

JOHNS FAMILY NATURE CONSERVANCY MANAGEMENT PLAN



Prepared For:
Regional District of Central Okanagan and
Central Okanagan Land Trust

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A word cloud of nature-related terms. The words are arranged in a roughly rectangular shape, with some words being larger and more prominent than others. The words include: Wildlife Corridors, Nature Based Recreation, Sustainability, Stewardship, Education, History, Inter-park Connections, Preservation, Scenic Qualities, Biodiversity, Accessible, Hidden Gem, Active Lifestyles, and Trails. The words are in various shades of gray and are of different sizes, with 'Wildlife Corridors' and 'Trails' being the largest.

Restoration Wildlife Corridors
Nature Based Recreation
Sustainability Stewardship Education
History Inter-park Connections Preservation
Scenic Qualities Biodiversity Accessible
Hidden Gem Active Lifestyles Trails

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DISCLAIMER

The content of this Management Plan was informed by public consultation/stakeholder involvement, a brief ecological inventory, and by the direction of a project steering committee comprised of RDCO and COLT personnel. There was a wide range of input and direction. Although this document is not inclusive of all input received, it does achieve a middle ground, and specifically designates the most environmentally sensitive areas for wildlife and habitat conservation, while providing low impact recreational access to other less sensitive areas. Due to the inherent problem with brief ecological inventories, additional work should be undertaken to garner a thorough species list and to develop methods and data collection protocols to document ecological change over time. Data within this Management Plan was not statistically analyzed and no inferences about statistical significance should be made. 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., 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 data collected and presented.

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Chapter 1 - Introduction

1.0 Introduction

The Johns Family Nature Conservancy Regional Park (the Conservancy) Management Plan (the Management Plan) was approved in the fall of 2014 by the Regional District of Central Okanagan (RDCO) Board of Directors and the Central Okanagan Land Trust (COLT) Board of Directors. The Management Plan was prepared by a local consulting team composed of Ecoscape Environmental Consultants Ltd., Juliet Anderton Consulting Inc., and Outland Design Landscape and Architecture under the direction of a joint RDCO and COLT Management Plan Steering Committee.

The Management Plan area encompasses 405.8 hectares (1002.7 acres) within the South Slopes of the RDCO, including 82 hectares of a former RDCO park - namely, Cedar Mountain Regional Park - and 323.8 hectares of land donated in 2011 to COLT by the Alfred Johns Family Estate. In 2012, the RDCO signed a long-term (i.e., 99 years) agreement with COLT to lease the lands and jointly develop a plan to manage the lands. The Management Plan outlined within the following document fulfills this agreement.

The Management Plan reports on the status of current ecological and recreational features within the Conservancy and establishes a long range vision shared by the RDCO and COLT. A set of ten year management goals was developed to provide direction to the content and priorities within the Management Plan and the goals will continue to serve as a reference for future decisions that will be part of the ongoing operation of the Conservancy. Similarly, the Management Zones set out within the Management Plan provide direction for the management and use of specific geographic areas.

A central feature of the Management Plan is the Conservation and Design Concept. The Conservation and Design Concept addresses the planned public, emergency and permit only access, parking and staging areas, trail network, and rock climbing access. The Concept also outlines improvement, and/or decommissioning plans, for facilities, buildings and infrastructure and provides direction for new fencing and signage to both educate patrons and support the Conservancy's expected code of conduct. Beyond direction to physical improvements, the Management Plan provides strategies for actions to be pursued to establish a foundation for the on-going operation and maintenance of the Conservancy.

The Management Plan concludes with the Preliminary Implementation Plan. The Preliminary Implementation Plan outlines the priorities necessary to implement the Conservation and Design Concept. Preliminary cost estimates are provided; however, it should be noted that figures will become more precise as additional information is gathered on implementation activities.

1.1 Background

1.1.1 History of the Donated Lands

The donated lands have been in the Johns Family since the 1950s when Hector and Elizabeth Johns purchased the “ranch” primarily for selectively logging. Hector and Elizabeth had four children, two of which maintained the ranch after their parents’ deaths. Nancy Johns was the youngest of the children and oversaw the finances and cattle operations, and Alfred (Alf) Johns, the second oldest, selectively logged the property. Figure 1.1 – *History of the Donated Lands*, outlines the history of the ranch since it was purchased by the Johns family.



Figure 1.1 *History of the Donated Lands*

Date	Key Events or Activities
~1930s – 1940s	Hector and Elizabeth Johns purchased the ranch. The Johns family used the lands for selective logging during the winter and to drive cattle from the lower Mission to upper Crown parcels for summer grazing.
1965	Hector Johns dies at the age of 79
1980	The Johns family farm in the lower Mission sold, and brother and sister, Alf and Nancy Johns, moved to the ranch year-round. Cattle operations were moved to the ranch, with livestock enclosures located adjacent to the lakeshore access road, north of the homestead. Selective logging continued during the winters.
1985	Elizabeth Johns dies at the age of 97
1992	Initial dialogue between Alf and Nancy Johns and COLT about the possibility of donating the ranch for the purpose of a wildlife conservancy
2002	Nancy Johns dies at the age of 80
2003	The ranch is devastated by the Okanagan Mountain Provincial Park fire
2004	The main cabin is rebuilt, and salvage logging occurs throughout the property
2004	The first ¼ section of the ranch (inclusive of the Kelowna Craggs) is donated to COLT
2005	Another ¼ section of the ranch is donated to COLT
2010	Cattle grazing rights are issued to Colin Thomson, effective through 2015
2011	Alfred Johns dies at the age of 92
2011	The remaining ranch land (323.8 ha of land in total), is willed to COLT, with the distinct wish that it be and remain an undeveloped park for the sake of wildlife. It is thought to be the largest private parkland donation in the history of the province.
2012	A 99 year lease agreement is signed between COLT and RDCO. A requirement of the lease is to jointly develop a park Management Plan to address environmental issues, public recreational activities, and park infrastructure and facilities.
2014	Park Management Plan process begins

1.1.2 Location and Adjacent Land Uses

The Nature Conservancy is located within the South Slopes of the RDCO, and is upslope of the Kettle Valley residential subdivision. The majority of the Conservancy is within Central Okanagan East Electoral Area; however, the northwest section crosses over into the City of Kelowna. Part of the southern boundary abuts the Okanagan Similkameen Regional District.

Access to the Conservancy is through the Kettle Valley subdivision via Chute Lake Road. The last two kilometres of road to the park is steep and unpaved. Hikers can also access the Conservancy by trail from the Lebanon Creek Greenway Regional Park.

The western boundary of the Conservancy is shared with a large parcel of Crown land. This parcel to the west, and a second smaller Crown parcel to the east, are managed by the Ministry of Forests, Lands and Natural Resource Operations and are designated by the province for the Use, Recreation and Enjoyment of the Public (UREP). The designation was announced by the Province in 2013 in conjunction with the creation of the Conservancy.

The Conservancy, in combination with the UREP lands and other nearby parks, including Okanagan Mountain Provincial Park, Myra-Bellevue Provincial Park, Bertram Creek Regional Park and Lebanon Creek Greenway Regional Park, ensures a long-term network of protected areas within the South Slopes. Although the Conservancy is just beyond the doorstep of the City of Kelowna's developing residential communities, it is largely surrounded by rural resource future land use designations and is outside the City of Kelowna's permanent growth boundary. It is also notable that the Conservancy is within a 69,000 square kilometer territory that had been occupied by the Okanagan Nation. Figure 1.2 – *Conservancy Location*, depicts the location of the Conservancy, noteworthy features and surrounding land uses.

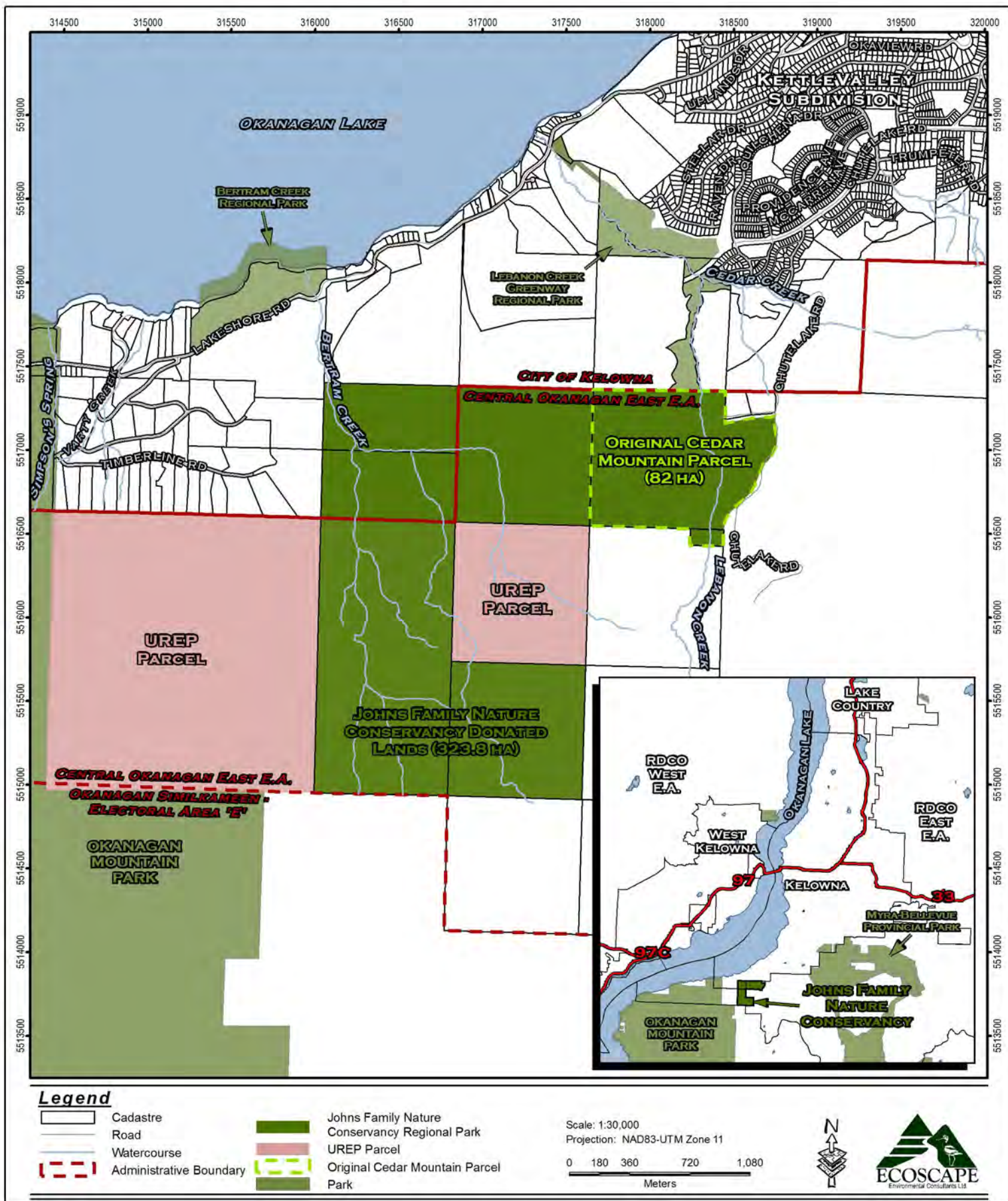


Figure 1.2 Conservancy Location

1.2 Planning Influences and Process

The development of the Management Plan was directed by the terms of the Johns Family land donation to COLT and the lease agreement between RDCO and COLT. The Last Will and Testament of Alfred Johns expressed the “distinct wish that the land be and remain an undeveloped park for the sake of wildlife”. The lease agreement establishes the land as a Regional Conservation Park, a RDCO bylaw (i.e., Our Regional Parks, Bylaw 884) classification that specifies that the land be managed for the protection or enhancement of habitat values. Within Regional Conservation Parks, recreational opportunities are generally passive and compatible with natural and environmental values.

Other significant influences on the development of the Management Plan included:

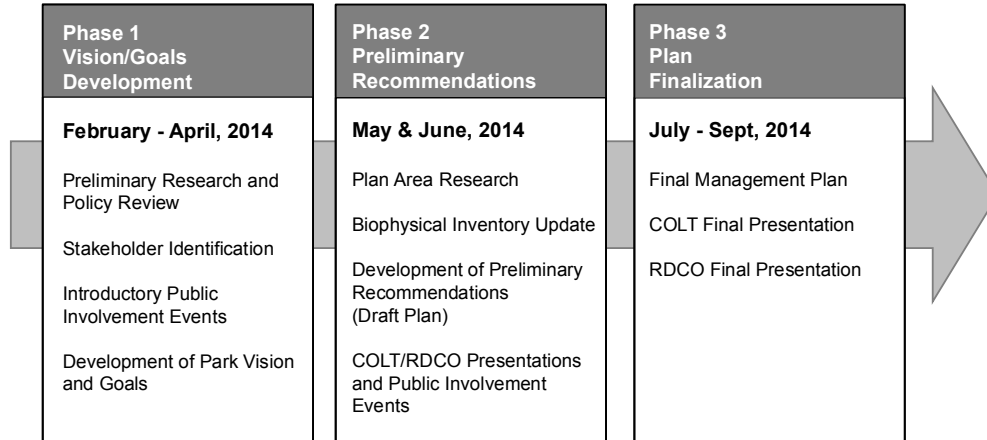
- the policies and practices relevant to the RDCO park services and operations,
- the biophysical inventory and outcomes of other assessments conducted within the plan area,
- the current and historical use of the Kelowna Crags and Cedar Mountain Regional Park,
- the outcomes of the Management Plan’s public involvement process, and
- the direction of the Management Plan’s Steering Committee.

Relevant RDCO policy documents are briefly highlighted below. The remaining aforementioned influences are elaborated on in the following chapters of the Management Plan.

- *RDCO Bylaw 884: Our Regional Parks, The Official Regional Parks Plan for the Central Okanagan*
- This document guides regional park development, including direction towards protecting the natural environment, providing outdoor recreation opportunities, setting regional park priorities and providing environmental education opportunities to park users.
- *RDCO Bylaw 1105: The Consolidated Regional Parks Regulation Bylaw*
- The rules and regulations governing the management, control and use of property for regional parks are outlined within this document.
- *RDCO Bylaw 1304: South Slopes Official Community Plan*
- This plan establishes a long-term vision for the community’s future, describes broad objectives, and guides future development and land use in the South Slopes.
- *RDCO Bylaw 1336: Regional Growth Strategy*
- A central concept of the Regional Growth Strategy is responsible stewardship of our natural ecosystems; and, more specifically, the commitment to protect, enhance and restore biodiversity within the RDCO.

The Management Plan was prepared through a three-phase process, over the course of nine months, beginning in February 2014 and ending in October 2014. *Figure 1.3 – Management Plan Process*, provides a high level view of the process. It should be noted, that the Management Plan process was closely aligned with the project’s Public Involvement Process (see Chapter 5 - Public Involvement). The latter was designed and implemented to engage residents of the RDCO and to generate feedback on key project decisions from the RDCO, COLT and other interested government and non-government organizations.

Figure 1.3 Management Plan Process



Chapter 2 – Environmental Values

2.0 Introduction

The following sections of the Management Plan describe the environmental values of the Conservancy, including the current ecological condition, occurrences of wildlife and ecosystems, and environmental sensitivities. The information is largely derived from a Biophysical Inventory that was undertaken in summer of 2011 (Patterson and Olson-Russello 2011), and from more recent field inventories conducted as part of the Management Planning process.

2.1 Environmental Context

The Nature Conservancy represents a regionally significant, contiguous patch of natural lands. It forms an important linkage between other protected areas within a fragmented and rapidly developing landscape. The Conservancy consists of a mix of open grassland and shrubland, stands of mature coniferous forests, and rugged rocky outcrops and cliffs. Several streams crisscross the Conservancy, including regionally significant watercourses such as Bertram and Lebanon Creeks. Pockets of wetlands with cattail marsh and open water communities are also scattered throughout the Conservancy, adding to the habitat and wildlife diversity.

2.1.1 Geology

The Conservancy landscape is part of the Okanagan Highlands and lies within the Monashee Mountains. The crags, cliffs, and other rock outcrop features were formed by glacial activity and erosive processes acting on granitic gneiss, a volcanic rock that is also found in the adjacent Okanagan Mountain Provincial Park and throughout the Monashee Mountains. The wide range of topographic features found within the Conservancy attracts rock climbers and other outdoor enthusiasts, such as hikers, bird watchers and photographers. While the Conservancy is only minutes away from bustling residential neighbourhoods, its vast size, limited access, unique geological features and adjacency to other large protected areas, give it a wild and remote feel.



2.1.2 Wildfire

The entire landscape was severely affected by the 2003 Okanagan Mountain wildfire and there is evidence throughout the Conservancy, including many standing dead trees, burned stumps, and dense stands of young regenerating trees. Only small patches of mature forest remain. Prior to the fire, the Conservancy was characterized by stands of Douglas-fir and ponderosa pine with patches of western red-cedar in the cooler and wetter areas, hence the name of the former Cedar Mountain Park. The fire

devastated the forest communities while restoring the natural fire regime of the area. The fire had followed years of fire suppression and fuel accumulation.

