

A wide-angle landscape photograph showing a paved path curving through a grassy field. The sky is filled with dramatic, dark clouds, with a bright sun breaking through on the left side, creating a golden glow and lens flare. The path is bordered by green grass and some trees in the distance.

# Municipal Offsets: Balancing conservation and responsible development





Office Consolidation  
2015 December



THE CITY OF CALGARY  
Municipal Development Plan

GPS2015-0259  
ATTACHMENT 1

## imagine Parks

A long-term vision of Calgary's public parks and open space

Forward / The City of Calgary open spaces and

## Riparian Strategy: Sustaining Healthy Rivers and Communities

Forward / The City of Calgary

## Open Space Plan

THE CITY OF CALGARY

ic imagineCALGARY  
IMAGINATION INTO ACTION

## CALGARY'S PLAN FOR LONG RANGE URBAN SUSTAINABILITY

Forward / The City of Calgary is committed to protecting and restoring the natural environment.

## Our BiodiverCity

Calgary's 10-year biodiversity strategic plan

In 2010, a young moose walked into downtown Calgary

Forward / The City of Calgary is committed to protecting and restoring the natural environment.



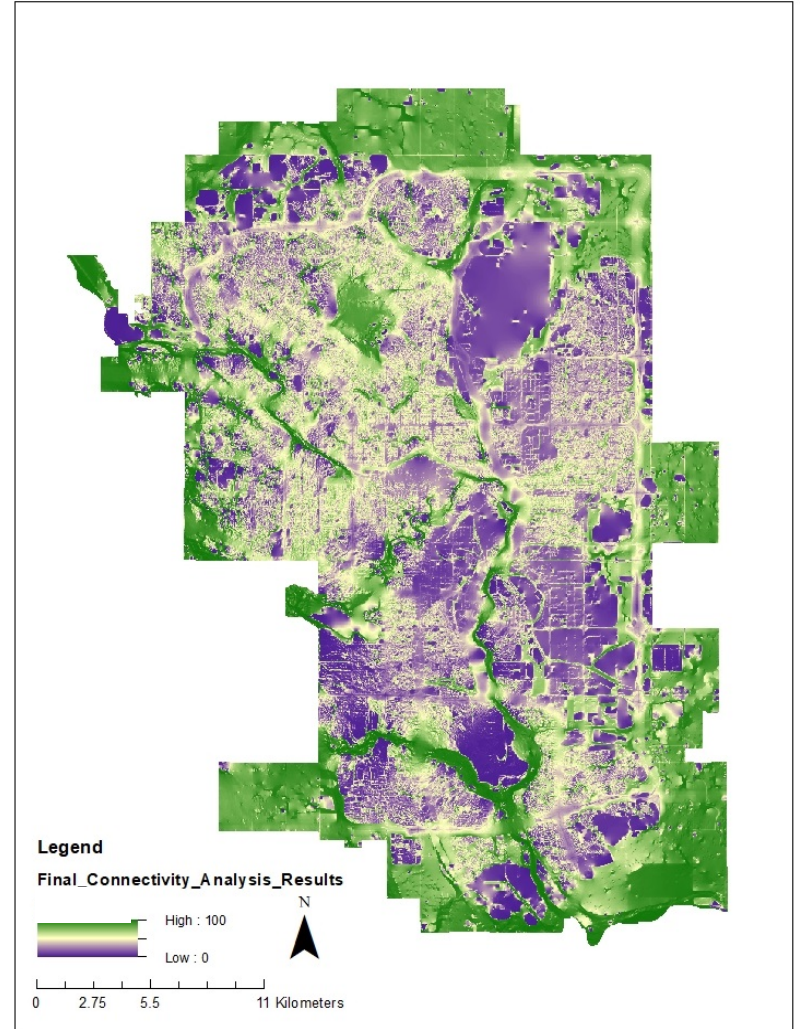
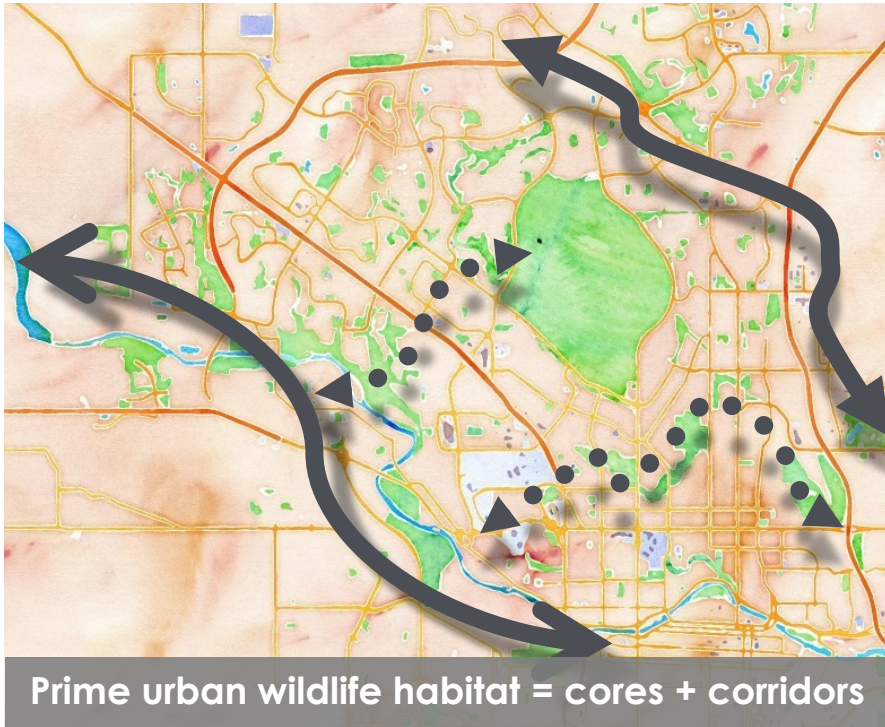
# Planning process

