

Strategy 8 Explore ways to diversify and enhance recreational use on the west side of the park.

Actions

A greater utilization of the west side of the park is likely best achieved through a coordinated effort of both PCRES and RDCK. Given the uniqueness of the equestrian facilities, RDCK and PCRES should explore ways to further promote regular equestrian use of the riding arena and horse stalls (e.g. meeting location for 4-H groups). – Ongoing

- 8.2 Enhance publicity and promotion of the park uses on the west side (e.g. RDCK website). Ongoing
- 8.3 The west side of the park should be explored as a destination for other community based events that will attract a broader demographic (e.g. winter festival, summer concert series). Ongoing

5.1.9 Park's Northeast Parcel

Strategy 9 Explore options to develop a trail network on the northeast side with

interpretative signs

Actions:

9.1 Work with Castlegar Friends of Parks and Trails to determine the feasibility of a trail network that would lead to a lookout point within the park's northeast parcel. – Year 9

Chapter 6 - Implementation Plan

Figures 6.1 through 6.3, Costing for Implementation of Concept Design, Operational and Maintenance Responsibilities, provides estimated costs for the Design Concept development items, and ongoing operational and maintenance responsibilities over the next ten years. These preliminary cost estimates will become more accurate with further design work and site assessments. Based on the estimates provided, the capital investment needed to undertake the Design Concept is approximately \$574,200. Although this budget is allocated over ten years, \$137,625 is slated for the short-term (years 1-3), \$139,500 for the medium term (years 4-7) and \$201,375 for the long term (years 8-10). Short-term work focuses on formalizing the park's trail network, including pedestrian access along Broadwater Road to connect the two side of the park, integration of a signage plan and basic recreational amenities such as bear proof garbage cans. Medium term priorities include upgrades to the swimming pond, upgrades to the park entry points on both the east and west sides of the park, including staging area, landscaping and parking lot design improvements, and other minor parking lot improvements. Development of a pedestrian bridge across Norns Creek and the creation of a trail in the north east park parcel are slated to occur over the long term. Restoration and enhancement of the Norns Creek riparian area occurs throughout the management plan period. A 20% contingency has also been added to cover unforeseen costs.

The operational and maintenance costs are estimated at \$471,700 over the ten-year period, with spending distributed much more consistently throughout the Management Plan period. Therefore, the total estimated 10 year capital and operating costs for Pass Creek is approximately \$1,045,900. Implementation of these works over the timeline specified is dependent on staffing capacity and on the availability of funding. The outlined costs are only inclusive of development items within the park boundary.

Possible funding sources include taxation, donations, grants (e.g. community works funding), fundraising, and in kind work. The Fish and Wildlife Compensation Program is a possible funding organization that may provide further support for restoration and enhancement work.

Figure 6.1 - Costing for Implementation of Concept Development Plan Items	Design	Sh	ort Term (Years	1-3)		Medium Ter	m (Years 4-7)		lor	g Term (Years 8	k-10)	Yr. 1-10 Total
Severapment run tems	Cost	year 1	year 2	year 3	year 4	year 5	year 6	year 7	year 8	year 9	year 10	11. 1-10 Total
Upgrade of Park Entry Points, including Staging Areas and Parking Lo	ts											
Parking lot designs and administrative costs	\$20,000.00				\$20,000							
Capital cost to upgrade lot on east side (inclusive of gravels, concrete parking barriers, gate and landscape design to	\$40,000.00				\$40,000							
prevent unwarranted access) Capital cost to develop a small parking lot on west side (inclusive of gravels, concrete parking barriers, gate and	\$20,000.00							\$20,000				\$92,000
landscape design)					45.000			,				
Improvements to park staging areas via landscape design	\$5,000.00				\$5,000			\$3,500				
Installation of two additional access gates	\$7,000.00 \$92,000.00				\$3,500			\$3,500				
Recreational Amenities	\$32,000.00											
Design and administrative costs	\$500.00			\$500								
Installation of seven bear aware trash receptacles (includes concrete slab)	\$17,500.00		\$17,500									\$35,500
Capital cost to supply and install two sets of bleachers	\$17,500.00					\$17,500						
Minor Design Improvements to other Parking Lots	\$35,500.00											
Design and administrative costs	\$3,000.00					\$3,000						
Upgrades of the parking lots adjacent to the day use area and	\$10,000.00					\$10,000						\$13,000
ball field to maximize parking	¢12.000.00											
Formalize the Park Trail Network	\$13,000.00											
Design and administrative costs	\$5,000.00		\$5,000									
Road upgrades 1.5 m existing trail upgrades (aggregate/mulch surfacing)	\$5,000.00			\$5,000								
(1,215 lm)	\$20,000.00 \$25,000.00			\$20,000								
1.5 m new trail construction (801 lm) Trail development to a lookout within the northeast parcel	\$30,000.00			\$25,000							\$30,000	\$114,500
Capital cost to supply and install two sets of stairs to connect the east and west sides of the park via Broadwater Road	\$20,000.00			\$20,000								\$114,500
Install three benches along trail network	\$4,500.00				\$4,500							
Decommissioning and re-vegetation of approximately 255 m of trail	\$5,000.00			\$5,000								
	\$114,500.00											
Pedestrian Bridge over Norns Creek			l	<u> </u>	I	<u> </u>	<u> </u>	l	<u> </u>		l	
Design and administrative costs	\$10,000.00									\$10,000		\$160,000
Capital cost to supply and install a pedestrian bridge over Norns Creek	\$150,000.00										\$150,000	
Signage plan	\$160,000.00											
Design and administrative costs	\$5,000.00		\$5,000									
Capital cost to supply and install two park turn off signs	\$1,000.00			\$1,000								
Capital cost to supply and install two custom park entry sign	\$5,000.00			\$5,000								
Capital cost to supply and install wayfinding signage including two Park Map / Main Trailhead (design and construction) and eight markers	\$9,000.00			\$9,000								\$34,500
Capital cost to supply and install four interpretive signs	\$8,000.00			\$8,000								, 2 ,,2 30
Capital cost to supply and install ten boundary signs	\$2,500.00			\$2,500								
Capital cost to supply and install eight regulatory signs	\$2,000.00			\$2,000								
Capital cost to install interpretive signs to accompany trail development in the northeast parcel	\$2,000.00										\$2,000	
Restoration and Enhancement of the Norns Creek Riparian Setback	\$32,500.00											
Administrative costs	\$1,000.00		\$1,000									
Environmental Assessment and Restoration Plan to Prioritize Restoration Efforts	\$3,000.00		\$3,000									\$29,000
Capital cost to supply and install restoration plantings	\$25,000.00			\$3,125	\$3,125	\$3,125	\$3,125	\$3,125	\$3,125	\$3,125	\$3,125	,
	\$29,000.00	\$0	\$31,500	\$106,125	\$76,125	\$33,625	\$3,125	\$26,625	\$3,125	\$13,125	\$185,125	\$478,500
Contingency (20%)												\$95,700
TOTAL 10 YEAR CAPITAL COST ESTIMATE												\$574,200

Figure 6.2 - Costing for Operational Responsibilities

	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	
Operational Responsibilities - Ongoing	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Yr. 1-10 Total
Plan implementation (coordination, capital project management, oversight of restoration/stewardship projects, initiation of partnerships, park neighbor communications, intergovernmental communications, etc.)	\$5,000	\$25,000	\$15,000	\$10,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$85,000
High level Regional Parks and Trails Strategy (for all RDCK parks)		\$15,000									\$15,000
High level Wildlife Tree Management Plan, Policy and Legal Advice (for all RDCK parks)		\$7,500									\$7,500
Park Service Review for Exhibition Grounds and Campground		\$10,000									\$10,000
Campground Cost, Benefit and Opportunity Study		\$5,000									\$5,000
Swimming Pond Upgrade Feasibility and Cost Study			\$7,500								\$7,500
Inventory and Assessment of Existing Infrastructure and Recreational Amenities		\$1,000									\$1,000
Assessment of Adjacent Residential Encroachment and Follow-up			\$1,200								\$1,200
East and West Trail Connectivity Study to Define Optimal Bridge Location		\$2,000									\$2,000
Volunteer Park Patroller Training and Coordination			\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$8,000
Hazard Tree Assessment and Regular Monitoring	\$1,500	\$500	\$1,500	\$500	\$1,500	\$500	\$1,500	\$500	\$1,500	\$500	\$10,000
Park Specific Public Communications (website, brochures, etc.)	\$500	\$1,000	\$1,000	\$1,000	\$500	\$500	\$500	\$500	\$500	\$500	\$6,500
Bylaw enforcement	\$0	\$3,250	\$3,250	\$3,250	\$3,250	\$3,250	\$3,250	\$3,250	\$3,250	\$3,250	\$29,250
Five/Ten-Year Management Plan Review	\$0	\$0	\$0	\$0	\$5,000	\$0	\$0	\$0	\$0	\$5,000	\$10,000
	\$7,000	\$70,250	\$30,450	\$15,750	\$16,250	\$10,250	\$11,250	\$10,250	\$11,250	\$15,250	\$197,950