The ecosystem recovery following the fire has been a slow progression through natural succession from heavily disturbed areas of exposed soil, to herbaceous cover of pioneer species, and re-establishment of native shrub and forest communities. Today, the Conservancy is in transition between the earliest stages of regeneration and the establishment of late seral species (an intermediate successional stage), where biodiversity is high and sensitivity to disturbance has begun to decrease. During the regeneration process, multiple activities have taken place, including aerial grass seeding, forest harvesting to salvage dead and dying timber, tree planting, and grazing of cattle throughout the bunchgrass and shrub-steppe communities.

2.1.3 Livestock Grazing

There is an existing 5-year cattle grazing license within the donated lands that extends through 2015. To date, the number of cattle using the area appears to be suitable and within the carrying capacity of the land. Typical grazing impacts, such as compacted soils, invasive plants, creek bank erosion and absence of large bunchgrasses, were noted within the Conservancy; however, the effects were largely isolated and are not likely to have long-term impacts.

Grazing is known to have potentially detrimental effects on regenerating forest ecosystems, wetlands, riparian areas and water quality when conducted in an overly intensive or irresponsible manner. Grazing must be undertaken and overseen in a manner that maintains the ecological values and does not contribute to the degradation of ecosystem communities, especially those described as Very High sensitivity (e.g., wetlands, riparian areas). There may also be potential conflicts with wildlife and recreational activities. Vegetation plots, measures of plant productivity, biodiversity assessments, grazing / wildlife conflicts, invasive plant inventories, and soil and water quality sampling are all useful data to help determine the potential effects of grazing.

The current licensee has expressed interest in the continuation of cattle grazing within the donated lands beyond the 2015 expiry, either in a similar capacity of May – October, or in a reduced capacity (May – June only).

2.1.4 Off-Leash Dogs

The portion of the Conservancy previously known as Cedar Mountain is currently open to the public, and on-leash dogs are permitted within designated trails. Despite the on-leash only bylaw, off-leash dogs appear to be commonplace. Off-leash dogs that are not controlled can cause numerous problems including harassment of wildlife, disruption of ground level nesting, 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.

2.1.5 On-going Research

During the biophysical inventory approximately twenty non-native species of plants were encountered, several of which are considered noxious weeds. The Ministry of Forests, Lands and Natural Resources Operations, Range Branch has an on-going project within the Conservancy to release and monitor bio-control agents for tansy ragwort (*Senecio jacobaeae*), a poisonous weed that can lead to the death of livestock. Further weed monitoring and control is warranted within the Conservancy, and is a stewardship priority.

Other on-going research within the Conservancy involves the use of temperature and relative humidity sensors to understand future climate and water demands within the Okanagan Valley. This work is being undertaken by Agriculture and Agri-Food Canada. The Conservancy could support additional research that could span a range of scientific topics.

2.2 Existing Ecosystems

A number of previous studies and inventories have been completed for the Conservancy that document various plant and animal species found in the Conservancy as well as those that have the potential to utilize the Conservancy habitats (Patterson and Olson-Russello 2011, Thomas 2004, COLT Annual Reports). The RDCO Parks Biophysical Inventory described twenty different ecosystem types, ranging from disturbed and anthropogenic sites (e.g., rural areas, cultivated fields and old roads) to rare and endangered forest communities and sensitive habitats, such as woodland, wetlands, talus slopes and rock outcrops (Patterson and Olson-Russello 2011). Four of the ecosystem communities within the Conservancy are Red-listed and five are Blue-listed in British Columbia. These designations indicate that they are endangered or are of special concern, respectively. Many of the ecosystem communities provide suitable habitats for species at risk, including the western toad, Lewis's Woodpecker, Barn Swallow and yellow-bellied racer, all of which have been documented within the Conservancy.

2.3 Aquatic Resources

The Conservancy contains a number of wetlands and drainages, both natural and modified, which feed into the regionally significant streams (Bertram and Lebanon Creeks) that flow through the Conservancy. These areas provide unique and important habitats and form core conservation areas and movement corridors for wildlife.

2.3.1 Streams

Bertram Creek (Watershed Code: 310-776000) extends north along the western edge of the Conservancy towards the outlet at Okanagan Lake within Bertram Creek Regional Park. The riparian communities associated with the stream corridor and its tributaries provide cover and refuge for migrating and resident wildlife. There are no known fish present within the section of Bertram Creek within the Conservancy due to a cascade barrier at Lakeshore Road; however, the creek provides a source of clean water and nutrients to downstream fish habitat.

Lebanon Creek (Watershed Code: 310-780500) originates from Lebanon Lake, approximately 4 kilometres south of the Conservancy. The creek flows north along the eastern edge of the Conservancy

(within the former Cedar Mountain parcel), and through the Lebanon Creek Greenway Regional Park towards the outlet at Okanagan Lake. The loss of riparian vegetation resulting from the 2003 wildfire has led to bank instability, erosion and channel down-cutting along portions of the creek (Hawes 2009). While portions of the creek are inaccessible to fish due to subsurface flows and other barriers, Lebanon Lake is stocked with rainbow trout and fish may be present throughout the reaches occurring within the Conservancy.

2.3.2 Wetlands

Pockets of cattail marsh, shallow open water, and seepage occur throughout the Conservancy and are generally associated with Bertram Creek and its tributaries. It appears that several of the wetland communities are ephemeral and dry up over the hot summer months. During the wetted periods, these communities provide critically important and regionally rare breeding habitats for amphibians such as frogs, toads, and salamanders, which provide foraging habitat for snakes, small mammals, and birds of prey. Wetlands are becoming increasingly rare throughout the Okanagan and these sensitive habitats require the highest priority for conservation or enhancement.



2.4 Wildlife and Species at Risk

Wildlife occurrences and potential species at risk were determined during the Biophysical Inventory using field data and online sources (i.e., BC Conservation Data Centre) (see Appendix A). The list was then refined following fieldwork for the Conservancy assessment. Observations were recorded and potential occurrences were determined based on the availability of habitats for important life functions such as breeding, migrating, feeding, resting and hibernating. The bird list, including documentation from volunteer groups over the past several years, includes more than 65 species.

The remaining pockets of coniferous woodland, grassland, shrub-steppe, rock outcrop and talus communities provide habitat for a wide variety of wildlife. Pockets of wetland and riparian communities add to the overall biodiversity of the Conservancy and provide habitats for various sensitive species such as amphibians, reptiles, and invertebrates. Sparsely vegetated areas, including talus slopes, cliff, and rocky outcrops, provide unique habitats for basking reptiles, nesting birds and overwintering small mammals. The Conservancy provides important overwintering grounds for ungulates, including both mule and white-tailed deer. The large, contiguous nature of the Conservancy and adjacency with other large natural areas creates an important east-west movement corridor for a variety of small and large mammals (i.e., from Okanagan Mountain Provincial Park to Myra-Bellevue Provincial Park) and from low to high elevation (Dr. L. Parrot, pers. comm. 2014). The Conservancy may also provide habitat for migrating or overwintering elk, which are known to occur within the adjacent Okanagan Mountain

Provincial Park. The carrying capacity of the Conservancy for ungulates is considerable, but may lead to conflicts with grazing livestock as well as with adjacent residential and rural areas.

2.5 Environmentally Sensitive Areas

Environmentally Sensitive Areas (ESA) were classified during the Biophysical Inventory and updated during the Conservancy assessment. The delineation and ranking of ESA was completed based on ecosystem characteristics and wildlife habitat suitability. Professional judgment was 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. Ecosystem types (polygons) were assigned a value rating based on these criteria, which reflects their overall relative habitat value (i.e., higher scores represent higher value). Figure 2.1 – *Environmental Sensitivity*, depicts the environmental sensitivity classifications and notable wildlife observations.

The vast majority of the Conservancy (i.e., 85.6%) was classified as having High ESA value, based on the criteria above as well as the general contribution to regional biodiversity and the connectivity with the surrounding landscape. Almost the entire remainder of the Conservancy (i.e., 12.5%) was classified as having Very High ESA value. These areas are associated with sensitive aquatic ecosystems, including wetlands and riparian areas along streams and drainages. The Very High areas provide important regional habitat function and connectivity and are the highest priority for conservation. The Moderate ESA values included anthropogenic sites that were historically used for agricultural purposes. There were no Low value ESA areas observed within the Conservancy. Refer to Appendix A for a detailed description of each ESA classification category.

Given the relatively recent wildfire disturbance within the Conservancy, and the current and historical anthropogenic uses, including logging and agriculture, ecosystems appear to be in generally good condition. Non-native and invasive species presence is limited to roadways, old fields and areas disturbed from intensive cattle grazing, gravel extraction and other human activities. The maintenance of the current ecological condition and enhancement or restoration of degraded areas will be important to conserving this valuable habitat resource.

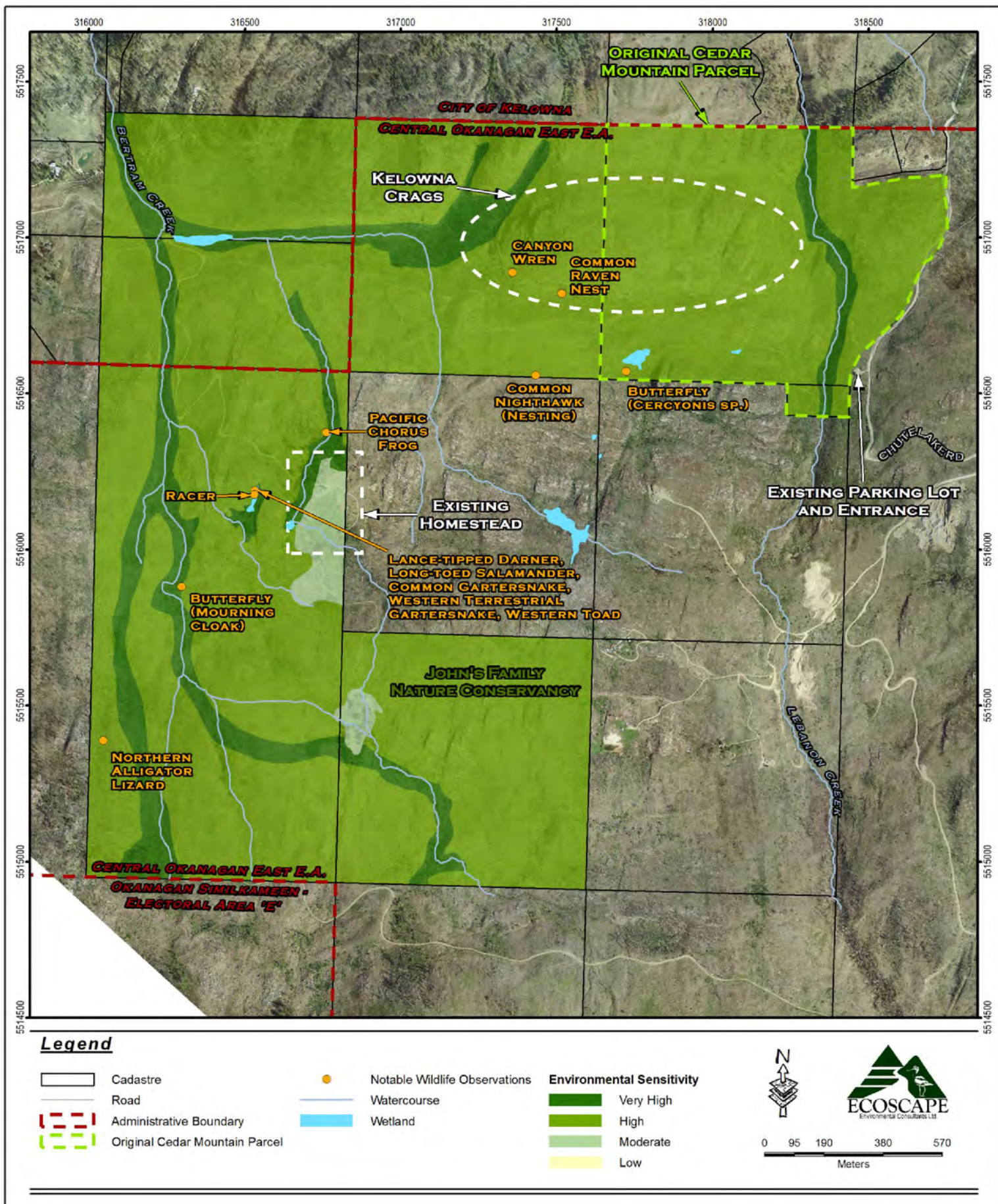


Figure 2.1 Environmental Sensitivity

Chapter 3 – Access, Infrastructure and Services

3.0 Introduction

The following sections provide an overview of the existing access, infrastructure and services within the Conservancy.

3.1 Access

3.1.1 Access to the Conservancy

Access to the Conservancy is through the Kettle Valley Subdivision, via Chute Lake Road, with the last two kilometers occurring on a steep, unpaved road. The condition of Chute Lake Road in this area varies by season; however, it tends to have washboard conditions that can be challenging to navigate. The Conservancy visitor must also be cautious as there is the potential for encountering gravel and logging trucks. A small gravel parking lot occurs west of Chute Lake Road and provides parking for approximately 10 to 15 vehicles. Hikers and bikers can also access the Conservancy by trail from the Lebanon Creek Greenway Regional Park.

Other unofficial points of access include a private driveway that originates from Lakeshore Road and a dirt road that was constructed to help fight the Okanagan Mountain Provincial Park fire from Timberline Road, both of which enter the Conservancy near the northwest corner and are closed to the public. The private driveway extends into the Conservancy approximately 200 metres before it loops back to the north, providing access to a residence located just outside of the Conservancy boundary. This easement allows the adjacent property owners access to their rental property, however it is the responsibility of the RDCO to maintain the road within the Conservancy boundary. Neither of these roads currently presents a problem for illegal trespass, as they both originate from private property.

An old logging road also provides access to the southern boundary of the Conservancy. Decommissioning works have been undertaken immediately south of the Conservancy as recently as the fall of 2013. Yet evidence of unauthorized vehicle access / trespass has been documented approximately three times since decommissioning, along with the defacing of boundary fencing and infrastructure (Mr. Colin Thompson, pers. comm. 2014). Gorman Brothers holds the logging tenure on the Crown land south of the Conservancy, but is not actively logging this area due to a lack of trees after the 2003 Okanagan Mountain wildfire.

3.1.2 Access within the Conservancy

There is an estimated 21.3 kilometres of existing roads, footpaths and cattle trails traversing the land within the Conservancy; the level of accessibility and maintenance varies with each. Access within the Conservancy can generally be grouped into the following categories:

- A trail extends from the parking lot and parallels Lebanon Creek, where it exits the Conservancy at the north east corner to join the Lebanon Creek Greenway Regional Park.
- A main access gravel road extends from the parking lot to the homestead. It should be noted that a portion (i.e., approximately 685 metres) of this road crosses the smaller eastern UREP

Crown parcel. A cattle guard and gate is located on this road at the boundary as the road crosses into the donated lands.

- A continuation of the main access road, past the homestead to the northwest corner of the Conservancy, connecting to the existing Lakeshore Road access easement.
- A steep trail access to the top of the Kelowna Crag.
- Primary access trails to the front (i.e., south) face of the Kelowna Crag.
- Multiple trails and gravel roads in the south west quadrant of the donated lands, currently used to patrol cattle grazing.
- Several parallel trails at the top of bank along Bertram Creek on the western edge of the donated lands.

Off-trail access has been made easier due to the wildfire and a lack of trees, although the scattered rocky outcrops, downed trees and elevation changes make it somewhat difficult, especially by vehicle. Figure 3.1 – *Existing Access*, shows the various access routes (i.e., roads, trails, cattle paths) that exist throughout the Conservancy, as well as the perimeter access points.

Access management, both perimeter and within the Conservancy is critical to minimize impacts to environmentally sensitive areas and to ensure that habitat degradation does not occur. Highly sensitive habitats such as wetlands, riparian areas, and grassland communities are extremely susceptible to disturbance, particularly during the early stages of recovery from the 2003 wildfire. Trampling of vegetation, compaction of soils, and introduction of invasive plants may all contribute to the degradation of these ecosystems from uncontrolled human access. There may also be a need for permanent or seasonal restrictions to protect sensitive wildlife and plants during critical life history stages (e.g., breeding birds, flowering plants, etc.). Climbing activity may require restriction during bird nesting along the cliffs associated with the sport climbing routes. Raptors, owls, and other sensitive avian species (e.g., canyon wren) utilize the cliff habitats for nesting and are vulnerable to disturbance during that period, possibly causing abandonment of nests, increased risk of predation, reduced fecundity and/or survivability.

3.1.3 Access to Adjacent Parks

The RDCO South Slopes Official Community Plan specifies the desire for improving trail connectivity between Regional, City and Provincial parks (see South Slopes Trails and Connectivity Map; Appendix B). The establishment of the Conservancy provides an opportunity for a trail connection to Okanagan Mountain Provincial Park through the UREP parcel to the west. The Conservancy also has the potential to link three parks via a connection from the Lebanon Creek Greenway Regional Park, to the Conservancy and through to Okanagan Mountain Provincial Park. The Friends of South Slopes could be a key partnership organization to help develop and build a trail from the Conservancy to Okanagan Mountain Provincial Park.