- Development Plans
- Redevelopment Plans
- Capital Projects
- Operational Work Plans
  
- Municipal Government Act
  - Conservation Reserve
  - Pay fair market value





## Ecological Network Analysis







**The Riparian Action Program:  
A blueprint for resilience**





## Tools

- Biophysical Impact Assessment Framework
- Habitat Restoration Project Framework
- Park Specific Management Plan Framework



# Enhancement

Manicured



Enhanced with naturalized areas



Approved by Council in 2004

**Vision:** “wetlands have become an integral part of our city’s urban fabric and they are maintained for the benefit, use and enjoyment of present and future Calgarians and visitors.”

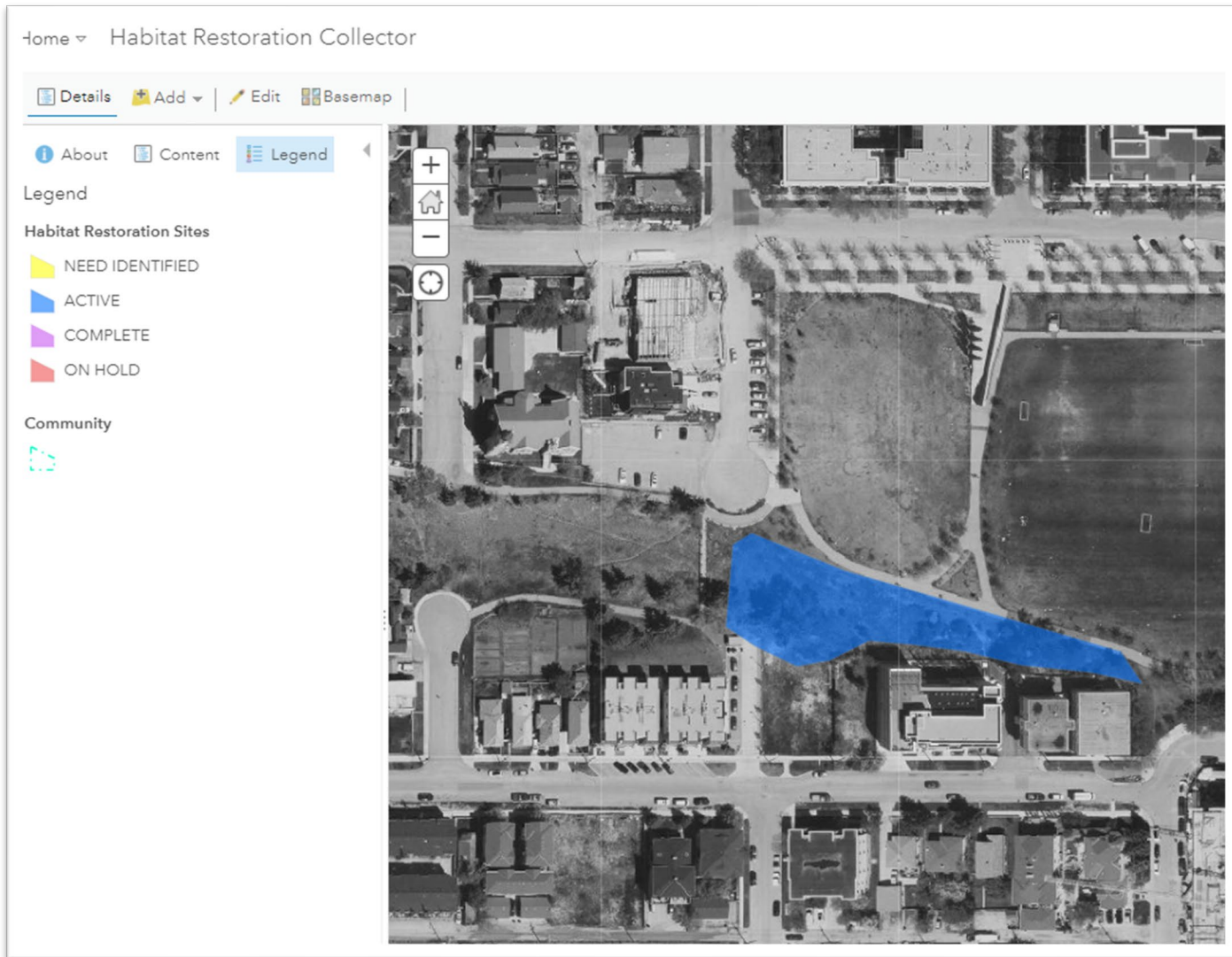
- Centred on the Mitigation Hierarchy
- Options for compensation from direct restoration to compensation banking