TOTAL 10 YEAR OPERATIONAL COST ESTIMATE

\$197,950

Figure 6.3 - Costing for Maintenance Responsibilities

	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	
Maintenance Responsibilities - Ongoing	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Yr. 1-10 Total
Park upkeep and garbage removal	\$10,700	\$10,700	\$10,700	\$10,700	\$10,700	\$10,700	\$10,700	\$10,700	\$10,700	\$10,700	\$107,000
Washroom servicing	\$3,000	\$3,000	\$3,000	\$3,000	\$3,000	\$3,000	\$3,000	\$3,000	\$3,000	\$3,000	\$30,000
Trail upkeep	\$0	\$0	\$0	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$7,000
Maintenance of day use areas (including summer mowing, watering and weed management)	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$100,000
Signage upkeep	\$0	\$0	\$0	\$0	\$500	\$500	\$500	\$500	\$500	\$500	\$3,000
Security duties	\$0	\$0	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$8,000
Routine safety inspections	\$0	\$750	\$0	\$750	\$0	\$750	\$0	\$750	\$0	\$750	\$3,750
Snow plowing as necessary	\$1,500	\$1,500	\$1,500	\$1,500	\$1,500	\$1,500	\$1,500	\$1,500	\$1,500	\$1,500	\$15,000
	\$25,200	\$25,950	\$26,200	\$27,950	\$27,700	\$28,450	\$27,700	\$28,450	\$27,700	\$28,450	\$273,750

TOTAL 10 YEAR MAINTENANCE COST ESTIMATE

\$273,750

TOTAL 10 YEAR CAPITAL, OPERATION AND MAINTENANCE COST ESTIMATE

\$1,045,900

References

Audy, N. and Zimmer, M. 2014. Fish Habitat Structure Monitoring in Pass (Norns) Creek 2013. Prepared by: Okanagan Nation Alliance. Prepared for: Fish and Habitat Compensation Program.

Braumandl, T.F. and Curran, M.P. 2002. A field guide for site identification and interpretation for the Nelson Forest Region.

COSEWIC. 2012. COSEWIC assessment and status report on the Western Screech-Owl *kennicottii* subspecies *Megascops kennicottii kennicottii* and the Western Screech-Owl *macfarlanei* subspecies *Megascops kennicottii macfarlanei* in Canada. Committee on the Status of Endangered Wildlife in Canada. Ottawa. Xii + 30 pp. (www.rgistrelep-sararegistry.gc.ca/default_e.cfm). Slocan river sources

Durand, R. 2013. Slocan Valley Sensitive Ecosystem Inventory. Prepared by: Taara Environmental. Prepared for: Slocan River Streamkeepers. Pg. 24.

Egan, B., Cadrin, C. and Cannings, S. 1997. Cottonwood Riparian Ecosystems of the Southern Interior. Ministry of Environment, Lands and Parks.

Ellis, D. 2011. Decision Support Tool for Wildlife Tree Management in the Okanagan Valley. Edited by: Lisa Scott, Wildlife Tree Stewardship Program (Okanagan-Similkameen) & Sandy Mah, Regional District of Central Okanagan. Funded by: The Habitat Stewardship Program for Species at Risk.

McCleary, R. 1999. 1998 Norns Creek Fish Habitat Enhancement Project. Prepared for: Columbia Basin Fish and Wildlife Compensation Program. Prepared by: Timberland Consultants Ltd.

Redfern, L. 2011. Pass Creek Regional Park: A recommendation for Habitat Restoration/Replacement. Prepared for the Castlegar and District Recreation Commission. Prepared by: Castlegar and District Wildlife Association, West Kootenay Naturalists and Castlegar Friends of Parks and Trails. July 25, 2011.

Regional District of Central Kootenay. 2011. Park Regulation Bylaw No. 2173.

Regional District of Central Kootenay. Official Regional Parks Plan Bylaw No. 2044, consolidated.

Thorley, J.L. and J.T.A. Baxter. 2012. WLR Monitoring Study No. CLBMON-46 (Year 4), Lower Columbia River Rainbow Trout Spawning Assessment, Study Period: January to July 2011. Prepared for BC Hydro, Castlegar, BC.

Wildlife Tree Committee of British Columbia. 2008. Wildlife/Danger Tree Assessor's Course Workbook: Parks and Recreation Sites Course Module.

Zimmer, M. 2000. Norns Creek 2000 Fish Habitat Enhancement. Prepared in partnership with Castlegar & District Wildlife Association and Columbia Kootenay Fisheries Renewal Partnership for Columbia Basin Fish & Wildlife Compensation Program.

Appendix A: Pass Creek Management Plan Summary Table

Management Challenge and/or Identified Issue	Comments	Importance Level	Recommendation	Related Plan Goal	Suggested Timeframe	Capital Cost	Operating Cost (over 10 years)
Lack of a high level regional parks and trails strategy	The RDCK currently manages more than 20 regional parks that are distributed across 11 electoral areas. Historically, the district has obtained park land opportunistically but there is currently no overarching strategy for prioritizing park management.	Very High	There is a need to develop a high level RDCK regional parks and trail strategy to define the future direction, policies, priorities and actions for the regional district parks.	Goal 14 – Formalize the Existing Trail Network and Facilitate Inter- Regional Trail Connections	Regional parks and trails strategy - Short-term (1-3 years)	n/a	\$15,000
Removal of Riparian Vegetation and Encroachment of Norns Creek	Quality streamside habitat is essential for ensuring healthy fish populations, and given the importance of Norns Creek as a spawning tributary, park activities should respect the 30 metre streamside protection and enhancement area (SPEA) of Norns Creek. Documented park activities within the SPEA include storage of horse manure and equipment, vegetation clearing and maintenance of the understory as turf.	Very High	Storage of all park related items (equipment, horse manure, etc.) should be removed from the SPEA. No further park development, other than a perpendicular creek crossing, should take place within this area and the focus of the SPEA should be ecological restoration (e.g. native vegetation planting). The Design Concept identifies areas for ecological restoration that will have the greatest benefit to Norns Creek.	Goal 1 – Protect and Enhance Norns Creek Riparian Areas	a. Remove park related items from setback area -Immediately b. Restoration and enhancement of the Norns Creek setback area ongoing	b. \$29,000	a. not costed
Hazardous Trees	The park, includes black cottonwood and other broadleaf trees that may act as potential hazards, especially during periods of high wind. Large branches or whole tree can fall down and may be a threat to park users, especially overnight campers. The difficulty, however, is that many of these trees also provide valuable wildlife habitat. As an example, the Western Screech-Owl (Megascops kennicottii macfarlanei) is known to nest in black cottonwood, has been documented within close proximity to the park, and is a federally and provincially endangered species.	Very High	The following management priorities should be undertaken to address hazard trees: a. Regularly monitor and identify hazard trees b. Develop a Wildlife Tree Management Plan, including the stratification of natural areas versus developed areas and strategies for allowance and/or creation of future high-value wildlife trees c. If a hazardous tree is removed from the 30 m streamside protection and enhancement area of Norns Creek, replacement trees should be installed following the provincial tree replacement criteria within identified restoration zones or other acceptable locations d. Campground cost, benefit and opportunity study	Goal 4 – Protect Wildlife Trees while Considering Risks to Park Visitors	a. Tree Monitoring -On-going b. Wildlife Tree Management Plan -Short-term (1-3 years) c. Restoration and Enhancement -ongoing d. Campground Study Short-term (1-3 years)		a. included within park monitoring b. 7,500 d. 5,000
Road Safety	There is currently no within park connection across Norns Creek between the east and west sides of the park. Therefore if a park user is attending an annual festival and is also camping on the east side of the park, they have to walk along Broadwater Road. There are no sidewalks along this road and it may be a safety concern, especially during times of high traffic.	High	The following management priorities should be undertaken to address safety along Broadwater Road and the lack of connection between the two sides of the park: 1. A pedestrian walking route connecting the two sides of the park should be formalized along Broadwater Road. To limit pedestrian time on the road, two staircases should be constructed. One staircase should extend from the southwest corner of the soccer field up to Broadwater Road, with direct connection to the side walk along the bridge. The second staircase should be constructed at the southwest corner of the western park parcel, along with a narrow walking trail that provides access to the festival activities. The specific locations of the staircases and trail should be determined with the goal of minimizing impacts to the environment. 2. Installation of signage that directs park visitors to the pedestrian route.	Goal 8 – Enhance Connectivity between the East and West Sides of the Park	a. Formalize the park trail network - Short-term (1-3 years) b. Signage - Short-term (1-3 years)		b. inclusive within the signage plan