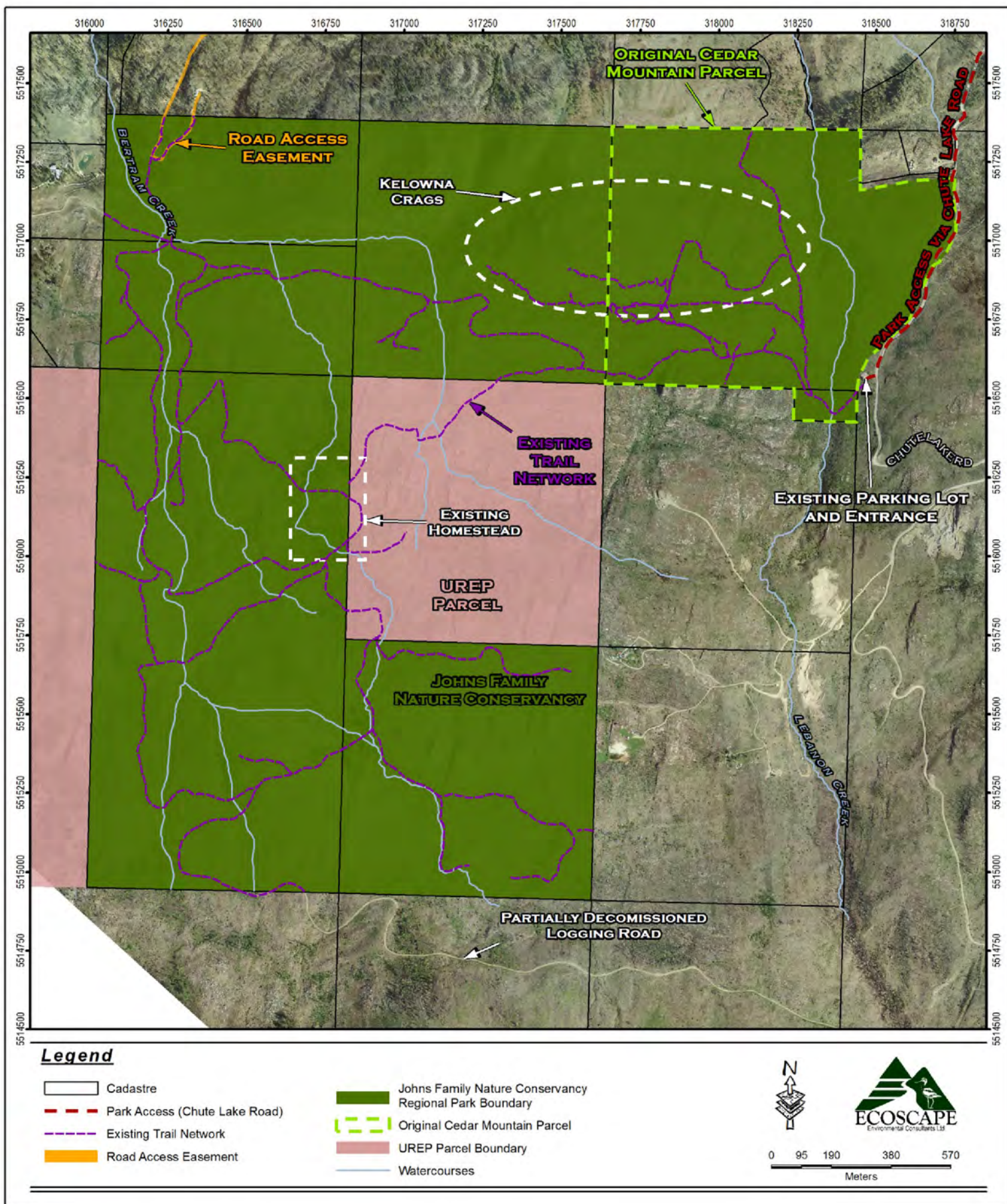


Figure 3.1 Existing Access

3.2 Infrastructure and Services

The Conservancy's facilities, infrastructure and services are minimal and are focused at the parking lot trailhead and at the homestead within the central part of the Conservancy. Amenities located at the parking lot are actually located within Crown land and are outside of the Conservancy boundary. The following sections provide an overview of the existing infrastructure within the Conservancy. Climbing related infrastructure is not addressed in this section (see Chapter 4).

3.2.1 Conservancy Entrance

The Conservancy entrance, west of the Chute Lake Road, has the following amenities:

- A gravel parking lot in fair condition that can support approximately 10 to 15 vehicles.
- A wooden kiosk entry sign, in fair condition (referring to the former park name).
- A vehicle control gate at the trailhead in good condition.
- Basic informational signage.



3.2.2 Signage and Fencing

With the exception of the kiosk and park signage at the parking lot entrance, and some limited boundary signage, no informational, interpretive, regulatory or directional signage exists within the Conservancy. Boundary signage exists advising the general public to recreate within the former Cedar Mountain Regional Park lands only and to stay out of the newly donated lands to the west. Limited boundary signage also identifies the Conservancy boundary.



The boundary signage along the southern edge of the Conservancy indicates that the fence line is the park boundary and that the park is closed due to hazards. There is a cattle guard with crisscross metal wires to prevent vehicle entry. Due to previous incidents where people have cut the adjacent fence line to gain entry, and cattle have escaped due to the defaced infrastructure, a wire gate has been installed within the fence line immediately adjacent to the cattle guard. A hand written sign also indicates that if one must pass, then please close the gate behind them.

Perimeter fencing is currently in place around the donated lands to contain grazing cattle, except where existing rock features naturally restrict movement. This includes a fence line that separates the donated lands from the Cedar Mountain parcel.

3.2.3 Homestead

The homestead is located at the interface of the western boundary of the UREP parcel and the eastern boundary of the donated lands. It consists of two residential dwellings: a recently upgraded 1-bedroom house, in good condition with an open living plan, kitchen area and a full bathroom; and a smaller studio house also in good condition with an open living plan, sleeping area and small bathroom. Both dwellings have electrical service, and water (supplied from Hector's spring, a tributary of Bertram Creek), and are on a septic system.

Other homestead features include:

- A wooden deck and walkway that occurs behind the 1-bedroom house. Both the walkway and deck are in fair condition; however, neither have been officially inspected for conformance to provincial codes. The wooden walkway allows access to the Johns family memorial site which contains memorial plaques mounted to bedrock.
- A snake rail fence encloses an adjacent pasture that is approximately 1.5 hectares in size.
- An almost 200 m² covered outbuilding occurs approximately 5 metres from the Conservancy boundary.
- An overhead electrical service line extends to the homestead from Lakeshore Road.
- Two communications towers within Okanagan Mountain Provincial Park and at the end of Lakeshore Road provide cellular coverage to the area.



Chapter 4 - Rock Climbing and Other Recreational Activities

4.0 Introduction

Rock climbing is the one of the most established recreational activities within the Conservancy. The crags that support this use are known as the Kelowna Crags. This rock feature occurs within the Cedar Mountain parcel and extends west into the donated lands, and is also complimented by a section of crags to the east of the Conservancy. The following sections provide a broad overview of the area's climbing history, climbing features and established climbing infrastructure.

4.1 Rock Climbing

4.1.1 Geology, History and Significance

The Kelowna Crags are a series of steep rock ridges oriented in an east-west direction. They are part of a regional rock formation referred to as the Monashee Gneiss (Roed and Greenough 2004). The rock ridges and cliffs are separated by gently sloping valleys, both of which were formed from a number of glacial expansions and retreats. Most of the rock ridges have low northern slopes and very steep southern slopes, believed to be due to the plucking action of at least three massive glaciations (Roed and Greenough 2004).

The Kelowna Crags have been used for rock climbing since the 1960s. Despite many of the established climbing routes occurring within the donated lands, the Johns Family tried to control access, in part because of the potential liability of a climber injury within their property. The Johns erected no trespassing signs on the fence that divides the south face of the Kelowna Crags where climbers accessed their property, but signs were regularly torn down. This section of land was the first to be donated to COLT in 2004.

The Kelowna Crags has been cited as one of the most popular rock-climbing localities in the Central Okanagan (Roed and Greenough 2004). Despite its notoriety, a typical in-season weekend (April – October), may accommodate less than fifteen climbers. July and August are the quietest months due to the southern exposure of the Kelowna Crags, and high temperatures that can lead to fatigue and an increased risk of equipment failure (Janice McQuilkin, pers. com. 2014).

With stacks, chutes, chimneys and sheer cliffs made of solid granitic gneiss, there are numerous climbs that require a range of skill levels. The Crags are used primarily by climbers who have local knowledge of the site and a familiarity with the infrastructure; however, the destination has been documented in climbing books (e.g., Vaaranpaa and Hanna 2008, Urness 1999) and it is reasonable to expect that it will attract an increased number of users in the future.

4.1.2 Climbing Access

The Kelowna Crags can be accessed by two main trail routes. These routes are essentially rough, unimproved footpaths that in places cross over uneven terrain, boulder scree slopes and moisture receiving pockets. There is no climbing specific informational, cautionary, regulatory or directional signage.

One of the trails provides access to the south face of the crags. There is a small stile that facilitates movement over the fence that currently separates the Cedar Mountain parcel from the donated lands. This stile was constructed to prevent climbers from damaging the fence that is currently needed to contain grazing cattle. From the main footpath along the south face of the Kelowna Crags, there are informal routes to the base of each climbing route.

A steep, poorly defined footpath extends upslope from the Lebanon Creek trail and leads hikers to the top of the Kelowna Crags to an informal seating area. There are no guardrails to limit access to the edge of the sheer cliffs of the Kelowna Crags; additionally, there are no measures to prevent rocks or other debris from falling downslope over possible climbing routes.

4.1.3 Climbing Infrastructure

Figure 4.1 – *Groups of Climbing Routes at the Kelowna Crags*, illustrates thirteen groups of climbing routes. Ten of the areas are along the south-facing slope of the Kelowna Crags, and three are located along the western and northern edge of the Kelowna Crags. In addition, the Lonely Crags is located on privately held land east of Chute Lake Road, approximately 2 km north of the Conservancy. Although smaller than the Kelowna Crags, the Lonely Crags are considered an equally significant feature by the climbing community.

Within the thirteen areas, there are approximately 100 sport routes and 20 traditional routes. A sport route relies on permanent anchors and bolts affixed to the rock for protection, while traditional routes are typically devoid of fixed anchors and bolts. The permanent anchors and bolts associated with the sport routes are installed and maintained on a volunteer basis by the climbing community. Outdoor groups that have been known to use the Kelowna Crags include the Alpine Club of Canada (ACC) Okanagan Section, the Climbers' Access Society of BC, the Association of Canada Mountain Guides (ACMG) and Yamnуска.

The Lair climbing area located west of the Kelowna Crags is a work in progress and requires more cleaning (due to the fire in 2003) to make the area usable. Access to this site is also difficult as there are no formalized trails. Scruffy Bluffs on the east side of the Kelowna Crags has the potential to develop as a beginner area due to the short routes and easy access; however, many of the routes require upgrades to make the area usable (Figure 4.1).

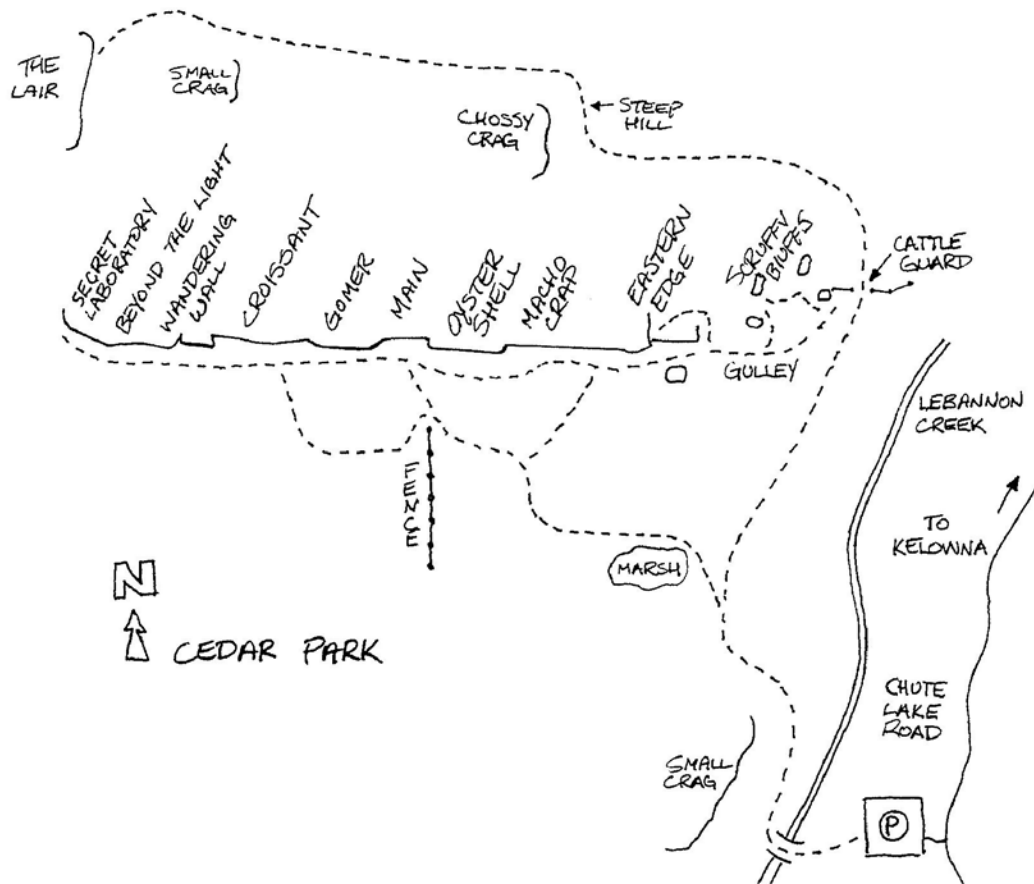


Figure 4.1 Groups of Climbing Routes at the Kelowna Crags

(From Vaaranpaa and Hanna 2008)

4.2 Other Recreational Activities

Other recreational activities that are supported within the Conservancy include hiking and nature appreciation, as well as visitors that come specifically to take in the spectacular lake and valley views. Mountain biking and dog walking are also noted to regularly occur with the Cedar Mountain parcel, and the frequency of use is likely to increase with the continued development of the surrounding areas and with the establishment of the Lebanon Creek Greenway Regional Park.

Documented winter activities include snow shoeing and cross country skiing, however formalized tracks are not provided.

Chapter 5 - Public Involvement

5.0 Introduction

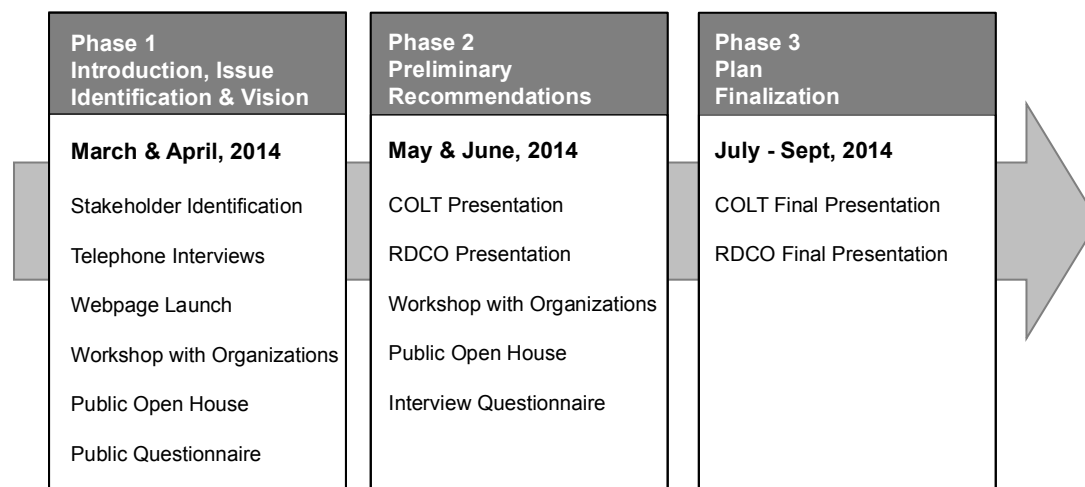
The Public Involvement Plan for the Management Plan project was designed and implemented to engage residents of the RDCO, and to generate feedback on key project decisions from the RDCO Parks Services Division, COLT and other interested government and non-government organizations. The public involvement plan was a critical component of the information gathering process, allowing the project to move from assessments of the current conditions and the existing policy directions to the formation of a long term vision for the Conservancy and set of ten year goals for the Management Plan. The public involvement process was also important for its capacity to build on and create new relationships between and among groups and individuals interested stewardship and other activities within the Conservancy.

The following sections outline the public involvement process, the range of interested organizations, the communication and notification methods used and the input received from participants through each phase of the project.