A photograph of a wetland landscape with tall reeds in the foreground, a body of water, and a blue sky with light clouds. The image is overlaid with a semi-transparent tan and white graphic design.

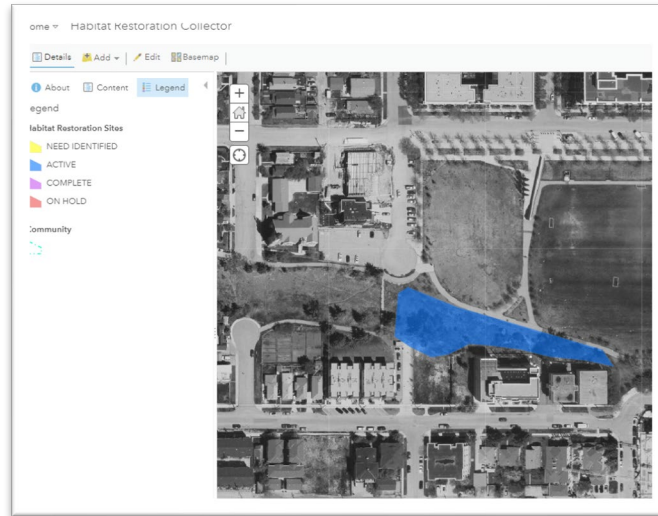
## Calgary Wetland Conservation Plan



# Habitat Restoration



# Habitat Restoration





# Urban Forestry Plan

City of Calgary Map Gall... x Urban Forest Managemen... x

Secure | <https://maps.calgary.ca/TreeSchedule/>

Apps Google Maps City of Calgary Intran... PARISLauncher WaterFront Spend Dynamics Corporate Project Me... The City of Calgary...

**Calgary**

**Urban Forest Management**

Our map has information about Calgary's urban forest, the overall tree value of a community and types of trees on public land. [Terms of Use.](#)

Urban Forest Overview

As a municipality, Calgary has approximately 7 million trees, located on both public and private lands, in parks, natural areas and green spaces. This is a remarkable and valuable accomplishment: in our arid climate, trees are not a natural feature of our landscape, save for riparian areas along rivers. Calgary's urban forest on public land has an estimated value of over \$1.3 billion.

Enter your address to view City trees near your property, by clicking on the magnifying glass. This map shows trees that are owned by the City. Due to the volume of data the map has to be zoomed to a neighbourhood level before the trees appear. If using a mobile device and you are standing by the tree you can hit the locate me button to zoom/pan the map to your location. Clicking on a tree will display some attribute information. If you're not sure if it is a City tree on your property, please contact 311 to confirm ownership prior to doing any tree work.

The community tree values provided in this map are estimated values only. Values are estimated based on the species, size and condition of trees found within the community. The City of Calgary uses the International Society of Arboriculture's *Guide for Plant Appraisal* (9th edition) to estimate values. All values are subject to change without notice.

The City of Calgary makes no representations, warranties or covenants, express or implied regarding The City of Calgary tree map and its content including, without limitation, no representation, warranty or covenant that The City of Calgary tree map or its content will be accurate, current, complete, reliable, timely or suitable for any particular purpose. The reliance on The City of Calgary tree map and its content is entirely at the user's own risk and liability.

