

Bend in the Bow.

Grand Vision

The Stories

What is Bend in the Bow?

Project Overview

The Bend in the Bow project began in 2015 and will be completed in 2017. The goals of the project are to:

- » Retain and enhance the cultural and natural significance of the entire site
- » Enhance educational programming opportunities
- » Improve connections between the parks
- » Explore complementary uses across the parks
- » Address ways to conserve, enhance and celebrate the only urban-centred, federally-recognized bird sanctuary in Canada

Throughout the design and engagement process, the concept was developed and refined. The preferred concept presented at the Grand Vision reflects:

- » Values of and feedback from the public and stakeholders
- » Stories about the site that were uncovered through research and engagement
- » Regulatory priorities and policies

Following the Grand Vision, a Design Development Plan (DDP) will be developed and presented to Council for approval.



Bend in the Bow is a project that connects the Inglewood Wildlands and Inglewood Bird Sanctuary with Pearce Estate Park and the adjoining green spaces along the Bow River.

City of Calgary Priorities

The Bend in the Bow project aligns with the City of Calgary's policies. These priorities include:

- » A healthy and green city
- » Citizen stewardship of air, land, and water
- » Flood protection and management
- » Meaningful engagement with citizens

Stories of the People

These stories speak to Calgarians about our city's beginnings, our impact on the land, and how our culture was shaped by our environment.

First Nations

Early maps of southern Alberta reveal trail networks that were commonly used by First Nations to reach river crossings, encampments, and significant places. Some of these trails laid the groundwork for routes that would become wagons trails, railways, and eventually roads and highways. For example, Blackfoot Trail derives its name from the Blackfoot Nation, the original peoples to call this land home. Many of our major roads today are named in honour of prominent First Nations leaders, regions, and communities.





Colonel James Walker

Colonel James Walker was one of the original commissioned officers of the North West Mounted Police (NWMP) and a much loved Calgarian. In 1975, the City of Calgary proclaimed him "Citizen of the Century". Colonel Walker and his wife Euphemia Quarrie moved to Calgary in 1882 and established their homestead on the site of the present day Inglewood Bird Sanctuary. Beginning in 1883 he operated the Bow River Sawmills on the site, one of the area's earliest industries that provided lumber for a rapidly growing city. Their residence, now a Provincial Historic Resource, is located on one of the few remaining original homesteads in the Inglewood community. He may be considered a forefather of urban farming in the region through his efforts to establish self sustaining farms at NWMP forts and outlooks in what was then the North West Territories. A strong booster of Calgary's economic potential, his many accomplishments include the establishment of the city's first gas well and the first telephone exchange.

Chinese Market Gardeners

Several Chinese families leased land from Colonel James Walker and established market gardens to serve the needs of a growing city. These highly productive gardens were used to grow vegetables and bedding plants, and represent an early example of urban agriculture and horticulture in the city. As part of the engagement process for Bend in Bow, it was discovered the descendants of one of the families, the Koo family, still reside in Calgary.





Selby Walker

The lasting legacy of the Walker family is the Inglewood Bird Sanctuary, a conservation project championed by Selby Walker, Colonel Walker's son. In addition to his efforts to conserve his family's homestead, he was also integral in the establishment of Banff National Park. To date, the sanctuary has served as a home for hundreds of species of migratory birds, mammals, and plants.





William Pearce, a Dominion Land Surveyor and civil engineer, was one of Calgary's earliest settlers and a strong proponent for the development of the city as a great Western Canadian centre. As construction on the Canadian Pacific Railway advanced into the Rocky Mountains, Pearce was sent to Calgary in 1887 to facilitate settlement and future development. Pearce was convinced that management southern Alberta's limited water resources was necessary to the successful agricultural settlement and future growth of the region. For the next 40 years, he studied and applied his practical knowledge of the conservation of natural landscapes and water management. He transformed his property, now Pearce Estate Park, by building an experimental irrigation system, testing grounds for the hardiness of tree and shrub species in Calgary, and building Bow Bend Shack, one of western Canada's prominent residences. A supporter of the "City Beautiful" movement, Pearce's efforts influenced Thomas Mawson's master plan for the city of Calgary. As a result, Mawson's Plan set aside St. George's Island, St. Patrick's Island, and numerous other riverside parks for future Calgarians.

William Pearce









Pearce **Estate Park:** An Engineered Environment

A new 1 gateway welcomes visitors into Pearce Estate Park.