5.1 Public Involvement Plan Process

The Public Involvement Plan was implemented through three phases, over the course of six months, beginning in March 2014 and ending in August 2014. *Figure 5.1 – Public Involvement Plan Process*, provides a high level view of the process. The following sections elaborate further on the activities undertaken.

Figure 5.1 Public Involvement Plan Process



5.1.1 Phase 1: Introduction, Issue Identification and Vision Development

Phase 1 of the public involvement process initially focused on identifying stakeholders and introducing these groups and individuals to the Conservancy and the Management Plan process. The project team established a website, contacted stakeholder organizations and conducted a number of brief telephone interviews to build their understanding of the interests of potential stakeholders.

A two-hour interactive workshop with interested organizations and a public open house held to explore the issues and challenges that participants believed were central to the Management Plan. The format for the two-hour workshop included an introduction by the RDCO, COLT and the consulting team. Participants provided their input by rotating through three theme-based group discussions. Themes included (1) the natural environment, stewardship, research and education; (2) park activities and access; and (3) park neighbours and connections. Facilitators recorded input on flip charts and note cards. The note cards were organized into similar categories to assess developing themes. At the end of the workshop, participants outlined the key words or phrases that they believed to be important components of a vision statement for the Conservancy.

The format for the two-hour evening open house included the display of a series of presentation boards introducing attendees to the project. Six project representatives were on hand to guide attendees through the presentation boards and answer questions. Project representatives gathered verbal feedback and questionnaires were available for attendees to complete. The open house presentation boards and questionnaire were also posted online on the RDCO project website (www.regionaldistrict.com/parkmanagementplans).

5.1.2 Phase 2: Preliminary Recommendations

In anticipation of the Phase 2 public involvement events, a long-term park vision, a set of 10-year management goals, and a series of preliminary Management Plan recommendations were prepared. The development of these materials was informed by the feedback gathered from the Phase 1 public involvement events, the environmental inventory, research on the best practices in park management and the direction set by the original intent of the Johns family land donation.

The vision, goals and preliminary Management Plan recommendations were presented for discussion to the COLT Board of Directors and to the RDCO Board of Directors. Stakeholder organizations were also circulated the draft recommendations and were invited to a second interactive workshop. Residents of the RDCO were invited to find out more about the project and the recommendations through a second open house. The open house was held at the Kelowna Farmers' and Crafters' Market as a special outreach activity and a means to go directly to the public to understand their views.

The workshop and open house focused on proposed measures to protect the Conservancy's environmental values, park uses and trails, access to the Kelowna Crag and the Johns family homestead and stewardship actions. Detailed notes were recorded by participants at the workshop and an interview-style questionnaire was conducted at the open house.

5.1.3 Phase 3: Plan Finalization

During Phase 3 of the public involvement process, the project team developed the Draft Management Plan. The plan was submitted to the Project Steering Committee and was posted on the RDCO website for stakeholder organizations and the public to provide comments prior to finalization. A presentation to COLT was held to receive final comments from the Board. Final amendments were made to the Management Plan and the plan was subsequently presented to the RDCO Board for final approval.

5.2 Project Stakeholders

5.2.1 Project Steering Committee

The Project Steering Committee and their respective boards' of directors were central to the public involvement plan process and were a central focus for consultation and reporting activities throughout each phase of the Management Plan project. Two members from the RDCO Parks Services Division and two members from COLT made up the Committee. Together, representatives were tasked with the mandate "to protect and steward the lands, while at the same time providing for educational and recreational outdoor experiences." Both organizations had a significant interest and investment in the outcome of the Management Plan and both were highly influential, each having a role in the approval and implementation of the final Management Plan.

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 RDCO in parks and other services are of interest to the residents of the RDCO. Parks staff and the RDCO Board are accountable to the public and have an interest in identifying and responding to public needs.
- The RDCO is committed to working and communicating effectively with other government bodies and agencies (e.g., federal, provincial, municipal, First Nations, etc.). Provincial ministries, and possibly adjacent local governments, will have important decision-making roles on specific aspects of the Management Plan implementation.
- The Johns family wishes and the terms of the RDCO and COLT lease agreement set the stage for preparation of the Management Plan and the scope of consultation. Previous decisions and the direction established within existing RDCO policy documents will also shape the Management Plan and impact the scope of consultation (e.g., South Slopes Official Community Plan, the Regional Growth Strategy and the RDCO Parks Bylaw).
- Although the overall project is complex in nature, the approach to balancing wildlife protection with passive recreation, the prioritization of park improvements (i.e., capital improvements) and the operational and maintenance program, are the central foci of the project.
- A number of stakeholder groups could be interested in participating in the project due to the potential for the Conservancy to support research and educational opportunities.

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

5.2.2 Interested Organizations

Over 35 government and non-government organizations were approached at the onset of the public involvement process to assess their interest in participating in public involvement events and to understand their desired level and method of involvement. Thirty-one representatives from 26 different organizations ultimately attended the workshops. *Figure 5.2 – Stakeholder Consultation and Information*, lists those organizations represented at the workshops and those circulated project information.

Figure 5.2 Stakeholder Consultation and Information

Organizations Participating in Interactive Workshops	Organizations Circulated Workshop Invitations and Information
<ul style="list-style-type: none"> – Agriculture and Agrifood Canada – Alpine Club of Canada – Okanagan Section – Central Okanagan Land Trust – Central Okanagan Naturalist Club – City of Kelowna, Infrastructure Division, Parks – Climbers' Access Society of BC – Central Okanagan Science Opportunities for Kids – Central Okanagan Trail Alliance – Community Recreation Initiative Society – CRUX Indoor Climbing Gym – Friends of South Slopes – Johns Conservancy Range Leaseholder – Johns Family – Land Owners/Developers (adjacent) – Local Park Climbers – Ministry of Environment, BC Parks – Ministry of Health, Interior Health – Ministry of Forests Lands and Natural Resources Operations, Regional Operations Division – Ministry of Forests Lands and Natural Resources Operations, Biocontrol Development Group – Mountain Bikers of the Central Okanagan – Okanagan College Biology Department – RDCO Environment Advisory Commission – RDCO Environmental Planning – School District 23, Planning Division – Science Opportunities for Kids – UBC BRAES Institute 	<ul style="list-style-type: none"> – Central Okanagan Outdoors Club – Grasslands Council of British Columbia – Ministry of Transportation and Infrastructure – Okanagan Basin Water Board – Okanagan Nation Alliance – Penticton Indian Band – Regional District of Kootenay Boundary – Regional District of Okanagan Similkameen – School District 23 – Experimental Education, Okanagan Mission Secondary – Westbank First Nation, Referral Officer – Westbank First Nation - Sncəwips Heritage Museum

5.2.3 RDCO Residents and Park Neighbours

Residents of the RDCO were invited to participate in the project through the public open house events, open house interviews and questionnaires and through the online questionnaire posted on the RDCO website. In total, over 110 people participated in the open house events and approximately 150 questionnaires were completed. Approximately, 300 area residents were also informed of the project by direct mail. The RDCO email lists reached approximately 73 different regional organizations and an additional 460 individuals (approximately). *Figure 5.3, Project Notification and Participation*, lists the public involvement events, the feedback tools, the communication and notification methods and the levels of participation achieved.

Figure 5.3 Project Notifications and Participation

Public Involvement Events (2014)		Notification Methods	PARTICIPATION	Stakeholder Organizations Phone Interviews/Emails	Surrounding Resident Direct Mail	RDCO Website Update	Interested Organizations Phone Contact/Emails	RDCO Board of Directors Update	RDCO Press Release/PSA	RDCO Email to Regional Interest Groups	RDCO Parks Contact List/ Email/Facebook/Twitter	Capital News Advertisement (2 Issues)	Capital News/Castanet Events Listing	AM 1150 News Story	Capital News Article
March	Project Introduction Outreach Website Launch	n/a	✓	✓	✓										
April 8	Workshop - Interested Organizations	25				✓	✓								
April 8	Public Open House & Exit Questionnaire	40		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
April	Website Questionnaire Launch	82			✓	✓	✓	✓	✓	✓					
May 28	COLT Board Presentation*	10	✓			✓									
June 12	RDCO Board Presentation	32					✓								
June 26	Workshop - Interested Organizations	14				✓	✓								
June 28	Public Open House and Interview Questionnaire	70			✓	✓	✓	✓	✓	✓	✓	✓	✓		✓
Sept	COLT Final Board Presentation	8	✓												
Oct	RDCO Final Board Presentation Plan Approval	30			✓	✓	✓	✓	✓	✓	✓				

5.3 Public Involvement Consultation Outcomes

Through each phase of the public involvement process, the project team received a series of detailed comments from participants. All of the comments were reviewed and fully considered by the project team. It should be noted, however, that it was not always practical or appropriate to incorporate all of the participants' comments in the development of the Management Plan. The direction of the Management Plan is ultimately a combination of the outcomes of the public involvement process, the environmental inventory, the research on best practices in park management and the direction set by the original intent of the Johns family land donation.

The following sections summarize the key themes heard through each phase of the public involvement process. It is important to acknowledge, in some of these areas, a range of opinions was expressed and there was not unanimous agreement.

5.3.1 Phase 1: Introduction, Issue Identification, Vision Development

Theme A: Wildlife Conservation is Paramount

Participants strongly emphasized that wildlife conservation and protection should serve as a central vision and goal of the Management Plan. Paramount for many participants was the role of the Conservancy as a wildlife corridor. Many saw clear opportunities to support biodiversity and healthy ecosystems. Limitations were proposed on human uses within the Conservancy and participants recommended that sensitive natural areas should be off-limits.

Theme B: Support for Parkland Stewardship

The importance of park stewardship was expressed by many participants. COLT and other interested organizations shared with participants some of the stewardship activities currently underway in the Conservancy and ideas were explored concerning the potential roles of other organizations in fundraising and other activities. The Alpine Club of Canada - Okanagan Section expressed an interest in a partnership to support the Kelowna Crags and the Friends of the South Slopes indicated the potential to invest in trail development and maintenance. Participants emphasized the importance of establishing a park warden, taking additional measures to protect the family homestead and protecting the Conservancy from motorized vehicles, vandalism and other damaging activities.

Theme C: Careful Management of Public Access and Conservancy Uses

Many participants saw the value in treating the land donated by the Johns family differently from land within the former Cedar Mountain Regional Park. Climbing and hiking was generally supported in Cedar Mountain, but many participants believed the donated lands should not be "wide-open" to the public, that access to these areas should be controlled. The Johns family cemetery and the research areas were noted as specific areas where measures were needed to prevent public access. Within the donated land, participants generally expressed a desire for a conservative trail system, one that followed the footprint of existing trails and included a limited number of access points. Some believed strongly in the opportunity to establish east west connections to other area parks, ultimately allowing hiking and biking connections through the Conservancy to Okanagan Mountain Provincial Park. The importance of a connection to the Lebanon Creek Greenway Regional Park was also noted.

Theme D: Research Opportunities

The importance of the Conservancy for research was recognized by a number of participants. Participants shared their thoughts about existing research activities in the Conservancy and the potential to couple learning opportunities for students with research activities that could improve knowledge of the area's natural values. Some cautions were noted, however. To be successful, research activities typically require that the public does not have access to the research equipment. It was also noted, that park managers should ensure research activities do not adversely impact the Conservancy's natural values. The opportunity provided by the Conservancy to learn more about post-fire succession and post-fire recovery was of particular interest. Also, notable was the interest in studying the area's wildlife corridors.

Theme E: Educational Opportunities

The public involvement process generated a range of opinions as to whether educational activities were appropriate in the Conservancy. Many participants believed that the Conservancy could include some interpretive components and support some limited educational opportunities such as guided hiking, birding and botany education. Others were more enthusiastic about the Conservancy's role in this respect and were hopeful the Conservancy would provide for group field trip opportunities, serve as an outdoor education classroom or even allow for limited camping opportunities. The Johns homestead was noted as a host venue for such purposes. Some participants noted the opportunity to establish connections with local schools (e.g., Chute Lake Elementary, Okanagan Mission Secondary), the scouts at the nearby Camp Dunlop and programs to support environmental education for youth. Members of the Johns family noted the potential for opportunities to recognize the history of the Johns family and the land donation.

Theme F: New Facilities and Signage

In terms of the overall investment in the Conservancy, participants did not generally view investments in new facilities or supporting park infrastructure as a high priority. One exception was the desire for a park washroom. Signage was considered an important means to outline the trail system, provide direction about the Conservancy code of conduct and provide interpretation (e.g. family and park history).

Figure 5.4 Public Open House Questionnaire Highlights (April 8, 2014)

Participants at the April 8, 2014 public open house were invited to complete an exit questionnaire. Twenty-seven of the 39 people who attended completed the questionnaire. Eighty percent had visited Cedar Mountain Regional Park. Walking, hiking and nature appreciation were the most popular activities. A number of respondents were climbers who regularly visit the Kelowna Crag.

Respondents were generally “very satisfied” or “satisfied” with the directional and informational signage, parking lot conditions, trail conditions and their sense of personal safety in Cedar Mountain Regional Park. Respondents were least satisfied with existing efforts to protect sensitive habitat from park users. Of the five climbers who responded, three were “unsatisfied” with the overall support provided for rock climbing activities.

Top priorities for the Management Plan were preventing motorized vehicle access, littering, vandalism and alcohol consumption; environmental protection, monitoring and rehabilitation; erosion, invasive plants and animals and visitor safety. Trail conditions, trail connections to other parks, and directional signage, were considered “very important” or “important” to the Management Plan by almost all respondents. Use of the Johns family homestead and interpretive/educational information and programs, were “important” or “very important” to most respondents but were a lesser priority.

Supporting infrastructure, such as lookout platforms, picnic tables, benches and shelters, were not a high priority; however, all respondents felt it was “very important” or “important” to have washroom facilities.

When asked about key words and phrases that would be important in creating a vision for the park, 59% of respondents note the term “preservation” as a priority. Wildlife corridors, sustainability, trails and nature-based recreation were also noted as priorities for over 40% of respondents. Lastly, of note, approximately 77% of respondents indicated dogs should be allowed in the park provided they remain on a leash.

5.3.2 Phase 2: Preliminary Recommendations

During Phase 2 of the public involvement process, workshop participants were provided with a draft long term vision, a set of draft goals and series of preliminary recommendations for the Management Plan. The Phase 2 workshop facilitators reviewed the draft materials with participants and asked participants if they believed the proposed recreational activities and uses were appropriate and if they believed the proposed actions to protect the Conservancy's environmental values would be effective. Participants were also asked about their priorities for park improvements and actions and about their understanding of their organizations' roles in park stewardship. The following section outlines the comment themes heard through Phase Two.

Theme A – Focus Activity Areas and Trails at the North End of the Conservancy

Many participants saw the value of focusing user activity toward the north end of the Conservancy as a means to limit the overall impact of the public on the Conservancy's natural values. This included efforts to downplay the Johns family homestead as a destination and gathering area, limiting trail access to the homestead to guided groups only, and locating informational and educational signage to the main park access. It was believed that a defined trail network was a priority and that the trail network was best limited to a trail through the north end of the Conservancy to connect with the Provincial crown land to the west and to Okanagan Mountain Provincial Park. This through connection was thought to encourage the public to move through the Conservancy and to discourage public gatherings. Trail connections to the Kelowna Craggs and the Lebanon Creek Greenway Regional Park were also believed to be important. Some participants encouraged the project team to investigate the possibility of a loop trail around the Kelowna Craggs.

Theme B – Establish a Park Warden

One of the key priorities for participants was to establish an on-site park caretaker or park warden. Enforcement of the overall park code of conduct (e.g., dog restrictions) and protection of the Johns family homestead from vandalism were noted responsibilities for the caretaker/warden. Some participants noted that the approach to enforcement should be cautious to also encourage park users and educational activities.

Theme C – Priority Improvements

Washrooms, signage, access control, fencing (i.e., smooth wire fencing) and a defined trail network were priority improvements for participants. It was noted that non-profit organizations could apply for funding from organizations such as the Habitat Conservation Trust Foundation and through Environment Canada's Habitat Stewardship Program for species at risk.

Theme D – Parkland Stewardship Roles and Coordination

Many participant groups saw a role for their organization in parkland stewardship. It was suggested that the Climbers' Access Society of BC and the Alpine Club of Canada Okanagan Section could support education for climbers, help implement best practices for climbing with wildlife (e.g., Skaha Bluffs Provincial Park), advise on trail locations and recruit volunteers for trail maintenance. The Central Okanagan Land Trust and the Central Okanagan Naturalist Club have a vast knowledge of the Conservancy's environment and include keen groups of volunteers. Birding, botany, monitoring and invasive plant and animal control were noted as areas where they could provide support. It was also suggested members of these organizations could work in kind with students from UBC Okanagan or Okanagan College; and that the Friends of South Slopes and the Central Okanagan Trail Alliance could partner with BC Parks to take a role in trail development and maintenance on Crown land to establish

necessary connections with adjacent parks. On-going coordination of stakeholder organizations through a body such as “Friends of the Johns Conservancy” and through annual stakeholder meetings were also believed to be important.