**Calgary**

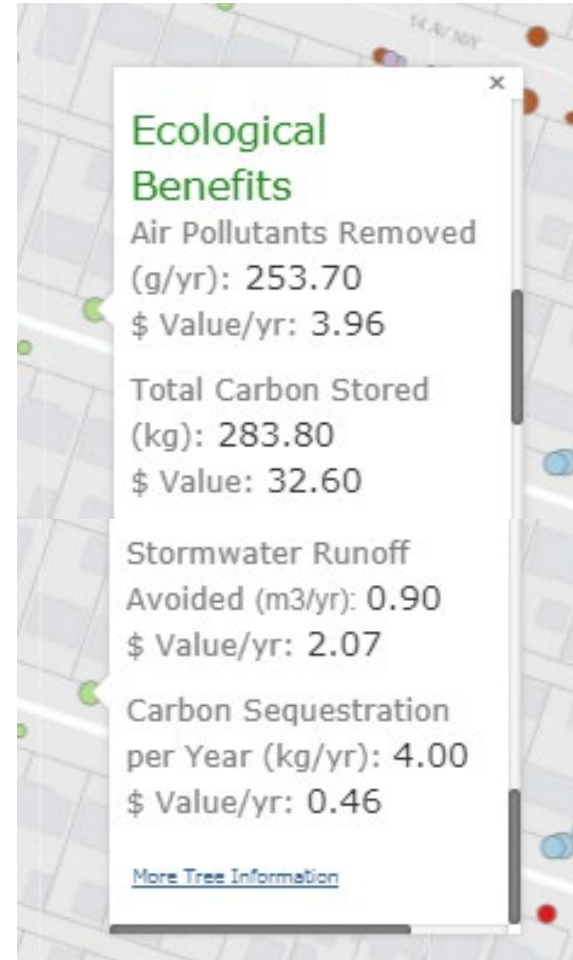
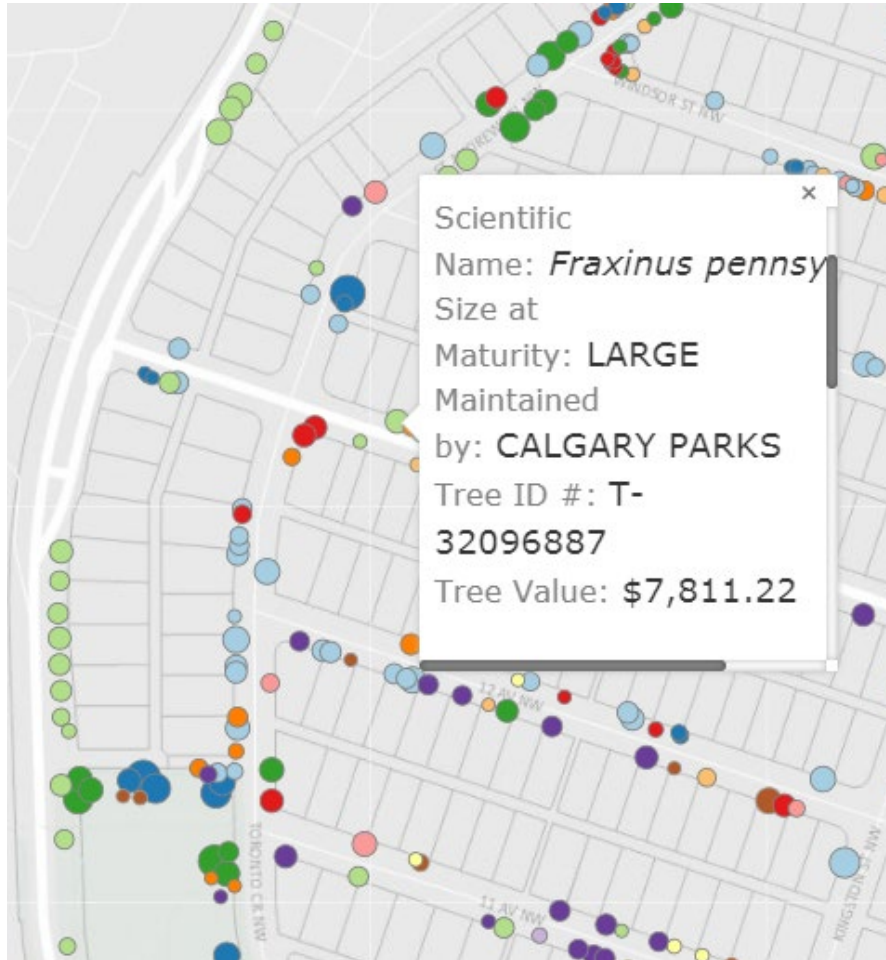
**Calgary Parks**

