## How Calgary's Municipal Development Plan Calls for a Complete Biophysical Impact Assessment before any Redevelopment at Glenmore Landing

Ensuring Alignment with Calgary's Municipal Development Plan (MDP)

Presented By: Palliser Bayview Pumphill Community Association

Date: December 3, 2024

## The MDP as a Guiding Instrument



CITY ADMINISTRATION HAS
CONSISTENTLY EMPHASIZED
THAT THE MUNICIPAL
DEVELOPMENT PLAN (MDP) IS
THE GUIDING FRAMEWORK
FOR THE REDEVELOPMENT OF
GLENMORE LANDING.



WHILE THE MDP DOES
PROMOTE STRATEGIC
DENSIFICATION, IT IS CRITICAL
FOR CITY COUNCIL TO ADOPT A
HOLISTIC INTERPRETATION OF
THIS FOUNDATIONAL
DOCUMENT.



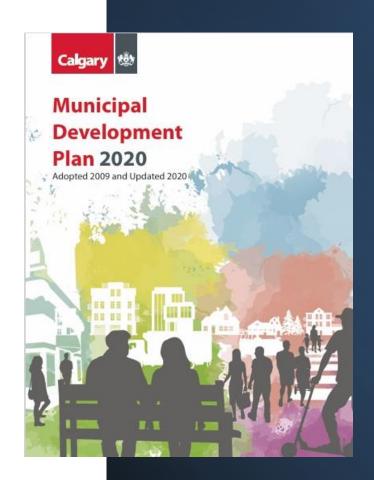
BEYOND ITS FOCUS ON URBAN GROWTH, THE MDP DEDICATES EXTENSIVE SECTIONS TO SAFEGUARDING ENVIRONMENTAL INTEGRITY, INCLUDING POLICIES TO PROTECT WATER QUALITY, RIPARIAN ZONES, AND SENSITIVE PARKLANDS.



BY BALANCING ITS DIRECTIVES
ON DENSIFICATION WITH ITS
ROBUST ENVIRONMENTAL
PROTECTION POLICIES,
COUNCIL CAN ENSURE THAT
REDEVELOPMENT ALIGNS
WITH THE BROADER VISION OF
SUSTAINABILITY AND
RESPONSIBLE URBAN
PLANNING ENSHRINED IN THE
MDP.

# Municipal Development Plan (MDP): Overview

- The MDP is Calgary's statutory guide for growth and city-building.
- Strong emphasis on sustainability and environmental protection.
- Aligns local decisions with broader provincial goals like the South Saskatchewan Regional Plan.



## Key Environmental Policies in the MDP

- Sustainability Principles (1.1.1):
  - ✓ Preserve open space, natural beauty, and critical environmental areas.
  - ✓ Utilize natural infrastructure.
  - Protect biodiversity and watershed integrity.



## Specific MDP Sections Supporting BIA

- Water Protection Policies (2.6.3):
  - Developments near water bodies must safeguard water quality and hydrological systems.

"Watershed management cannot occur in isolation and must tie closely with land development and urban growth. Population and economic growth require a secure water supply and The City must consider the quantity, quality and movement of water alongside other planning outcomes. This requires direction guiding water conservation, improving flood and drought resilience, protecting source water, planning for infrastructure upgrades and managing increased stormwater runoff in communities that are growing and changing. "

### 263 WATER

### Objective

Protect, conserve and enhance water quality and quantity by creating a land use and transportation framework that protects the watershed.

Our rivers and creeks are the most visible part of a complex hydrological system. The Bow and Elbow Rivers have drawn people to their banks and sculpted the landscape for thousands of years. However, rivers are far more than the waters within their banks, they are the hearts of freshwater systems called watersheds that include all lands that drain to the rivers, as well as groundwater, springs, wetlands, ponds, streams and lakes within those lands. Watersheds reflect both the natural characteristics of their geography and the impacts of human activities within them.

Calgary contains six sub-watersheds (see Figure 2-5) and each sub-watershed is influenced by its surrounding topography and impacted by human settlements and activities.