Management Challenge and/or Identified Issue	Comments	Importance Level	Recommendation	Related Plan Goal	Suggested Timeframe	Capital Cost	Operating Cost (over 10 years)
Intensive use by park visitors	Intensive recreational use by park users has the potential to affect the biological biodiversity of the park and the protection of key habitat known to support plants, vertebrates and invertebrates at risk of becoming locally or globally extinct.	High	There is a need to balance recreational use of the park with habitat protection. Park management zones are established to direct recreational activities to appropriate areas and to ensure that a portion of the park is actively managed as natural habitat for the benefit of wildlife. To this end, Norns Creek and its associated SPEA is designated as a 'Special Preservation Zone', while other non-disturbed locations within the park are designated as a 'Natural Area Zone'.	Goal 2- Restrict further Encroachment of Recreational Use into Natural Areas	Management Plan Implementation -Short-term (1-3 years)	n/a	\$85,000
Park Litter, Cleanliness and Dumpin	Litter, including bottles and cans, is a challenge within the park, particularly during peak summer months when the volume of users is high. Despite the presence of garbage cans, garbage and dumping of large items (e.g. mattress, recliner, etc.) was encountered within the campground and also along Pass Creek Road.	High	Signage indicating proper conduct within the park should be posted. There should also be greater oversight of campsite conditions, and possibly bylaw enforcement. Finally, staff resources are needed to ensure the park is kept clean and free of dumped items.	Goal 7 – Enhance the Park as a Valued Community Asset AND Goal 2- Restrict further Encroachment of Recreational Use into Natural Areas	a. signage -Short-term (1-3 years) b. Enhanced campground oversight - Immediately c. Park upkeep and garbage removal -ongoing		b. inclusive within Management Plan Implementation c. \$107,000
Lack of cohesion between the east and west side of the park due to physical separation	The east and west sides of the park are physically separated by Norns Creek. It is probable that park patrons visit one side or the other, but not both. The presence of the west side of the park for public use on a daily basis is also not well known or publicized.	High	RDCK should look at ways at connecting the two sides of the park. A short-term recommendation is to establish a pedestrian pathway along Broadwater Road with associated staircases on each side of the park and a loop trail network that may have interpretive signage associated with it. A long-term recommendation is to tie the loop trail onto a pedestrian bridge that will cross Norns Creek upstream of the rip rap slope. The west side of the park could also be more actively managed to attract daily visitors.	Goal 8 – Enhance Connectivity between the East and West Sides of the Park	a. Connection along Broadwater Road - Short Term (1-3 years) b. Pedestrian Bridge - Long Term (8-10 years)	a. inclusive within the park trail network b. \$160,000	n/a
Diversion of water for the swimming pond and potential impacts to fish	Both rainbow trout and kokanee are using the diversion channel for spawning. Although the pond design was historically modified to reduce impacts on fish, it is important that the diversion channel maintains year around flows given that kokanee eggs are deposited in late summer and hatch the following spring.	High	The operations of the swimming pond should be reviewed by a fisheries biologist to ensure that operations are having minimal impact to fish. There may be a need to retrofit the inflow/outflow structure to maintain year-around flows through the diversion channel. Other investigations should identify if there is a need to replace the pond liner or if further access to water is necessary (e.g. via a well or culvert) and to evaluate if there is benefit to enhance the diversion channel with spawning gravels.	Goal 10 – Improve and Maintain the Swimming Pond for Public Recreation	Swimming pond upgrade feasibility and cost study -Short-term (1-3 years)	n/a	\$7,500

Management Challenge and/or Identified Issue	Comments	Importance Level	Recommendation	Related Plan Goal	Suggested Timeframe	Capital Cost	Operating Cost (over 10 years)
Invasive Weed Management	The mixed use of the park leads to the potential for weed establishment and encroachment from recreational and agricultural areas into native habitat locations. Non-native plants are well established within the park. Active weed management is necessary to adequately control invasive plants.	High	The Central Kootenay Invasive Plant Committee (CKIPC) is in the process of finalizing an invasive species strategic plan for the Central Kootenay region. The goal is to provide a working framework for the coordination of invasive species management. RDCK staff should establish a working relationship with the CKIPC to most effectively manage invasive plants within the park. Of particular concern is the infestation of Japanese Knotweed that is currently growing along the ditch adjacent to RelKoff Road, as well as Hoary Alyssum, which is poisonous to horses. Management of these infestations is a high priority, as well as to educate adjacent property owners on how their actions may effect invasive species presence within the park.	Goal 6 – Monitor and Manage Invasive Plant Species	Management Plan Implementation -Short-term (1-3 years)	n/a	included within Management Plan Implentation
Human-Wildlife Conflict	Human/wildlife conflict is defined as any interaction between wildlife and humans which causes harm, whether it's to the human, the wild animal, or property. There are numerous examples of potential for conflict within the park, including an actively used wildlife movement corridor across Pass Creek Road, a campground/park that does not have secured garbage facilities, a creek used by spawning fish, which may attract bears or other wildlife and the presence of fruit trees on the west side of the park.	High	The following management priorities should be undertaken to reduce human-wildlife conflict: 1. Adopt formal campground standards (e.g. BC Parks or Parks Canada) to minimize potential conflicts with wildlife. 2. Replace all existing garbage cans with bear proof garbage cans. 3. Work with Ministry of Transportation and Infrastructure to install wildlife crossing signs on Pass Creek Road. 4. Install signage within the park that informs park users of proper conduct if a bear is encountered. 5. The presence of escapee fruit trees (i.e. apple, cherry) on the west side of the park may attract bears during the fruiting season. Monitoring should take place to determine if it is an issue.	Goal 5 – Goal 5 – Identify and Improve Wildlife Corridors AND Goal 2- Restrict further Encroachment of Recreational Use into Natural Areas		b. \$18,000	a. and c. included within Management Plan Implentation d. \$10,000
Limited signage within the park	In general, the existing signage within the park is poor. There is one park sign adjacent to Broadwater Road that tells park users where to turn to access the park, but there are no park entry signs at either entrance on the west or east sides of the park, no within park directional signage, and limited to no park conduct/rule signs. There are a few informational signs that highlight the native trees and fish of the park.	High	The Signage Plan for the park includes the following: 1. Wildlife crossing signs on Pass Creek Road, 2. Directional signage both outside and within the park, 3. Welcome signage at the entrance to both the east and west sides of the park, 4. Interpretive signage along a formalized trail network, 5. Regulatory signage within the day use and campground area. 6. Risk management signage for the creek and danger trees.	Park as a Valued	Signage Plan - Short Term (1-3 years) Signage Upkeep -ongoing	a. \$34,500	b. \$3,000
Creek Safety	Norns Creek is a large enough creek that drowning and exposure are potential risks, especially for young children with little swimming experience.	High	There is already signage in place that warns of the potential hazards of the fish enhancement structures, but signage should also be installed that warns of general water hazards.	Goal 7 – Enhance the Park as a Valued Community Asset	Signage Plan - Short Term (1-3 years)	inclusive within signage plan	n/a

Management Challenge and/or Identified Issue	Comments	Importance Level	Recommendation	Related Plan Goal	Suggested Timeframe	Capital Cost	Operating Cost (over 10 years)
Pit Toilet Servicing	It was noted that at least one of the pit toilets on the east side of the park, near the campground, was in dire need of servicing.	High	RDCK should ensure that there is an established schedule for servicing pit toilets. In addition, park personnel or park contractors should monitor pit toilets on a regular basis to ensure cleanliness and identify potential problems.	Goal 17 – Maintain Park Facilities to Good Quality Standards	a. Washroom servicing b. park monitoring	n/a	a. 30,000 b. included within park monitoring
Norn's Creek bank damage and loss of fish habitat enhancement structures	High creek flows in the summer of 2012 resulted in the loss of bank rip-rap along the western side of Norn's Creek and damage/loss to fish enhancement structures within the main channel of the creek (Audy and Zimmer 2014). If the bank is not repaired and stabilized, it is likely that further bank loss will occur during periods of high flow (e.g. freshet) and may negatively affect fish spawning and rearing habitat. If climbed upon, damaged fish structures also have exposed stakes and wood debris that are hazardous to park visitors. Signage exists that warns of the hazard and encourages people to stay off the structures.	High	IWorks are slated to occur in July and August of 2015	Goal 3 – Maintain Critically Important Fish Habitat within Norns Creek	Norns Creek Bank Enhancement	Not costed	n/a
Plan Monitoring and Review	The park management plan is the key tool to guide decision-making for Pass Creek Regional Park.	High	Five and ten year reviews of the plan are important to determine the effectiveness of the plan in achieving goals and addressing management challenges.	Goal 7 – Enhance the Park as a Valued Community Asset	a. Plan Review - <i>periodic</i>	n/a	a. \$10,000
Lack of a formalized park entrance and parking areas that have a welcoming feeling	The west side of the park feels more like a private, rural property. There is no signage indicating that it is a part of Pass Creek park and no established parking areas. A visitor to this side of the park might feel as if they are trespassing. The east side of the park has at least three separate unimproved parking areas off of Parkside Road, one services the soccer / field hockey field, another lot provides parking for the day use area and campground, and the last parking area is associated with the baseball field. There is no signage associated with these parking areas, and a park visitor may not even realize they are within Pass Creek park.	High	The Design Concept proposes access, parking and signage improvements at the main entrances to each side of the park to create an inviting interface as visitors approach the park, park their vehicles and become oriented to the park environment.	Goal 7 – Enhance the Park as a Valued Community Asset	a. Upgrade of park entry points, including staging areas and parking lots b. Snow plowing		\$15,000
Beaver activity resulting in altered flows within the diversion channel	Resident beavers have been known to modified the diversion channel that directs flow from the Norns Creek to the swimming pond, resulting in an altered flow regime and the need for regular removal of woody debris. A beaver management program is likely warranted, which may include the relocation of problem beavers, as necessary.	Moderate		Goal 3 – Maintain Critically Important Fish Habitat within Norns Creek	Management Plan Implementation -Short-term (1-3 years)	n/a	included within Management Plan Implentation

