

BYLAW 2017-14



Parkland County
**Municipal
Development
Plan**

One Parkland: Powerfully Connected.



Parkland County

Municipal Development Plan

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INTRODUCTION



1.0 INTRODUCTION

Parkland County is a proud, progressive rural municipality with vast offerings to residents, visitors and the business community.

With a population of 32,097 (in 2016) covering 242,595 hectares, this rural community offers a distinctively vibrant atmosphere with an assortment of farming properties, country residential acreages and a diverse range of small and large businesses. Parkland County has recreation opportunities for all ages, where residents and visitors can enjoy hunting, fishing, boating, golfing, farmers' markets, arts and culture and shopping.

The County extends some 90 kilometers west to the Pembina River, and is bordered by the City of Edmonton to the east, North Saskatchewan River to the south, Brazeau County to the south-west, and Lac Ste. Anne and Sturgeon Counties to the north and north-east. The City of Spruce Grove, Town of Stony Plain, and Summer Villages of Seba Beach, Kapasiwin, Lakeview, Betula Beach, Point Alison, Village of Spring Lake; Enoch Cree First Nation and Paul First Nation are also located adjacent to the County.

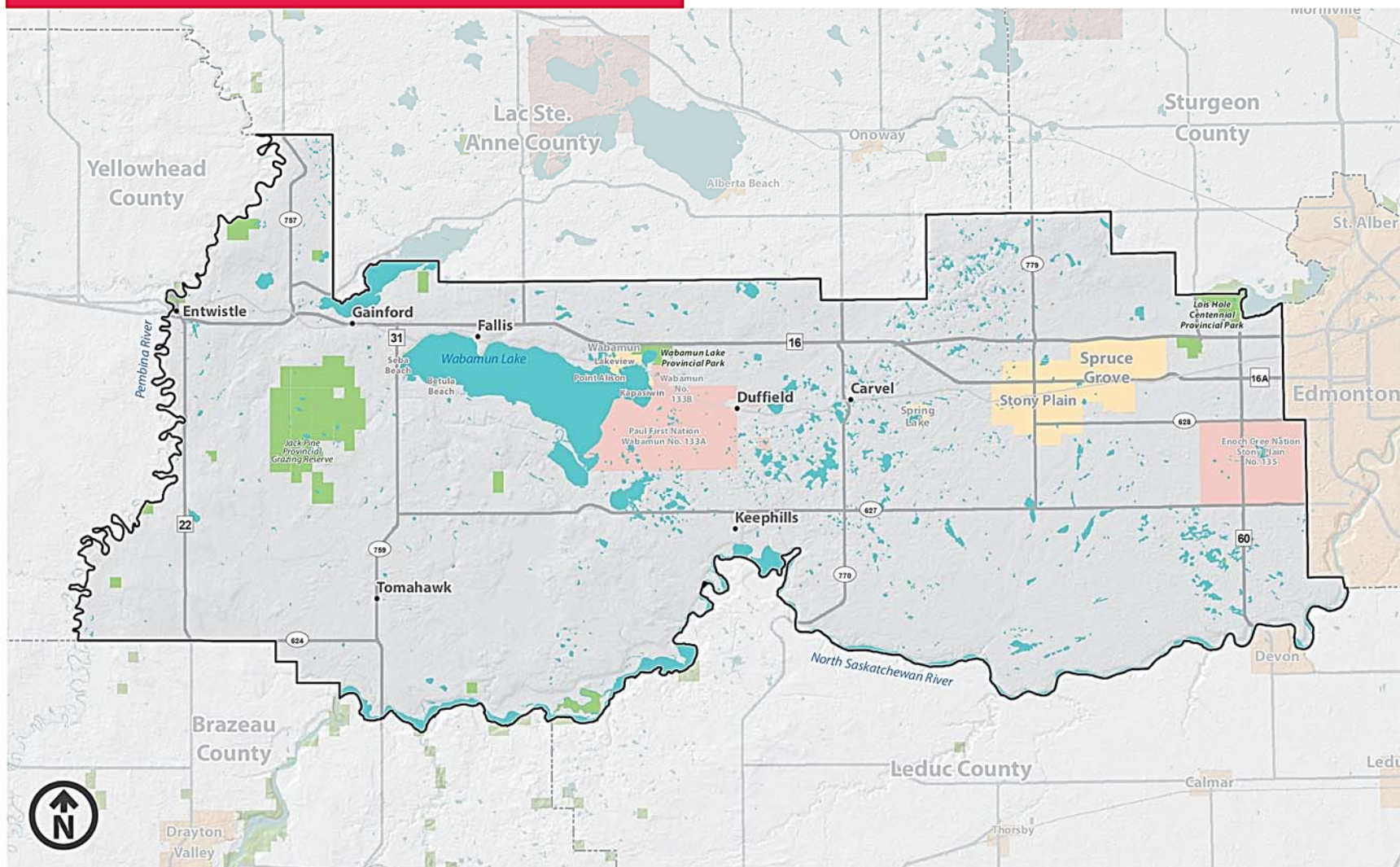


POPULATION OF
32,097
IN 2016



COUNTY SIZE
242,595
HECTARES



**FIGURE 1 | PARKLAND COUNTY CONTEXT**



1.1 Legislative Requirements - What is an MDP?

The *Municipal Government Act* Alberta 2000 Chapter M-26 (MGA) requires that every municipality must adopt a Municipal Development Plan (MDP) to guide long-range planning and land use. The MGA also identifies the required and optional contents of a MDP. Other County statutory plans and related bylaws must be consistent with the MDP.

This Municipal Development Plan has been prepared under the direction and in accordance with the MGA. It is intended to support Parkland County's identity as a unique and diverse rural community by building a long-term and sustainable vision for growth with a development concept that represents 30 years of rural and urban development.

1.2 Plan Interpretation

1 Policies within this Municipal Development Plan contain key operative terms such as "Shall", "Should" and "May." The interpretation of these terms is as follows:

SHALL, REQUIRE, MUST, or WILL – directive terms that indicate the actions outlined are mandatory and apply to all situations.

SHOULD – a directive term that indicates a preferred outcome or course of action but one that is not mandatory.

MAY – a permissive and/or discretionary term that denotes a choice in applying the policy.

2 Maps and figures have been provided as part of this Municipal Development Plan to show the general location of proposed land uses and future transportation and utility corridors. Boundaries will be refined through subsequent stages of planning including Area Structure Plans, Local Area Structure Plans, Area Redevelopment Plans, Conceptual Schemes, Redistricting and Subdivisions. Minor changes to alignments or locations of map features may be undertaken as part of subsequent planning processes without amendment to this plan.



1.3 Community Profile & Growth Trends

3 If a development is proposed within the plan area of a higher-order statutory plan, including the North Saskatchewan Regional Plan, the Edmonton Metropolitan Region Growth Plan and/or a relevant Intermunicipal Development Plan, the development must consider and conform to the policies of the higher-order statutory plan. If there is a conflict with a policy or regulation within a higher-order plan and the policies of this Municipal Development Plan, the higher-order plan shall prevail.

4 All provincial and federal policies and regulations in effect shall apply and shall prevail over the policies contained within this Municipal Development Plan.

5 This MDP does not assume or bear any jurisdictional authority over provincially owned lands, lands under another municipal jurisdiction, or any First Nation reserve lands.

Between 2011 and 2016 Parkland County grew from 30,586 people to 32,097 people, a total population growth of 5% (StatsCan 2016). The average age of Parkland County residents was 40 years old in 2016, with 90% of residents living in a single family home (StatsCan 2016). The Capital Region Board (the Board) has projected that Parkland County will continue to grow, and anticipates Parkland will be home to between 42,700 and 50,000 people by 2044. This Municipal Development Plan provides a framework that defines how this growth can be accommodated in ways that increase the quality of life for residents and visitors in areas throughout the County.

Parkland County maintains a strong position in the Capital Region. Parkland County offers excellent transportation and market access, affordable land prices, amongst the lowest non-residential taxes in the Capital Region, and over 10,000 acres of industrial land and strong agricultural opportunities. As noted in the ISL Engineering and Land Services Community Scan and Analysis (April 2015), the County's economic base is primarily focused on industrial pursuits such as manufacturing, mining, wholesale trade and construction. Recent changes in the economic climate of the province, policy changes around coal-fired transmission plants and lower rates of employment in traditional agricultural pursuits have modified the outlook on certain industries that are important to the County's economic base. To ensure the County's resiliency, Parkland County is aggressively pursuing opportunities for economic diversification and innovation throughout the County.

As part of a commitment to employment growth, Parkland County actively seeks to attract and retain employment. Parkland County's Community Economic Diversification department actively promotes business development and tourism in the County, supporting both existing businesses and those looking to locate in the County. Industrial and employment uses play an important role in the quality of life for residents by providing goods and services and employment. In turn, employment growth increases the demand for residential uses and community services that increase the vitality of the County. Promoting these types of synergies throughout the County is a foundational goal of this Plan.