You feel a sense of arrival as you enter the park, and are curious to learn more about the park's namesake, William Pearce. From the parking lot, you can see kids fishing in the (2) Kids Can Catch Trout Pond, and remember the first time you visited the (3) Fish Hatchery. It's no wonder this is one of the top tourist destinations in Calgary.

You're here for a family barbecue, and catch a glimpse of your sister and her kids in the (4) picnic area. The sounds of children laughing draw your attention to the (5) play area and a new small shelter. Upon further exploration, you learn that this commemorates William Pearce's residence, the Bow Bend Shack. The familiar "conkla-reee" song of a male red-winged blackbird draws you towards the (6) Ducks Unlimited wetland for a peek at the thriving wildlife that call this place home.



Walking towards the river, there's $\overline{(7)}$ a new landform.

Stretching from one corner of the park to the other, the rolling form of the berm weaves around the existing trees and park elements, forming a gentle buffer between the natural riverine forest and the more actively-used areas of the park.

The new flood protection berm is a critical piece of infrastructure to protect the community of Inglewood from future floods.

A short while later, you find yourself beside (8) a quiet forest stream.

You remember the stories your nephew shared about the coldwater stream after a school trip last year. He was fascinated by how floods helped to create healthy riverbanks and forests, and how this quiet creek was actually built by an army of volunteers in just one day. Even though the park is busy today, it feels very quiet and serene by the stream.

Crossing the bridge, you discover another (9) monument for William Pearce, and learn that he was instrumental in the development of the weir in the Bow River that still provides water to many of Alberta's farmers. You carry on, imagining what this place might have looked like in Pearce's time.

At the river's edge, you see (10) Harvie Passage.

Rebuilt after the 2013 floods, the terraced river bank has become a popular spot to relax and watch the activities on the river.

Further downstream, you arrive at the (11) gravel beach and touch the water. It seems like the rocks and logs have formed a natural living room. You find a place to sit on a log and enjoy the sun, observing the engineered environments around you.







The Corridor: History in Motion

While out for a walk from the community of Inglewood, (1) you enter the park.

Once an underutilized corner, a new pathway leads you towards a grove of trees.

Walking down the (2) pathway, you discover that this is historic ground.

In this area, the First Nations travelled extensively, moving with the seasons along ancient trails. The raised ground beneath you reveals traces of a railroad track that was once here. Railroad ties embedded in the paving create a rhythm as you move down the path.

In the (3) tree grove, you notice small tags identifying different tree species. You learn that the same collection of trees planted in this arboretum are the same kinds that William Pearce experimented with in Calgary's early days.

You pass the 4 play field and head towards the bridge.

After the ball diamonds moved, this field became a new open space for active uses and a new gathering space for larger group activities.

In the background, the sounds of Blackfoot Trail are muffled by a (5) **buffer of trees**. You follow the pathway towards the river. When you reach the riverbank, you see a nature trail below.

At the river's edge, you walk down to the 6 nature trail.

Birds, such as bank swallows, make this area their home, and larger wildlife, such as deer, move through the area as part of their connection to the rest of the region. You are proud to share this space with such a diversity of plant and animal species.

Cyclists cruise by on the (7) regional pathway.

You wave to your neighbours as they pass on their daily jog home. They stop for a quick chat and mention how much nicer the commute has become since the path has was widened.





You find the 8 gateway to the Inglewood Bird Sanctuary.

Continuing along the path, you come across a new gateway feature that welcomes you to the sanctuary and outlines the etiquette of the federally-protected bird sanctuary.

During this walk you have been able to experience the area's ecological and cultural history in motion.



Inglewood Bird Sanctuary:

Homesteads & Habitats

From the pathway, you come across a new $\widehat{(1)}$ gateway.

The gateway defines the entrance of this space. The Inglewood Bird Sanctuary is Canada's first urban bird sanctuary, and the lasting legacy of the Walker family. This place feels like a sanctuary for migratory birds everything seems slower and quieter here.

You arrive at the (2) educational heart of the sanctuary.

Public programs, information for self-guided tours and school groups use the Nature Centre as the launching point when they visit.

Along the (3) Homestead Trail, you learn about the past.

You pass the market gardens, which commemorate the agricultural efforts of the Chinese families who leased land from Colonel Walker to supply fresh produce to early Calgarians for over 25 years. The (4) footprints of these gardens have been retraced. Within each plot, unique native plant communities have replaced the nonnative brome grass. You learn about the importance of preserving grasslands, and how humans can play a role in restoring them.

You arrive at the (5) Walker House, the family's third home constructed on their homestead. Along the Homestead Trail, you have learned about the history of urban agriculture and the people that pioneered farming methods in Calgary.