Management Challenge and/or Identified Issue	Comments	Importance Level	Recommendation	Related Plan Goal	Suggested Timeframe	Capital Cost	Operating Cost (over 10 years)
Unsanctioned Trail Use	Trails within the park are generally limited to a small trail network that extends north of the campground providing access to Norns Creek and the wooded area between the creek and Pass Creek Road. There are a couple of locations within this trail network where there are parallel, redundant trails.	Moderate	The park trail network should be formalized, with redundant, non-necessary trails decommissioned.	Goal 14 – Formalize the Existing Trail Network and Facilitate Inter- Regional Trail Connections	e a. Formalize the park trail network - Short-term (1-3 years) b. Trail upkeep -ongoing	\$114,500	\$7,000
Encroachment and dumping by surrounding residents	The park boundaries are not clearly defined and residential neighbors have encroached into the park in some locations. Activities include clearing of native vegetation, storage of personal items, and mowing of park vegetation. There is also the example of yard waste dumping, that has resulted in an infestation of a very invasive plant, Japanese Knotweed.	Moderate	The following management priorities should be undertaken to reduce encroachment by park neighbours: 1. Installation of park boundary signs at key locations 2. Educational program for park neighbors on ways to limit their impacts to the park	Goal 2- Restrict further Encroachment of Recreational Use into Natural Areas	a. signage -Short-term (1-3 years) b. Park Specific communications	a. Included within Signage Plan	b. \$6,500
Maintenance Resources and Aging Equipment	Maintenance and operations within the west side of the park has historically been undertaken by volunteers associated with the Pass Creek Exhibition Society (PCES). Current volunteers are now retiring and new management options will need to be explored. The park infrastructure and amenities are in various states of condition.	Moderate	RDCK should work with the PCES to assign maintenance responsibilities on the west side of the park. There are benefits of RDCK having a greater role in the operations and maintenance of the west side, and the management plan encourages a division of labour. The management plan has identified a couple amenities for replacement (e.g. bleachers), but a wholesale assessment of park infrastructure and amenities is warranted.	Approaches to Delivery	a. Management Plan Implementation b. Bleacher replacement c. Maintenance of dayuse areas	b. \$17,500	a. inclusive within Management Plan Implementation c. \$100,000
Lack of cohesion between the east and west side of the park due to the areas being managed for different purposes.	The two park areas have been managed by different organizations for very different purposes. The result is a park that has little cohesion between the two sides.	Moderate	Recommendations include diversifying the activities that are currently available on the west side of the park. These may include a loop trail with interpretive signage that ties into the park's east side, and the addition of recreational activities that might be used on a daily basis, rather than just during annual events.	Goal 8 – Enhance Connectivity between the East and West Sides of the Park AND Goal 7 – Enhance the Park as a Valued Community Asset	a. Enhanced trail network b. Enhanced recreational activites	a. inclusive within the park trail network b. not costed	n/a
Off-leash Dogs	Uncontrolled off-leash dogs can cause numerous problems including harassment of wildlife, disruption of ground level nesting birds, spread of invasive plants, trampling of native vegetation, degradation of aquatic ecosystems, and conflicts with other park users.	Moderate	Given the environmental sensitivities of Norns Creek, off leash dogs should not be allowed within the park. Park users should be informed via signage and distribution of campground rules at the time of check-in. Bylaw enforcement should also be undertaken to ensure compliance.	Goal 2- Restrict further Encroachment of Recreational Use into Natural Areas AND Goal 3 – Maintain Critically Important Fish Habitat within Norns Creek	a. Signage - short-term (1-3 years) b. Bylaw enforcement	a. inclusive within the signage plan	b. 29,250

Management Challenge and/or Identified Issue	Comments	Importance Level	Recommendation	Related Plan Goal	Suggested Timeframe	Capital Cost	Operating Cost (over 10 years)
Basic Parking	There are a 2-3 parking areas on the est side of the park (near baseball field and campground) that consist of gravel and/or mowed grass. One of the lots is lined with black cottonwood.		These lots could be better formalized to maximize parking, to reduce parking maintenance and to limit the potential for tree fall	Goal 7 – Enhance the Park as a Valued Community Asset	Minor parking improvements -Medium-term (4-7 years)	\$13,000	n/a
Lack of existing environmental education	Pass Creek is an optimal park to host a wide range of environmental education initiatives. Characteristics such as proximity to city centre, existing developed areas within the park and a variety of existing ecological attributes make this park ideal for educating the public on the environment. Currently within the park there are a couple of informational signs highlighting the park's fish and tree species, but otherwise education is largely absent.	Low	The feasibility (including community need and desire) of operating an Environmental Education Centre at Pass Creek should be investigated. Although it would require a significant financia contribution, Pass Creek is an excellent park location for this type of facility. Adding onto the existing infrastructure within the Park Services Zone may be all that is structurally required and the most economical. Other expenses include personnel to oversee the centre, staff to act as environmental educators, educational resources/exhibits, as well as additional operations and maintenance costs.	Goal 11 – Explore Options for the Campground	Investigate the feasibility of an Environmental Education Centre	Structure not costed	Inclusive within Management Plan Implementation

Appendix B: Pass Creek Public Involvement Plan

Pass Creek Regional Park Management Plan Project Public Involvement Plan Summary

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1.0 INTRODUCTION

The Public Involvement Plan for the Pass Creek Regional Park management plan project was designed to engage residents of the Regional District of Central Kootenay (RDCK), specifically those living in the adjacent communities. The Public Involvement Plan also sought to generate feedback on key project decisions from the RDCK's Community Services and Development Services Departments and other interested government and non-government organizations. The following document outlines the public involvement process, the range of interested organizations, the communication and notification methods and the input received from participants through Phase 1 of the Public Involvement Plan.

2.0 PUBLIC INVOLVEMENT PLAN PROCESS

The Public Involvement Plan was implemented through three phases, over the course of approximately ten months. Implementation began in October 2014 and was complete in the early fall of 2015. *Figure 1.0 – Public Involvement Process*, provides a high level view of the process.

Phase 1 Phase 3 Draft Plan Introduction, Issue Plan **Finalization** Recommendations **Identification & Vision** Oct - Dec, 2014 Jan - June, 2015 July - Fall, 2015 Plan Finalized Stakeholder Identification **RDCK Feedback RDCK Board Consideration** Telephone Interviews Public Open House Webpage Launch Public Questionnaire Public Open House Public Questionnaire **Public Involvement Summary**

Figure 1.0 - Public Involvement Process

2.1 Phase 1: Introduction, Issue Identification and Vision Development

Phase 1 of the public involvement process took place between October and December 2014. This phase focused on identifying stakeholders and introducing these groups and individuals to the park and the management plan process. The project team established a website, contacted stakeholder organizations and conducted a number of telephone interviews to build their understanding of the interests of potential stakeholders.

A public open house was held on November 5, 2014 to explore the issues and challenges that participants believe to be central to the management plan and to understand participants' visions for the future of the park. The format for the open house included the display of a series of presentation boards. Seven project representatives were on hand to guide attendees through the boards and to answer questions. Project representatives gathered verbal feedback and questionnaires were available for participants to complete. The open house presentation boards and questionnaire were also posted online on the project website (http://www.rdck.ca/EN/main/services/parks/park-management-plan.html).

2.2 Phase 2: Draft Plan Recommendations

Phase 2 of the Public Involvement Plan took place in the spring of 2015. In anticipation of the Phase 2 public involvement events, a long-term park vision, a set of 10-year management goals and a draft management plan was prepared. The development of these materials was informed by the:

- feedback gathered from the Phase 1 public involvement events
- environmental and other site-specific research
- current and historic park uses
- regional and provincial regulations affecting the use of the land, and
- research on best practices in park management.