1.4 Regional Context Statement

The Parkland County Municipal Development Plan (MDP) supports the pillars of the Edmonton Metropolitan Region Growth Plan ("Growth Plan") and the Alberta Land Use Framework. The MDP recognizes the Growth Plan as a governing, higher-order document, including policy tiers and density targets (where they apply).

ALIGNMENT WITH THE EDMONTON METROPOLITAN REGION GROWTH PLAN

Parkland County's MDP is built on the County's vision of "One Parkland, Powerfully Connected". This vision speaks to the MDP's policy direction which supports a balanced approach to economic development, natural systems and agricultural protection, and the rational planning of land uses, infrastructure and transportation systems. In line with the spirit and intent of the Growth Plan, the County has identified growth hamlets and employment areas where future infrastructure investment will be prioritized.

A central best planning practice found in both the Growth Plan and the Parkland County MDP is the preservation of agriculture and natural living systems through focused development that is efficient, clustered and contiguous. This type of clustered growth has economic benefits by promoting synergies between businesses and establishing an efficient and cost-effective servicing pattern. The MDP's key map, the Development Concept (**Figure 7**), identifies a logical planning approach that protects key agricultural areas while promoting economic and residential growth in clustered areas.

NATURAL SYSTEMS

Aligning with the spirit and intent of the Growth Plan's Natural Living Systems section, the County's MDP identifies high priority landscapes and emphasizes the preservation and/or protection of natural ecosystems. A biophysical impact assessment process will be one tool to ensure an integrated approach to subdivision and development can be implemented.

AGRICULTURE

Parkland County supports growth in agriculture. Minimization of agricultural land fragmentation is strongly supported in the MDP through the clustering of growth. Value-added and agri-tourism businesses are key to the continued success of agricultural areas, and agricultural diversification will play a key role in growing the County's employment base.

LAND USE AND INFRASTRUCTURE

The MDP also identifies long-term solutions to the integration of land use, infrastructure and transportation systems through the requirement to update area structure plans for significant portions of the County's existing, designated country residential areas. These updated Area Structure Plans (ASPs) will be an excellent opportunity to endorse a long-term approach to planning that increases the fiscal, social and environmental sustainability of these areas. These ASPs are to be supported by a Fiscal Impact Assessment to ensure their viability while providing an opportunity to implement best planning practices, such as fully considering the effects of development on natural systems, integrating infrastructure and creating a more



community-focused design (“complete community”).

COMMUNITY, HOUSING AND HAMLET GROWTH

Community, housing and hamlet growth is another key priority for the County’s MDP. The County’s approach to residential growth focuses on nodal development in existing hamlets and developed areas. Intensification and increasing densification of existing hamlets will be considered by the County through implementation of Hamlet Area Redevelopment Plans or related future plans that put the MDP into action. The MDP also emphasizes the need for mixed use communities with a range of available housing types in all areas of the County.

ECONOMIC COMPETITIVENESS

The County will provide a range of serviced and unserved employment opportunities throughout all areas of the County. Economic growth and employment is key to the long term sustainability of the County. The County encourages growth in all types of employment industries, including agriculture, and provides a number of employment areas with a range of servicing and transportation levels.

TRANSPORTATION SYSTEMS

Transportation corridors are also identified within the MDP as key development areas that need improved planning and design. Identified transportation corridors as per the MDP will be subject to future planning and design considerations to ensure minimization of visual impacts, safety and provision of adequate transportation services to County residents.



VISION & SUSTAINABILITY

20



VISION & SUSTAINABILITY

ONE PARKLAND: POWERFULLY CONNECTED.



2.0 VISION & SUSTAINABILITY

Parkland County's Vision "One Parkland: Powerfully Connected" means many things to the MDP.

Parkland County is "powerfully connected" through strong community connections rooted in its agricultural and rural heritage. It is also naturally connected through its diverse natural areas cherished by its residents. Strong physical connections link Parkland to regional and global markets through strategic networks of rail, road, and digital infrastructure. Embracing the future, the County will connect to emerging economic opportunities, strengthen our social and cultural fabric, leverage digital technologies and carefully plan and develop hamlets and residential areas.



The County's vision of *One Parkland: Powerfully Connected* aligns closely with the MDP. Responsible land use planning policies, identified in this MDP, will strengthen and support a powerfully connected County.





2.1 Municipal Development Plan Community Vision

The Community Vision for the Municipal Development Plan was developed collaboratively with Parkland County residents, the business community and Council. It represents the hopes and desires of all stakeholders for the future of the County. The MDP Community Vision was formally adopted by Council on March 8, 2016.

"Parkland County will steward our natural environment and foster a sustainable and diverse economy while maintaining our rural character. We will be innovative and creative in growing a healthy community that provides equitable opportunities for all, and we will celebrate our heritage and culture."

The Community Vision aligns with Council's Strategic Plan.

2.2 Municipal Development Plan Community Pillars

Municipal Development Plan policies are guided by five Community Pillars. These pillars were created in partnership with community residents and provide the building blocks to achieving the shared community vision. Each pillar describes the desired state in which Council, administration and the community wish to leave Parkland County for future generations. They closely align to Council's Strategic Plan and also align to the Integrated Community Sustainability Plan. The MDP Community Pillars were formally adopted by Council on April 26, 2016.

 LAND USE	<i>A state in which the community's land use meets community needs now and in the future.</i>
 NATURAL ENVIRONMENT	<i>A state in which the demands placed on the natural environment can be met without reducing its capacity to allow living things to live well now and in the future.</i>
 ECONOMY	<i>A state in which the community's economy is able to generate prosperity now and in the future.</i>
 COMMUNITY	<i>A state in which the community's social and cultural traditions thrive now and in the future.</i>
 GOVERNANCE	<i>A system of government which maintains the capacity and the resources necessary to function now and in the future.</i>



2.3 Rural Sustainability

Parkland County is a rural county on the doorstep of a major urban centre in a growing region. In a large municipality like Parkland County, planning for growth and development is complex. Although some communities and areas of Parkland County benefit from the proximity to urban centres, other areas are experiencing population decline and an associated loss of local and community services.

In Parkland County, rural sustainability means building effective relationships between the rural and urban residential and industrial landscapes to the benefit of both; **One Parkland: Powerfully Connected**. Urban areas require and benefit from the environmental, natural and agricultural resources found in rural areas while rural areas require the local, regional and international markets and employment created by urban centres.

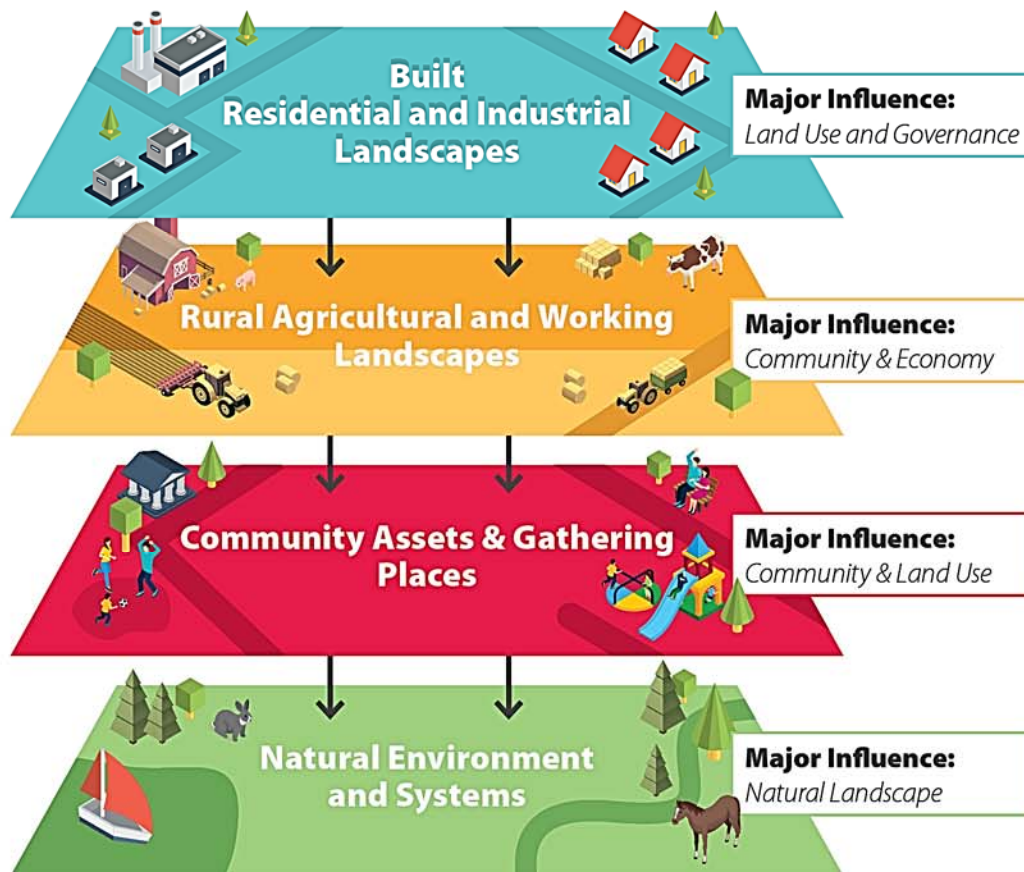
Ensuring opportunities for rural lifestyles and rural employment is important to maintain and grow communities, but this growth must be planned in a way that is sensitive and that prevents sprawl and the loss of agricultural and environmental integrity. Communities are not just physical resources – they are the people that bring life and vibrancy to a community. A key component to a healthy community is social capital, the web of cooperative relationships between individuals and organizations that help solve community problems. Parkland County must be planned in a way that supports maintaining and growing social capital for all citizens.

