

Clearwater Park Development Plan



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ACKNOWLEDGEMENTS

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EXECUTIVE SUMMARY

Clearwater Park was selected as one of the Legacy Park Program candidate parks for preservation and protection of key watershed areas along the Elbow River. The City acquired the Clearwater Park site in 1979 through a donation of lands from the Devonian Group of Charitable Foundations. The purpose of the acquisition was to promote the preservation of unique riparian habitats along the Elbow River and to offer recreation opportunities for residents in the region.

The dynamic Elbow River system and associated riparian communities contribute to this site's high level of environmental significance. Current use consists of group camping activities at the Clearwater Park Tipi Site, archery at the Calgary Archery Club lease area, and informal visits by neighbouring residents, mostly for walking and dog walking. The site is not physically identified as a park.

The Province of Alberta - Alberta Transportation is planning to twin Highway 8, and this has a significant effect on considerations related to the park's future. Clearwater Park could potentially be used to treat and manage stormwater runoff (from the highway and/or the surrounding area), a new regional trail system will run along the south side of the highway, and the new highway construction will displace the Elbow Valley Constructed Wetland, which has been the location for a popular environmental education program.

This project involved the preparation of a development plan for the City-owned portion of Clearwater Park. The planning was accomplished through a comprehensive design and community engagement process with input from City staff (internal stakeholders), external stakeholders and the public.

The biophysical site inventory and analysis identifies the terrain and soils, hydrology and hydrogeology, vegetation, wildlife, fish / fish habitat, and species at risk. The entire park is an environmentally sensitive area, with the north side of the river being particularly sensitive and most appropriately set aside as a conservation area. It is recommended that no permanent structures be placed within the 1-in-50 year flood zone.

The site analysis identifies excellent opportunities for water- and land-oriented recreation; environmental protection, enhancement and education; and trail uses. These need to be considered in relation to the site sensitivity and risks, visitor expectations, current conditions, highway noise, the current lack of water and sewer services, groundwater levels, and management responsibilities.

The following is the vision for the park:

Clearwater Park is a unique legacy park, representing the nature and culture of the lands • ` ! ![` } åð * Á Calgary. It is an oasis, focusing on nature conservation and environmental education. The Áæ Æ a jewel that protects what is precious; land, air, water, and natural areas. The park is connected to the regional trail system.

Objectives and program options were identified and used to guide the preparation of park plan options. After several rounds of preparing and reviewing options, a preferred development plan was prepared. The following are its key features.

- An entry road with a park sign leads to a short loop road with pockets of parking and a drop-off area.
- Major new park features include a washroom building, large and small picnic shelters, and a "landmark energy" structure all oriented around large grass play spaces and a pond/wetland feature.
- Loop trails around and over the pond/wetland include a boardwalk, pier, viewing platform, overlook, and water access.
- A trail entering the southwest corner of the park connects Clearwater Park to the regional trail system.
- The campsite is enhanced with a new washroom building, new picnic shelter, yurts instead of tipis, and a portable, seasonal dock on the pond.
- The forests along the Elbow River are protected, with loop trails providing access.

Considerations related to park management, an order-of-magnitude cost estimate, and next steps provide information to support the future planning and design of the park.



INTRODUCTION

1.1 Site Context

Clearwater Park was selected as one of the Legacy Park Program candidate parks for preservation and protection of key watershed areas along the Elbow River. The Legacy Park Program, funded through the Enmax Legacy Park Fund, supports land acquisition and park development within and near the City of Calgary in future development corridors. The Legacy Park Program focuses on the creation of regional parks in the Shepard, Bearspaw, and Clearwater areas, where the City has significant land holdings.

The City acquired the Clearwater Park site in 1979 through a donation of lands from the Devonian Group of Charitable Foundations. The purpose of the acquisition was to promote the preservation of unique riparian habitats along the Elbow River and to offer recreation opportunities for residents in the region.

Clearwater Park is located 7.2 km west of Calgary's city limits, north of Highway #8 (Glenmore Trail), along the Elbow River (**Figure 1**). The entire future park consists of about 383 ha (947 acres), portions of which are owned by Rocky View County, a Municipal District in Alberta. The park land owned by the City is a quarter section, or about 65 ha.

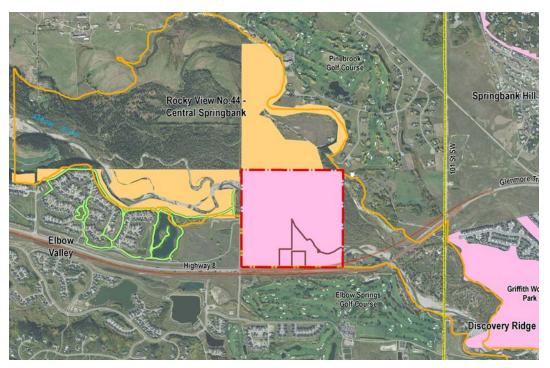


Figure 1: Context Map

The park is bisected by the Elbow River (**Figure 2**). The northern boundary abuts a conservation area of Rocky View County, Highway 8 forms the southern boundary, and Range Road 25 borders the western edge of the park. Surrounding the park, there are private lands containing small acreages, golf courses and subdivisions. Griffith Woods Park, a significant natural area within Calgary, is located south of the highway within close proximity to Clearwater Park.



Figure 2: Aerial View of Park Site

The dynamic Elbow River system and associated riparian communities from alluvial wetlands to forests contribute to this site's high level of environmental significance. The Elbow River is an important wildlife habitat and movement corridor, and a variety of significant ecosystems are found within the park site. The City is committed to minimizing damage to the unique natural assets of this park while supporting environmental education and recreation. Not all of the park is environmentally sensitive; the southwest corner of the park site was a previously cultivated field and there is a large area of mowed grass near the south boundary.

Portions of the site have been made available for recreation use over the years. The Clearwater Park Tipi Site consists of campsites and tipi platforms that can accommodate approximately 30 people. This rustic amenity provides the City of Calgary with the only overnight "backyard" camping for school, community and private groups; there are about 30 bookings per year. The Calgary Archery Club leases a portion of the park site. Its facilities include several buildings, fences, an open grass area used as an archery range, and an archery cross-country area with platforms, trails and obstacles within the forest.

A Master Plan for Clearwater Park was prepared in 1982; the plan identifies the site's resources, park objectives, and a proposed plan for recreation use and amenities within the park. A study of the park's biophysical resources was prepared in 2010 (Dillon Consulting). Due to the age of the original master plan and the presence of a relatively new community around the park site, the City initiated this planning process for Clearwater Park.

The Province of Alberta - Alberta Transportation is planning to twin Highway 8, and this has a significant effect on considerations related to the park's future. Some of the considerations related to the highway project include the following:

- Early in the process, Alberta Transportation considered using Clearwater Park to treat and manage stormwater runoff from the highway and as a potential source of gravel for road construction. A subsequent decision was made not to pursue these options.
- A new regional trail system will run east-west along the south side of the highway.
- The new highway construction will displace the Elbow Valley Constructed Wetland, which has been the location for The Mud Between My Toes, a popular environmental education program that is a combination of outdoor field studies and classroom workshops.