Watersheds require management to limit the impact of human settlements and activities and to maintain their health and capability in providing clean, reliable water. Managing a watershed requires close collaboration between The City of Calgary, Calgary's regional partners and the Province. This collaboration helps to safeguard the water supply, promote sustainable water use and keep rivers healthy.

Watershed management cannot occur in isolation and must tile closely with land development and urban growth. Population and economic growth require a secure water supply and The City must consider the quantity, quality and movement of water alongside other planning outcomes. This requires direction guiding water conservation, improving flood and drought resilience, protecting source water, planning for infrastructure upgrades and managing increased stormwater runoff in communities that are growing and changing. Water is an important component of city-building and must be integrated into land use plans, policies and decisions.

To integrate watershed management with land use planning it requires a multi-faceted policy approach that includes direction to service development. mitigate impacts to watershed health, shape communities and protect public health and safety. To do this effectively, The City needs to consider water from multiple perspectives: the service lines (potable water, wastewater and stormwater) severe weather patterns (flooding, droughts and storms) and water security (source water protection, water supply etc.). In addition to these different perspectives, climate change and community resiliency provide important lenses to ensure water and its role in city-building is evaluated comprehensively and thoroughly to meet the needs of Calgarians today and into the future.

With an increase in severe weather patterns, including floods and droughts, decreasing freshwater resources and increasing land use changes, Calgary is becoming increasingly vulnerable to climatic changes.



### Water security

For thousands of years, people have met at the confluence of the Bow and Elbow rivers. These rivers are the lifeblood of Calgary – they provide safe drinking water, clean water for the natural environment and a reliable water supply to support Calgary's economy. Calgary has grown to be a big city on a small river. Limited water availability, declining water quality and flood resiliency are important considerations in maintaining Calgary as a healthy and green city.

## **Specific MDP Sections Supporting BIA**

- Ecological Networks (2.6.4):
  - Preserve riparian areas and ecological corridors.
  - Ensure no encroachment or degradation by urban development.

Policies Protection of natural ecosystems:

"i.Protect environmentally-significant areas in the allocation of land use. ii. Ensure the protection of sensitive ecological areas and unique environmental features within the city's parks and open space system takes precedence over other uses."

• ii. Strategically protecting areas adjacent to waterways to safeguard freshwater resources



### Ecological Network Typology

### Habitat

There are two types of environmentally significant areas and natural environment parks that form the framework of Calgary's open space system:

- Habitat cores: areas greater than 30 hectares
- Stepping stones habitats: areas between five and 29 hectare

### Corrido

Corridors are natural and semi-natural open spaces that link habitats. There are two types of corridors:

- Primary corridors connect Calgary to the region and consist of linear riparian zones along Calgary's major waterways including the Bow and Elbow Rivers, Fish Creek, Nose Creek and West Nose Creek.
- Secondary corridors connect other ecological network elements to a primary corridor, through a configuration of stepping stone habitats.

### **Policies**

### Protection of natural ecosystems

- Protect and enhance the quality and function of significant natural assets and features.
- Land use, development and transportation planning should seek to conserve and protect natural asset features, parks and open spaces and the buffers and connections between them to:
- Protect environmentally-significant areas in the allocation of land use.
- Ensure the protection of sensitive ecological areas and unique environmental features within the city's parks and open space system takes precedence over other uses.

- Encourage the integration of trees, vegetation and natural infrastructure to reduce the impacts of development.
- Integrate sensitive design and construction management practices to optimize the protection of natural assets and the services they provide.
- Incorporate trails and pathways that link local and regional open space into the planning and review processes.
- Provide an 18 metre building setback from the tops of escarpments.



Ecosystems: the interaction between organisms, including humans and their environment. Ecosystem health and integrity refers to the adequate structure and functioning of an ecosystem, as described by scientific information and societal notionities.