Protecting environmental landscapes is the foundation of rural sustainability. Without a functioning ecosystem, the ecological goods and services that support all aspects of life cannot be provided. This Municipal Development Plan strikes a balance between protecting natural, agricultural and environmental resources while also supporting the rural lifestyle and rural employment opportunities. Parkland County is committed to maintaining population and employment in the agricultural area through targeted investment in transportation, utility and community infrastructure, concentration of employment and services in key hamlets, and flexibility in land use planning to accommodate innovative ideas, agriculture diversification and employment generators. Protecting key open spaces and agricultural areas will ensure the resources needed to feed and build the region are maintained for future generations while supporting the ability of agricultural areas and hamlets to attract and retain residents and businesses.





RURAL SUSTAINABILITY



Rural sustainability, from a land use perspective, is the interplay of all these layers



2.4 Community Input

Parkland County recognizes the considerable input provided by County residents in updating the Municipal Development Plan (MDP). In January 2014, the Development Services Division began work on updating the MDP and Integrated Community Sustainability & Development Plan (ICSP). The Public Engagement Plan focused on three key elements:



TRADITIONAL ENGAGEMENT
METHODS

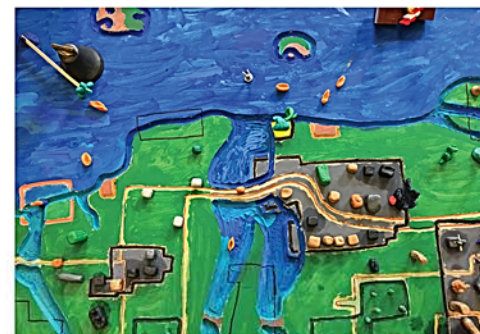


YOUTH
ENGAGEMENT



ONLINE
ENGAGEMENT

In addition to public engagement, an advisory committee was formed to provide input in the planning process and the Parklandia youth engagement program was created. Parklandia gathered children's feedback on planning for the future in Parkland County and acted as a vehicle to raise the interest of children and youth in the planning process.



Artwork/models completed by Grade 6 students who participated in the 2017 Parklandia Fair.



PUBLIC ENGAGEMENT TIMELINE





2.5 Collaborative Partnerships

One Parkland: Powerfully Connected is a testament to our commitment to working collaboratively with other municipalities and agencies; a key factor in advancing regional prosperity.

Parkland County will play a strong and supportive role in the growth of the Edmonton Region. As regional partners come together to leverage the Region's strengths, a network of regional systems will develop. These systems, such as infrastructure and transportation systems, environmental and agricultural systems and economic systems are stronger when planned and coordinated at the regional level. This Municipal Development Plan supports the implementation of the policy directions and policy tiers of the Edmonton Metropolitan Region Growth Plan. These policy tiers are identified in **Figure 2: Edmonton Metropolitan Region – Policy Tiers**.

Parkland County has a legacy of working together with its municipal and Indigenous neighbours, non-government and community organizations, other levels of government and private sector entities. The County is also actively strengthening its relationships with Indigenous communities. The County will continue to support coordinated regional planning to work towards a prosperous future for all regional members.

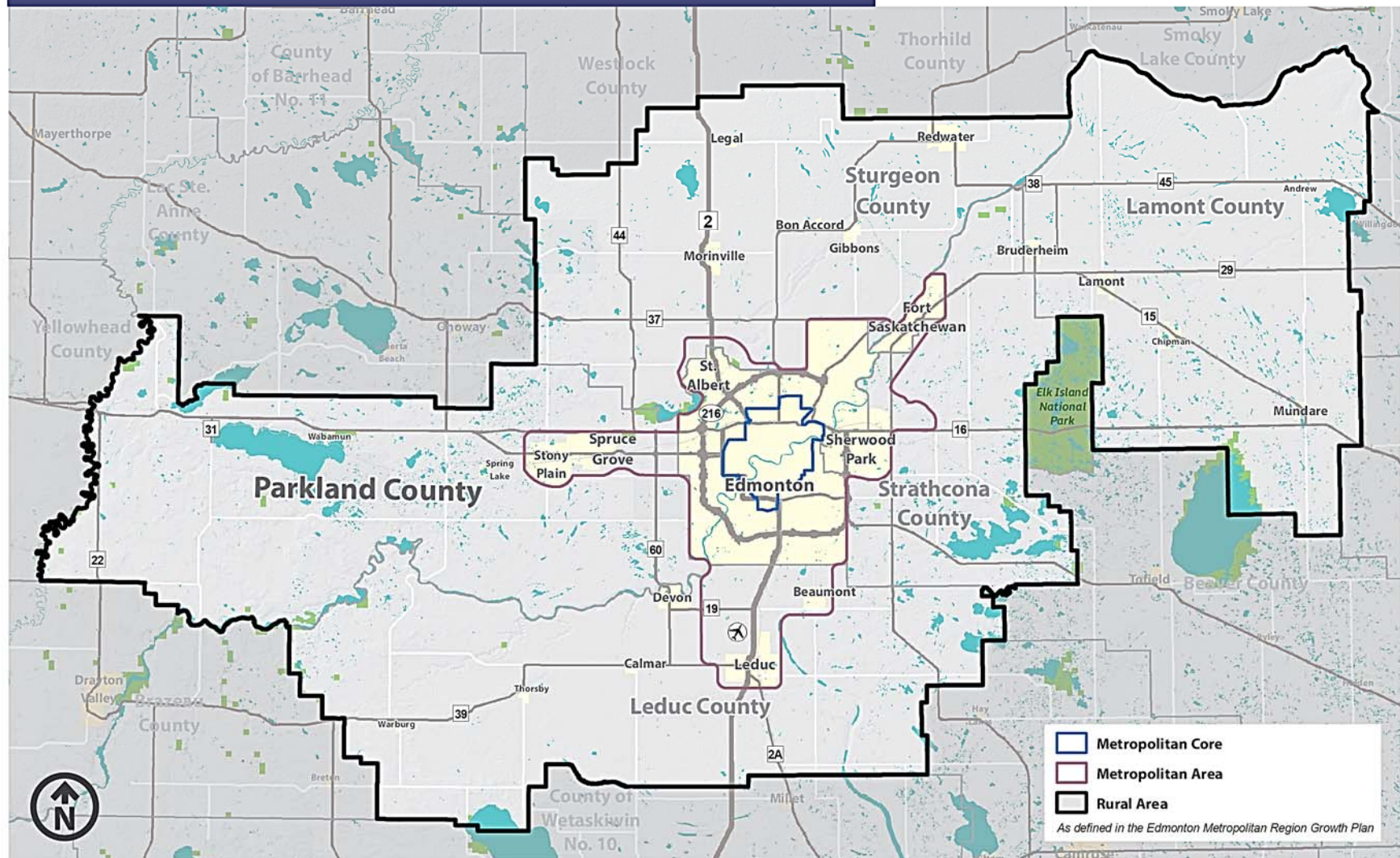
2.6 Indigenous Communities

Parkland County recognizes adjacent and nearby Indigenous communities, including First Nations and Métis Nations.

As a neighbour, Parkland County has engaged in discussions with several nearby Indigenous communities, including the Metis, to provide them with updates on the Municipal Development Plan process and to receive feedback on its policies. Parkland has received letters and input from Indigenous community representatives throughout the planning process.