These considerations helped to inspire the idea for a wetland on the previously disturbed portion of the park site. Potential benefits of the wetland include serving as an alternative site for the environmental education program, managing stormwater runoff (not necessarily from the highway), adding interest and diversity to this portion of the site, and providing trail links from the regional trail to the Elbow River.

1.2 Purpose and Process

The purpose of this project was as follows:

- Prepare a vision and concept plan for Clearwater Park
- Prepare a plan for external pathway connections between the park and surrounding areas
- Prepare a conceptual plan for the City-owned portion of Clearwater Park
- Prepare a detailed design development plan for the City-owned portion of Clearwater Park – this task is being considered and may occur once The Province completes design and development work on a new Elbow River bridge and highway twinning along the south edge of the site

The planning was accomplished through a comprehensive design and community engagement process with input from City staff (internal stakeholders), external stakeholders and the public (**Figure 3**). The planning process involved the following steps:

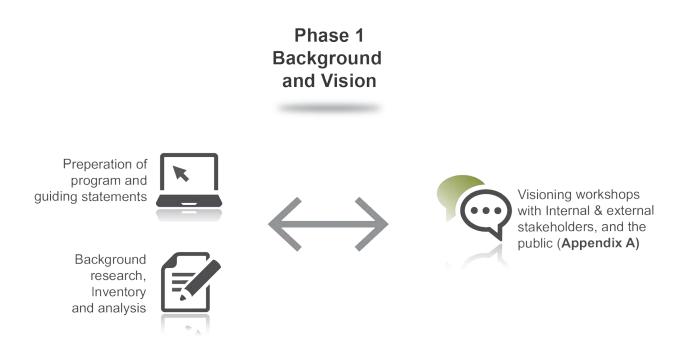


Figure 3: Park Planning Process

Phase 2 Preliminary Design

Preperation of three sketch options (Appendix B)





Workshops with internal & external stakeholders to review sketch options

Preperation of a preferred preliminary design with 3D visualizations and character images





Workshops with internal & external stakeholders and the public to review a preliminary conceptual plan (Appendix C)

Key stakeholders involved in the process included the following:

City of Calgary - Parks, Recreation, Councillor-Ward 6, Transportation Planning, Community and Neighbourhood Services, Water Resources

Alberta Transportation (Long Range Planning)

Other external stakeholders involved in the process included the following:

City and Community Groups

Community Associations of Signal Hill and Discovery Ridge

Elbow River Watershed Partnership

Calgary Pathway Advisory Committee

Calgary Arts and Development Council

Calgary River Valley Forum

Calgary Field Naturalists

Calgary Sports Council

Cycling Groups

Calgary Archery Club

Off Leash Calgary

Other Government Groups:

Rocky View County

Alberta Environment

TransAlta

Department of Fisheries and Oceans Canada (DFO)

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SITE INVENTORY AND ANALYSIS

2.1 Biophysical Inventory and Assessment

The site inventory and analysis is based largely on the Biophysical Inventory and Assessment conducted by Dillon Consulting in 2010, which includes information on the following:

- Biophysical information on the park and adjacent riparian lands
- Environmentally significant areas within the park
- Preliminary impact assessment related to future recreation amenities and activities
- Recommendations for appropriate locations of future amenities to minimize development impacts to the natural environment

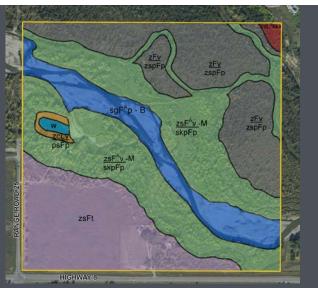
Overview

The Clearwater Park site is substantially level and it slopes gradually down to the grade of the Elbow River. Most of the property is in a relatively natural state, containing river, river bank, riparian and forested ecosystems. A previously cultivated field occupies the southwest corner, and a pond that was originally built to be a swimming pool is located south of the river near the west edge of the park.

The portion of the park south of the Elbow River is easily accessible, with roads on two sides, and it is used informally by residents of the surrounding areas. Access to the north side is limited to one rural road end. The north side of the river is therefore much less disturbed. The northeast corner of the site extends up an escarpment.

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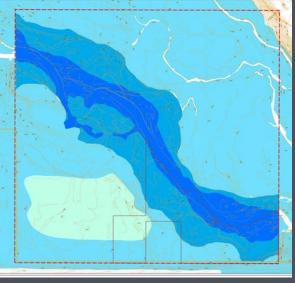


Figure 4: Terrain (Dillon Consulting)

Figure 5: Flood Zones

Terrain and Soils

The terrain or surficial geology (geomorphology) of the study areas is comprised of five types of material (**Figure 4**):

- Morainal (till)
- Glaciolacustrine and lacustrine
- Glaciofluvial
- Fluvial
- Organic

The majority of the parent materials are fluvial sands and silts that include imperfectly drained and rapidly drained Regosols; poorly drained Humic Gleysols and imperfectly drained Humic Regosols. The south-west corner is well to moderately well drained Black Chernozems. The underlying bedrock of the entire area is the Paskapoo sandstone formation.

Hydrology and Hydrogeology

The aquatic features in the park include shallow water, wetland fens and the active floodplain of the river. The Elbow River typically rises dramatically in the months of May, June, and July (**Figure 5**). As the water table rises, the old channels and low-lying areas of the park become inundated. In major flood events, the river overruns its banks and spreads out across areas of the floodplain. Only a small portion of the park in the southwest corner is above the 100-year floodway, but it is still considered a fringe flood zone.

The structure of the river through the park is a riffle-pool system that has both permanent and ephemeral side channels, as well as historical channels. As a dynamic system, the shoreline is continually shifting within the active flood zone (**Figure 6**). The bankfull width of the river is between 50 to 60m. Within the bankfull channel, there are sediment bars.







Figure 7: Vegetation Communities

Vegetation

High quality, provincially rare white spruce ecosystems and river wetland habitat dominate the majority of the land north of the Elbow River (Figure 7). South of the river, balsam poplar forest is the dominant vegetative cover. The previously cultivated field in the southwest corner of the park is now occupied by numerous native plant species such as silverberry, shrubby cinquefoil, Canada buffaloberry and buckbrush, in addition to grasses.

Around the perimeter of the constructed pond, situated just north of the tipi campsite, there is standing water and poorly drained upland soil material. The shrub species in this area include silverberry, willows and choke cherry. Emergent species in the saturated soil and standing water include small sedges, rushes, horsetail, and other wetland species. Because the pond has a diverse cover of aquatic and hydrophytic vegetation along its entire perimeter, it is classified as a wetland.

On the exposed gravel bars of the Elbow River, a mixture of sand and coarse fragments composed of pebbles, cobbles and boulders are present. These sites are flooded on an annual basis. Vegetation is established around the shelter of stranded logs and trees. The characteristic shrub species include red-osier dogwood, balsam poplar, sandbar willow, velvet-fruited willow, flatleaved willow, silverberry and buckbrush.