The vision, goals and draft management plan, as well as the Phase 1 public involvement outcomes were presented for discussion and feedback to the RDCK project management staff. Stakeholder organizations were also circulated the draft plan and RDCK residents were invited to find out more about the recommendations and provide their feedback through a second questionnaire and open house on June 22, 2015. The questionnaire was available to complete at the open house as well as online.

2.3 Phase 3: Plan Finalization

Phase 3 of the public involvement process, involves the finalization of management plan. The plan will be submitted to the RDCK project management team and posted on the RDCK website for stakeholder organizations and the public to provide final comments. Final comments and the management plan will be presented to the Castlegar and District Community Recreation Commission and to the RDCK Board of Directors for final approval.

3.0 PROJECT STAKEHOLDERS

3.1 RDCK Project Resource and Management Team

The RDCK project resource and management team included the RDCK's:

- General Manager of Development Services, Sangita Sudan
- General Manager of Community Services, Joe Chirico
- Parks Operations Supervisor, Cary Gaynor
- Planning Manager, Meeri Durand
- Planner, Mark Crowe; and
- Manager of Recreation, Jim Crockett

The resource and management team was a central focus for consultation and reporting activities throughout each phase of the management plan project. The RDCK had significant knowledge to bring to the project and a significant interest and investment in the outcome of the management plan. The RDCK Board of Directors makes park policy and budget decisions for the park.

3.2 Potential Stakeholders

In further developing the initial list of individuals and organizations that could be interested in the management plan, consideration was given to what was known about the central focus of the project and the scope of the project decisions. The following points touch on some of the considerations that contributed to the development of the initial stakeholder list.

- As a public entity, the actions and investments of the RDCK in parks and other services are of interest to local residents. The Castlegar and District Community Recreation Commission, the RDCK staff and the RDCK Board of Directions are accountable to the public and have an interest in identifying and responding to public needs.
- The RDCK is committed to working and communicating effectively with other government bodies and agencies (e.g., federal, provincial, municipal, First Nations, etc.). Provincial ministries, agencies and commissions could have important decision-making roles on specific aspects of the management plan implementation. The RDCK values provincial processes for consultation with First Nations and will apply these processes throughout the project.
- Previous decisions and the direction established within existing RDCK's policy documents will also shape the management plan and impact the scope of consultation (e.g., Official Regional Parks Plan Bylaw 2044 and the Castlegar, Area I and Area J Service Area Bylaw 533).

 The public involvement process could provide opportunities to grow a resource of organizations interested in the on-going stewardship of the park.

3.3 Interested Organizations

Over 40 government and non-government organizations were approached at the onset of the public involvement process to assess their interest in participating in public events and to understand their desired level and method of involvement. Figure 2.0 – Stakeholder Consultation and Information, lists those organizations participating in the public involvement process and those circulated project information.

Figure 2.0 - Stakeholder Consultation and Information

3.4 RDCK Residents and Park Neighbours

Residents of the RDCK were invited to participate in Phase 1 of the project through the public open house event, open house one-on-one discussions with hosts, an open house questionnaire and/or an online questionnaire. In total, approximately 55 people participated in the first open house event and a total of 100 questionnaires were completed. *Figure 3.0, Project Notification and Participation*, provides details of the public involvement events, the feedback tools, the communication and notification methods and the levels of participation achieved.

Figure 3.0: Phase 1 - Project Notification and Participation

Figure 3.0: Phase 1 - Project Notification and Participation													
Public Involveme Events (2014)	Notification Methods	PARTICIPATION	Stakeholder Organizations Phone Interviews/Emails	Surrounding Residents Direct Mail	RDCK Website Update	RDCK Press Releases/PSAs	RDCK Facebook/Twitter	Pennywise – Castlegar/Slocan Valley ed Advertisement	Castlegar News Advertisement	Kootenay Morning Radio News Story	Castlegar News Article	The Goat FM	Poster in Castlegar and District Community Complex
Phase 1													
October	Project Introduction Outreach Website Launch	n/a	~		~	V	~						
Oct/Nov	Website Questionnaire Launch Public Open House	100 55		~	~	V	~	~	~	~	V	V	~
Nov	Questionnaire Reminder	n/a			V	V	V						
Phase 2													
June (2015)	Website Update & Questionnaire Public Open House	50 30		V	~	V	~	,	~	V	~		~
Phase 3													
Fall (2015)	Draft Plan Posted Board Consideration			~	•	•	•						

4.0 PHASE 1 - PUBLIC INVOLVEMENT OUTCOMES

4.1 Phase 1: Comment Themes

Through Phase 1 (Introduction, Issue Identification and Vision Development) of the public involvement process, the project team received a series of detailed comments from participants. All of the comments were reviewed and considered by the project team. The following sections summarize the key comment themes heard through Phase 1. It is important to acknowledge, in some of these areas, a range of opinions were expressed, and there was not unanimous agreement. It should also be noted some themes raise competing objectives.

Theme A: Develop Pass Creek Park as Valued Community Asset

The vast majority of participants see Pass Creek Park as a valuable community asset. Many participants noted the beauty of the park and the range of opportunities it offers to residents through community events such as the fall fair and recreational facilities for walking, hiking, camping, swimming and other activities. Participants were generally satisfied with current conditions; however, they see opportunities for the park to be more inclusive and welcoming to the public, and to expand to attract a broader segment of community interests and more events on a year round basis. Some suggested efforts should focus on planning and managing the park as a whole, integrating the west and east sides of park (possibly through the addition of a bridge over Norns Creek).

Theme B: Improve the Quality of Park Facilities

As noted above, participants were generally satisfied with a range of current conditions in the park; however, many expressed a strong desire for the park to continue to be maintained at a high level. The Pass Creek Regional Exhibition Society and some community residents feel that public funding is needed for long-term maintenance of the exhibition ground facilities. Some of the challenges include declining volunteer numbers. On the east side of the park, the swimming pond (identified as a key component of the success of the campground) is facing maintenance challenges and the playground is in need of repair. In addition, maintenance of previous bank stabilization work on Norns Creek also requires investment.

Theme C: Protect the Park's Natural Environment and Wildlife Habitat

Hiking, walking and nature appreciation (including wildlife viewing and birding) were the most popular park activities, following attendance at the fall fair; and many participants emphasized the importance of the park for its wildlife values (terrestrial and riparian). Some participants feel very strongly that no further development should occur, that no further removal of cottonwoods occurs and that other wildlife habitat trees be retained and protected (specifically from beavers). Safety considerations for campers and walkers were noted; however, the wildlife values for some participants were considered of primary importance. "Danger tree" safety considerations were noted by the public.

Participants also noted the importance of retaining Pass Creek Park as a valuable wildlife habitat close to urban areas. At least two species of fish were noted to spawn in Norns Creek; and the park was identified as valued habitat for the Lewis' woodpecker, Townsend's solitaire, bald eagles, blue herons, wood ducks and harlequin ducks. Efforts to ward dogs away from sensitive areas, manage invasive plants and animals, and prevent motorized vehicle access were suggested measures to protect the park environment.

Theme D: Maintain Trails and Enhance Trail Connections

The Pass Creek Park nature trails were identified by participants as an important attribute to their use and enjoyment of the park. As noted above, walking/hiking was the second most popular park activity. The trails were noted to be very accessible to seniors and could be made to support wheelchairs in some sections. Some respondents were looking for connections to the area's broader trail network (e.g., Trans Canada Trail, Castlegar-Pass Creek-Brilliant Bridge-Waterloo Eddy) and some were hopeful for support for bicycles in the park, including designated routes, maps and signage. Others were concerned bicycles could make the walking trails dangerous.

Theme E: Support Equestrian Users

The Pass Creek Park equestrian facility was noted by some as the best in the Kootenays. Its central location draws riders of all ages from throughout the Kootenays for clinics, shows and the annual fall fair. Some users noted the facility is ideal for further development and enclosure (to create a four seasons, all weather, regional facility). Some equestrian users indicated the need for improved parking (separate from the public and close to their horses) and camping conditions (again, close to their horses).

Other Points of Interest

The following points, although they did not develop into common themes, were also of note.

- Norns Creek salmon need to be highlighted (i.e., interpretative signs).
- Include a septic system for indoor washrooms on the exhibition grounds.
- Expand and update existing camping facilities. Area campgrounds are full and not able to keep up with demand for "family-camping"; include services like power/water.
- More allowance for overnight camping on the exhibition grounds.
- No camping fee increases please. Keep it affordable for low-income people.
- Soccer/field hockey field is in disrepair and needs to be addressed immediately.
- Add the Crown land located east of the southeast corner of the park.

4.2 Phase 1: Questionnaire Results

Throughout the introductory phase of the management plan project, a public questionnaire was made available on the project website for interested individuals to complete. Residents within the RDCK were made aware of this opportunity through the RDCK's social media channels, press releases and paid advertising. The majority of those in attendance at the November 5, 2014, public open house also completed the questionnaire. A total of 100 responses were received.