FIGURE 2 | EDMONTON METROPOLITAN REGION - POLICY TIERS





2.7 Supporting Studies

The following plans, studies and background reports created a base of information for the Municipal Development Plan update process:

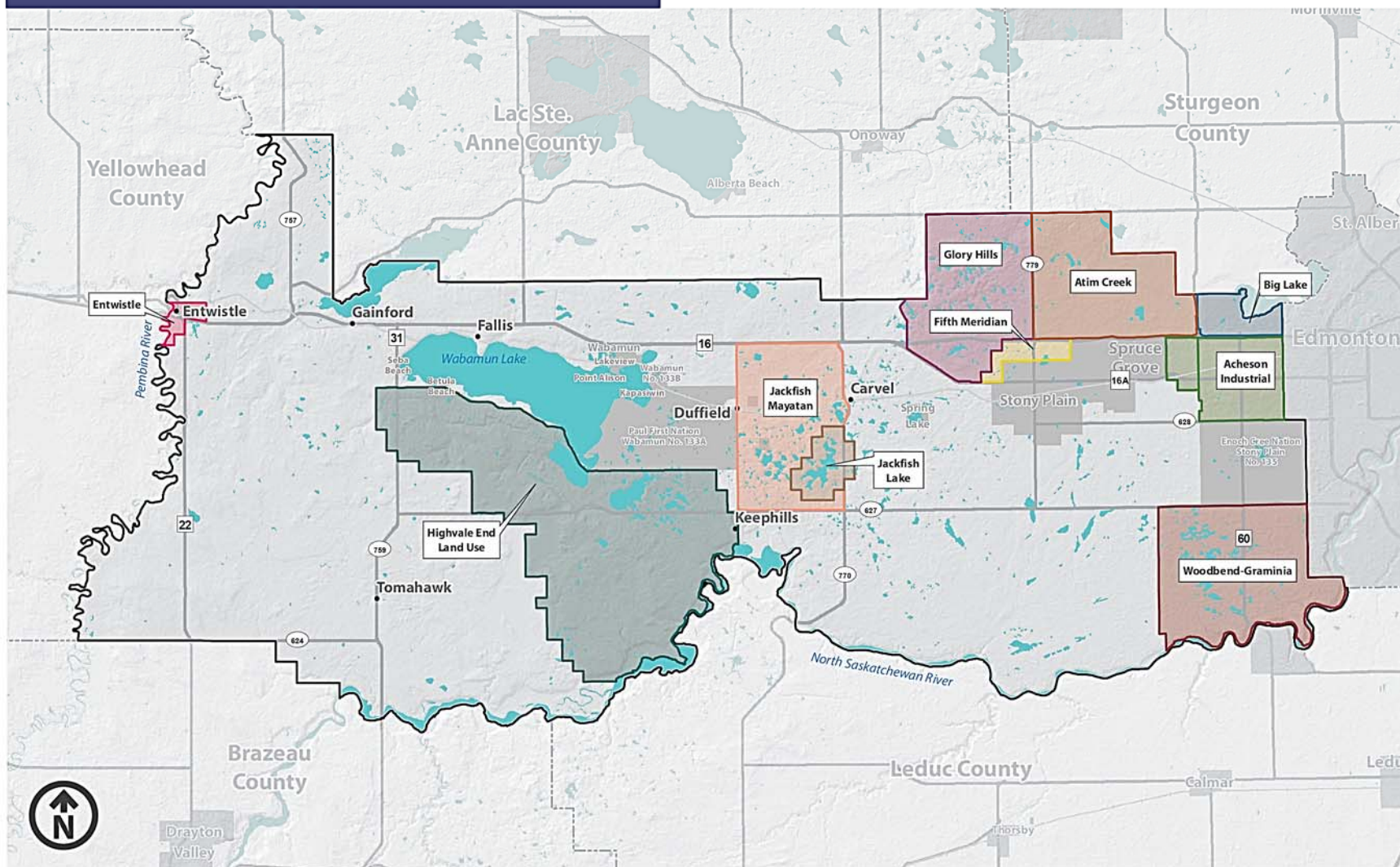
 Integrated Community Sustainability Plan	 Wetland Inventory and Historical Loss Assessment
 Parkland County Technical Growth Study	 Fire Services Master Plan
 Community Scan & Analysis	 Parks, Recreation & Culture Master Plan
 Parkland County Environmental Conservation Master Plan	 Future of Agriculture Study
 Wabamun Lake Sub-Watershed Land Use Plan	 Council Strategic Plan

The Parkland County Technical Growth Study, in particular, provides considerable policy direction for managing new growth while maintaining the viability of the County's agriculture industry and ensuring the sustainability of its rural communities and rural character.

Figure 3: Approved Area Structure Plans illustrates existing planning documents that have been approved by Parkland County Council. These plans are currently in effect to guide the process of subdivision and development within specific areas of the County. These Area Structure Plans may be rescinded or amended as approved by Council.



FIGURE 3 | APPROVED AREA STRUCTURE PLANS





2.8 Existing Considerations

General considerations for natural resources including natural resource extraction areas, areas with potential for aggregate resources, oil and gas pipelines and areas of concentrated oil and gas well activity have been illustrated in **Figure 4: Natural Resource Considerations**. Development applications submitted to the County must identify, consider and respect all applicable provincial, regional, federal and municipal regulations and guidelines related to these considerations, including sour gas facilities and pipelines, where they apply.

Existing Environmentally Significant Areas (ESAs) and wetlands were identified in the County's Environmental Conservation Master Plan (O2 Planning + Design 2014) and the Wetland Inventory and Historical Loss Assessment (Fiera Biological Consulting 2016). Understanding the location and significance of existing ESAs and wetlands can be used to prioritize environmental management initiatives. **Figure 5: Environmentally Significant Areas** and **Figure 6: Wetlands** identify these features. The findings of the Environmental Conservation Master Plan have been used to develop the policies of this Municipal Development Plan.