Figure 5.5 *Public Open House Interview Questionnaire Highlights (June 28, 2014)*

Participants at the June 28, 2014 public open house were invited to participate in a short interview questionnaire. Fifty-seven of the 70 people who attended participated in the interview. One third had heard of the John Family Nature Conservancy, and only a few more had heard of Cedar Mountain Regional Park. Less than a quarter had visited Cedar Mountain, and approximately 10% had climbed the Kelowna Crag.

The main findings of the interviews were that 85% of participants believed it was “important” or “very important” that some of the RDCO parks should be dedicated primarily for the protection of wildlife and 72% agreed that some areas of the Conservancy should be off-limits to the public.

5.3.3 Phase 3: Plan Finalization

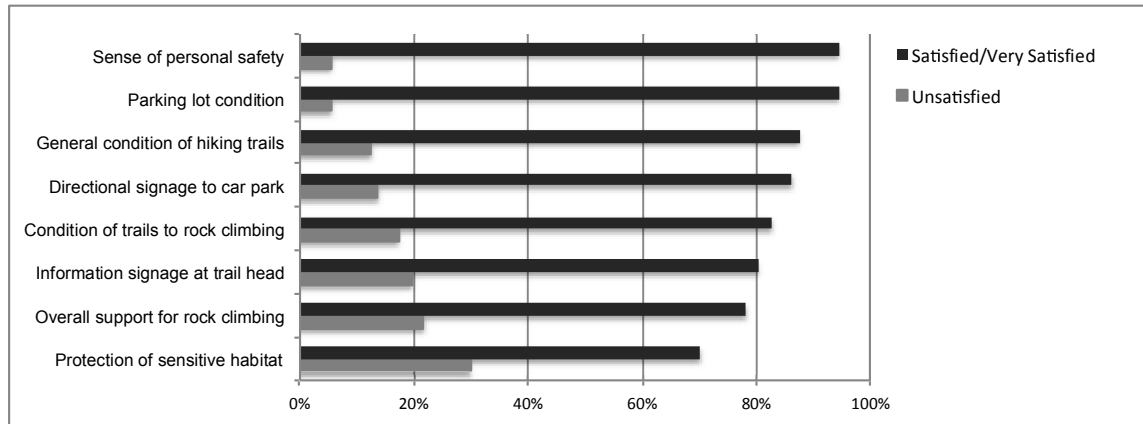
During Phase 3 of the public involvement process, the project team developed the Draft Management Plan. The plan was submitted to the Project Steering Committee and was posted on the RDCO website for stakeholder organizations and the public to provide comments prior to finalization. A presentation to COLT was held to receive final comments from the Board. Final amendments were made to the Management Plan and the plan was subsequently presented to the RDCO Board for final approval. Requests for changes to the management plan from the public and participating organizations through this process were not significant in nature.

5.3.4 Management Plan Project Questionnaire (April through June, 2014)

Throughout the course of the project, a public questionnaire was made available on the project website for interested individuals to complete. Residents within the RDCO were made aware of this opportunity through the use of both social media channels and direct email notifications. In total, 82 people responded to the online questionnaire.

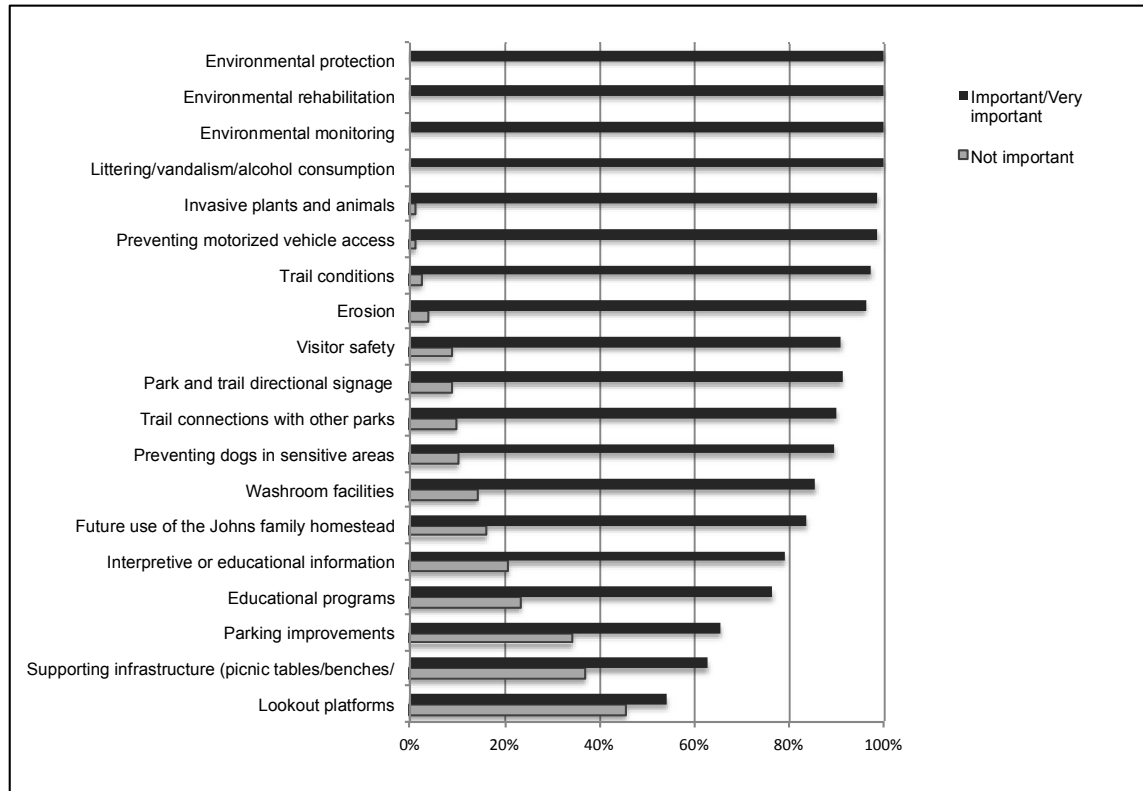
Respondents who had visited Cedar Mountain Regional Park were generally “satisfied” or “very satisfied” with the condition of the parking lot, their sense of personal safety in relation to natural hazards, directional signage to the parking lot, informational signage at the parking lot, and the general condition of hiking trails and trails to the climbing area. At least 80% of respondents were “satisfied” or “very satisfied” with each of these aspects of the Cedar Mountain Regional Park. Respondents were least satisfied with existing measures to protect sensitive natural habitat from park users; however, even in this respect, 70% of respondents were “satisfied” or “very satisfied.”

Figure 5.6 *Satisfaction Level with Existing Conditions*



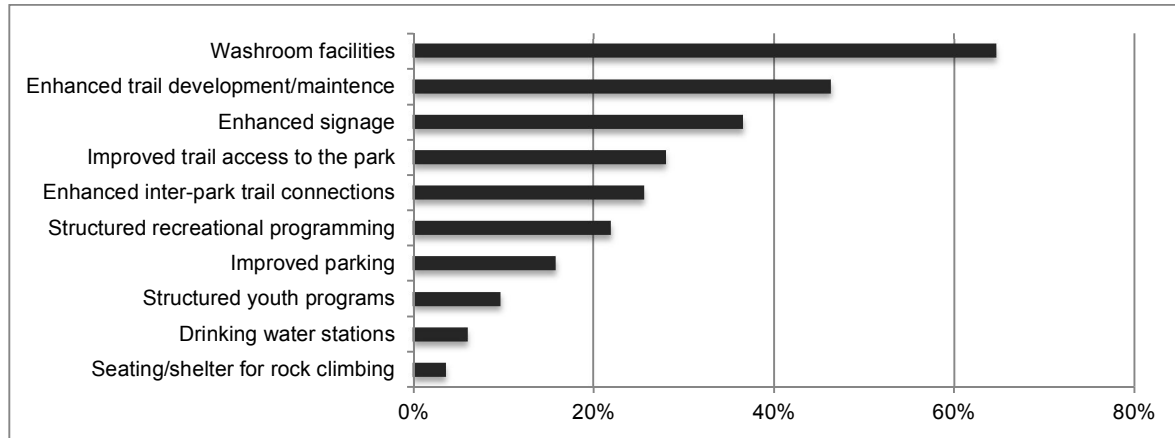
Almost all of the respondents indicated that the top priorities for the Management Plan should be efforts to address environmental protection, rehabilitation and monitoring, invasive plants and animals, soil erosion, trail conditions, and prevention of motorized vehicles, littering and vandalism. To a slightly lesser extent, respondents noted the importance of trail connections to other parks, preventing dogs from accessing sensitive areas, visitor safety, directional signage, washrooms and the future use of the Johns family homestead. Approximately 85% to 90% of respondents considered these aspects to be “important” or “very important” in the development of the Management Plan. Lookout platforms, supporting infrastructure and parking improvements were the least important of the potential response.

Figure 5.7 Top Management Plan Priorities



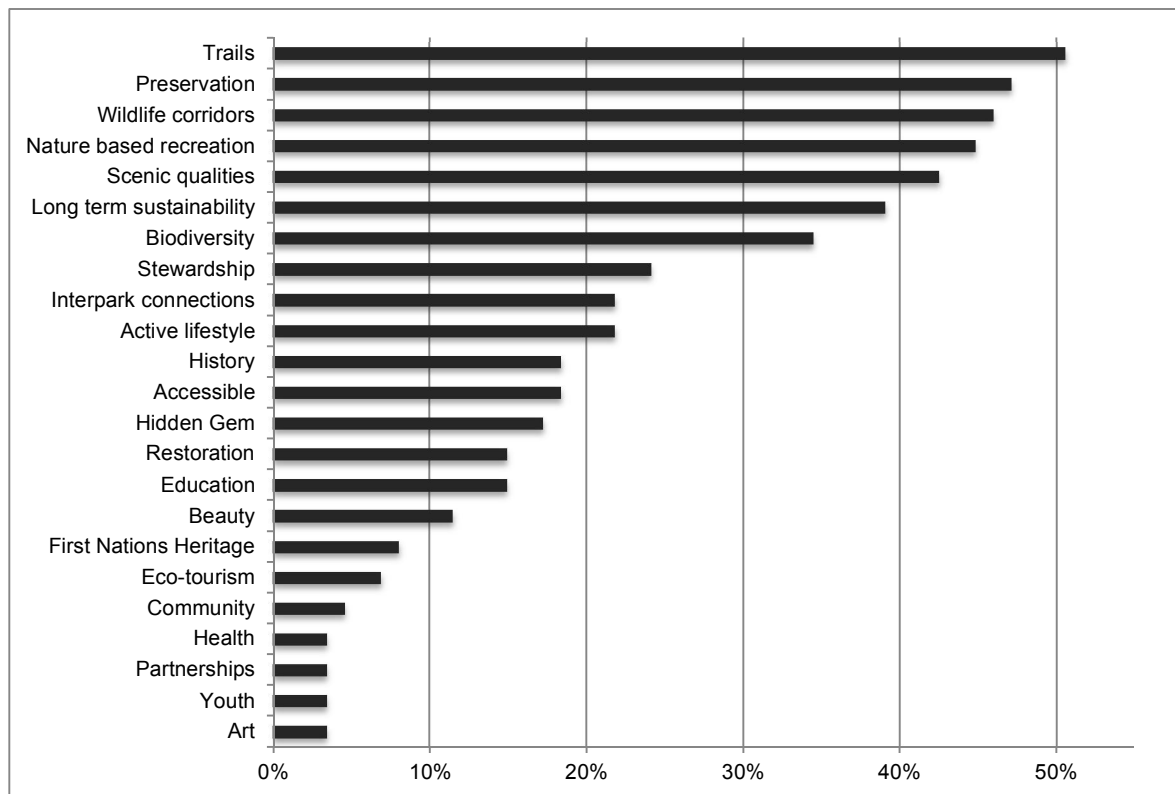
When asked about priorities for services, facilities and programs, respondents indicated their highest priorities were for washroom facilities (64%) and enhanced trail development and maintenance (46%). Improved signage (36%), trail access to the Conservancy (28%), inter-park trail connections (26%) and structured recreational programming (22%) were lesser priorities. Little support was reported for seating or shelter for rock climbing users (3%), drinking water stations (6%), structured youth programs (9%) or improved parking (16%).

Figure 5.8 *Top Services, Facilities and Programs*



Respondents were also asked about words and phrases they believed were central to developing a vision for the Conservancy. Top responses are outlines below.

Figure 5.9 *Top Words and Phrases Important to the Development of the Conservancy Vision*



Lastly, 80% of respondents indicated dogs should be allowed in the Conservancy as long as they remain on a leash. The majority of all respondents were over the age of 50 and one third were associated with the Central Okanagan Naturalist Club.

Chapter 6 – Vision and Goals

6.0 Introduction

The long-term vision for the Conservancy and the set of ten year goals for the Management Plan clearly and concisely explain the desired future condition of the Conservancy and the purpose and direction of the Management Plan. They were developed to focus and direct the content and priorities within the Management Plan and will continue to serve as a reference for future decisions that will be part of the ongoing operation of the Nature Conservancy. The vision and goals were developed through the public consultation process and considering the terms established between the RDCO and COLT, existing RDCO policies and the existing and historical conditions of the plan area.

6.1 Long Term Vision Statement

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

The Johns Family Nature Conservancy is a protected natural area. Wildlife corridors within the Conservancy, through to Okanagan Lake, allow connectivity. Lebanon Creek, Bertram Creek and their tributaries are protected and make important contributions to the regional watershed. The Conservancy's terrestrial and aquatic life is thriving and overland plants and trees are regenerating.

The Conservancy, and access to it, is carefully managed and monitored, and is a model for public natural area stewardship. Patrons are well informed of the Conservancy's natural values and activities are in harmony with the ecological integrity and long-term sustainability of the area's natural systems. With its environmentally significant areas, regenerating areas, spectacular geography and regional vistas, the park teaches young and old the enduring value of our natural environment.

6.2 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 Conservancy 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.

Four primary goal areas have been developed. Each goal area includes a central goal statement and a series of more specific goal statements to direct management of the Conservancy. The central goal statements are outlined below and the more specific goal statements are detailed in the following sections.

A Place for Nature

To protect the natural ecosystems and allow natural regeneration by ensuring the health and diversity of native species, habitats, landscapes and ecological processes.

A Place for Stewardship

To actively engage all levels of government to align decision-making in support of the Management Plan goals, inspire passion and pride for the Conservancy within interested individuals and local organizations and build knowledge and respect for the Conservancy's natural values within the conscience of park patrons.

A Place for People

To invite public use of the Conservancy governed by an established code of conduct that ensures harmony between the presence of users and the natural ecologic values and integrity of the Conservancy.

A Place of History and Culture

Identify, protect and conserve cultural heritage features for their inherent value, and to depict the long-term human use and occupancy of the area.

6.2.1 A Place for Nature

To protect the natural ecosystems and allow natural regeneration by ensuring the health and diversity of native species, habitats, landscapes and ecological processes.

1. **Wildlife Corridors** – To protect known wildlife corridors through the Conservancy, to advocate for protection of the connections these corridors have to neighbouring public and private properties and to build further knowledge of the Conservancy's role in supporting wildlife movement.
2. **Healthy Riparian Areas** – To protect the riparian areas of Bertram Creek and Lebanon Creek and their tributaries, wetlands and creek banks within the Conservancy, including the ecological function of the riparian areas in protecting the watershed and providing habitat for aquatic and terrestrial wildlife.
3. **Biodiversity and Species at Risk** – To maintain the biodiversity of the Conservancy and to protect key habitat within the Conservancy that supports known plants, vertebrates and invertebrates close to becoming locally or globally extinct. Encourage retention of the natural cover on surrounding lands to maintain the range of flora, fauna and community types.
4. **Post Fire Recovery** – To allow the Conservancy's shrubs, grasses and trees to recover and regenerate naturally from the Okanagan Mountain Provincial Park fire without significant competition from invasive alien species.
5. **Fire Suppression** – To be guided by the existing direction for fire suppression in RDCO parks, and to develop a park-specific fire mitigation approach that incorporates ecological values, biodiversity, forest community health, and best management practices for forest fire suppression (i.e., considering fire breaks where the Conservancy perimeter abuts private infrastructure).
6. **Land Acquisition** – To pursue opportunities for land donations, leases, right-of-ways, easements, and acquisitions for strategic parcels of land that will help achieve the desired goals of the plan..

6.2.2 A Place for Stewardship

To inspire passion and pride for the Conservancy within interested individuals and local organizations, build knowledge and respect for the Conservancy's natural values within the conscience of park patrons, and actively engage all levels of government to align decision-making in support of the Management Plan goals.