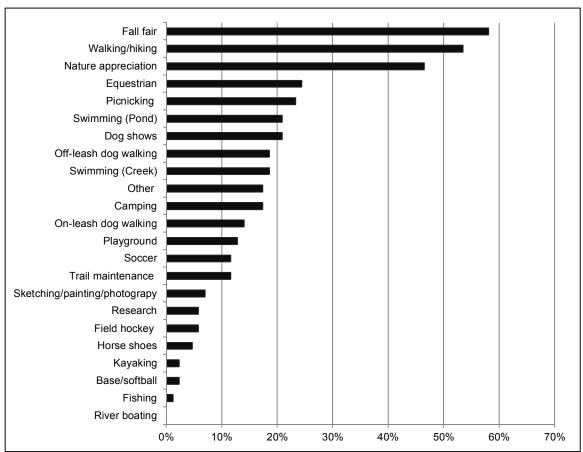
Approximately a third of the respondents were from Robson or Pass Creek, a third were from Castlegar and a third were from other area communities. Only 20% identified themselves as a park neighbour. All respondents had visited the park, and 43% had visited more than five times over the past two years.

The Pass Creek fall fair was the park activity most common among respondents. Fifty eight percent of the respondents had attended the fall fair. Walking and hiking (54%) and nature appreciation (including wildlife viewing and birding) (47%) were also common among approximately half of the respondents. Visitors also enjoy the park for a wide range of other activities, including equestrian, picnicking, swimming, dog shows, and dog walking, to name just a few. Notably, 17% of respondents had camped in the park, either on the Pass Creek Exhibition Grounds (west of the creek) or at the Pass Creek Campground (east of the creek). Figure 4.0 – Participation in Part Activities, outlines the percent of respondents who participated in the various park activities. Within the category noted "other" respondents indicated they have cycled in the park or participated in the Blue Grass Festival, the Gospel Music Festival, the Firefighter Games, youth education, community meetings and/or park maintenance.

Figure 4.0 – Participation in Park Activities

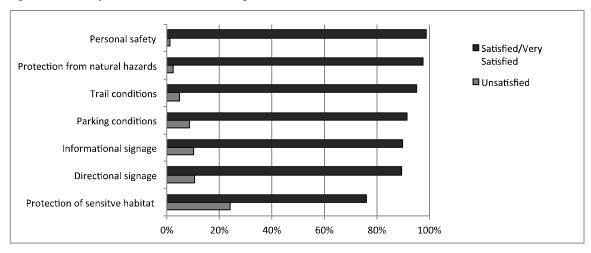
(see following page)





Respondents generally "very satisfied" or "satisfied" with all existing conditions in the park. The lowest satisfaction level was associated with current measures to protect sensitive habitat from park users; however, even in this area 76% of respondents indicated they were "satisfied" or "very satisfied" in this regard. Figure 4.1 – Satisfaction Levels with Existing Conditions, provides the questionnaire results of those who expressed opinions about existing conditions.

Figure 4.1 - Satisfaction Levels with Existing Conditions



Respondents were asked to identify five words and phrases they believed to be important to developing a vision for the park. *Figure 4.2 – Top Words and Phrases Important to the Development of the Park Vision*, sets out the response.

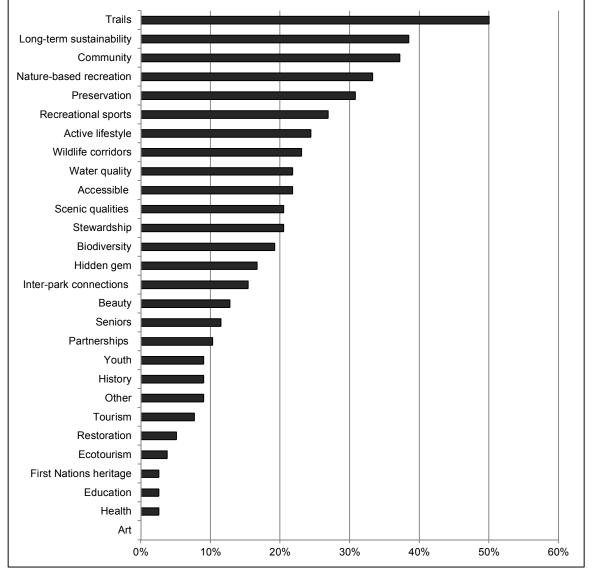


Figure 4.2 - Top Words and Phrases Important to the Development of the Park Vision

Note: Those responding "other" noted that vision should include terms such as: peaceful and quiet trails, improved swimming, rural farm appreciation, equestrians and expanded equestrian facilities, sustaining existing infrastructure, paved roads in the campground, and camping, electricity, and drinking water at the exhibition grounds.

When asked about their priorities for the management plan, there was strong support for most of the potential management plan topics. All except for two topics were considered "very important" or "somewhat important" by over 80% of the respondents and over 64% considered all topics "very important" or "somewhat important." Addressing littering, vandalism and alcohol consumption, preventing motorized vehicles in prohibited areas and environmental protection, were the management plan topics that were most important; however, many other management plan topics also followed closely as high priorities. Figure 4.3 – Top Management

Plan Priorities, provides the questionnaire results of those who expressed opinions about management plan priorities. Respondents also noted a wide range of other priorities they believed should be included in the management plan, including: protection of the cottonwoods and other wildlife trees, converting the campground near the stables to a natural area, improving parking for equestrians, retaining the stables and horse arena, retaining the camping, improving the beach and playground, creating an off-leash dog park, improving signage, ensuing economic fairness for both side of the park, stopping illegal camping and fires in sensitive areas, illuminating invasive plants and providing hot showers for public use.

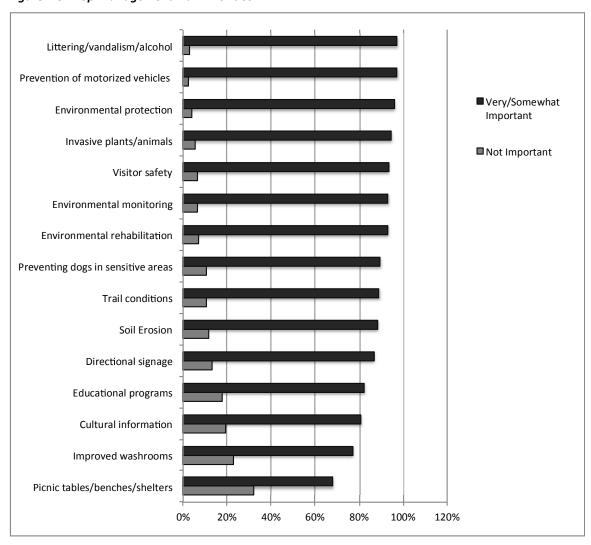


Figure 4.3 - Top Management Plan Priorities

When asked specifically about their top three priorities for services, facilities and/or programs, respondents indicated their highest priorities were for enhanced trail development and maintenance (57%). There was less agreement among the respondents in regards to the other potential priorities. New washroom facilities and drinking water stations were top three priorities for 35% and 34% of respondents, respectively; and notably, recreational programs were within the top three priorities of 27% of respondents. Some respondents noted their desires for other facilities and services, including a dog park, an indoor arena, flush washroom

facilities, campground expansion, play areas, and improvements to the existing beach and campground. Some respondents noted that efforts to support wildlife habitat should include a plan not to add any new facilities and to restore lost habitat. *Figure 4.4 – Top Services, Facilities and Programs*, highlights the questionnaire results of those who expressed opinions about services, facilities and programs.

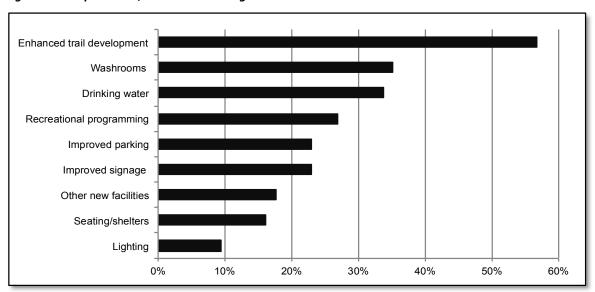


Figure 4.4 - Top Services, Facilities and Programs

When asked for their opinions about dogs in the park, 77% "strongly disagreed" with a ban on dogs in the park. Although, the vast majority (96%) "agreed" or "strongly agreed" that dogs should be kept on a leash. When asked specifically about allowance for off-leash dogs on trails only, the opinion among respondents was split between those who "agreed" or "strongly agreed" (48%) with such an allowance and those who "strongly disagreed". Ninety four percent "strongly disagreed" with the suggestion that dogs be allowed off-leash throughout the park. Figure 4.5 – Dog Restrictions, highlights the responses received from four questions concerning dog restrictions.