FIGURE 4 | NATURAL RESOURCE CONSIDERATIONS

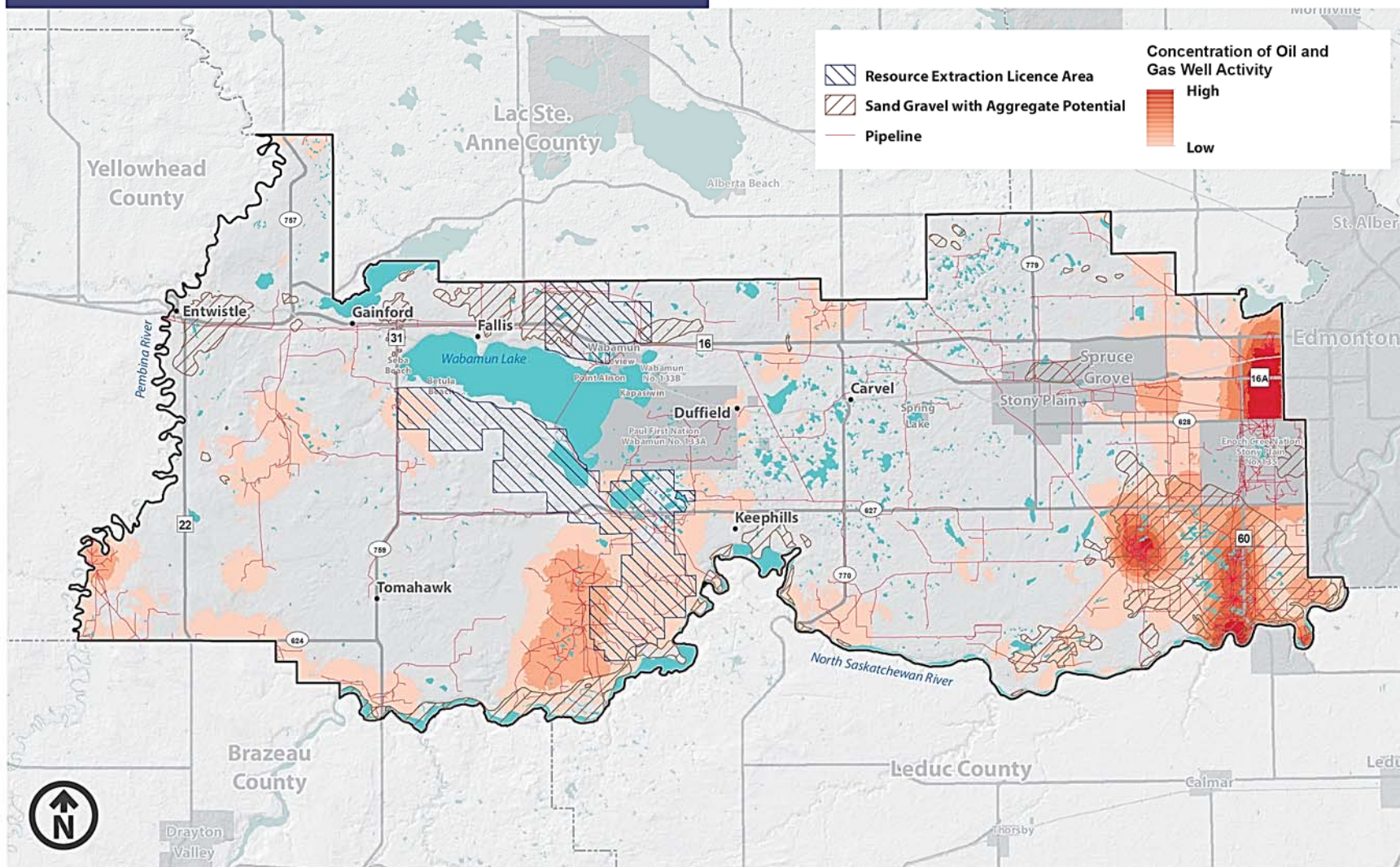




FIGURE 5 | ENVIRONMENTALLY SIGNIFICANT AREAS

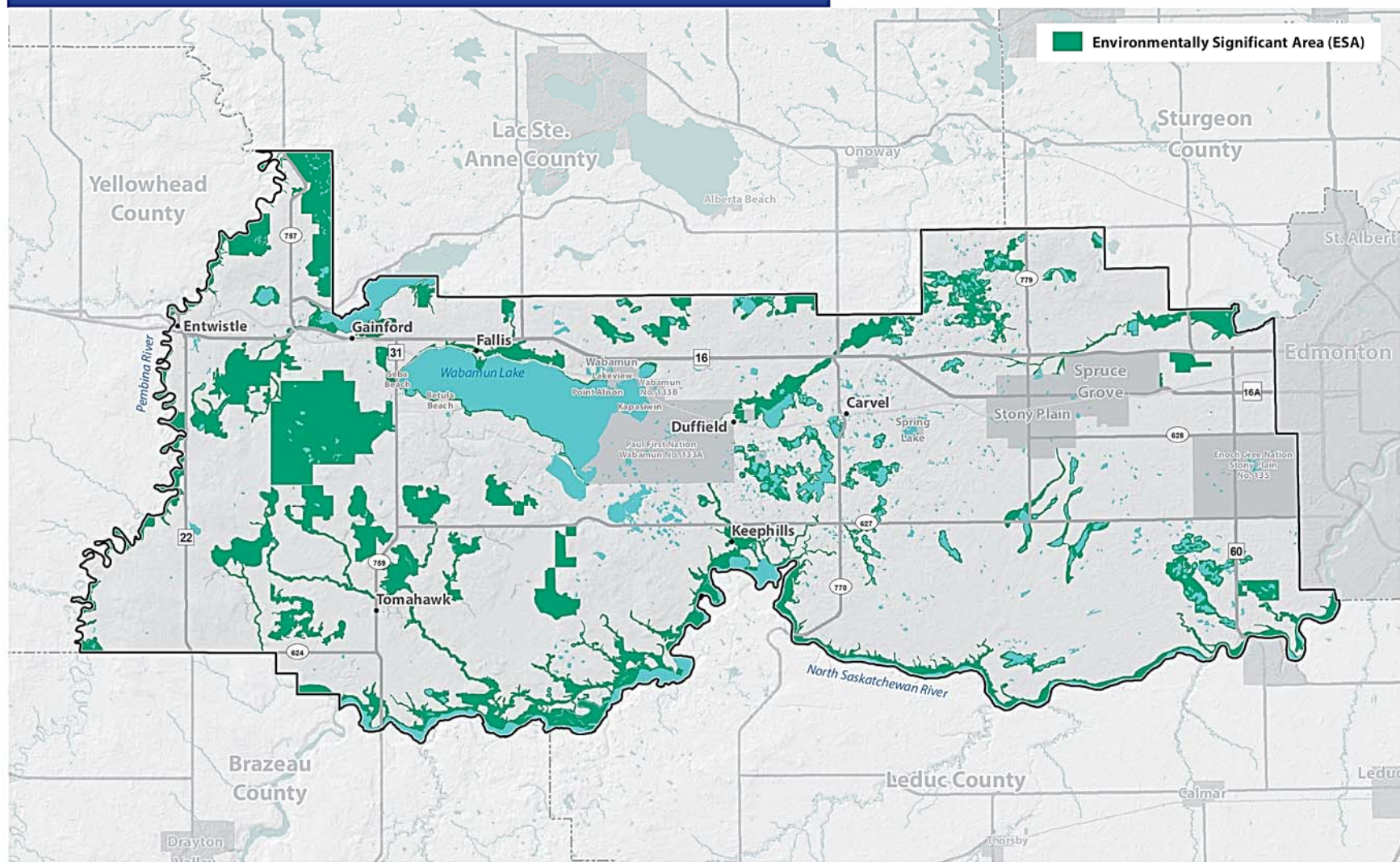
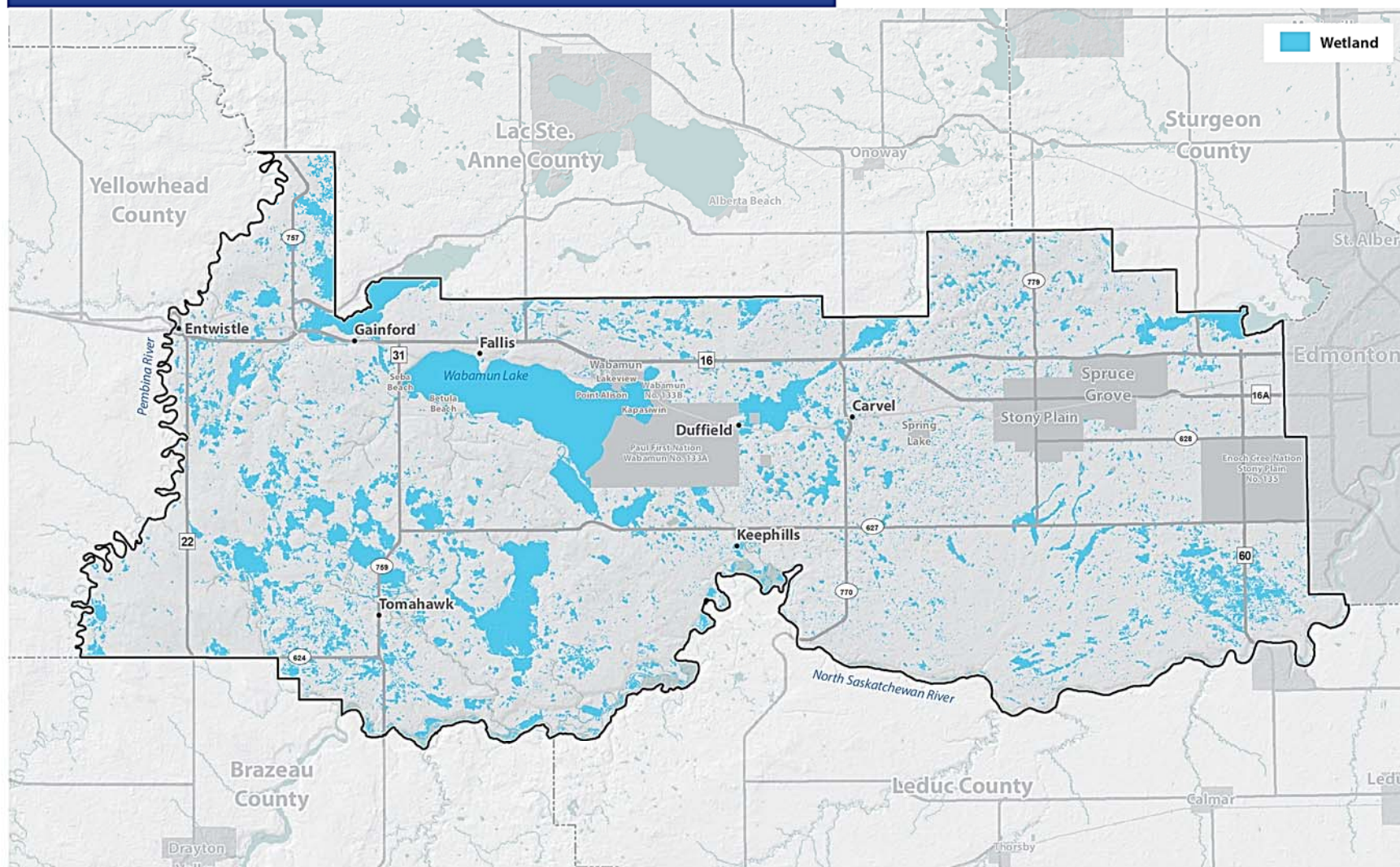




FIGURE 6 | WETLANDS





3.0



DEVELOPMENT CONCEPT



3.0 DEVELOPMENT CONCEPT

Figure 7: Development Concept illustrates a generalized land use framework for Parkland County.

The Development Concept includes consideration for Parkland's regional context and the policies of the Edmonton Metropolitan Region Growth Plan (Growth Plan). The Development Concept also includes considerations for natural features and environmentally significant areas, historical development patterns, employment and economic development areas, and transportation and utility infrastructure. The goals and policies provided within this Municipal Development Plan are intended to guide development within the County and achieve the goals of Council and the community.