In low-lying areas of the active floodplain that are subject to periodic inundation, soils are typically coarse sand. Willows dominate the shrub layer, along with consistently occurring balsam poplar and silverberry. Common forbs include creeping spike-rush, bluejoint, redtop, Kentucky bluegrass, wire rush and Canada thistle.



Wildlife

Clearwater Park is within the range of a number of large mammals. Moose and white-tailed deer use these habitats primarily in the winter months. Mule deer and elk are present in low numbers. Large carnivores such as mountain lion, black bear, bobcat and coyote appear to use the area as a thoroughfare. Small mammals in the park include deer mice and southern red-backed voles.

There were 58 bird species observed during field studies. Commonly occurring bird species include yellow warbler, pine siskin, least flycatcher, house wren, American robin, and white-throated sparrow.

Many frogs and toads use the site and breed in the spring. The wood frog and boreal chorus frog are common throughout most of the area; the northern leopard frog, Canadian toad and western toad are less likely to be found here.

Fish and Fish Habitat

Sport fish that are located in the Elbow River within the park include brown trout, mountain whitefish, northern pike, and rainbow trout. The non-sport fish include brook stickleback, fathead minnow, lake chub, longnose sucker, and white sucker. Undercut banks along both sides of the river give cover to fish through the majority of the area, except where gravel bars have formed. Fish habitat is further enhanced by the presence of instream large woody debris and overhanging vegetation.

Species at Risk

Two rare plants were documented on site, western fescue and widgeon-grass. Western fescue is found in the open White Spruce – Canada Buffaloberry forest vegetation community on the north side of the Elbow River. The widgeon-grass is found in a small impounded section of a Willow – Spike-rush channel vegetation community, also north of the Elbow River. A bird called the least flycatcher, listed as a sensitive species in Alberta (ASRD 2009), is also present. This species is found in the Balsam Poplar – Red-osier Dogwood Forest (shrub, young forest and mature forest stages) and Sedge – Horsetail Wetland Fen vegetation communities.

Biophysical Inventory Assessment

The following is a high-level assessment of the park site:

- The entire park is an environmentally sensitive area.
- Over 80% of the park site is occupied by natural vegetation.
- The entire Elbow River floodplain is a continuous wildlife corridor.

- This is the best example of a relatively undisturbed riparian floodplain in Calgary's park system.
- No known contamination exists.

Recommendations from Dillon Report

The following recommendations were prepared for Clearwater Park based on the biophysical inventory and assessment:

- The entire area on the north side of the Elbow River should be set aside as a conservation area for the protection of wildlife habitat and wildlife corridors. Public access should be limited and educational opportunities should be explored and considered.
- Signage indicating the boundaries and perimeter of Clearwater Park should be posted as soon as possible (currently there is no indication at any point on the perimeter of the park that the property is administered and controlled by the City of Calgary).
- A policy regarding access for dog-owners and dogs to the south side of the park is needed. Currently dog-owners and dogs use this part of the park intensively and as a result trails are forming in silty soils, compaction is occurring, and dog fecal matter is strewn throughout the area and in close proximity to the river.
- As an initial consideration for future recreational use and facility development, no permanent structures should be placed within the 1-in-50 year flood zone.

2.2 Site Use Inventory and Assessment

Heritage Resources and Traditional Land Use

The park is close to the Tsuu T'ina Nation Indian Reserve 145, 500 m from the nearest point. Given a wealth of historical resources located near the park, it is apparent that the Tsuu T'ina people, and possibly other First Nations groups, used the general area for living, hunting and gathering. The Blackfoot First Nation currently has interests in the area.

Buffalo hunting and gathering of plants were likely the primary activities in this area. There are campsites and kill sites in the broad Clearwater study area, but none known within the park. Due to the current private and local government land ownership in the broad study area, it is highly unlikely that any traditional activities (food gathering or cultural) are currently being conducted here.



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The bedrock exposures on the south side of the Elbow River below Elbow River Estates and glaciofluvial gravel both have high palaeontological potential. These deposits could be overlain by thin surficial silt as well as morainal material and therefore could be disturbed by excavation or grading. Any future developments within Clearwater Park should reduce damage to potential archaeological sites at depth. If any deep excavations are planned, the area should be examined for palaeontological resources before construction begins. It is also recommended that a site inventory for palaeontological resources be completed, especially of any bedrock exposures along the Elbow River.

2.3 Existing Infrastructure

A gravel road provides access into the park from Range Road 25, and there is a rough trail system within the forested areas south of the river. The only other infrastructure within the park is located within the Tipi Site and the Archery Club lease areas, as follows:

Tipi Site Amenities

- Approximately 40 acres of fenced space
- 4 @ 6.3 m diameter tipis complete with wood floors and wood-burning stoves; each tipi sleeps 7 children or 6 adults
- 1 @ 6 X 6 m festival tent with 6 picnic tables
- 2 pump-out toilets, one of which is wheelchair accessible
- Cook room with Coleman stoves, lanterns (naphtha camp fuel), cookware and dining utensils
- Emergency telephone and gear storage room
- In-ground and portable fire rings

Archery Club Amenities*

- House
- Clubhouse
- Mowed grass lawn
- Perimeter fence
- Various structures and landforms such as bridges, gullies, berms and shelters used for archery

*The park planning team did not have access to the archery lease area,

so this list is based on what is visible from public land and air photos.

Visual Resources

The potential for recreation use is affected significantly by the visual characteristics, or resources, of a site. The primary visual feature of Clearwater Park is the Elbow River. When the water level is low enough to allow safe access, the river provides outstanding open views up and down the river. The river bed is a dynamic landscape that is always changing. Rock and driftwood features are unique elements and park visitors often create sculptural or structural art with the rocks and wood.

The constructed pond and the channels connected to the river are also interesting features of the site. Forested areas vary in character and are attractive as well as providing experiences of nature, including the smells, sounds and sites of water, soil, fresh air, vegetation, fish and wildlife.

The park is less attractive close to the highway, where the experience and sounds of traffic dominate. The overgrown field in this location does not have any particular appeal for the average park visitor.

Existing Use

The site is not physically identified as a park. The Clearwater Park Tipi Site is rented by reservation to community groups such as schools and not-for-profit organizations that have low–impact land stewardship ethics. The site, which is currently user maintained, is open from Easter to Thanksgiving. During July and August, the site is used intensively. In the spring and fall, use is lower, and mostly on weekends. Between 2010 and 2013, there were between 17 and 19 annual bookings.

The park provides the City of Calgary with the only overnight "backyard" camping for community groups close to the city. Activities of community groups typically occurring at the campsite include team-building, nature study and appreciation, orienteering and outdoor games. The pond is close to the campsite and there are trails to the river from the campsite.

A portion of the Clearwater Park property is leased to the Calgary Archers Club for use as an archery range. The long-term lease expired in 2012 and the lease is now renewed annually.

In addition to the sanctioned uses, there is a significant amount of informal use on the site, despite it not being identified as a park. Most of the use is based on walking on the trails through the forest and to the river. The site appears to be used a significant amount for dog walking,



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including use by commercial dog walkers. Floating down the river takes place in the summer months.