### **Establish and Maintain Ecological Networks**

- Ensure parks and natural assets are valued pieces of Calgary's heritage, natural history and identity.
- Create a network of land uses, landscape elements, natural areas and open spaces that support ecosystem connectivity, biodiversity, wildlife and habitat conservation.
- f. Plan and support natural areas and parks to help shape the urban form and buffer incompatible uses by:
- Integrating natural features of the surrounding landscape into the site design to maintain a high degree of interconnectivity.
- Strategically protecting areas adjacent to waterways to safeguard freshwater resource
- Allowing for the modification of natural areas, to increase their capacity to incorporate a buffer for more sensitive ecological areas.

# MDP Requirements for Environmental Oversight

- Outline Plans and Subdivisions (1.4.7):
- ☐ Preservation of environmental reserves and open spaces.
- ☐ Compliance with policies ensuring sustainable integration of natural systems.
- Development Permits (1.4.9):
- ☐ Must adhere to MDP environmental guidelines.

### 1.4.7 OUTLINE PLAN AND LAND USE AMENDMENT APPLICATIONS

The City undertakes detailed planning and design of new communities, or the redevelopment of large areas of existing communities, through the outline plan and subdivision process. This involves design details such as the preservation of environmental areas, open space locations and reserve dedications, development patterns, land use mixes and local street networks.

The outline plan is a non-statutory site plan, with associated conditions, that is usually processed together with land use amendments, to ensure a workable distribution of land uses, open space and road network (e.g., land use districts, the location and classification of streets, the distribution and size of the parks and school sites in the neighbourhood).

Outline plans must be consistent with statutory provincial, regional, and municipal plans and policies.

A land use amendment (or land use redesignation) changes the allowable uses and development rules of an area. It may be processed concurrently with an outline plan or as a standalone application.

Not all areas experiencing development pressures have the benefit of a local area plan to provide guidance to a local community or specific application. In such cases, the MDP should be used to provide guidance on the application of an appropriate land use district or identify appropriate land use.

In areas where an approved ASP or ARP is in effect, when making land use decisions, the specific policies and design guidelines of that plan will continue to provide direction. In cases where the ASP or ARP is silent, or does not provide sufficient detail on land use, development or design issues, the MDP should be used to provide guidance on the appropriate land use district, as deemed appropriate by the Development Authority.



# The Importance of Environmental Stewardship

- The Glenmore Landing redevelopment proposes a dense urban project near Calgary's drinking water source.
- Sensitive riparian parklands and natural ecosystems are at risk.
- Calgary's Municipal Development Plan (MDP) mandates robust environmental protections.

## Specific Environmental Concerns of Proceeding without BIA

- The planned excavation for six floors of underground parking will produce significant dust and particulate matter. Such emissions threaten local air quality and could drift into the parklands and Reservoir. Dust settling on riparian vegetation can impede photosynthesis, disrupt habitats, and affect biodiversity. Section 2.6.5 (Climate Change and Energy) of the MDP emphasizes mitigating development-related emissions to safeguard Calgary's environment.
- Runoff and Water Contamination
   Heavy construction near the
   Glenmore Reservoir risks
   contaminating runoff with
   sediments, chemicals, and debris.
   This threatens Calgary's drinking
   water source, as noted in the MDP's
   Section 2.6.3 (Water), which stresses
   protecting watersheds and ensuring
   high water quality standards.
- Riparian Habitat Degradation
   Riparian zones are crucial for
   ecological balance, acting as natural
   buffers that filter pollutants and
   provide habitat. The intensity of use
   proposed by RioCan's development
   risks encroaching on these zones,
   disrupting their delicate ecosystems.
   Section 2.6.4 (Ecological Networks)
   of the MDP mandates maintaining
   and enhancing natural linkages to
   support biodiversity.



# Why Conduct a Biophysical Impact Assessment (BIA)?

- Identifies risks to natural ecosystems and water quality.
- Ensure all plans comply with MDP sustainability and environmental directives.
- Protects critical areas like Glenmore Reservoir and riparian corridors.



## Conclusion

- The Glenmore Landing redevelopment must prioritize environmental sustainability.
- Calgary's MDP provides the framework to protect critical natural areas.
- A Biophysical Impact Assessment ensures responsible and informed urban development.