The Development Concept identifies several land use policy and priority growth areas: Agriculture, Major Employment, Local Employment, Country Residential, Lakeshore Residential, Priority Growth Hamlets and Growth Hamlets. In addition, there are policy overlay areas identified on **Figure 9: Prime Agricultural Areas**, **Figure 11: Prime Recreation and Tourism Areas**, and **Figure 14: High Priority Landscapes** that recognize the unique character of specific areas within the County and provide additional policies to support and enhance this character.

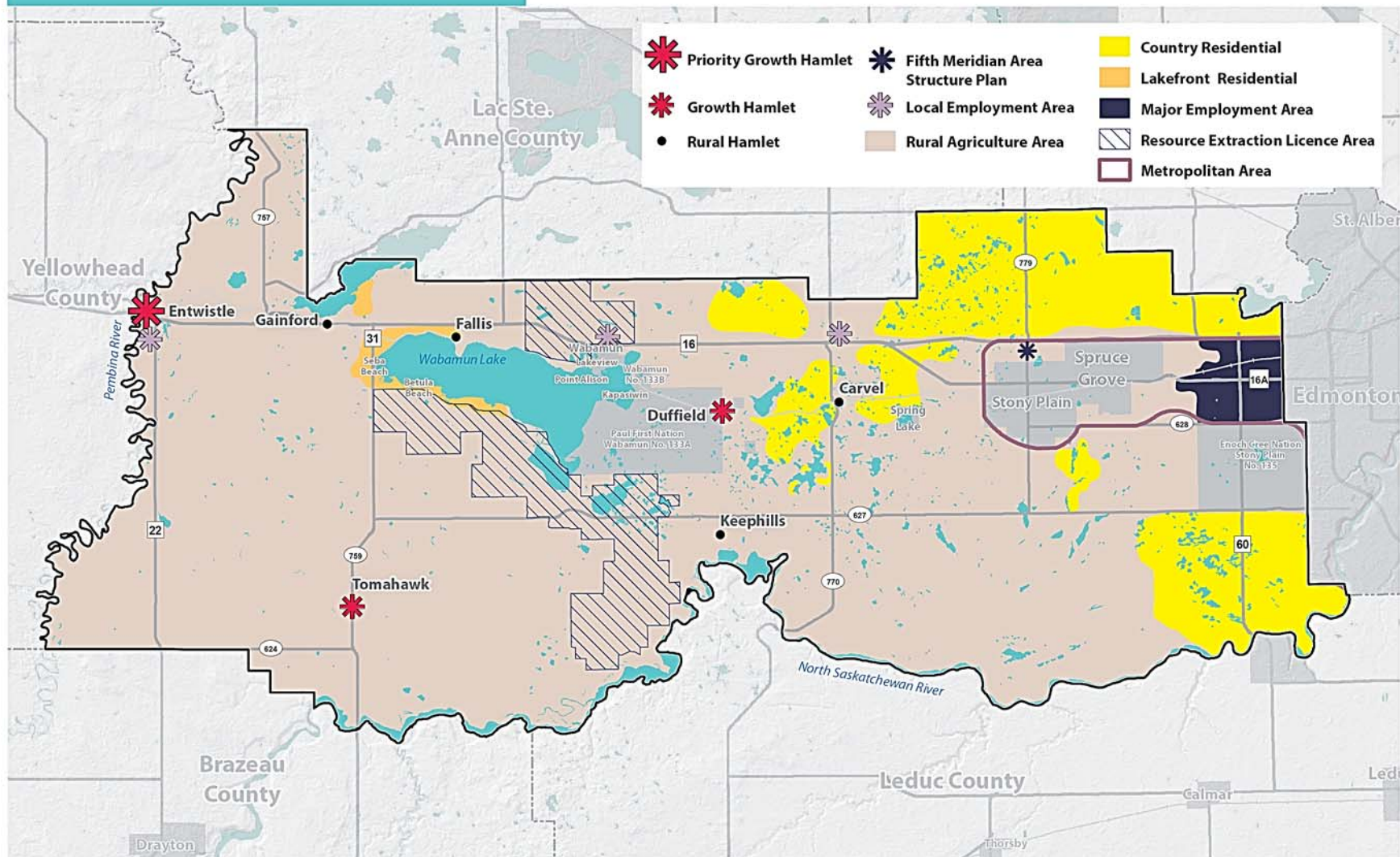
The Development Concept is intended to reflect and support the spirit and intent of the Growth Plan and the aspirations of the Edmonton Region. The Growth Plan identifies a Metropolitan Regional Structure that includes three (3) policies tiers (see Section 3.2 of the Growth Plan). Each tier has associated characteristics, objectives and policies to guide growth and development across the Region. Parkland County contains lands within the Rural Area Policy Tier and the Metropolitan Area Policy Tier.

The Metropolitan Area is defined as the area surrounding the Metropolitan Core and includes portions of county lands, urban communities, major and local employment areas and undeveloped areas that are socio-economically tied and that share industry, housing and infrastructure. The Metropolitan Area boundary, as described in the Growth Plan, is illustrated in **Figure 7: Development Concept**.

The Rural Area incorporates the majority of lands within the County and all lands outside of the Metropolitan Area. It consists of rural working landscapes with agricultural lands, major and local employment areas, natural areas, recreation areas, resource extraction areas and a network of towns, villages, hamlets and country residential areas with local levels of service and community amenities.



FIGURE 7 | DEVELOPMENT CONCEPT



*NOTE: Interpretation of **Figure 7: Development Concept** shall be considered in conjunction with policy overlay areas as depicted in **Figure 9: Prime Agriculture Areas**, **Figure 11: Prime Recreation and Tourism Areas**, and **Figure 14: High Priority Landscapes**.



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AGRICULTURE



4.0 AGRICULTURE



OBJECTIVE

To protect and enhance the County's valuable agricultural land base while supporting a strong rural economy and vibrant rural lifestyle.

Agriculture is an integral part of Parkland County's historic and future economic and community life. The agriculture industry in the County is highly innovative, with increasing diversification to ensure long-term viability and growing employment opportunities. The County maintains a strong commitment to being a leader in agricultural production in the Region; **One Parkland: Powerfully Connected.**

The County has completed a Future of Agriculture Study (Bouma and Stantec 2016) to understand the current state of agriculture within the County and how to support its continued success. The Study confirmed strong support for agriculture and agricultural practices amongst County residents, and identified key initiatives to make the agricultural industry more sustainable.

From the findings of the Agriculture Study comes a "Made in Parkland" approach to growth within the Rural Agricultural Area that recognizes the need to protect prime agricultural lands while being flexible to allow for new agricultural pursuits throughout the County. Prime Agricultural Areas are designed to reflect the unique characteristics of soils and the diversity of agricultural operations throughout the County. Parkland County is well positioned to diversify its primary agricultural base by promoting innovative agricultural opportunities in all agricultural areas.





DEVELOPMENT IN AGRICULTURAL AREAS

Rural Agricultural Area | The Rural Agricultural Area includes all of the Prime Agricultural Areas and is the primary land base of the County. It supports a range of agricultural activities and a rural farming lifestyle.

Value-Added Initiatives | Parkland County strives to enhance and provide opportunities for agricultural diversification and enhancement into the future. Part of broadening opportunities in agriculture is ensuring the ability to use agricultural property for more than traditional agricultural activities. Value-added pursuits could include on-site sales, stores, restaurants, agri-tourism or other supportive activities.

Rural Agricultural Subdivisions | Rural Agricultural Subdivisions maintain the opportunity for a rural country lifestyle and promote intergenerational family farming. In Parkland County, there are three (3) types of Rural Agricultural Subdivisions: Farmstead, Agriculture and Residential.

- Rural Agricultural Subdivision - Farmstead is the subdivision of a parcel of land (typically a quarter section in size) where there is an existing residence and associated improvements.
- Rural Agricultural Subdivision - Agriculture is the subdivision of a parcel of land that is 80 acres or greater for agricultural purposes.
- Rural Agricultural Subdivision - Residential is the subdivision of a single parcel of land for a new residential development.



4.1 Rural Agricultural Area – General

The Rural Agricultural Area hosts a wide range of agricultural operations, rural subdivisions, farmsteads, rural businesses, parks, environmental areas and other uses and amenities. In this area, the primary land use is agriculture. The preservation and protection of the agricultural area from fragmentation is a significant priority for Parkland County. The following policies are applicable to all agricultural areas, including Prime Agriculture Areas unless otherwise stated.

POLICIES

4.1.1 Right to Farm

- a. Agriculture shall have precedence over other land uses in the Rural Agricultural Area in accordance with the *Agricultural Operation Practices Act*.
- b. The County will endeavour to increase public awareness and understanding of agricultural operations and businesses by promoting the importance of the agricultural industry for food, jobs, trade, economics and the environment.