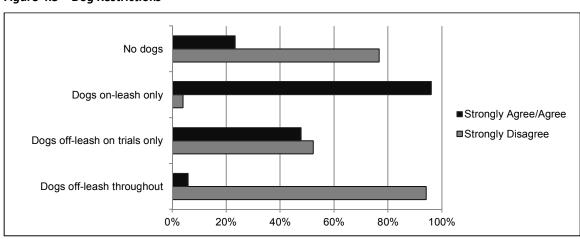


Figure 4.5 – Dog Restrictions

Respondents were also asked if they supported tourism and ecotourism uses in the park where these uses are compatible with conservation and environmental values. Approximately 76% supported such uses, 5% did not and 19% indicated they were unsure.

Thirty eight percent of respondents were male and 62% were female. Approximately 70% of respondents were over the age of 50. Figure 4.6 represents the age distribution of respondents.

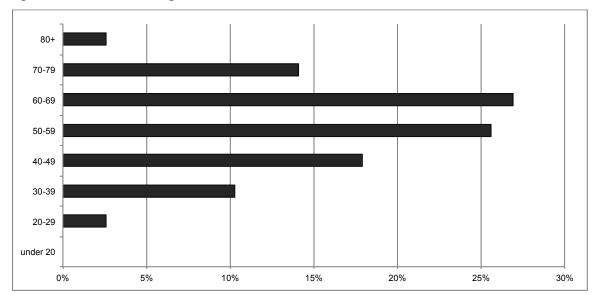


Figure 4.6 – Questionnaire Age Distribution

5.0 PHASE 2 – PUBLIC INVOLVEMENT OUTCOMES

Phase 2 (Draft Plan Recommendations) of the public involvement process for the Pass Creek Regional Park Management Plan was underway in the spring of 2015. In anticipation of the related public involvement events, the draft park management plan was prepared, including the long term park vision and the set of ten year management goals. During Phase 2, the draft plan was presented for discussion and feedback to the RDCK project management staff and Electoral Area Directors. Stakeholder organizations, interested individuals and park neighbours were also notified and provided online access to the draft plan. RDCK residents were invited to find out more about the recommendations and provide their feedback through a second questionnaire and public open house on June 23, 2015. Residents within the RDCK were made aware of this opportunity through the RDCK's social media channels, press releases and paid advertising. Approximately 30 people attended the open house, and a total of 50 questionnaire responses were received.

5.1 Phase 2: Comment Themes

The project team received a series of comments on the draft plan. All of the comments were reviewed and considered by the project team. The following section summarizes

the main comment theme heard through Phase 2. It is important to acknowledge, a range of opinions was expressed and there was not unanimous agreement.

Main Comment Theme: Strong opinions expressed concerning the proposed 30 metre riparian setback and the loss of exhibition event parking

The strongest opinions expressed through the open house and the questionnaire were related to the management plan proposal to restore a 30 metre riparian setback for Norns Creek. The proposal, including restoration planting within the setback, would impact available parking for exhibition events. Fifty two percent (52%) of questionnaire respondents believed the setback proposal to be "very important" or "somewhat important," while 26% believed it should not be pursued, 4% felt it was "not important" and 18% were "neutral" (see Figure 5.4).

Those who supported the proposal for the 30 metre setback, noted the importance of this proposal and the importance of restoring this area for wildlife. Some were very glad to see the ecological richness of the park recognized, including the fish species and the multitude of birds, and noted opportunities for environmental education. It was also noted that local NGOs (and perhaps Robson School) would be willing to work with local youth to complete restoration work at a low cost and with great community involvement.

Those who did not support the proposal believed the setback was too excessive; some believed the loss of parking would result in the downfall or decline of the Fall Fair (including agricultural education offered by the fair), as well as the Bluegrass Jamboree and equestrian events. Participants noted many event goers are seniors or children and they felt it is not realistic to expect them to walk the distance from the proposed east side parking area to the west side, over a bridge, adding that some event goes are in wheel chairs or pushing strollers. In addition, it was noted, the easily accessible parking area on the west side is needed for horse trailers, musicians and exhibitors who have livestock or large heavy equipment related to their activities. Equestrian users noted the need for the parking area close to the stables and horses and away from fair goers. A number of participants also rejected proposals to establish pedestrian connections across the creek, in part because they believed these proposals were part in parcel of the proposal to reducing parking on the west side.

Jamboree musicians who have camped in the past under the shade of the trees near the creek were also passionate about their desire for the Regional District to allow event camping to be reestablished under the trees within the riparian setback. A couple of participants noted the heat of the summer sun is a serious issue for campers during the Jamboree event and they believed no environmental degradation has come from camping uses.

Concerns related to the reduction in parking, and a general level of support for the hard work of the Pass Creek Regional Exhibition Society, as well as exhibition and equestrian events, lead a number of respondents to request the west side of the park be "left alone" entirely.

Other Comments and Points of Interest:

- The two sides of the park should be treated differently one is a park, one is fair grounds.
- Clarify that management should be equal on both sides. The west side needs predictable funding for a caretaker and for maintenance.
- The PCRES should continue to maintain the grounds.
- It is very important to maintain the important equestrian facilities used by all equestrian disciplines and to bring a focus for the Kootenay East and West equestrians.
- More farm related events. Maintain and support related facilities.
- I like the idea of maintaining and making minor improvements to the park.
- I see the value in safely developing the area so more people can enjoy it, even tourists.
- It's a good concept but will the RDCK be able to manage it?
- Don't get rid of the buildings in the park.
- Putting money into a septic system on the west side is a favourable suggestion.
- Manage traffic flow related to how to get to the park.
- Improve directional signage to the ball diamond.
- Improve directional signage to state Relkoff Road is not a through road. There is no safe turn-around at the end.
- Upgrade the narrow road access to the park.
- Manage access to the ball diamond to curb late night parties. Utilize security cameras, increase park presence, or a gate that is locked after hours.
- Off leash dogs exercises should be kept in mind.
- Allow an off-leash section of trails.
- There has never been any reported negative interaction between dogs and wildlife.
- Park planning lends heavily toward the environment and not the public who loves to come to the park and have their dogs off-leash.
- Plant park friendly trees in half of the area between the south side of the playing field and the toe of the slope in anticipation of cottonwood loss in 15-25 years time.
- Will there be creek bank improvement or protection of fish habitat for the rest of Norns Creek?
- Promote nature trails and ecosystems.
- Walking trails are important to me.
- Access to the falls on Norns (Pass) Creek should be a priority.
- Maintain the apple field on Raspberry Road. The trees are an import part of area bears' diet.
- Save the beaver.

- Pass Creek is a hidden gem.
- The proposed bridge lands in the backwater.
- The proposed bridge lands in the beaver pond.
- Cut down on dust in the arena.
- When renting out the space the speakers are too loud, consider the neighbours.
- Allow shower access on the east side for the Bluegrass Jamboree campers.
- What sized bear proof garbage containers will go in and at what expense?
- Add the adjacent Crown land across from playing field parking area. This is a great spot for additional sports fields, parking, overflow camping, etc.
- Engage with residents closest to the park to see if they have any further concerns beyond what is stated in the public documents.
- Public opinion has not been listened to. How many hours was put into the park review because this was not well planned?
- Presenters were overbearing, raising their voices, talking over guests; visitors were
 mostly unanimous with "it's not broke so don't fix it" with the presenters being
 overbearing and in raised voices taking the stance the "we're" in charge, "we're" the
 experts and your opinions aren't valid anyways. The word "rude" fits their talking
 down to members of the community.
- Liability insurance for the Jamboree is a huge financial burden. The RD should shoulder the responsibility for all the insurance as part of owning and managing those sites.
- How is the plan addressing the third upper part of the park?
- Undertake tree management by the ball diamond.
- What is the RD going to do to reduce the number of stolen vehicles left at the entrance of the park each winter (in the turn-around before the campground) and illegal activity?
- Too much money, I don't want my taxes to go it.
- No fireworks.

5.2 Phase 2: Questionnaire Results

As noted above, 50 questionnaire responses were received. Figure 5.0 summarizes the range of organizations that respondents identified with. Respondents were able to identify with more than one organization. Twelve organizations are represented within the Figure 5.0 category labeled "other," including the following:

- Ministry of Environment
- Ministry of Transportation and Infrastructure
- Regional District of Central Kootenay
- Interior Health Authority
- Selkirk Lions Club (West Kootenay)
- Selkirk College
- Castlegar Chamber of Commerce
- West Kootenay Invasive Weed Council

- West Kootenay Naturalists
- Slocan Valley Concerned Citizens Forum
- Castlegar and District Wildlife Association

80%
70%
60%
50%
40%
30%
20%
10%
O
School District 20 PC Regional Exhibition Friends of Castlegar Other
Society Parks & Trails

Figure 5.0 – Questionnaire Respondents

The questionnaire asked respondents about their level of support for the proposed vision statement for Pass Creek Regional Park.