1. **Grow Capacity** – To grow capacity within the community by inspiring champions, advocates and volunteer crews, and by seeking creative partnerships and diverse funding sources to achieve Management Plan goals.
2. **Educate Patrons** – To ensure users understand the Conservancy's natural values, Management Plan goals, and code of conduct, and that they are aware of the impacts of their presence and actions.
3. **Enforce Conduct** – To enforce the Conservancy code of conduct through education, signage, physical barriers, on-site supervision, by-law enforcement and ticketing.
4. **Align Decision Making** – To ensure RDCO decisions affecting the Conservancy align with the natural area goals of the Management Plan, and to advocate for land use decisions, acquisitions and actions that support these goals by other government bodies and by surrounding public and private landowners.
5. **Improve Knowledge Base** – To continue to build the knowledge of public and private park stewards with respect to the ecological functions of the Conservancy through non-invasive research of wildlife corridors, habitat functions, and the impacts of human use on natural areas.
6. **Monitor Progress** – To monitor and collect data to document the effects of human uses within the Conservancy and ensure compatibility with the goals of the Management Plan.

6.2.3 A Place for People

To invite public use of the Conservancy governed by an established code of conduct that ensures harmony between the presence of users and the natural ecologic values and integrity of the Conservancy.

1. **Passive Recreation** – To be proactive in meeting the growing desire for public use and enjoyment of the Conservancy by strategically channeling public access and passive recreation activities with the objective to reduce impacts to the natural environment.
2. **Rock Climbing** – To plan for a growing desire for use of the Kelowna Crags, proactively structuring access and protecting areas of very high environmental sensitivity from user impacts.
3. **Trail Network** – To provide and maintain a limited public trail network, focused on connections to the Kelowna Crags, a connection through the Conservancy, and a connection to Lebanon Greenway Regional Park.
4. **Trail Placement** – To ensure, where possible, that trails are located away from areas of very high environmental sensitivity, are located away from wary animal corridors, and use existing

disturbed areas. Existing trails targeted to be retained will not be re-routed if they are currently adjacent to sensitive areas.

5. **Prohibited Activities** – To pursue strategies to discourage and/or prevent disregard for the Conservancy’s natural values and code of conduct.
6. **Periphery Access Management** – To ensure those considering entry into the Conservancy are clearly aware of the Conservancy boundary, the authorized and unauthorized access points, and the permitted and prohibited uses within the Conservancy.
7. **Public Safety and Security** – To ensure a park visitor safety plan is in place to guide duty of care obligations within public access areas; and that parking areas are designed to discourage crime and vandalism.
8. **Accessibility** – To ensure appropriate opportunities exist for accessibility to the Conservancy for people with mental or physical challenges.
9. **Environmental Education** – To build park users’ understanding of the natural and cultural values of the Okanagan landscape, and their protection and management requirements through compatible hands on learning for youth and other Okanagan residents.
10. **Research** – To allow the Conservancy to continue to contribute to our community’s understanding of ecology, where it is compatible and in harmony with the natural environmental goals of the Conservancy.

6.2.4 A Place of History and Culture

Identify, protect and conserve cultural heritage features for their inherent value, and to depict the long-term human use and occupancy of the area.

Historic Sites and Resources – To ensure special areas of historical significance to the Johns family are protected and that park users have opportunities to learn about the Johns family the land donation, and Euro-Canadian history of the land.

First Nations Heritage – To understand, through meaningful consultation, the relationship of First Nations to the broader area and seek opportunities for the Conservancy to raise awareness about First Nations’ spiritual, social, cultural, and economic relationships to the land within the region.

Archaeology Features – To protect archaeological sites and artifacts in the event that they are discovered within the Conservancy.

Chapter 7 – Conservation and Design Concept

7.0 Introduction

The Conservation and Design Concept is a central feature of the Management Plan. It includes the Plan's direction to the management and use of specific areas through the establishment of park zoning 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 Conservation and Design Concept was developed to support the implementation of the vision and goals. It reflects the direction of the terms of the Johns Family land donation, the lease agreement between RDCO and COLT, as well as RDCO's Regional Conservation Park designation. The Conservation and Design Concept was also shaped by the public involvement process, by consultation with the Project Steering Committee; and was grounded by an understanding of the environmental values, the physical landscape and the existing pattern of public use.

7.1 Key Design (KD) Strategies

The Conservation and Design Concept expresses the Management Plan's ambition to manage access to support wildlife and to protect natural habitats, while allowing compatible public use. Six Key Design Strategies run through the Conservation and Design Concept to achieve this balance. The Key Design Strategies are briefly described below.

7.1.1 KD Strategy A: Limit Points of Public Access to the Conservancy

Managing public access at the periphery is a key strategy to attract and direct patrons to the designated parking area and public access trails, and to deter patrons from accessing areas of Conservancy that are not open to the public. Channeling access in this manner provides opportunities to educate patrons as they enter the Conservancy and inform them of the expected code of conduct. The strategy also requires that existing undesirable access routes be actively decommissioned (e.g., signage, gates, fencing, and/or replanting).

The Conservation and Design Concept allows one access for public vehicles at the main parking lot west of Chute Lake Road, and trail access via the Lebanon Creek Greenway Regional Park and via a future trail connection through the western Crown UREP parcel through to Okanagan Mountain Provincial Park. An emergency access is designated for the existing road connection from Lakeshore Road to the north western corner of the Conservancy. The Design Concept includes existing fencing along large sections of the Conservancy boundary, and new park boundary signage at the main parking lot, the exiting Lebanon Creek Regional Park trail connection, and the planned connection to Crown parcel to the west. New signage is also planned at the southern access gate, where the partially decommission road crosses into the Conservancy.

7.1.2 KD Strategy B: Focus Recreation in the Northern Portion of the Conservancy

Focusing recreational activities primarily within the former Cedar Mountain parcel and in the northern portion of the donated lands is a key strategy to facilitate public access, while limiting the overall

footprint of the public, reducing the potential for conflict with wildlife and allowing for the regeneration of natural habitats within the Conservancy. The Conservation and Design Concept supports the historical use of climbing and hiking within these northern sections with public access trails to the Kelowna Crags and through inter-park connections to the Lebanon Creek Greenway Regional Park and to Okanagan Mountain Provincial Park.

7.1.3 KD Strategy C: Limit and Monitor Access to the Homestead and Southern Portions of the Conservancy

In-line with the strategy to focus recreation at the north end of the Conservancy, access to the Johns Family homestead and the southern portion of the Conservancy will be monitored through a permit process. The Conservation and Design Concept designates two categories of trails, public access trails and operational / permit-only trails. The portion of road to the homestead, beyond the former Cedar Mountain parcel, is designed for operational purposes and for use through a RDCO permit. The existing fencing between Cedar Mountain and the donated lands will be retained and “gateway” will be formed to highlight the transition into the donated lands. The trail network at this location will be realigned; and signage, fencing and the overall landscape design will direct patrons to continue northwest along on designated public access trail. Signage will emphasize a strong environment ethic for the donated lands and information on permit restrictions. The goal of the permit process is to monitor activities outside of the public access trail network and provide direction to educational, research, and recreational users who have an interest in visiting the area.

7.1.4 KD Strategy D: Facilitate Inter-park Trail Connections and Movement through the Conservancy

Another key concept of the Conservation and Design Concept is to facilitate connections for patrons between the Lebanon Creek Greenway Regional Park and the Conservancy, and between the Conservancy and Okanagan Mountain Provincial Park. The strategy continues the existing access enjoyed by those using the Greenway and takes advantage of future opportunities to connect with the Okanagan Mountain Provincial Park. The Design Strategy also encourages patrons to move through the Conservancy and discourages patrons from gathering within the donated lands. Further steps are required to determine the specific alignment and to develop the trail through the Crown UREP parcel between the Conservancy and Provincial Park, however, stakeholders appear open to the process.

7.1.5 KD Strategy E: Target Specific Locations for Design Improvements to Protect Environmentally Sensitive Areas

The Design Concept includes locations within the Conservancy where public access trails are located in close proximity to, or within areas, that are environmentally sensitive. The Design Concept targets these locations for design improvements such as fencing, signage, boardwalks, bridges and other trail improvements to protect key habitat features present.

7.1.6 KD Strategy F: Limit Investment in Support Facilities

The Design Concept has a limited focus on new user facilities. The focus of capital improvements is strategically designed to protect environmental values while supporting public access, and to ensure public safety. Some improvements are also proposed to maintain existing facilities to an acceptable service standard.

7.2 Designation of Conservancy Management Zones

Figure 7.1 – *Conservancy Management Zones*, depicts five different management zones within the Conservancy. The zone categories are defined by the Official Regional Parks Plan for the Central Okanagan. These zones were assigned to areas of the Conservancy based on environmental values and existing infrastructure, and align with the overall direction of the Management Plan. The zones will help focus permitted uses within suitable areas and will facilitate the preservation of environmentally sensitive areas.

7.2.1 Special Preservation

The Special Preservation Zone is generally inclusive of most of the riparian communities associated with Bertram and Lebanon Creeks. In addition to the defined creek channels and vegetation communities immediately surrounding them, there are areas that are characterized as wetlands and exhibit slow moving, standing, or at minimum shallow ground water. These moisture receiving pockets, wetland communities and riparian corridors provide habitat for a diverse species assemblage that includes rare and endangered species.

Ephemeral wetlands, defined as waterbodies that only exist for a short period following snowmelt or precipitation, are also included within the Special Preservation Zone. At one such site, a cattail marsh community with an ephemeral open water component, approximately ten individual snakes of three different species were observed in the summer of 2011. In addition, tadpoles, salamanders, a range of invertebrate species (i.e., dragonflies, damselflies, beetles, flies, etc.) and birds were documented using the site. Red and blue listed species included: lance-tipped darner, barn swallow, western yellow-bellied racer and western toad (most probable, but not confirmed). Within the Okanagan Valley, wetlands are rare and it is estimated that more than 85 percent of historical valley bottom wetlands and riparian habitats have been lost (Hawes and Schleppe 2009). Therefore, it is of utmost conservation priority to conserve the remaining intact wetlands and to restore those that have been degraded.

Conservation of the Special Preservation Zone is critical to the integrity and biodiversity of the Conservancy. Human presence within these areas substantially increases risks to wildlife, ecosystems, and other aspects of the environment. At locations where the Outdoor Recreation Zone abuts waterbodies within the Special Preservation Zone, split rail fencing and signage will be used to educate the public of their importance and to prevent public access. Access by Permit is allowed within the Special Preservation Zone, but careful consideration and rationale for access will be considered as part of the permit process. Access for research, sole observer wildlife viewing, or very small educational groups (e.g., 2 to 5 people) are the preferred types of activities, unless a very carefully planned access and mitigation plan is presented.

7.2.2 Ecosystem

The Ecosystem Zone represents most of the southern half of the donated lands. It includes shrubland, pockets of mature woodland, sparsely vegetated communities and moisture receiving sites associated with the headwaters of Bertram Creek that are not included within the Special Preservation Zone. Although much of this area was affected by the fire, it maintains high ecological value and has begun to naturally regenerate. In the low lying areas, especially those associated with the upper reaches of Bertram Creek, young trembling aspen copse and willow species have developed. These areas provide critical shade, forage, refuge and cover for a variety of species. The significance of these lands lies in

their overall size, their regional ecosystem rarity (i.e., Red or Blue listed communities) and in their connectivity to the adjoining largely uninterrupted landscape.

The Ecosystem Zone will have little influence of human activities. Vehicular access will be limited to the Operational Access network (see Figure 7.3), and will only be allowed for operational needs (e.g. fence repair) and only under special circumstances for permit users. All other permitted access will be on foot. There is no public access within the Ecosystem Zone.

7.2.3 Natural Environment

The Natural Environment Zone represents the grassland, scrubland, pockets of woodland and sparsely vegetated communities that occur within the northern half of the Conservancy (i.e. High-value ESA areas). A single public access trail that will provide future connection to Okanagan Mountain Provincial Park intersects the Natural Environment Zone. This trail occurs on a pre-existing road so impacts to the surrounding landscape are expected to be minimal.

The Natural Environment Zone should be largely conserved, but may be considered for additional public access if deemed warranted in the future. Any expansion of public access will require the joint approval of COLT and RDCO. Access by Permit within the Natural Environment Zone is allowed. Permit users can access all locations within the Natural Environment Zone on foot, with vehicle access on Operational Access roads only permitted under special circumstances.

7.2.4 Park Services

The existing homestead area is zoned as Park Services. The Park Services Zone includes the broader homestead area, including the cabins, agricultural fields, outbuildings and surrounding disturbed areas. The Park Services Zone will provide living quarters for a residential contractor, and has considerable space for expansion of facilities if needed in the future. Technically, the parking lot and staging area adjacent to Chute Lake Road also acts as a Park Services Zone, however, because it is outside of the Conservancy boundary it has not been included within the management zoning.

Any expansion of infrastructure, amenities or services within the Park Services Zone will require joint approval of COLT and RDCO. Access by Permit is allowed within this area, and basic amenities such as picnic tables and garbage cans will be provided.

7.2.5 Outdoor Recreation

The Outdoor Recreation Zone is centered in the northwest quadrant of the Conservancy and is generally focused around the Kelowna Craggs. Public access trails within this zone provide connection to the Lebanon Creek Greenway Regional Park, and a future trail connection to Okanagan Mountain Provincial Park. The public access trail network within this zone is shown in Figure 7.3, but may be expanded or modified to meet the needs of the public or to reduce impacts to the surrounding areas. The designated trails within the Outdoor Recreation Zone are capable of accommodating a range of low-impact recreational opportunities including hiking, mountain biking, equestrian use, and dog walking (on a single trail), as well as rock climbing at the Kelowna Craggs.

Public access and recreational activities including hiking, biking, equestrian use, dog walking and rock climbing will be directed to the Outdoor Recreation Zone. Infrastructure including signage and trail improvements will be undertaken to help direct the public to appropriate areas within this zone.

7.2.6 Summary of Permitted Uses within Management Zones

Figure 7.2 - *Summary of Permitted Uses*, outlines the permitted activities that can occur within each Management Zone. Typical low impact recreational activities are to be undertaken within the Outdoor Recreation Zone. These include activities such as rock climbing, hiking and biking. Equestrian use is also permitted within the Outdoor Recreation Zone despite that it is not typically allowed within most RDCO parks. The Management Plan provides for equestrian use to ensure consistency with the future trail connection to Okanagan Mountain Provincial Park where equestrian use is permitted.

All other RDCO permitted uses/restrictions are consistent with the Regional Parks Regulation Bylaw No. 1105. Typical restrictions include:

- No overnight camping
- No campfires
- No off-road vehicle use
- No dumping & disposal
- No overnight parking
- No hunting/trapping
- No smoking
- No littering

It should be noted that on-leash dogs are only allowed on the Lebanon Creek trail that provides connection to the Lebanon Creek Greenway Regional Park. Dogs are not allowed within the donated lands or at the Kelowna Crag.

Additional access beyond the Outdoor Recreation Zone can be achieved through a permit process. Access by permit for educational, research and recreational purposes will be granted on a case-by-case basis. Any future trail and amenity development within the Conservancy will require joint approval by COLT and RDCO.

Figure 7.2 Summary of Permitted Uses

Permitted Uses	Management Zones				
	Special Preservation	Ecosystem	Natural Environment	Outdoor Recreation	Park Services
Hiking/Walking/Running				✓	
Nature Appreciation				✓	
Mountain Biking				✓	
Horseback Riding				✓	
Geocaching				✓	
Picnicking				✓	
Cross Country Skiing				✓	
Snow Shoeing				✓	
Rock Climbing				✓	
On-leash Dog Walking				✓ (on Lebanon Creek Trail only)	
Special Events*				✓	✓
Use by Permit for Educational, Research and Recreational Purposes**	✓	✓	✓	✓	✓
Future Trail Development***	✓ (perpendicular crossings only)	✓	✓	✓	✓
Development of Future Amenities or Infrastructure***				✓	✓

*Requires prior approval by RDCO.

**Requires prior approval by RDCO. Permitted access is by foot only. Vehicular access within the Operational Access Network will only be considered under special circumstances.

***Requires joint approval by RDCO and COLT. In most cases, trail development in Special Preservation and Ecosystem Zones will not be considered. Exceptions may occur to provide future trail connections to other adjacent parks. Any future trail crossings of waterbodies should occur perpendicular to the feature to minimize encroachment.

7.3 Design Concept

The Concept Design addresses the trail network, including public and operational access, access by permit, parking and staging areas, and rock climbing amenities. The Concept also outlines infrastructure improvements, decommissioning plans, and provides direction for new fencing and signage to both educate patrons and support the Conservancy's expected code of conduct. All recommended amenities and infrastructure are to be built as per RDCO park standards.

Figure 7.3 – *Conservation and Design Concept*, depicts the highlights of the concept plan.

7.3.1 Conservancy Parking Lot and Staging

The following improvements have been identified to enhance access and staging to the Conservancy. All of the following items, with the exception of the washroom, occur outside of the Conservancy boundary. Works in this area should be undertaken in consultation and cooperation with relevant provincial ministries and local authorities. The following improvements are listed in priority order.