**Urban Forestry Plan**

**2017 - 2022**

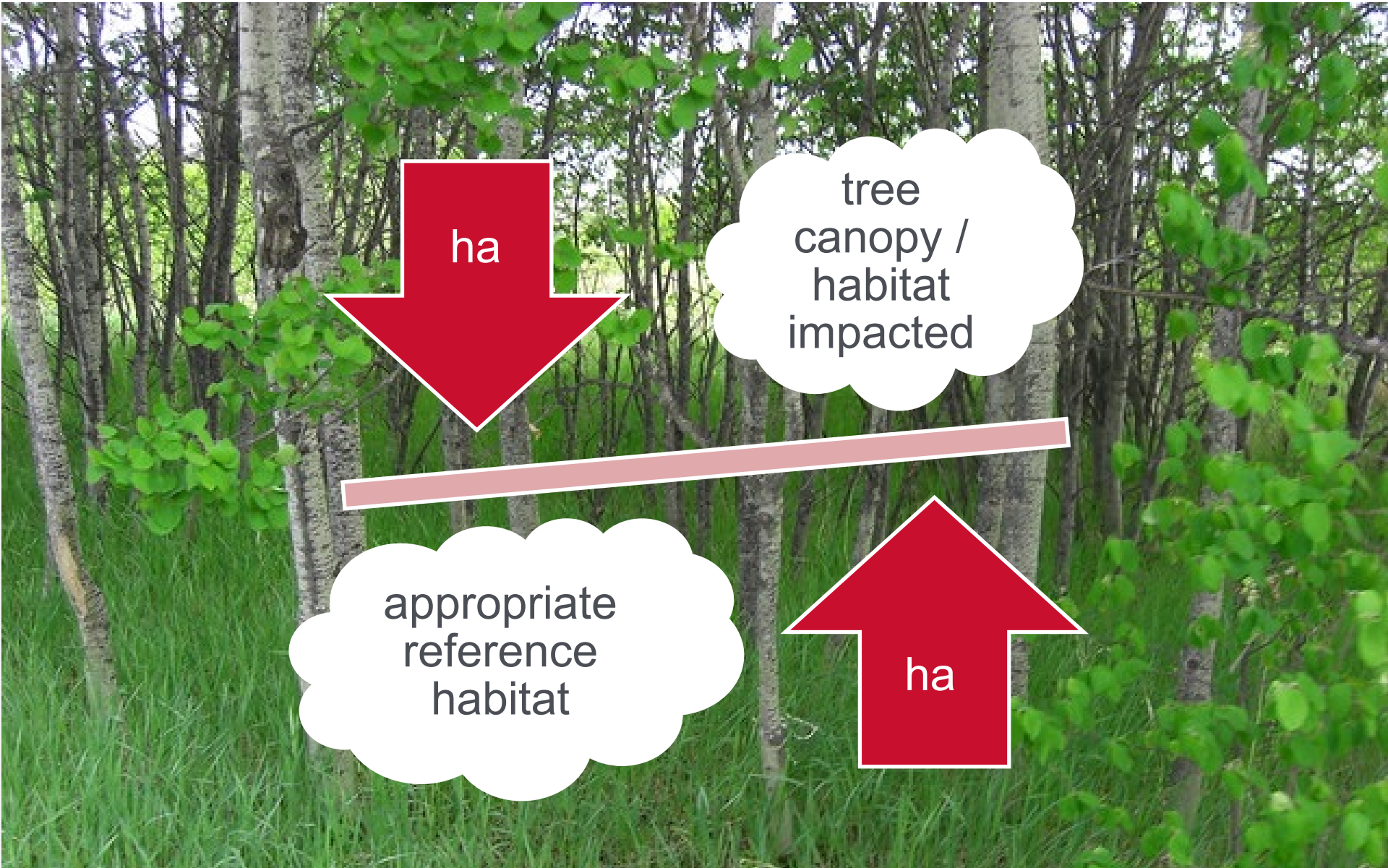
Calgary Parks | Urban Forestry Plan 2017—2022