You cross the (6) lagoon bridge.

On this side of 9th Avenue, you pass the (11) TD Outdoor You are now on the island. Most areas of the island remain publicly inaccessible to strengthen habitat. Learning Centre, what was once a gravel lot has now completely grown in. These newly restored grasslands This is a lovely retreat from the city, and you feel like you're provide more habitat for ground-nesting birds. It's the golden hour for photography, and you can't believe you've completely alone — aside from the beaver on your right and the birds singing overhead. You think you catch a glimpse spent the whole afternoon here, but just ahead is a sand of a great horned owl, but you can't be sure at this distance. piper. What luck! Walking along the lagoon, you learn that it was once used to

raise fish, and pens nearby were used to raise pheasants to release for hunting.

Under the canopy of the (7) riparian forest you learn that these seedlings are a result of the 2013 flood. Despite the destruction, it's a relief to know that the floods help sustain our riparian ecosystem. At (8) Jefferies Pond, you learn this seemingly natural pond is actually the result of early gravel mining operation. You spot a white-tailed deer ahead on the trail so you turn back on another path.

Crossing another bridge, you see a (9) stormwater pond.

The new stormwater pond creates habitat while drawing overflow water from the neighbourhood. You learn that this pond is part of a city-wide system that preserves the water quality of the Bow River by filtering sediments and removing contaminants that might harm the river.

The nearby structure marks the location of Walker's former sawmill which provided lumber for Calgary's early boom years. It provides a new covered resting place for visitors.

Further up the trail, you see a structure located in the stream. You investigate further, and learn that this is a (10) lagoon gate. It controls water flows so that spring meltwater from the Bow River can separate the "island" from the rest of the sanctuary. This restores slow moving waters for fish spawning while retaining waterfowl habitat.

You enter the north field.

You depart, ready to share what you've learned about homesteads and habitats.





Inglewood Wildlands: Regenerating Nature

You enter the (1) Wildlands.

In the early morning mist, you're drawn to explore the landscape before you - rolling grassland, trees, birds, small structures and open space. As you walk, you learn how this site was once an oil refinery. From degraded landscape to wildland, you learn how the Wildlands has undergone a remarkable transformation that has brought this landscape back to a more natural state.

As you stand on the existing (2) outlook hill, a view of downtown beyond the Wildlands serves as a reminder that nature exists so close to the city. In the other direction, grassland becomes forest. You see a train, and learn that a railway once ran through Inglewood, and ended where Fort Calgary once stood.

After the outlook, you discover traces of the oil refinery.

Before you, stands a small brick (3) transformer building, now the only remaining structure of what used to be an electrical generation system for the refinery. This now serves as a beacon of the Wildlands' fascinating heritage, as well as the site's slow transition from industry to habitat.

Walking further, you discover (4) traces of the former oil tanks, and learn about the incredible volunteer efforts that initiated the renewal of the land in the 1990s. In partnership with Suncor (formerly Petro-Canada) and community stakeholders, the site continues to be restored. Wandering through these areas, you discover the site and scale of the previous tanks, and gain an understanding of the landscape's natural resiliency and transformative cycles.





Looking down, you see a (5) developing woodland.

You learn that this is a "hydrosere": part of the natural plant succession from wetland to woodland. The establishment of the wetlands was part of the remediation process, and water was artificially pumped into the area to support these processes.

The wetlands have now dried up, and over the next few years, nature will continue returning this area into a naturally sustained balance.

To the south, a (6) restored grassland catches your eye.

Using soil rebuilding techniques, the ground can support a larger diversity of plant species. For now, this area has been set aside for wildlife and visitor viewing to allow natural habitat-forming processes to take place. Maybe in a few generations, this field will be an unbelievable habitat, not seen here since First Nations people inhabited the area.

Following the main arcing trail, along the exact alignment of Colonel Walker's old driveway, you take a quick detour to peer into the Separator Trench. This was installed to collect oil from groundwater as part of the site remediation, but is now full of clean water and teeming with life.

You are now standing in a (7) grove of poplars.

Phytoremediation is a process that uses plants to remove contaminants from the soil. Suncor started a pilot phytoremediation project during the summer of 2016 to complete the remediation process by planting these fast growing trees. Since then, these eastern and southern edges have been completely transformed into treed areas.

Following the examples of Pearce and Walker, Suncor continues to experiment with trees. The phytoremediation project will leave a legacy as a remediation showcase for techniques used throughout Alberta.

This experience of a site in a state of transformative change provides you with a new perspective on the landscape and our role in regenerating nature.