There is a well-used trailhead just west of the park that follows the Elbow River to the west, with trails extending into Elbow Valley developments. There is minimal public use of the parkland north of the river; anecdotal input suggests that some people access the river from that side for fishing.

Human Health and Safety

The Dillon report included an overview of potential risks to human health and safety associated with future use of the site as a park. These include the following:

- Contact with wild animals including large carnivores and ungulates during mating season or care of young
- Drowning in the Elbow River (especially in flood season) or in areas of standing water
- Falling while hiking through natural areas that include channels, steep slopes and uneven terrain
- Consuming parts of poisonous plants including berries and tubers
- Coming in contact with barbed wire fences
- Being stung by wasps, hornets or bees.

The chances of contacting large carnivores (mountain lion or black bear) in the broad study area are relatively low and probably greater on the north side of the Elbow River than on the south side. The risks from potential contact with either bobcat or coyote are considered minimal and both species would most likely flee on initial sighting of people.

The risk of drowning in the Elbow River is potentially high during flood season (spring months with high snow melt levels and storm events). Common sense would dictate that most people would not venture close to the banks of the river during periods of high flow. Because the banks of the river are constantly being eroded by moving water, there is always some risk that trails could become unsafe. Hiking through natural areas always includes the risk of falling, especially in areas of uneven ground or steep slopes.

The risk of being poisoned from eating parts of a poisonous plant within the study area is relatively low, although some plants have berries or fruit that appear to be edible and are actually toxic. Such plants include buckbrush and baneberry. For some plants, all parts including leaves,

flowers, seeds, and roots can be poisonous and deadly, e.g., tall larkspur, death camas, and locoweed (late yellow locoweed and early yellow locoweed) and Canadian milk vetch.

Throughout the park site, there are remains of old barbed wire fences and in some cases these wires are low to the ground and hidden from obvious sight by vegetation. These wires represent considerable trip hazards where they are present.

As in any natural area, the risk of being stung by wasps, bees or hornets is always present.

2.4 Analysis

The analysis of opportunities and challenges is based on the site inventory and assessment information and input received during the planning process.

Bullets all need space between them

Opportunities

Clearwater Park offers many opportunities to create a highly unique park for the City and region, offering valuable and rewarding experiences attractive to residents and tourists. Some of the key opportunities include the following:

- Water-oriented recreation With excellent access to the Elbow River, the potential activities include boating, fishing, wading, river art, and appreciation of the river environment.
- Land-oriented recreation Existing recreation opportunities include walking, hiking, and camping. These could potentially be expanded to include informal play (on grass areas), picnicking, cycling, and disc golf. With some limited improvements to the accommodations, there could be opportunities to expand camping opportunities to include older groups, school groups, and private or corporate retreats.
- eresurces on the site. Due to the park's proximity to the City, there are also opportunities for environmental education, both on an informal basis (e.g., interpretive signs and brochures), and through organized programs (e.g., school excursions, summer camp experiences, community programs). Current environmental education opportunities relate to the river and forest ecosystems; these could be expanded with the addition of a pond/wetland.

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- Trail uses Since the potential exists to link this site to the regional pathway system and to connect it with Griffith Woods Natural Environment Park, Signal Hill and other communities and destinations, there are opportunities to offer attractive and educational linear experiences to those travelling on foot, bicycle, skis, and other non-vehicular modes.
- Proper park entry and unique character There are significant opportunities to establish an identity for this park that is unique in the region, and to express this at the park entries and throughout the park site.
- Utilities The site would need improved utilities to support a higher level of development. Options include extending the water service from Rocky View County or drilling a well for water; sanitary sewage options include tying in to Rocky View County services, composting or pump-out toilets, or a septic system.

Challenges

There are a number of challenges that need to be addressed in the park plan, including the following:

- Site sensitivity and risks The site is environmentally sensitive and poses risks to the public. Overuse or inappropriate use could detract from the environmental values and human enjoyment.
- Balancing expectations The trailhead west of the park is heavily used by pedestrians and dog walkers and this could put pressure on the park in terms of the types and levels of use and the desire for a continued trail connection along the river. Consultation indicated that there are varying interests in this park; some would like it to become an active site offering multiple recreation opportunities, e.g., sports, staging area for the regional trail, and others, particularly those living nearby, want it to remain primarily natural.
- Trails The current trail system is ad hoc and is not based on good trail planning principles, e.g., the developed portion of the park currently has no formal connection to the Elbow River.
- Access Road The adjacent road, Range Road 25, is used extensively for access to Clearwater Drive by the residents of the Elbow Valley subdivision to the west. The challenge is the amount of traffic on this road at peak commuting times, but it is also an opportunity in that it provides good road access to the park site.
- Lack of park identity There are no visual cues to identify the park entrance, no formalized parking, and no signs leading to or within the park itself. There are also no signs to identify private land that abuts the park site.

- Highway The traffic noise from Highway 8 Glenmore Trail can be heard within the park. This will likely increase with the highway twinning. Other constraints related to the highway twinning include the loss of access from the highway to the site (currently for the archery club) and the likelihood that the trail will not be able to extend east from the park along the river.
- Tipi site The Clearwater Park Tipi Site limits opportunities for the public to have access to the entire park site, including the pond.
- Utilities The site has no water or sewer access, and toilets are currently outhouses.
- Water level If a stormwater pond is built, without stormwater flows from the highway project, it is unknown whether the groundwater combined with local stormwater will be enough to have water in the proposed pond year-round.
- Management responsibilities Because this is a City park in the
 county, management responsibilities are unclear and will need to be
 determined in relation to emergency response for police, ambulance,
 fire and environmental hazards, as well as management of park use
 and environmental stewardship.

Site Inventory and Analysis Summary

The site was divided into areas of similar characteristics that relate to the park development plan (**Figure 8**). These are as follows:

- North of River ESA environmentally sensitive area not suitable for park development, could be used on a limited basis for environmental education or research
- Elbow River Channel environmentally sensitive area and highly hazardous in the spring, not suitable for park development, could be used on a seasonal basis for environmental education and art
- Pond and Wetland Fen environmentally sensitive area not suitable for park development, except potentially for the east gravel bar edge that could be used for seasonal access to the pond for small boats
- Secondary Channels environmentally sensitive areas have opportunities for environmental enhancement, potential for some limited trail crossings on small bridges
- Forest with Informal Trails and Forest with Structures, Trails and Bridges – moderate environmental sensitivity, has potential for environmental enhancement and nature trails



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- Tipi Site moderate environmental sensitivity, has potential to remain a separately functioning campsite or to be combined into the overall park plan
- Road Access good location for the park entry
- Old Field Habitat, Mowed Grass and Buildings and Landscaping

 lowest environmental sensitivity within the site, area least subject to flooding, has potential for environmental enhancement and/or active recreation uses and amenities

Figure 8: Site Inventory and Analysis Summary





GUIDING STATEMENTS

3.1 Vision and Objectives

The vision and objectives for the park are based on the site inventory and analysis, as well as stakeholder and community input.