4.1.2 Conservation of High Capability Farm Land

- a. The County supports the completion of a Regional Agricultural Master Plan as identified in the Edmonton Metropolitan Region Growth Plan.
 - b. The County supports and encourages agricultural production and diversification through implementation of the Future of Agriculture Study findings and associated amendments to the County's Land Use Bylaw.
 - c. The conversion of high capability agricultural lands to non-agricultural uses should be minimized to support continued agricultural production.
 - d. The County supports programs that transfer subdivision density or development credits from areas of higher capability agricultural land to areas of lower capability agricultural land to support the conservation of large tracts of agricultural land.
-

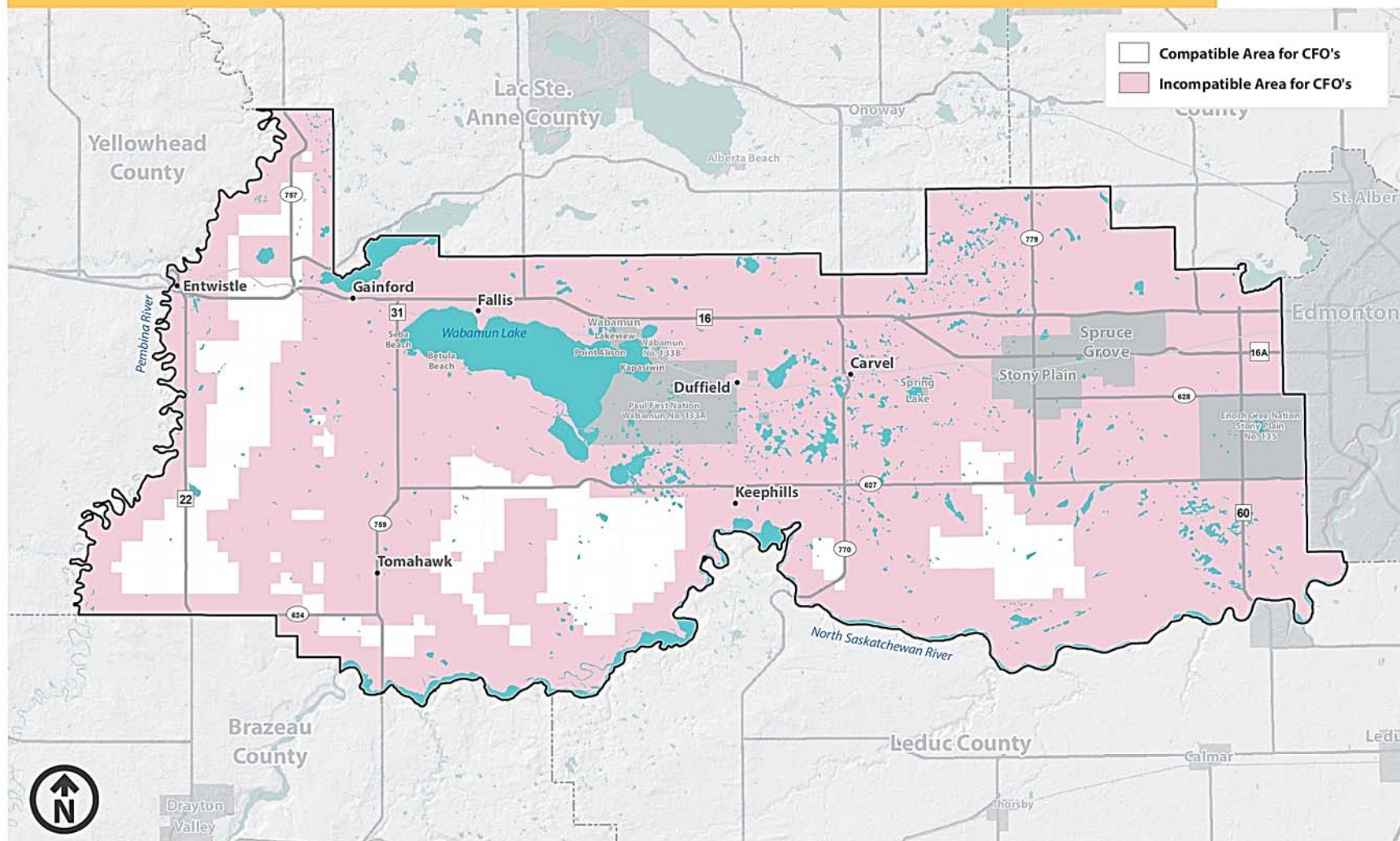


4.1.3 Value-Added Initiatives	a. Agricultural-based business, including agri-tourism, value-added initiatives and industrial agriculture, shall be supported throughout the Rural Agricultural Area. b. The diversification and expansion of existing agricultural operations into emerging agricultural sectors shall be supported throughout the Rural Agricultural Area. c. The County will support flexibility in subdivision and development practices within the Rural Agricultural Area to meet land and development requirements for emerging agricultural sectors.
4.1.4 Keeping the Family on the Farm	a. Rural farming lifestyles will be supported by promoting housing types and complementary uses that support multiple generations of families staying on the farm or in the agricultural sector. b. The County will support innovative and diverse housing forms (i.e. secondary suites, garden suites, tiny houses). Specific criteria for alternative housing forms will be regulated through the County's Land Use Bylaw.
4.1.5 Growth Management	a. The location and design of subdivision and development within the Rural Agricultural Area should minimize both the fragmentation of agricultural lands and the impact of development on County road infrastructure to the satisfaction of the County. b. New subdivisions should be clustered together and directed to the least agriculturally productive site on the quarter section whenever possible. c. Non-agricultural activities are encouraged to locate in hamlets and employment areas whenever possible. When this is not possible, non-agricultural activities should locate on land with lower capability soils and soil characteristics and where transportation and infrastructure needs can be met.
4.1.6 Rural Agricultural Area	a. Unless otherwise noted in the policies of Section 4.2 for Prime Agricultural Areas, a total of four (4) parcels per quarter section are supported throughout the Rural Agricultural Area.



AGRICULTURE

4.1.7 Rural Agricultural Subdivision - Agriculture	a. Rural Agriculture Subdivision - Agriculture for agricultural purposes other than small holdings should typically be eighty (80) acres (32.37 ha) or greater in size.
4.1.8 Rural Agriculture Subdivision - Farmstead	a. Rural Agriculture Subdivision - Farmstead is supported in the Rural Agricultural Area to provide opportunities for rural living, support multi-generational farming and ensure sufficient population to service the agricultural sector. b. Rural Agriculture Subdivision - Farmstead in the Rural Agricultural Area should not encompass productive agricultural land and are typically no more than ten (10) acres (4.05 ha) in size.
4.1.9 Rural Agriculture Subdivision - Residential	a. Rural Agriculture Subdivision - Residential is generally supported in the Rural Agricultural Area to provide opportunities for rural living. b. A maximum of three (3) Rural Agriculture Subdivision - Residential are allowed per unsubdivided quarter section unless otherwise stated in Section 4.2 Prime Agricultural Areas. c. The County will complete a market analysis and planning study to determine appropriate parcel size regulations for Rural Agriculture Subdivision - Residential.
4.1.10 Agricultural Impact Assessments	a. An Agricultural Impact Assessment prepared by a qualified professional shall be required for new area structure plans in areas of high capability agricultural land.
4.1.11 Locating Confined Feeding Operations (CFOs)	a. The County will direct CFOs to locate where there are minimal conflicts with non-complementary or sensitive land uses, as identified in Figure 8: Confined Feeding Operations Land Use Compatibility Areas. b. The County may limit residential subdivisions in the vicinity of CFOs, where off-site impacts of the nearby CFOs may be a significant nuisance to residential use. c. The County may use the minimum distance separation formula as established in the <i>Agricultural Operation Practices Act (AOPA)</i> as criteria for determining the appropriate setback for residential subdivisions from a CFO.
4.1.12 Expansion of Existing CFOs	a. The County recognizes there are existing CFOs in existence in Parkland County. Where an existing CFO applies to the NRCB for an expansion, the County will consider Figure 8: Confined Feeding Operations Land Use Compatibility Areas, and existing land uses adjacent to the proposed expansion when providing its recommendations to the NRCB.





4.2 Prime Agriculture Areas

Prime Agriculture Areas encompass the unique needs and characteristics of certain agricultural areas within the County. While all agricultural areas are important, prime agricultural areas have a cohesive identity and existing synergies between agricultural producers that are supported through the policies of this Municipal Development Plan. Prime Agricultural Areas are identified on **Figure 9: Prime Agriculture Areas**.