- *Update signage information panels of the kiosk, and include regulatory, directional and interpretive information.*
- *Install a provincial parks style, unisex, pit toilet, to be located along the trail network, within the first 500 m of the Conservancy entrance. The preferred location of the toilet will depend on the ability to service the toilet. One location that should be investigated is the south side of the main trail at the intersection of the trail that extends north along Lebanon Creek.*
- *Work with the Ministry of Transportation to install safety advisory signage on Chute Lake Road regarding the potential to encounter trucking vehicles.*
- *Installation of a gate at the entrance to the parking lot that will be opened and closed to correspond with Conservancy hours.*
- *Install directional signage through the Kettle Valley neighbourhood.*
- *Work with the Ministry of Transportation to upgrade surfacing of Chute Lake Road to the Conservancy parking lot.*
- *Installation of a new culvert at the entrance of the Conservancy parking lot.*
- *Resurface the Conservancy parking lot with gravel.*

7.3.2 Access and Trail Concept

A conservative approach has been taken in the development of the Conservancy trail network. However, once the trail network is established, it may become apparent that small changes in the network will be necessary to accommodate public access. Any future expansion of the trail network should be consistent with the vision and goals of the Management Plan and the Permitted Uses outlined in Figure 7.2.

Figure 7.3 - *Conservation and Design Concept*, depicts the trail network, including Public and Operational Access. The trail concept reduces the length of trail from 21 kilometres (currently existing) to approximately 14 kilometres, with about 7 kilometres openly accessible to the public without a permit.

The following sections further describe the trail concept, including public access areas and the permit only access areas. The improvements required for each concept are detailed within each section.

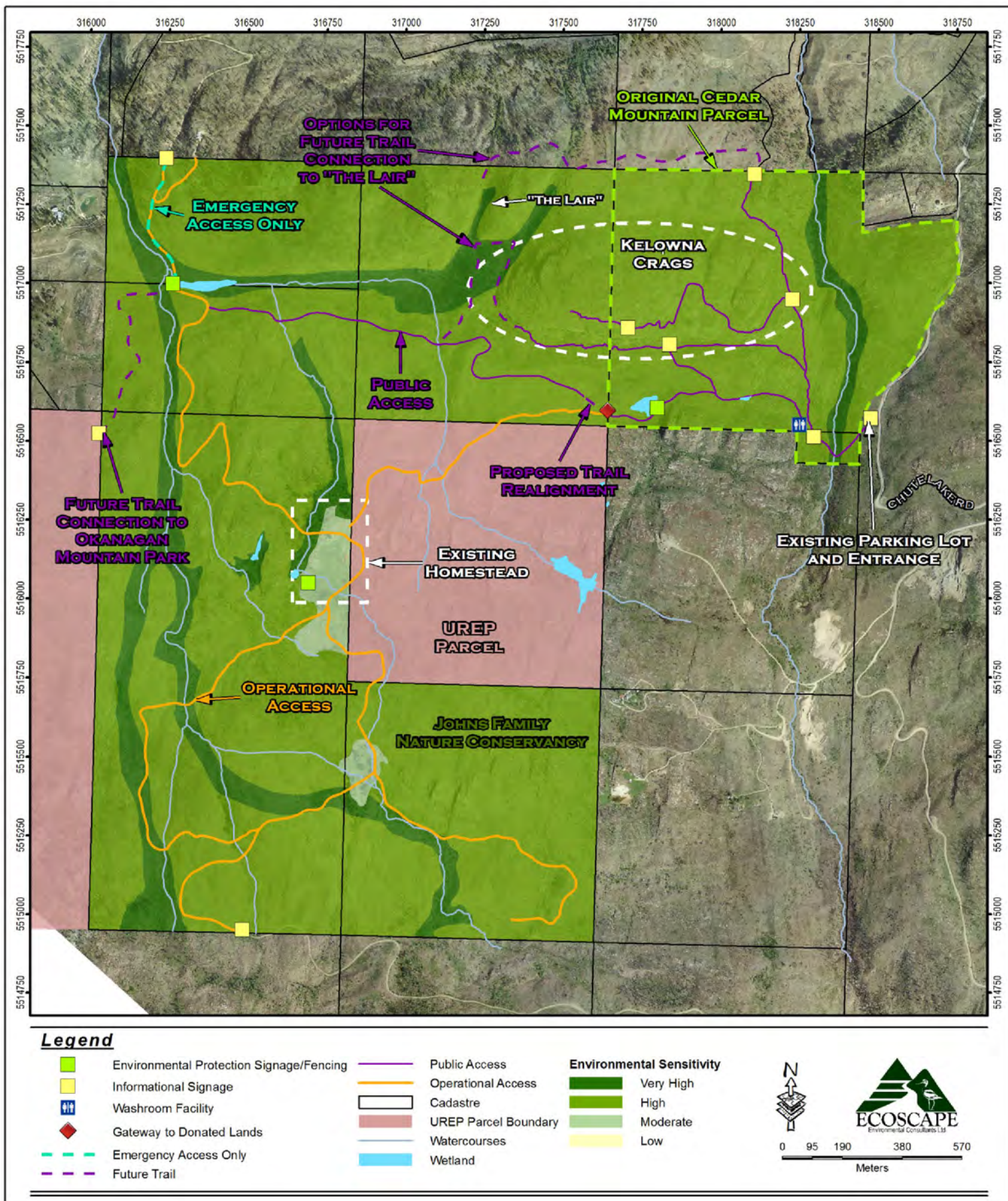


Figure 7.3 Conservation and Design Concept

7.3.2.1 Public Access

The Public Access trail network consists of approximately 7 kilometres of trail. It provides a connection to the Lebanon Creek Greenway Regional Park, to rock climbing activities on the south-face of the Kelowna Crag, to the top of the Kelowna Crag for additional climbing access and scenic views, and access across the northern section of the donated lands, including a future trail connection through the western UREP parcel and into Okanagan Mountain Provincial Park. All public access, except the proposed connection to Okanagan Mountain Provincial Park, occur on pre-existing roads and trails, although trail improvements and directional signage are needed.

A key component of public access into the donated lands is the establishment of a trail connection along the western side of the Conservancy, into the UREP parcel, and ultimately connecting to Okanagan Mountain Provincial Park. The establishment of this trail is important to allow the donated portion of the Conservancy to act as a recreational corridor, rather than a destination for public gatherings or public activities that can be intensive in nature and can conflict with natural ecosystems/wildlife.

The following identified trail improvements are associated with the public access trail network:

- *Main road from the parking lot to the Gateway*
 - *Road surface upgrades in select locations to address and deter erosion*
 - *Assessment of the Lebanon Creek crossing. The crossing consists of a double barrel culvert with headwalls that are in need of repair. Consideration of a single span arch culvert may be warranted.*
- *Trail connection to Lebanon Creek Greenway Regional Park*
 - *Trail upgrades and directional signage*
- *Trail connection from the Gateway to the Bertram Creek*
 - *New trail construction from the Gateway downslope to connect with the existing road. This improvement will be important to effectively direct the public away from the Operational Access road that leads to the homestead.*
 - *Trail upgrades and directional signage*
 - *Trail narrowing and small bridge or boardwalk where the trail intersects a Bertram Creek tributary*
 - *Fencing along the south side of the entire length of the Public Access trail from the Gateway to the western boundary of the Conservancy OR only in select locations where people are likely to stray from the trail*
- *Connection to Crown land to the west and Okanagan Mountain Provincial Park*
 - *Bertram Creek crossing upgrades*
 - *Trail creation from an existing road that parallels Bertram Creek to the western boundary of the Conservancy*
 - *Directional signage*

Trail improvements associated with climbing access are discussed in Section 7.3.5 below.

7.3.2.2 Operational and Permit Access

The Operational Access network consists of 7.9 kilometres of road, over and above the public access network. This network will be used by RDCO staff for operational activities. The alignment of the

network makes use of pre-existing roads and provides access to the remote corners of the Conservancy. The use of these roads is important to efficiently monitor the Conservancy boundaries and to have an alternate egress from the Conservancy in the case of an emergency (see Figure 7.3).

Conservancy visitors may garner access to areas outside of the Public Access trail network by completing a RDCO park permit. RDCO has the right to deny or suggest alternative times for access based on the number and type of users already operating within the Conservancy and the proposed impact of the desired use. The objective is not to be too onerous to RDCO or applicants, but to reinforce the expected code of conduct within the Conservancy by use of permits.

Visitors who have obtained a permit may access the different areas of the Conservancy by hiking to their destination; being cautious not to create unnecessary ground disturbance. Permitted vehicle access within the Public or Operational Access network will only be allowed under special circumstances.

The following identified trail improvements are associated with Operational Access:

- *Continuation of the main access road to the homestead*
 - *Informational and directional signage to direct patrons without permits away from the road to the homestead*
 - *Fencing to physically and symbolically direct patrons without permits away from the road to the homestead*
 - *Vehicle gate*
 - *Road surface improvement in select locations to address and deter erosion*
- *Basic maintenance of operational roads within the Conservancy*
 - *Minimal road improvements to maintain emergency access and monitoring access*

7.3.2.3 Decommissioning of Unsanctioned Roads/Trails

Existing roads and trails not included within the public and operational access network will naturalize with discontinued use. The naturalization process will be monitored to ensure invasive weeds are not overrepresented. Roads and trails will be prioritized for active decommissioning and targeted with surface roughening, the application of native mulch, a dissolved mycorrhizae solution, an appropriate native seed mix and tree planting. Large woody debris scattered across the Conservancy may also be useful in trail decommissioning. Priority roads and trails for decommissioning are those that have direct connections to the public access network.

7.3.3 Gateway to Donated Lands

As a way to highlight the donated lands and the intention to preserve these lands for wildlife, “a gateway concept” will be implemented. The gateway makes use of the existing fence that separates the Cedar Mountain parcel from the donated lands. The following identified improvements are associated with the gateway.

- *Redirect the public access trail at the entry of the donated lands to effectively separate the public trail from the non-public access road that continues to the homestead*
- *Install an overstated stile or gate for single person walking and biking entry to the donated lands*

- *Create and install signage that addresses regulatory (Code of Conduct), wayfinding, and story boarding of Johns family and First Nations heritage of the lands*
- *Install appropriately placed signage along the Operational Access road to the homestead to indicate that it is a private driveway and there is no public access*
- *Removal of cattle guard*

7.3.4 Use of the Homestead

The existing homestead will be used as living quarters for a resident contractor who will have basic park related responsibilities that will be determined by RDCO, with input from COLT members. In addition, the homestead area will function as a destination for permit users (e.g. educational groups). The following improvements are associated with the homestead.

- *Designate the larger cabin as living quarters for the resident contractor. Depending on the agreement between the contractor and RDCO, the smaller cabin could be used as an extension of the living space, or it could be used to store Conservancy related items, as well as to provide a washroom facility for permit user groups.*
- *If the smaller cabin is to be used by the contractor, then a provincial parks style, unisex pit toilet for permit users may be warranted, depending on levels of use.*
- *Designate a previously disturbed area for parking to accommodate approximately five vehicles.*
- *Install basic park amenities including a couple of picnic tables and a bear proof garbage can.*
- *Remove existing boardwalk structure that extends to the Johns family memorial site and replace with a narrowly defined footpath.*
- *Assess the condition of the existing barn to ensure that it is structurally sound, and determine if it is providing roosting habitat for either bats or birds (e.g. barn swallows). If structurally sound convert to a shelter that can be used by permit users. If not structurally sound and not in use as a roosting site, plan for demolition and removal. All construction/demotion practices (e.g., timing, impact) should be sensitive to wildlife.*

7.3.5 Climbing

Recreational climbing activities have a long history at the Kelowna Crag. As the climbing destination becomes more popular, additional safety considerations and formalization of the activities may be prudent. The following items have been identified to improve the rock climbing experience:

- *Formalize a partnership with the Climbers' Access Society of BC and/or Alpine Club of Canada to continue the maintenance of climbing infrastructure.*
- *Further explore the partnership to develop Best Management Practices (BMPs) specific to rock climbing within the Johns Conservancy. The BMPs should emulate other rock climbing guides for BC Provincial Parks (Frimer et al. 2012, BC Parks 2010).*
- *A climbing specific kiosk and signage is to be installed at the intersection of the main climbing trails used to access the south face of the Kelowna Crag. The purpose of the kiosk is to post climbing specific information, such as the BMPs, routes that may be closed due to wildlife (e.g. nesting birds), or areas where specific pre-cautions are needed. The kiosk should also provide a voluntary sign-in book that includes date and time of visit, number of people in the party and planned climbing routes/destination. This site could also be considered for an additional pit toilet and picnic table, if climbing numbers warrant it in the future. The site has the potential for*

growth in the number of users, therefore management should be undertaken to stay one step ahead of a burgeoning recreation.

- *Post “Use at your own Risk” signage to help address RDCO duty of care obligations.*
- *Post signage at the top of the Kelowna Craggs to prevent people from dropping rocks, or inadvertently causing rock slides which may impact climber safety below.*
- *The potential for rock fall is substantial in and around the Kelowna Craggs area. Mitigation measures for rock fall hazards could be in direct conflict with preserving habitat for wildlife. Therefore, mitigation measures to reduce risk to the public should be appropriately balanced to achieve the vision and goals of the Management Plan.*
- *Trail improvements, specifically more defined and better marked trails are needed. This is particularly true for the trail that extends from the Lebanon Creek trail to the top of the Kelowna Craggs.*
- *Directional signage is needed at trail intersections in and around the Kelowna Craggs to direct users to specific climbing routes. Signage could also inform the user on levels of climbing difficulty.*
- *Trail upgrades are needed to accommodate wetter periods when certain trails may be saturated. Solutions may include an elevated boardwalk or a re-alignment of the trail to avoid low lying, wetter areas.*
- *Further investigation is needed to determine if a trail should be formalized to “The Lair” area. Options for trail expansion include an extension of the Lebanon Creek trail beyond the Conservancy boundary, and around the north side of the Kelowna Craggs, or to extend the existing trail that is used to access the south face of the Kelowna Craggs (see Figure 7.3 for approximate trail locations). There are currently game trails in these locations that are used by climbers, but both areas have difficult accessibility and potential rock fall hazards. A benefit of extending the trail north of the Conservancy boundary is the potential to create a loop trail. RDCO should work with the landowner to the north to investigate the feasibility of extending a trail through this property or to determine the potential for acquiring the land.*

7.3.6 Environmental Protection

Protection of the environment is a key component of the Conservation and Design Concept. It was the driving force in determining the alignment of the public access trail. There are several mitigative measures that should be incorporated along the trail network to further prevent conflict between people and the environment. Priority protection measures include:

- *Protection of wetlands that occur immediately adjacent to the public access trail with informational signage and split rail fencing to discourage entry.*
- *Trail improvements where the public access trail intersects with a tributary of Bertram Creek. Improvements should include a narrowing of the trail and a small bridge to facilitate movement over the creek.*
- *Trail improvements will also be necessary at the intersection of the public access trail and the mainstem of Bertram Creek in order to establish the connection to Okanagan Mountain Provincial Park. Improvement priorities to protect Bertram Creek should be investigated once the alignment of the future connection is finalized.*

- *Trail improvements to access the main climbing area where the trail crosses over seepages or wet areas. Improvements could be in the form of an elevated walkway or an alternative route that is less wet.*

Environmental protection is also the driving factor in prohibiting future use of the Conservancy for cattle grazing. Because the headwaters of Bertram Creek originate within the Conservancy, much of the southern sections of the donated lands are wet due to the presence of creek tributaries and wetlands. These areas tend to be hotspots for biodiversity and are highly sensitive to disturbance. The annual presence of cattle in these areas is inconsistent with management of the Conservancy for wildlife.

Once the grazing license expires, there will be opportunities for enhancement of creek banks along several of the Bertram Creek tributaries. If funding is available, COLT should oversee an assessment of the creeks to identify areas that may have been impacted by cattle and where native vegetation plantings would help to stabilize creek banks. Alternatively, impacted areas could be identified and monitored over time with regular photo points to document the rate of the creek side vegetation recovery.

Finally, the value (to wildlife) of the remaining pockets of mature woodland that remain in the Conservancy following the Okanagan Mountain Provincial Park fire cannot be overstated. These areas should be largely left alone over the duration of this Management Plan.

Chapter 8 - Operations and Maintenance

8.0 Introduction

The operation and maintenance of the Conservancy will be centrally coordinated by the RDCO Parks Services Division in a manner that is consistent with the vision, goals and overall direction of the Management Plan. All related activities must also comply with the terms of the RDCO lease agreement with COLT as well as local, provincial and federal regulations, policies and bylaws. RDCO Bylaw 884, the Official Plan for the Regional Park System, and RDCO Bylaw 1105, the Consolidated Regional Parks Regulation Bylaw, contain policies that provide specific direction to regional park operations and outline the authority of the Director of Parks.

Operational activities will include responsibilities such as issuing permits, enforcing bylaws, undertaking inspections, coordinating communications and monitoring plan implementation and the Conservancy's environmental health. Maintenance responsibilities will include a series of on-going activities related to park facilities and infrastructure. One-time activities that fall within the scope of Conservancy operations will also be necessary as the Management Plan begins implementation (e.g., hazard assessments, infrastructure and facility assessments).