Pass Creek Regional Park is a diverse multi-use park, vital to the quality of life of the local community and beyond. The Park balances recreational uses that support healthy lifestyles, while protecting the long term sustainability of Norns Creek and the park's ecosystems.

Seventy three percent (73%) of respondents "agreed" or "strongly agreed" with the proposed statement, 8% were neutral and 15% disagreed.

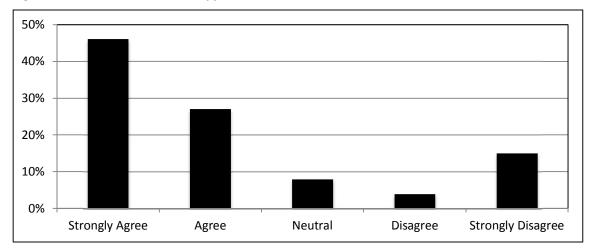


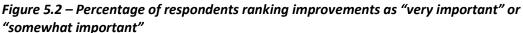
Figure 5.1 – Vision statement support

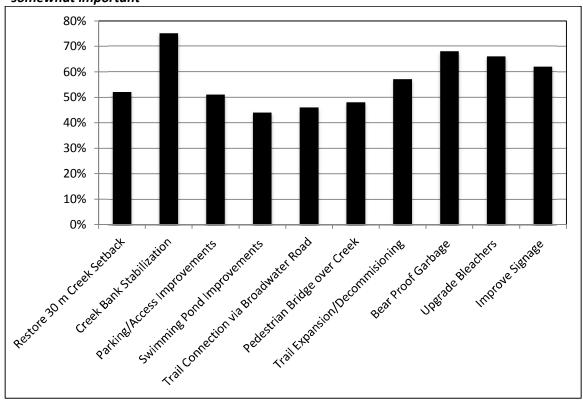
The design concept for Pass Creek Regional Park proposed a number of park improvements. The questionnaire asked respondents how important each of the improvements was to them

and if some proposals should not be pursued. Figures 5.2 through 5.13 summarize the results of the series of questions related to park improvements.

Only three of the ten design proposals received clear support from questionnaire respondents. At least 65% of respondents indicated the following improvements were "very important" or "somewhat important": creek bank stabilization (75%), bear proof garbage containers (68%) and upgrading the bleachers (66%). Respondents were more divided on the remaining desigan concept proposals. Less than 65% of respondents considered the following proposals "very important" or "somewhat important": signage improvements (62%), trail network expansion and decommissioning (57%), restoring the 30 metre riparian creek setback (52%), parking and access improvements (51%), constructing a bridge over the creek, establishing trail connections across the creek via Broadwater Road (46%) and swimming pond improvements (44%).

Thirty percent (30%) of respondent believed constructing a bridge over the creek "should not be pursued" and 28% felt that establishing a trail connection across the creek via Broadwater Road "should not be pursued"; (26%) felt that restoring the 30 metre riparian creek setback should "not be pursued."







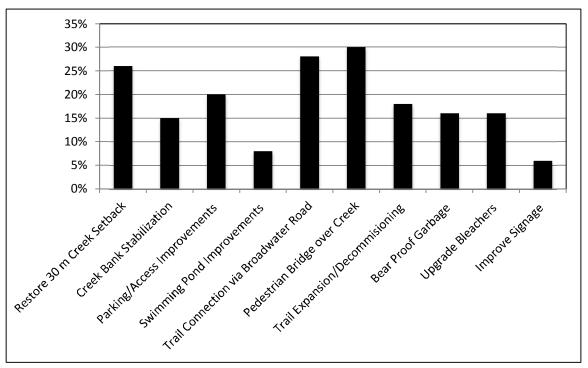


Figure 5.4 – Restore Norns Creek 30 metre riparian setback to reduce environmental impacts

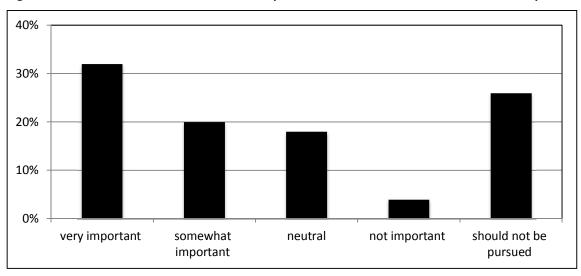


Figure 5.5 – Undertake Norns Creek bank stabilization and enhancement to reduce environmental impacts

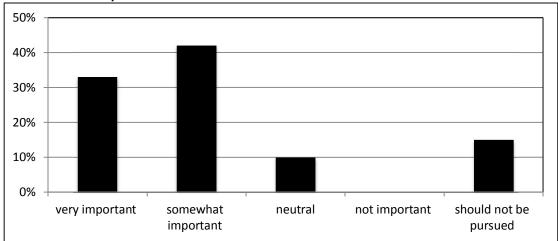


Figure 5.6 – Undertake parking and access improvements

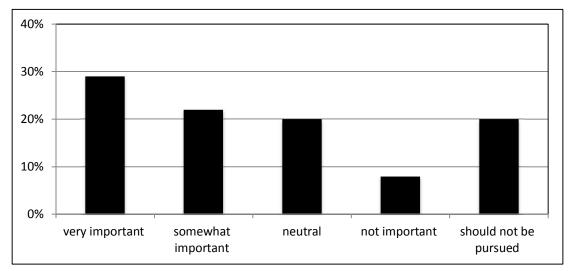


Figure 5.7 – Undertake swimming pond improvements

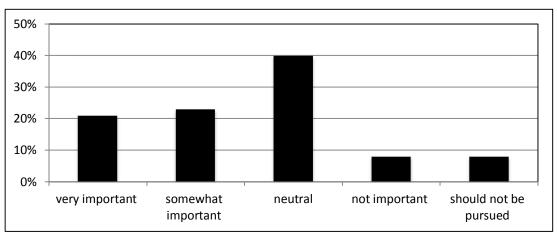


Figure 5.8 – Connect the park's east and west sides via Broadwater Road with a new trail and/or stairs

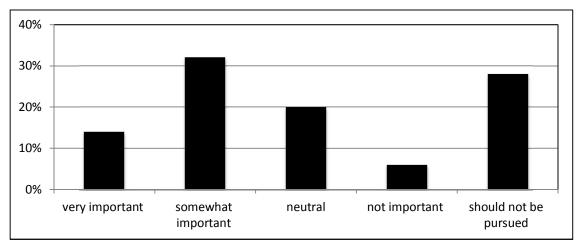


Figure 5.9 – Construct a pedestrian bridge across Norns Creek

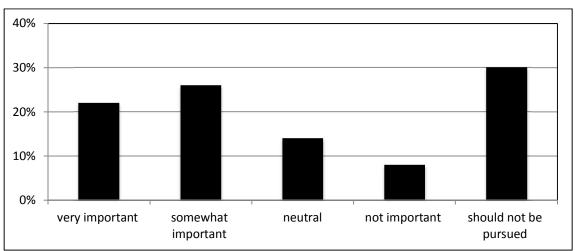


Figure 5.10 – Create a defined trail network through trail expansion and decommissioning

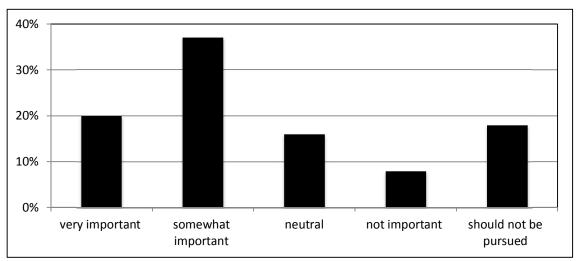


Figure 5.11 – Add bear proof garbage facilities

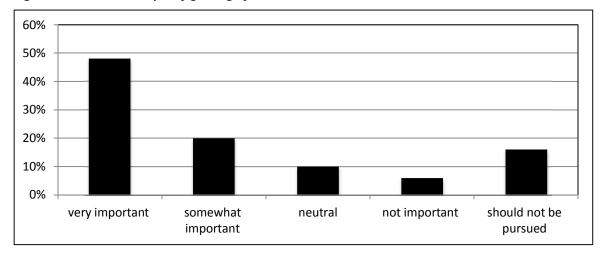


Figure 5.12 – Expand and upgrade bleachers to view events

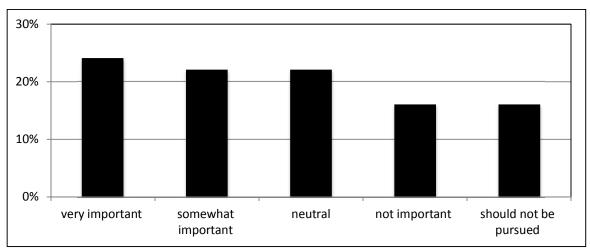


Figure 5.13 – Improve directional, educational and informational signage