Vision

The vision is in the present tense, as it describes how it is hoped that the park will be seen in the future:

Clearwater Park is a unique legacy park, representing the nature and culture of the lands surrounding Calgary. It is an oasis, focusing on nature conservation and environmental education. The site is a jewel that protects what is precious; land, air, water, and natural areas. The park is connected to the regional trail system.

Objectives

- 1. Protect environmental resources, including the wildlife corridor through the valley and the habitats within the park.
- 2. Provide interpretive information and nature and cultural education programs.
- 3. Manage use to minimize conflicts among uses and impacts on habitat, addressing the need for use guidelines and standards for etiquette.
- 4. Plan the major park amenities based on the principals of universal design.

Retain and improve the opportunity for the "tipi camping" experience, i.e., rustic, nature-oriented experience.

Establish trails that connect the park with the regional trail system.

Retain access to the river, respecting risk management considerations.

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3.2 Program

There are different perspectives on the degree to which the park site could be developed; therefore the potential program is described at three different levels. These could be options for the future or phased over time, beginning with the Basic program.

Program 1: Basic

minimal improvements to existing facilities and uses

Facilities

- Trail network: well defined hierarchy, identification / directional signs, for use summer and winter
- Entry: sign, gate, kiosk with site map
- Interpretive signs: natural and cultural features, wildlife
- Enhanced tipi site: minimal enhancements, mark site as separate from day use area
- Small parking lot: provision for day use and overnight visitors, minimal impact, space for expansion without affecting trees
- Benches, picnic tables, garbage bins (optional)
- Boundary signs (where needed)

Activities

- Walking
- Wildlife/bird viewing
- Dog walking personal use, in control, no commercial dog walking
- Environmental education programs (with other groups), e.g., schools, camps
- Camping tipis
- Cross-country skiing, snow shoeing
- Picnicking
- No formal uses north of the river visit on guided interpretive tours primarily

Program 2: Moderate

moderate improvements to site, enhanced facilities

Facilities

Same as Program 1, with the addition of:

- Interpretive centre: nature and culture, indoor, interpretive displays, meeting / multi-purpose room, washrooms, summer and winter use (warm-up hut in winter)
- River access marked path
- Interpretive wetland: stormwater function, paths and viewpoints, trails
- Washrooms for tipi site
- Larger parking lot for day use: minimal impact

Activities

Same as Program 1, with enhanced walking, wildlife/bird viewing and environmental education opportunities, improved river access, camping not quite as rustic

Program 3: Enhanced

 enhanced day use functions and facilities, no tipi site (rationale is that significantly higher day use would conflict with the overnight tipi use)

Facilities

- Trail network: well defined hierarchy, identification / directional signs, for use summer and winter
- Major interpretive centre: nature and culture, indoor, interpretive displays, meeting / multi-purpose hall, washrooms, summer and winter programs and use, available for rental, utilities to be determined / potential opportunity for a "green" approach
- Interpretive wetland: stormwater function, paths and viewpoints, trails
- Largest parking lot: includes staging for bikes
- Pond access: launch for floating water activities (not swimming)
- River access: boat launch for rafts, canoes, kayaks
- Entry: sign, gate, kiosk with site map



Precedent Image: Bridge

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- Interpretive signs: natural and cultural features, wildlife
- Benches, picnic tables, garbage bins (optional)
- Boundary signs (where needed)
- Dog off-leash area

Activities

- Walking
- Wildlife/bird viewing
- Dog walking personal use, in control, no commercial dog walking, dogs off leash
- Environmental education programs summer and winter (with other groups), e.g., schools, camps
- Gatherings and events
- Staging area for boating and biking
- Picnicking
- Organized "nature" sports, e.g., disk golf, orienteering
- Cross-country skiing, snow shoeing





Precedent Images: Viewing Deck and Picnic Shelter



DEVELOPMENT PLAN

4.1 Plan Description

Several iterations of the development plan were prepared during the planning process. **Appendix B** describes the first set of options. These were refined into a preferred preliminary design plan that was presented to stakeholders and the public for input in April 2012 (**Appendix C**). Generally the response to the plan was very positive, with slightly lower support for disc golf, sports, and overnight camping. This can be explained partly by the respondents, who were mainly neighbourhood residents.

After consideration by City staff, the preferred plan was refined, with a variation related to stormwater management. The development plan of 2014 has stormwater management and environmental education functions, and it is intended for consideration as a replacement of the Elbow Valley Constructed Wetland. The park will be built to support year-round use with a focus on nature appreciation and education.



Figure 9: Preliminary Design & 3D Visualizations



The following are the features of the development plan that are common to both options:

- An entry road with a park sign leads to a short loop road with pockets of parking and a drop-off area.
- Major new park features include a washroom building, large and small picnic shelters, and a "landmark energy" structure (e.g., solar, wind) all oriented around large grass play spaces and a pond/wetland feature.
- Loop trails around and over the pond/wetland include a boardwalk, pier, viewing platform, overlook, and water access from which to appreciate the rich riparian habitats.
- A trail entering the southwest corner of the park connects Clearwater Park to the regional trail system.
- The campsite is enhanced with a new washroom building, new picnic shelter, yurts instead of tipis and a portable, seasonal dock on the pond. Gates on the entry road and access trail allow the tipi site to be separated from the main park site to provide privacy for those renting it. The parking is configured as small pockets of parking on a loop road.
- The forests along the Elbow River are protected, with loop trails providing access.
- Intermittent low berms and clumps of native vegetation provide partial buffering and view windows from the highway into the park.
- Other park elements include: a sign kiosk and interpretive signs throughout the park; a service road and park operations area; clumps of native vegetation providing interest, shade and filtered views into the park; park boundary signs where needed; potential disc golf area; and benches, picnic tables, and garbage bins where needed.
- The following are the features unique to Option 1.
- A pond system with a forebay and three separate pond areas collects and remediates stormwater, with an overflow channel to the Elbow River.
- The service road extends beyond the park operations area to provide access for removal of sediment from the forebay, with a loop enabling easy truck movements.

The following are the features unique to Option 2.

 The pond/wetland system has two separate pond areas and a wetland, with an island between the main pond and wetland.

4.2 Park Management

The management of the park will need to be determined over time depending on the amenities that are developed and the partnerships that may be formed. The following are some initial ideas that were discussed in relation to management:

- The park would be gated and locked at night, with a security service hired to open and close the gate and to check on the park at night.
- Community stewards would be encouraged to provide informal oversight and to engage in environmental stewardship.

4.3 Cost Estimate

A Class D cost estimate for the options is based on typical 2014 construction costs (Figure 10). A Class D estimate is an "indicative" estimate, a rough cost projection used for budget planning purposes in the early stages of concept development of a project. More detailed cost estimates will need to accompany preliminary and detailed design. The items included in the cost estimates for both options are described below.

A. Site Preparation

 Clear and rough grade areas for new site amenities including paths, roads, parking areas, sites for structures and furnishings, and new vegetation areas. Strip, screen and stockpile organics for re-use in vegetation areas. Rough grading does not include pond and wetland excavation or grading of berms.