# Tree compensation program





# Habitat compensation – natural areas



ha

tree canopy /  
habitat  
impacted

appropriate  
reference  
habitat

ha

# Fish Compensation – Proactive Banking





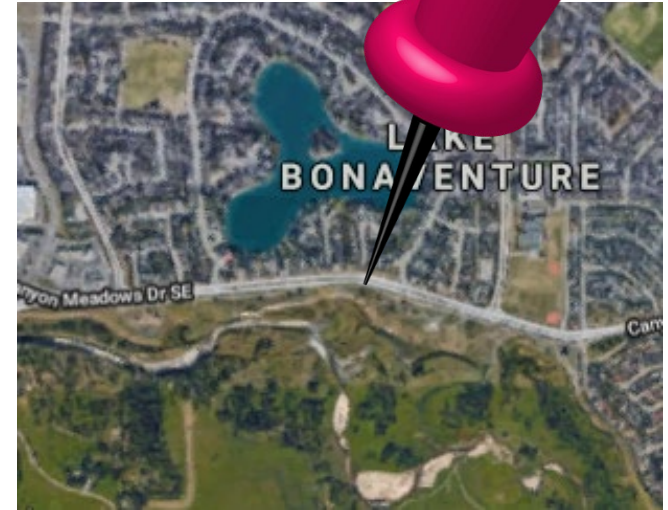
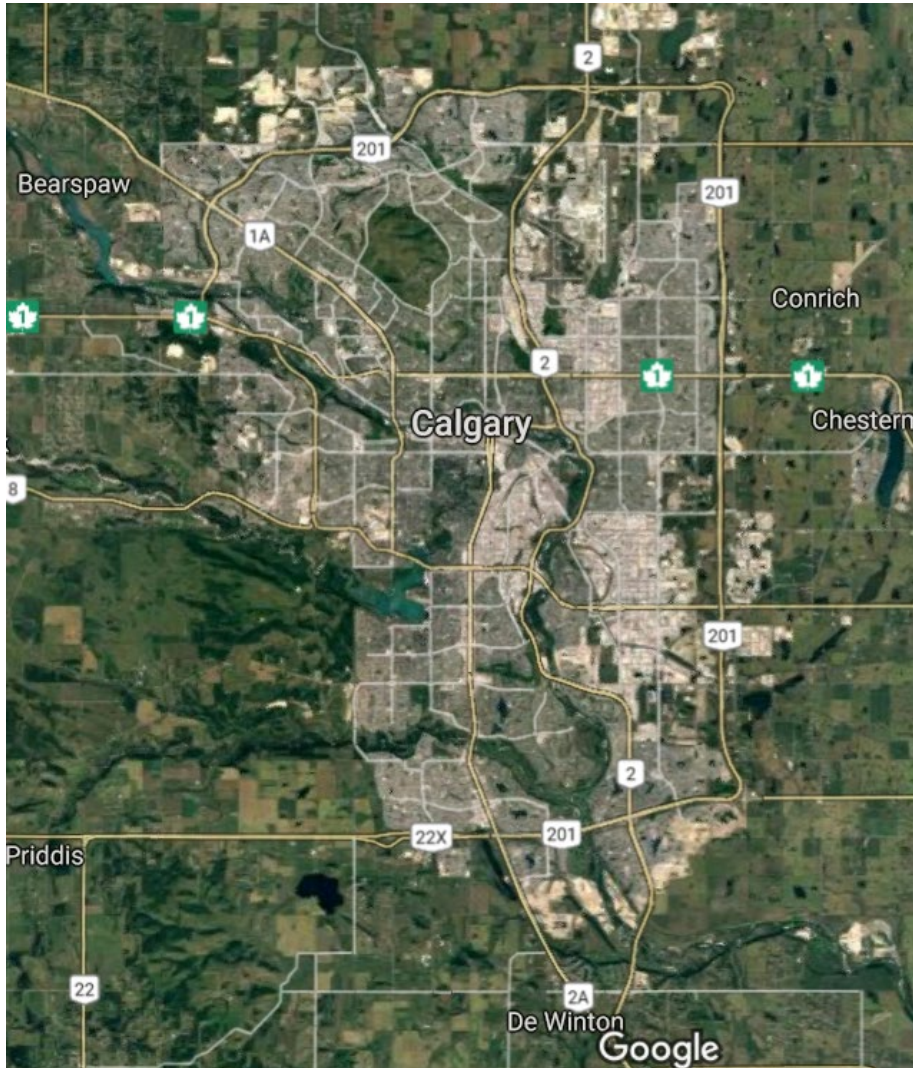
# Fish Compensation – Bank Rehabilitation