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

The RDCO Parks Services Division places a high value on working with community organizations, interested individuals and park neighbours. The importance of the relationship between the RDCO and COLT has been discussed in previous chapters. The spirit of the partnership will be carried through all aspects of park operations, and members of COLT will be actively involved in parkland stewardship. The passion and enthusiasm of COLT, and other community organizations and volunteers, will be employed for activities such as park patrols, visitor education, group guiding, environmental monitoring, trail maintenance and invasive weed management. Community stewardship and community partnerships are addressed below to reflect the important role that 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 8.1 – Operational and Maintenance Responsibilities*, summarizes the preliminary set of responsibilities that will need to be assigned.

Figure 8.1 Operational and Maintenance Responsibilities

Operational Responsibilities – Ongoing	Maintenance Responsibilities – Ongoing
<ul style="list-style-type: none"> – Plan implementation coordination – Bylaw enforcement – Issuing permits – Overseeing RDCO park projects – Overseeing community stewardship projects – Overseeing research – Overseeing educational programs – Support philanthropic initiatives – Staff communications – Intergovernmental communications – Public communications (website etc.) – Staff liaison for Friends of the Johns Family Nature Conservancy – Bi-annual meeting with COLT – Volunteer trail patrollers training and coordination – Resident contractor training and communication – Lease agreement – Annual sustainability scorecard and associated monitoring 	<ul style="list-style-type: none"> – Car park upkeep – Garbage removal – Washroom servicing – Trail and boardwalk upkeep – Signage upkeep – Fencing upkeep – Bridge maintenance – Emergency access road maintenance – Homestead upkeep – Invasive weed management – Snow plowing on the access road to the homestead – Security duties – Routine safety inspections – Wildfire fuel management
One-Time Operations Initiatives	
<ul style="list-style-type: none"> – Conservancy hazard assessment – Kelowna Crags hazard assessment – Assessment of Conservancy infrastructure (barn, bridge, boardwalk) – Facilitation of the formation of the Friends of the Johns Family Nature Conservancy – Development of partnerships with the Climbers' Access Society of BC and/or the Alpine Club of Canada – Five year plan review 	

8.1 Operational and Maintenance Strategies and Actions

8.1.1 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 RDCO Director of Parks Services.
- 1.2. Outline the detailed list of operational responsibilities; assign the staff members responsible for overseeing each, utilizing existing structures and processes for service delivery and providing guidance for service levels where appropriate.
- 1.3. Establish the set of park operator functions that can be assigned and contracted to the resident contractor.
- 1.4. Assign the staff member or private contractor responsible for maintenance activities and determine service levels as appropriate.
- 1.5. Assign a staff member to coordinate the volunteer patroller program and bylaw enforcement schedule.
- 1.6. Initiate an information meeting with operational and maintenance staff to ensure staff are familiar with the Management Plan and are committed to carrying out their responsibility in manner that is consistent with the plan.
- 1.7. Assign specific organizational representatives to establish clear lines of communication between RDCO and COLT.

8.1.2 Public Safety and Duty of Care

Strategy 2 – Ensure due diligence is exercised in addressing public safety and wildfire protection.

Actions

- 2.1 Undertake a public safety assessment of designated park trails and permitted public areas to address RDCO duty of care obligations (e.g., assess hazards and develop a plan to post cautionary signage or remediate hazards as appropriate).¹
- 2.2 Undertake an inspection of the Kelowna Craggs with members of the Climbers' Access Society of BC and/or Alpine Club of Canada – Okanagan Section and a professional qualified to assess the safety of existing climbing infrastructure and address RDCO duty of care obligations (e.g., assess and remediate hazards and post cautionary signage as appropriate).
- 2.3 Undertake an inspection of the proposed public access trail to assess its safety for hiking and biking. Known hazards include downed logs and adjacent steep slopes.
- 2.4 Develop a schedule for RDCO park safety inspections.

¹ Due to the Okanagan Mountain Park fire and subsequent salvage logging veteran trees and snags are under-represented. It is important to conserve those that are remaining for nesting, denning and perching habitat (Fenger et al. 2006). There are so few remnant patches of woodland, that retention of trees should be relatively easy and a low risk to park visitor safety. The remaining fallen trees and coarse woody debris should also be left in place to provide much needed wildlife habitat and nutrients.

- 2.5 Ensure contact information is available to the public at the Conservancy for users to report hazards, fire and other threats.
- 2.6 Provide a voluntary survey book to gather information related to date and time of visit, number of people in the party, and planned activities/destination.
- 2.7 Align wildfire management practices with the spirit and recommendations of the RDCO Park Operational Wildfire Protection Plan.²
- 2.8 Maintain and manage fire breaks where the Park perimeter abuts private property, while also safeguarding ecological values.
- 2.9 Allow the short term (10 – 25 years) post-fire regeneration process to occur naturally without overt human interference. In the long term (>25 years), it will be prudent to more actively manage the land. Future consultation with land management experts is warranted to identify state of the art management techniques and priorities to best manage the Conservancy for wildlife, while also considering public safety, fire risk, forest stand diversity, and other important factors.
- 2.10 Initiate a request to the Ministry of Transportation and Infrastructure for a safety assessment of the unpaved portion of Chute Lake Road and lobby for necessary road safety improvements and the addition of cautionary signage for users.
- 2.11 Assess the condition of the existing barn and walkway within the homestead area and demolish and remove infrastructure as necessary in a manner sensitive to wildlife (e.g., timing, impact).

8.1.3 Park Etiquette and Enforcement

Strategy 3 – Educate park patrons about park etiquette and take enforcement action.

Actions

- 3.1 Develop a bylaw enforcement schedule detailing the time and frequency of bylaw inspections.
- 3.2 Target peak user days to host park etiquette education sessions with patrons.
- 3.3 Train RDCO Volunteer Trail Patrollers and develop a schedule for volunteer park patrols.
- 3.4 Train the resident contractor to educate park patrons on park etiquette.
- 3.5 Develop park signage and brochures to educate the park user on etiquette, Conservancy's vision, history, and unique features. Other possible topics include wildfire, geology, biodiversity, and at risk species.
- 3.6 Ensure that park signage and brochures are available and adequately convey etiquette information.

8.1.4 Community Engagement

Strategy 4 – Engage community stewardship, develop community partnerships and encourage good neighbours.

Actions

² As an un-treed park, Cedar Mountain was not considered for fuel treatment and the donated land were not assessed by the Operational Wildfire Protection Plan. Isolated areas adjacent to residential areas may warrant some fuel treatment measures and should be assessed.

- 4.1 Bring key community organizations together and encourage and support an initiative to form a society that would become the central working group for undertaking community stewardship activities and community driven Conservancy projects. The society, termed “Friends of the Johns Family Nature Conservancy” would include representatives in various capacities from the RDCO Parks Division, COLT, Central Okanagan Naturalist Club, Alpine Club of Canada – Okanagan Section, Friends of South Slopes and other interested organizations. Regular meetings would be held to identify priorities, plan projects, raise funds and share information among groups.
- 4.2 Initiate discussions with the Climbers’ Access Society of BC and/or the Alpine Club of Canada Okanagan Section to formalize an agreement whereby the societies would undertake responsibility for the operation of the Kelowna Crag, including: 1. maintain climbing routes and trail access to the Crag, and 2. lead educational initiatives related to climbing etiquette, safety, and interaction with wildlife.
- 4.3 Initiate discussions with the Friends of South Slopes, the Central Okanagan Trail Alliance and MOE (BC Parks) to build a partnership to implement the inter-park trail connection from within the Conservancy through the UREP parcel to Okanagan Mountain Provincial Park.
- 4.4 Continue communications with the Westbank First Nation and the Okanagan Nation Alliance to explore opportunities in the Conservancy to interpret First Nations culture and heritage.
- 4.5 Invite interested organization to make presentations and share relevant information with the Friends of the Johns Family Nature Conservancy (e.g., CONC annual bird count, UBC Biodiversity Resilience and Environmental Sustainability Institute wildlife corridors study, Climbers’ Access Society of BC and/or the Alpine Club of Canada climbing educational initiatives, etc.).
- 4.6 Develop a letter to adjacent property owners informing them of the direction of the Management Plan and providing information about actions they could take to be a good Conservancy neighbour, who to call with concerns and support plan implementation.
- 4.7 Investigate educational partnerships and opportunities for the Conservancy to serve as a venue to connect the region’s youth with the natural environment in a hands-on way. Possible partnering organizations include School District 23, UBC Okanagan, Okanagan College and Science Opportunities for Kids.
- 4.8 Continue to update the RDCO website with information about the actions taken to implement the Management Plan.

8.1.5 Philanthropy

Strategy 5 – Facilitate philanthropic initiatives.

Action

- 5.1 Support COLT and other interested fundraising organizations in their efforts to raise funds for the implementation of the Management Plan by developing an annual set of priorities for projects for consideration for fundraising by philanthropic organizations.

8.1.6 Intergovernmental Communications

Strategy 6 – Raise awareness among adjacent jurisdictions of actions they can take to support the direction of the Management Plan.

Actions

- 6.1 Prepare a formal notice to the City of Kelowna noting the interest the RDCO has in ensuring that the land north of the Conservancy remains designated as a “Resource Protection Area” within the City’s Official Community Plan and remains outside the City of Kelowna’s “Permanent Growth Boundary.”
- 6.2 Establish communication with the RDOS to ensure land use decisions on the parcel of land directly south of the Conservancy maintain a rural land use designation.
- 6.3 Pursue discussion with MFLNRO to develop a nominal rent tenure that would incorporate the UREP parcel that the Conservancy surrounds, within the boundaries of the Conservancy. If such a tenure is not pursued, look to ensure other leases and licenses on that land do not negatively impact the Conservancy, or are not rented or bought out.
- 6.4 Pursue discussion with MFLNRO and MOE (BC Parks) to encourage the compatibility of uses on the UREP parcel west of the Conservancy and other measures to manage impacts on the Conservancy from the west.
- 6.5 Support MFLNRO and MOE (BC Parks) in efforts to change the designation of the UREP parcel west of the Conservancy and incorporate the land within Okanagan Mountain Provincial Park. If the park designation does not materialize, look to ensure leases and licenses on that land are discontinued and do not negatively impact the Conservancy.
- 6.6 Ensure that all development or demolitions within the Conservancy conform to the RDCO Development Permit Guidelines (i.e., Aquatic, Terrestrial, Hillside, and Fire).

8.1.7 Plan Monitoring

Strategy 7 – Monitor ecosystem health, levels of recreational use, invasive species, and other impacts on the park.

Actions

- 7.1 Set up a motion triggered counter/camera to document park user numbers and recreational uses (e.g., users with dogs, bikes, etc.)
- 7.2 Encourage Conservancy users to get involved in the long-term monitoring of the recovery and conservation of the Conservancy through signage that allows visitors to take standardized photos of the land and upload them to social media photo-sharing websites with common tags. The goal is to generate a database that shows change over time. Refer to <http://nerdsfornature.org/monitor-change/> for additional information.
- 7.3 Complete an Annual Sustainability Scorecard that relies upon collection of useful, long term data that can be used to monitor species and habitats, number and types of permitted users, bylaw infractions, park patroller volunteers, and recreational users over time. There are numerous key performance indicators, but some examples include avian, wildlife, and vegetation abundance and diversity, invasive species establishment and rate of spread, recreational densities (using motion sensors), number of activity permits issued, number of bylaw infractions and number of capital project improvements.
- 7.4 Evaluate the results of the Sustainability Scorecard on an annual basis to determine if there is a need to alter management practices, improve data collected, and make adjustments as needed to better align with the Management Plan.

- 7.5 Establish bi-annual meetings between RDCO and COLT to discuss the Management Plan operations and its long term impacts on the Conservancy.
- 7.6 Revisit the Management Plan after 5 years to ensure the management practices are working effectively and are aligned with the Management Plan goals.

8.1.8 Environmental Stewardship

Strategy 8 – Maintain and enhance environmental values within the Conservancy.

Actions

- 8.1 Carefully manage public access, recreation and education/research within the Conservancy to ensure that human-based activities do not cause a reduction in the capacity of the land to support wildlife populations/diversity or significant alterations to important sensitive ecosystems.
- 8.2 Undertake an inspection of the public access route to identify locations where mitigative measures need to be undertaken to protect the environment. Examples include access mitigation (e.g., installation of perimeter fencing that does not inhibit wildlife movement along adjacent wetlands) and construction of infrastructure to reduce impacts such as walkover bridges where tributary creeks flow over the trail.
- 8.3 Conserve the remaining trees and snags for nesting, denning and perching habitat. In areas where fuel mitigation is required to reduce fire risks, environmental values should be inventoried and considered.
- 8.4 Retain the remaining fallen trees and coarse woody debris to provide wildlife habitat and nutrients.
- 8.5 Coordinate the removal of invasive plants with the MFLNRO, Range Branch, as a low level presence of certain invasive plants is necessary to ensure the survival of biocontrol agents.
- 8.6 Retain the natural state of the Conservancy over the long-term to not only benefit wildlife within its borders, but to also provide safe passage for wildlife moving through³. The RDCO should continue to work closely with UBCO to develop, understand, and support the Conservancy's role as a regional wildlife corridor. In addition, determine the feasibility of engaging UBCO or others, to complete wildlife surveys that could be revisited every five to ten years to monitor change over time. It will be important to identify key datasets that will be needed to help document changes within the Conservancy, as exhaustive inventories have not been undertaken. Thus, baseline datasets are still needed to set the benchmark for the current condition of the Conservancy.

³ The Conservancy acts as an important link for wildlife connectivity on both a local and regional scale. Lebanon and Bertram Creeks function as important movement corridors for wildlife; providing connection between the Conservancy and Okanagan Lake. Ongoing work at the University of British Columbia Okanagan (UBCO), also suggests that the Conservancy acts as a primary movement corridor for terrestrial mammals to move between higher and lower elevations. Finally, the Conservancy is well positioned as an important east-west connection between Okanagan Mountain Provincial Park and Myra-Bellevue Provincial Park.

9.0 - Implementation Plan

Figure 9.1 through 9.3, *Implementation Plan*, provide estimated costs for the development plan items, and ongoing operational and maintenance responsibilities over the next 10 years. These preliminary cost estimates will become more accurate with further design work and site assessments. Based on the provided estimates, the capital investment needed to undertake the development plan is approximately \$630,000. Although this budget is allocated over 10 years, the works are slated to occur within years 1 through 4. The operational and maintenance costs approach \$560,000 over a 10-year period, with spending distributed much more consistently through the Management Plan period.

Short-term work (within the first 3 years) focuses on trail and signage improvements within the Cedar Mountain parcel as a first priority. Design assessment work within the donated lands will also occur early, but implementation will not occur until after 2015 to correspond with the end of grazing lease. Based on these timelines, the donated lands could be opened to the public in either 2016 or 2017. Ideally the opening of the public access trail within the donated lands will correspond with the continuation of the trail into the western UREP parcel and onto Okanagan Mountain Provincial Park.

References

BC Parks. 2010. Interim Management Statement for the Proposed Skaha Bluffs Park.

Fenger, M., T. Manning, J. Cooper, S. Guy, and P. Bradford. 2006. Wildlife and Trees in British Columbia. Lone Pine Publishing, Edmonton, AB 336. Pp.

Frimer, J., D. Zevick, C. Moorhead, J. Smith, M. Bourdon, C. Harrison, K. Holm, J. Howe, A. Ike and P. Winter. 2012. Best Practices Guide for Rock Climbing Route Development in the Squamish Area Provincial Parks: Stawamus Chief, Shannon Falls, and Murrin. A BC Parks Publication.

Hawes, K. 2009. Sensitive Habitat Inventory and Mapping (SHIM) 2008 Survey Period. Inventory Summary Report – Volume 3-A Comprehensive watercourse Catalogue. Prepared for City of Kelowna. Prepared by: Ecoscape Environmental Consultants Ltd. COK File: CAS08-42. Ecoscape File: 08-293. Pp 174.

Needoba, A., K. Broome, and B. Blackwell. 2010. Regional District of Central Okanagan Parks Operational Wildfire Protection Plan - Part A. An Operational Plan for Wildfire Hazard Abatement within the RDCO Parks System. Submitted by: B.A. Blackwell and Associates Ltd. Submitted to: Regional District of Central Okanagan Parks and Recreation Department. April 2010.

Official Regional Park Plan (ORPP). 2000. Our Regional Parks: The Central Okanagan's Official Plan for the Regional Park System. "Schedule A". Prepared By: Residents and Enthusiastic Park Users of the Central Okanagan with the Assistance of the Parks and Recreation Department, Regional District Central Okanagan. November 2000.

Roed, M.A. and J.D. Greenough (Editors). 2004. Okanagan Geology. Kelowna Geology Committee.

Patterson, A. and M.A. Olson-Russello. 2011. Biophysical Inventory for Cedar Mountain Regional Park (CMRP) & Surrounding Lands. Prepared for: Regional District of Central Okanagan. Prepared by: Ecoscape Environmental Consultants Ltd. File No. 11-743.

Thomas, N. 2004. A baseline inventory report for the South Kelowna Acreage. Prepared for: The Central Okanagan Parks and Wildlife Trust and the Regional District of the Central Okanagan.

Urness, D. 1999. Rockclimbs, Kelowna and Area.

Vaaranpaa, J. and Hanna K. 2008. Kelowna Rock Climbing and Bouldering. Blue Moose Publications.