B. Pond and Wetland

- Excavate pond and wetland areas. Grade pond and wetland areas and on-site berms. Re-use excavated materials for berms. . Excavated materials may be salvaged as base material for path and road construction if appropriate. Excess excavated materials may be used elsewhere for City works or sold. The estimate does not include costs for off-site disposal.
- 2. Supply and install liner in pond areas.



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Precedent Images: Viewing Deck, Interpretive Centre/Washrooms, Dock

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3. Supply and install rock banks, constructed of 0.5m to 2m diameter boulders.

C. Primary Paths

1. Supply and install 3m wide gravel paths, including placement of gravel base and surface courses.

D. Secondary Paths

1. Supply and install 1.5m wide gravel paths, including placement of gravel base and surface courses.

E. Roads and Parking Areas

- 1. Supply and install 7m wide gravel entry road and parking areas, including placement of gravel base and surface courses.
- Supply and install 4m wide gravel road and parking areas in overnight site, including placement of gravel base and surface courses.
- 3. Supply and install 4m wide gravel service road and operations area, including placement of gravel base and surface courses.

F. Structures and Furnishings

- 1. Supply material for and construct large picnic shelters, including picnic tables.
- 2. Supply material for and construct small picnic shelters, including picnic tables.
- 3. Supply and install yurts, including base.
- 4. Supply material for and construct washrooms, include male, female and possibly family stalls.
- 5. Supply material for and construct the landmark structure.
- 6. Supply material for and construct the pier.
- 7. Supply material for and construct the portable dock.
- 8. Supply material for and construct the viewing platform and 1.5 m wide boardwalk in the paddling area.
- 9. Supply material for and construct 1.5m wide boardwalk in the wetland.
- 10. Supply material for and construct bridges suitable for foot traffic and small maintenance vehicles.

- 11. Supply material for and construct the entry kiosk with roof and sign boards.
- 12. Supply material for and construct the stairs.
- 13. Supply and install the gates.
- 14. Supply and install the benches, including concrete pads.
- 15. Supply and install minimal security lighting for the overnight site parking lot.
- 16. Supply and install signage, including park entry, interpretive, wayfinding, and regulatory signs.

G. Disc Golf Area

- 1. Supply and install 18 baskets.
- Supply material for and construct 18 tee boxes, including gravel base and surface courses with wood edging.
- 3. Supply and install course signage.

H. Vegetation

- Supply and install shrubs in proposed vegetation areas, including placement and fine grading of growing medium 45 cm deep.
- 2. Supply and install trees spaced 2m on centre in groups covering \(^1\)4 of the proposed vegetation areas.
- 3. Supply and install grass and wildflower mix hydroseed for meadow areas, including placement and fine grading of growing medium 20 cm deep.
- 4. Supply and install grass mix hydroseed for lawn in open play spaces, including placement and fine grading of growing medium 20 cm deep.
- 5. Supply and install wetland plants at pond edges and wetland area, including placement and fine grading of growing medium 30 cm deep.





CLEARWATER PARK DEVELOPMENT PLAN Page 33 of 58 4.4 Next Steps

The development plan establishes the general direction and design ideas for this park.

Some of the next steps will include the following tasks:

Confirm the role of the park in relation to stormwater management.

Confirm the groundwater level in the open field area in relation to its capacity to hold

water, and the anticipated water levels in various seasons.

Determine the role of Clearwater Park in relation to the regional greenway,

e.g., if this will be a staging area for the greenway.

Explore potential environmental education opportunities, including The Mud Between

My Toes program and other options.

Explore the potential interest in group use of an upgraded campsite.

Explore opportunities for water and sewage systems on the site.

Explore opportunities for partnerships related to servicing and emergency

management of the park.

Explore opportunities for partnerships related to environmental management of the

park, e.g., Ducks Unlimited.

Confirm if or how the park will be used after dark, and plan for lighting accordingly.

Engage with the Blackfoot First Nation to explore any opportunities for integration of

cultural interpretive information or experiences.

If the structures in the archery lease area are to remain on the park site, assess

opportunities for potential uses of those structures.

Prepare a dog management plan as part of a final park design.

Confirm the phases of construction, and prepare detailed design plans for each

phase.

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Appendix



Phase 1
Visioning
Workshops

On May 5, 2011, three visioning workshops were held regarding the Clearwater Park Design Development Plan. The workshops were held with internal stakeholders, external stakeholders, and the public. The purpose of these workshops was to inform participants about the planning process, and to request information and ideas for the vision, objectives and program for the park. All workshops were facilitated by Catherine Berris, Catherine Berris Associates Inc., and Rick Gendron, 818 Studio Ltd.

The agenda for these workshops was as follows:

- Presentation brief introduction to the project purpose, scope, process; overview of the site inventory
 and analysis, including context (relationship to trails, other parks, etc.) and site (site features, uses,
 circulation, habitat, proposed highway widening, etc.); and description of the purpose of the meeting,
- Information participants were asked "is there anything else we should know about this site or the surrounding area?"
- Workshop –Part 1: participants were engaged in an interactive process to brainstorm ideas for a
 vision, objectives, and potential program of activities and facilities. Part 2: participants generated
 priority lists for the vision, objectives and program then used audience response software to indicate
 their top preferences from each list.

The following is the complete input from each workshop. Numbered items are listed in order of priority based on voting by participants using an audience response system.

Workshop with Internal Stakeholders

11 Participants

Information

- Cannot assume that municipal water and sewer services will be available due to the park being in Rocky View county, may want to explore whether well water is an option
- Inter-municipal Development Plan is to be released soon City and Rocky View
- Mountain bikers will have interest in this plan
- 15 @ 40 gallon oil drums were removed from the pond in the past
- Camp fires are common along the river
- The Elbow Valley constructed wetland will be lost to road construction, it is booked solid with school groups, it is a well-loved site with a shelter and parking. The Province committed to paying for its relocation; perhaps this could be the replacement site.
- John Merriman can help with communications for the next meetings.
- Consider Ralph Klein Park as an example, e.g., "green" catering, composting, all garbage cans were removed so visitors need to remove their own garbage

X (*)	
Vision	Premier site, jewel, bird sanctuary, destination
	2. Oasis for people/groups
	3. Legacy
	4. Protect what's precious - land, air, water, space
	5. Environmental education
	6. City / Rocky view collaboration
	7. Involvement of the community
	Other Comments on Vision
	Refuge
	"Private sanctuary" available to groups
	Progressive design
	Regional open space
	 Importance of land – human health, habitat
	Park focused on water, corridors and connections
	Bird sanctuary "exemplified"
	 Premier site for the City (with other 2 Legacy sites)
Objectives	Manage use to minimize conflicts and protect habitat
	2. Coordinate planning with Rocky View
	3. Accessible to all but not all accessible
	Keep and enhance tipi aspect
	5. Guidelines, etiquette, standards
	6. Trail corridors east and west
	7. Environmental protection
	8. Protect valley wildlife corridor
	9. Connection to traditional land uses – wildlife, plants, etc.
	Other Comments on Objectives
	Protect and restore the riparian zone, link to watershed planning

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Program

- 1. Environmental education programs (with other groups)– schools, camps
- 2. Interpretive wetland
- 3. Arts / interpretive centre, public art
- 4. Winter activities
- 5. Revenue generation
- 6. Water interaction in pond (not swimming)
- 7. Wildlife/bird viewing
- 8. Dogs well managed
- 9. River access boat launch for canoes