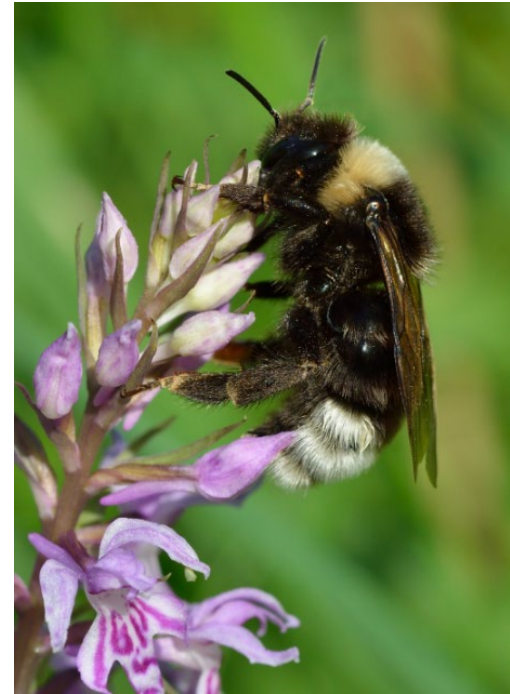
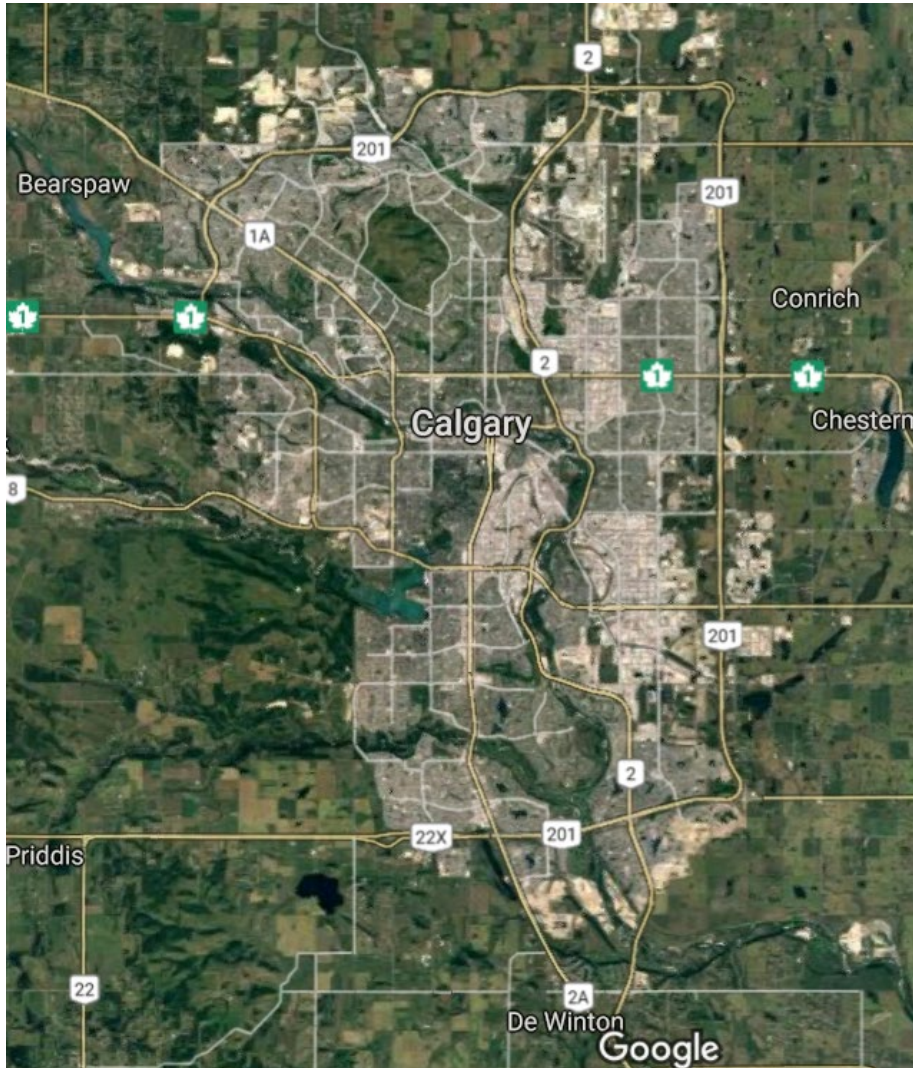
# Considerations – Scale, Location