Other Comments on Program

- Allow controlled access to the ESA, i.e., don't fence it and disallow access
- Summer camps
- User- managed dog park with fee
- Yurts
- Winter activities snowshoe, XC ski
- Need to determine what the trail design expectations will be
- Use the edge of the site for parking lots of opportunity to get cars off the highway

Workshop with External Stakeholders

8 Participants

Information • Elbow Valley is a nature-focused community, lots of green space and trail	s
	_
Riverside and roadside trails are public	
 Rocky View Parks Plan is complete, will be going to Council soon – this s has ER and MR land and both can be used as park 	ite
 Trail just west of the site was washed out along the river – will be closed, needs to be rerouted 	
Dog waste is a huge issue, especially in the spring when the snow melts	
Dog owners should be self policing, however this isn't always the case	
There is a wide spectrum of dog walking opportunities - off leash and on leash areas	
Bears are common in the area, e.g., difficult to compost	
Tipi Site is too rustic, more of a fair weather site	
Check flood mapping, it seems to flood more than what is shown on the r	пар
 The north side of the river is used for fishing, fishers park at a road end across the river from the west portion of the park site, then they hike dow the river 	n to
 There are old barrel stave pipes on the north side of the river that were particles of Calgary's first water supply 	art
 Groynes and bioengineering are planned within the park near the new highway bridge to reduce the impacts of the river on the bridge structure 	
A shopping centre is planned (on the corner southwest of the park?)	
 Design work is under way on the highway so it can be "shovel ready", ner funding 	eds
 Likely resident concerns with the park will be traffic, parking, garbage, security and partying 	
Park has the advantage of immediate access off the highway	
No transit to this area	
Hwy 8 wetland will be wiped out. Replace it here?	
Vision* • Keep the park in its natural state	
Use a transect approach across the site – from developed to restored to visit to the site – from developed to restored to visit to the site – from developed to restored to visit to the site – from developed to restored to visit to the site – from developed to restored to visit to the site – from developed to restored to visit to the site – from developed to restored to visit to the site – from developed to restored to visit to the site – from developed to restored to visit to the site – from developed to restored to visit to the site – from developed to restored to visit to the site – from developed to restored to visit to the site – from developed to restored to visit to the site – from developed to restored to visit to the site – from developed to restored to visit to the site of	vild
Objectives • No structures below 1 in 50 year flood	
Dog use policies and law enforcement	
 Private trails vs. public trails – need to provide clear direction on this 	
There should be a pedestrian/cycle path along the highway	

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Program-Brainstorming

- 1. Trail network summer/winter
- 2. Interpretive/education centre nature and culture
- 3. Family picnicking
- 4. Stormwater wetland
- 5. Organized "nature" sports, e.g., disk golf, orienteering
- 6. Raft staging / launch site
- 7. Wildlife viewing
- 8. Enhance tipi site
- 9. Bike staging
- 10. Tipi site enhancements
- 11. Dog off-leash area
- 12. Bike skills area
- 13. Soccer field

Other Comments on Program

Fitness trails

Workshop with the Public

5 Participants (4 adults, 1 child)

Information

- It will be important and challenging to cross the highway with the trail, use suspended sidewalks under bridge?
- Informational issues re: tipi site it is not well known that it can be booked, how to book it
- Entire park site has been under water several times in the past 6 years
- Bit of equestrian use now
- Trans Canada Trail is way north
- Bush parties, fires are a concern
- People sometimes stray from the park site and enter private land, there are currently no fences or signs to prevent this
- City of Calgary's first water system came from Bragg Creek and the pipes passed through the north part of this site

^{*} Since this group generated so few vision and objective statements, consolidation and priority setting for those topics were not conducted at this workshop.

No Class A Park Natural conservation Minimal "grooming", focus on maintaining "naturalness" Minimum services with emphasis on natural environment Environmental protection [wildlife corridor] Connectivity to the city and Bragg Creek Cultural representation Reinforcing the Calgary experience Unique No car camping Interpretive, like the wetland Restrict equestrian movement Less paved trails for conservation reasons No motorized vehicles Access to river is adequate Program- Brainstorming Trails Trail use Boat launch at end of Cleanwater Drive Picnic tables Benches Education More trash bins Out houses Minimal increase to tipi site okay Camping - keep the tipis Vision- Consolidation and Priorities Minimal services Reinforcing the Calgary experience Cultural representation Connectivity to the City and Bragg Creek						
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		Reinforcing the Calgary experience				
6. Connectivity to the City and Bragg Creek		5. Cultural representation				
		6. Connectivity to the City and Bragg Creek				

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Objectives-	Allow personal dog use, under control (no commercial dog walking)	
Consolidation and Priorities	Interpretive information	
	Restrict to pedestrian use - no motorized vehicles, no equestrian use	
	Encourage wildlife use	
	Keep style of camping as it is	
	Retain access to river as it is	
Program- Consolidation and	Parking – minimal impact, limited, space for expansion without affectives	ng
Priorities	Trail use	
	Minimal increase to tipi site	
	Education	
	Boundary signs	
	Outhouses	
	Benches and picnic tables, trash bins	

Appendix B

Plan Options

Introduction

Three rough sketch options for the park plan were prepared in 2011. These were based on the site analysis, vision, objectives and program options. These sketch options were intended for discussion with City staff, after which they were refined into potential phases of construction.

Phase 1

Phase 1 is based on making minimal improvements to existing facilities and uses, sufficient to establish the site as a park.

Characteristics

- Tipi site retained with minimal enhancements
- Entry feature on road into site (e.g., sign, gate, art)
- Parking for day use along the existing road, visible from the park entry (need to turn off to tipi site)
- Kiosk at end of parking lot / entry to the trail network
- Multi-use path along the river above the 20 year flood area, connecting to trails beyond the park, multi-use path goes around tipi site to provide privacy to overnight users
- Secondary trail loop goes to and along the river
- Old field habitat is retained, dog off-leash trail around it, dog off-leash area on the mowed grass of the existing archery range
- Archery club structures removed and area restored
- Buffer of trees/berm along roads for partial screening, retaining some views into the park
- Other potential park features: interpretive signs, benches, picnic tables, garbage bins, boundary signs



Phase 2

Phase 2 is based on enhancing the tipi site, supporting all-season uses, and introducing a wetland and interpretive centre (similar in scale to the Elbow Valley constructed wetlands on Highway 8).

Characteristics

- Tipi site retained with enhancements such as indoor washroom/shower building
- Entry feature on road into site (e.g., sign, gate, art)
- Parking for day use south of the existing road in two separate pods, within cleared area
- Stormwater wetland feature centred within old field area
- Small interpretive centre with displays, space for small group programs
- Nature / warm-up hut to serve all-season trail users and education programs, could be a conversion of the archery clubhouse, if available and appropriate
- Landmark feature visible from highway and road, e.g., viewing tower, windmill, solar collector tower, sculpture
- Multi-use path along the river above the 20 year flood area, to connect to trails beyond the park, multi-use path goes around tipi site to provide privacy to overnight users
- Secondary trail loops go to and along the river, around the wetland (with one bridge crossing), and to the nature/ warm-up hut
- Buffer of trees/berm along roads for partial screening, retaining some views into the park
- Other potential park features: interpretive signs, benches, picnic tables, garbage bins, boundary signs



Phase 3

Phase 3 is based on removing the tipi site, and providing a wide variety of day use opportunities, including access to paddling on the pond and boating on the river.

Characteristics

- Entry feature on road into site (e.g., sign, gate, art)
- Parking for in four separate pods, all within non-forested areas, to serve: riverside picnic area, river trails, interpretive centre, and dog off-leash area
- Stormwater wetland feature within east portion of old field area
- Major interpretive centre with multiple displays, space for larger group programs
- Clubhouse for community groups or education programs and to serve all-season trail users, could be a conversion of the archery clubhouse, if available and appropriate; informal play area in previous archery range
- Landmark feature visible from highway, e.g., viewing tower, windmill, solar collector tower, sculpture
- Riverside picnic area with paddling on the pond, separate river access for boat launching
- Multi-use path along the river above the 20 year flood area, to connect to trails beyond the park
- Secondary trail loops go to and along the river, around the wetland (with one bridge crossing), to the clubhouse and picnic area
- Dog off-leash trail and area on the west portion of the old field
- Buffer of trees/berm along roads for partial screening, retaining some views into the park
- Other potential park features: interpretive signs, benches, picnic tables, garbage bins, boundary signs



Appendix



Phase 2 Comment Form Input



The development plan of Clearwater Park was presented to the public at an open house on April 25, 2012. An information package on the plan was also posted on the City's website. There were 23 comment forms received, and the input on these forms is provided here.

Comment form introduction:

Clearwater Park will provide opportunities for recreation, environmental education, and links to the regional greenway system. This is the second of three consultation phases in the design process. Please provide us with your input on the preliminary design.

1. What do you like best about the Clearwater Park preliminary design?

(Comments are listed by topic in order of response frequency, with the number of respondents mentioning each topic in brackets.)

- Paths / accessibility to site and river / link to regional pathway and other areas (9)
- Natural approach river protection / wetland / boardwalk / meadows / aesthetics (6)
- Well thought out / adapts to the existing environment (4)
- Increases amenities and facilities for recreation (3)
- Keeping the Tipi site / camping (3)
- Opportunities for education / stormwater management (3)

2. What do you like least about the Clearwater Park preliminary design?

(Comments are listed by topic in order of response frequency, with the number of respondents mentioning each topic in brackets. Where there is no bracket, only one respondent mentioned the topic.)

- Increased people may result in over use / negative impacts on habitat
 (4)
- Loss of archery (3)
- Concerns about traffic noise, congestion, transients, illegal parking on RR25 (2)
- No trails north of river / lack of access to the ESA (2)
- Sitting water in ponds
- Not enough trees along highway

CLEARWATER PARK DEVELOPMENT PLAN

- Upgrade will enhance the party venue / lack of control over the party crowd / effects on community
- Would like more inter-connected walking trails sooner
- Concerns about public safety re: flooding and ongoing maintenance and operations
- Boat ramp is not needed

3. The proposed park design includes many elements. Please indicate how important each of the following activities and components is to you?

(These are listed in order of the average or mean response from most important to least important in each list.)

Activities 1 = not at all important 5 = very important	1	2	3	4	5	Average
Walking / hiking on local and regional pathways			1	3	16	4.41
Nature appreciation, e.g., bird watching	1		2	5	13	4.38
Nature interpretation and outdoor education	1	1	1	81	11	4.23
Winter sports, e.g., cross-country skiing, snow-		2	6	5	6	3.41
shoeing						
Staging area for boating, biking	5	4	4	6	2	2.81
Gatherings and events, e.g., picnics	72	1	8	3	3	2.73
Dog walking	8	3	2		6	2.63
Overnight camping at the Tipi Site	10	1	5	3	3	2.45
Organized "nature" sports, e.g., disc golf,		5	2	4	2	2.45
orienteering						
Un-programmed field sport activities, e.g., Frisbee, ball		4	8	2	1	2.43

^{1.} Great to focus on flooding not just vegetation

^{2.} Safety - evacuation, removal of floatable items (cars, buildings, garbage, etc)

Components 1 = not at all important 5 = very important	1	2	3	4	5	Average
Protection of Elbow River forests with small trails				5	14	4.74
Naturalized meadow and tree/shrub areas				5	13	4.72
Loop trails in park connected to regional trail network	2		2	2	16	4.36
Vehicular access, parking and drop-off areas	3		2	6	10	3.95
Washrooms near open space area	2		4	3	8	3.88
Storm water pond system	1	32	3	5	9	3.86
Benches, picnic tables and garbage bins	1	14	4	7	5	3.78
Pond viewing structures - boardwalk, pier, viewing		1	6	3	9	3.76
platform, overlook						
Open grass areas	2		6	4	6	3.67
Small picnic shelters for small gatherings	1	3	5	5	5	3.53
Sign kiosk and interpretive signs	3	1	6	5	4	3.32
Enhanced Tipi Site - washrooms, picnic shelter, dock	5	2	6	3	71	3.22
Large picnic shelters for group events		3	2	3	5	3.00
Winter servicing and access			4	6	3	3.00
Landmark energy structure (e.g. solar, wind)		1	4		5	2.71
Disc golf area	10	2	5	1		1.83

^{1.} Safety, above 100 yr water level, protects from floodwaters and erosions / doesn't want release of sanitary into river if building impacted

4. Do you have any other comments on the Clearwater Park preliminary design?

(Comments are listed by topic in order of response frequency, with the number of respondents mentioning each topic in brackets. Where there is no bracket, only one respondent mentioned the topic.)

- Impressive design / like the ideas so far (4)
- Don't make it too easy for people to use, it's one of the best kept secrets
- Safety of pedestrian access to the park from the south side of Hwy 8
- Move the whole design away from the river by 20 feet to have less effect on the area near river
- Traffic concerns to local residents consider traffic study to determine if RR25 needs widening
- Security monitoring for teenage "party" place on weekends
- Stock fish in major pond as in Allan Bill Pond area
- More gravel pathways for walking and biking through the treed areas as in Fish Creek

Who maintains? No plan for City to develop out here so difficult, argument for city to operate / maintain. Who is responsible if water quality is not meeting guidelines? From AB Transport road.

^{3.} Can impact riparian areas

Floating debris if lifted by flood water

- Offer a transit with a shuttle service (or subsidize cab fares from a closer Calgary terminal)
- It will encourage more people into our exclusive neighbourhood
- Let it be mostly natural
- Should be delayed until there is another location for the Archery Club

5. What is your primary interest in this park?

7 Rocky View residents (includes 2 x Rocky View Gov Councillors, Elbow Valley)

11 Calgary residents (incl Guide leader who used the Tipi site before, archery)

0 Environmental Groups

2 Recreation Groups
 Bike Calgary, MnM Outdoor Club

1 OtherEURC

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