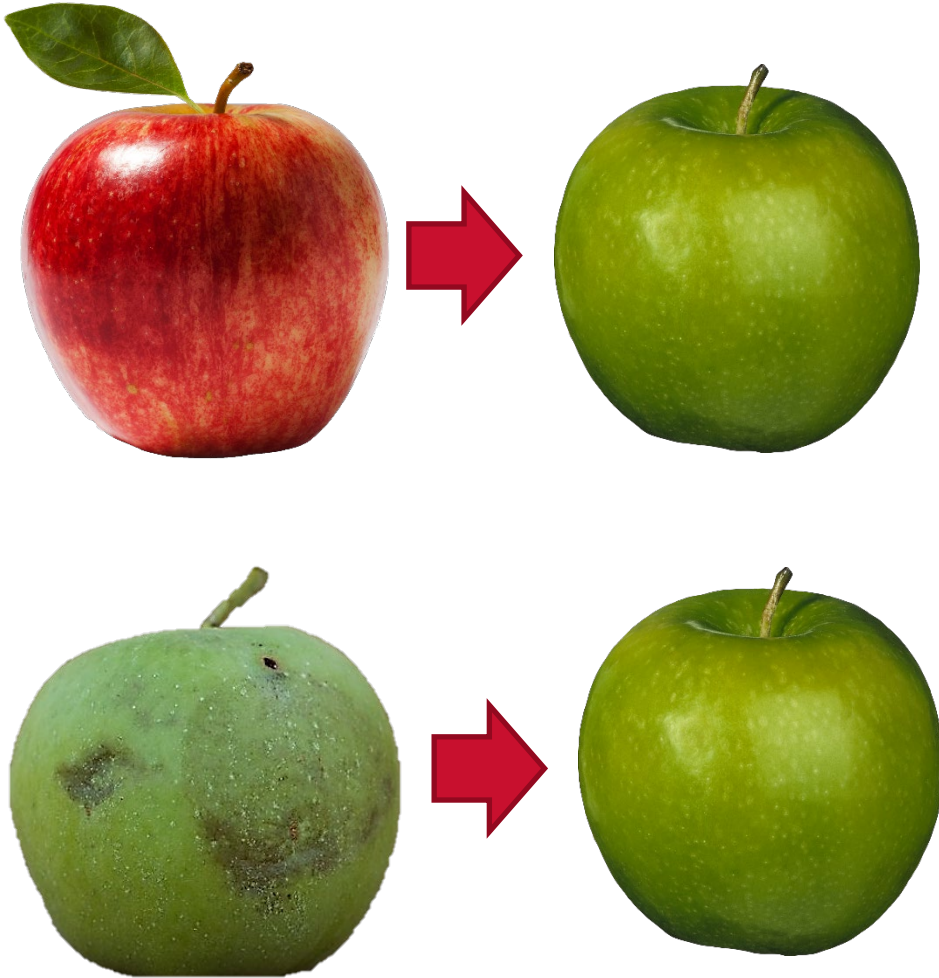




# Considerations

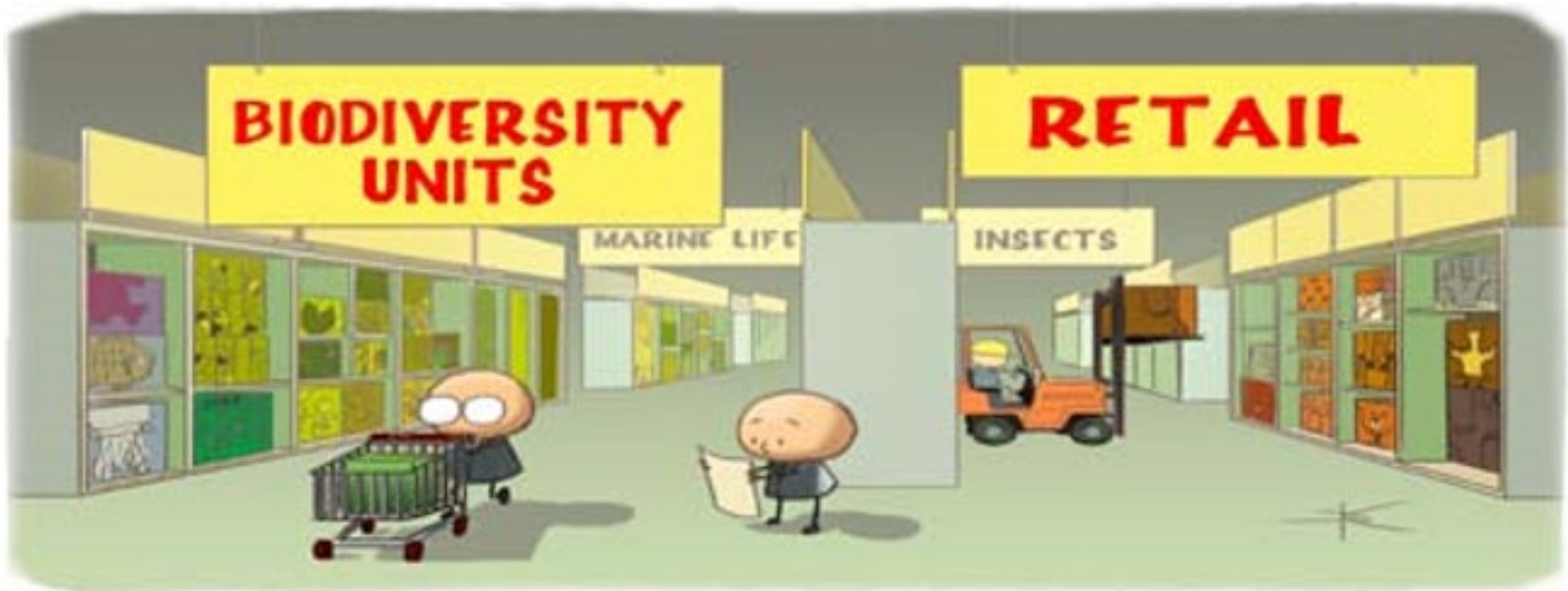


# Considerations – Replacement?





# Considerations - Accounting



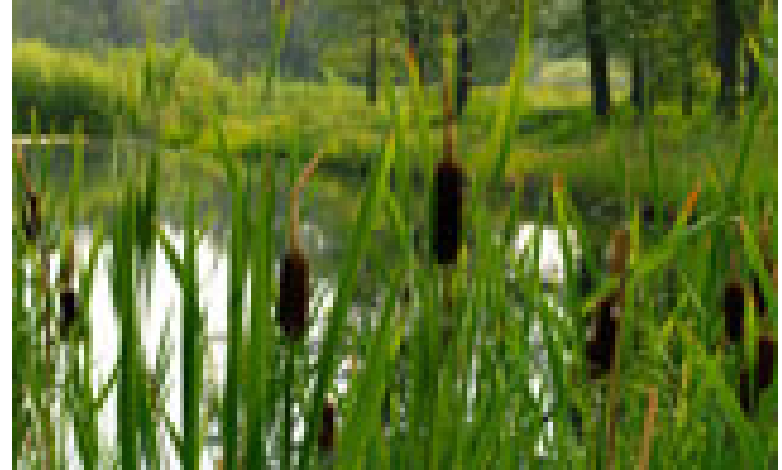
# Natural Infrastructure Project

Tangible Capital Assets



“Grey”

Natural Assets



vs.

“Green”





# Municipal Offsets





Thank you

Questions? Comments?

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