PRIME AGRICULTURE AREAS

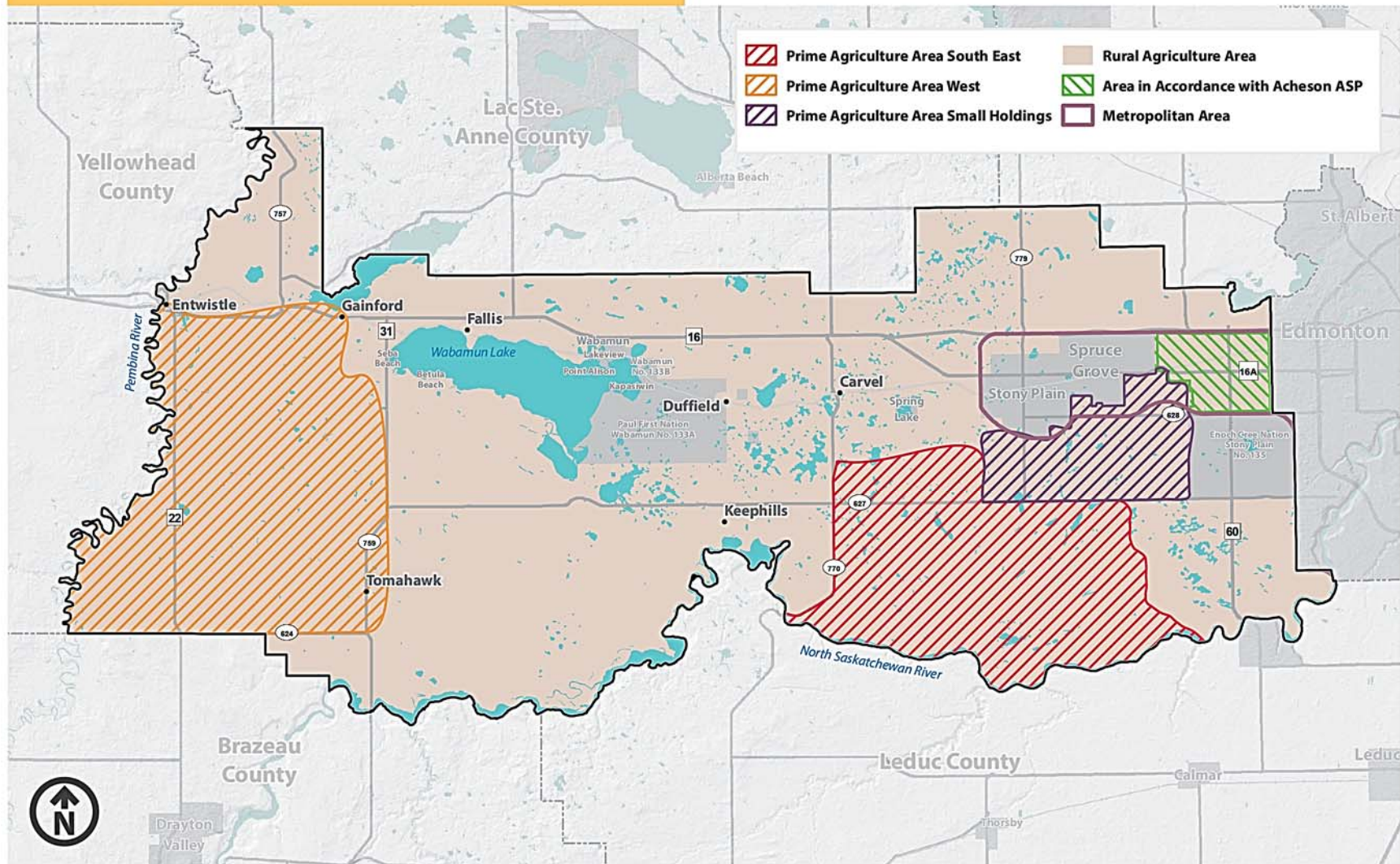
Prime Agriculture Area South East (PASE) | Prime Area South East aims to preserve large tracts of land for larger farm operations (grains, vegetables, livestock, etc.) while promoting diversification and expansion into new agricultural sectors.

Prime Agriculture Area West (PAW) | Prime Area West aims to preserve large tracts of land for larger operations (grazing, other specialty crops, etc.) and reduce fragmentation for non-agricultural purposes.

Prime Agriculture Area Small Holdings | Prime Area Small Holdings encourages a range of parcel sizes to support value-added and specialty operations on smaller tracts of land. Small holdings are intended to accommodate a range of agricultural operations, such as horticultural uses, specialty crops and specialty agricultural developments, that support agri-businesses and agriculturally supportive industries. Small holdings provide important employment opportunities and support the diversification of the County's employment base.



FIGURE 9 | PRIME AGRICULTURE AREAS





AGRICULTURE

POLICIES

4.2.1 Prime Agriculture Areas	a. Prime Agriculture Areas shall be located as shown on Figure 9: Prime Agriculture Areas and shall include the Prime Area South East, Prime Area South West and Prime Area Small Holdings.
4.2.2 Prime Agriculture Area South East	a. Prime Agriculture Area South East should retain large land parcels to support grazing and specialty operations such as grain and crop farming while promoting diversification and expansion into new agricultural sectors. b. Within the Prime Agriculture Area South East, a total four (4) parcels are supported per quarter section. c. Subdivisions for non-agricultural developments should be limited in Prime Agriculture Area South East.
4.2.3 Prime Agriculture Area West	a. Prime Area West should retain large land parcels to support grazing and specialty operations grain and crop farming. b. Within the Prime Agriculture Area West, a total four (4) parcels are supported per quarter section. c. Subdivisions for non-agricultural developments should be limited in the Prime Agriculture Area West.
4.2.4 Prime Agriculture Area Small Holdings	a. Prime Agriculture Area Small Holdings allows for flexibility of parcel sizes to allow for specialty agricultural operations and horticultural uses. b. Subdivisions in the Prime Agriculture Area Small Holdings should be between ten (10) and forty (40) acres in size. c. Within the Prime Agriculture Area Small Holdings, a total four (4) to six (6) parcels are allowed per quarter section. d. Rural Agriculture Subdivision - Residential is not supported within the Prime Agricultural Area Small Holdings.





5.0



ECONOMIC COMPETITIVENESS AND EMPLOYMENT



5.0 ECONOMIC COMPETITIVENESS AND EMPLOYMENT



OBJECTIVE

To promote a strong and diversified economy throughout all areas of the County; **One Parkland: Powerfully Connected.**

Parkland County is well situated to continue to grow its economy through a diverse range of agriculture, commercial, industrial, natural resource and institutional land uses.

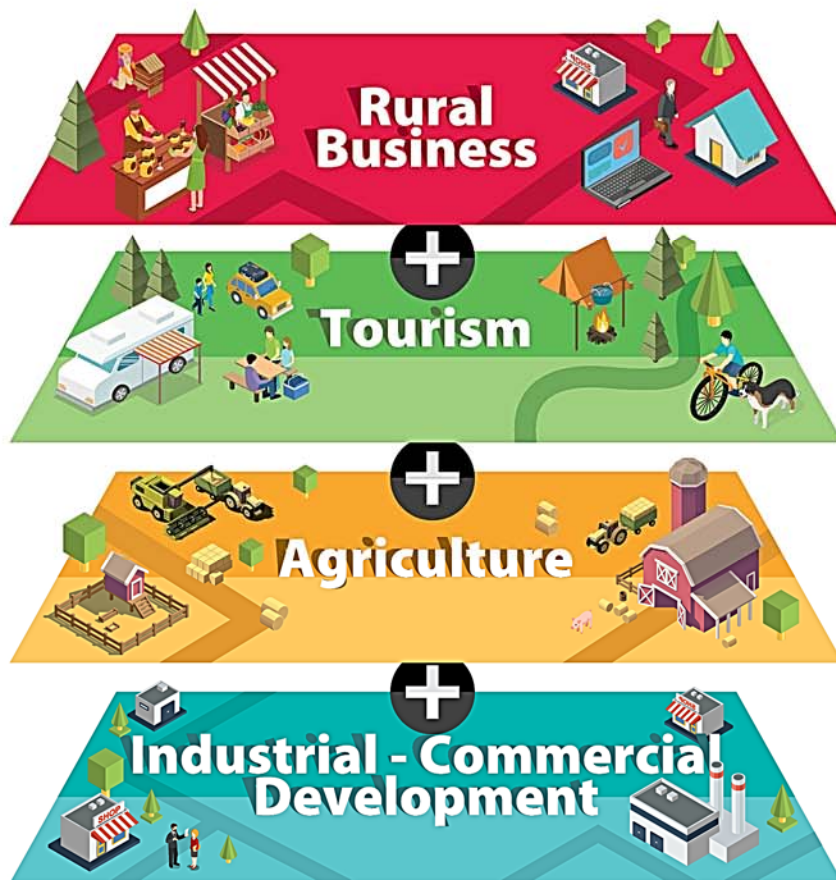
The County has supported many successful business ventures that bring stable and diversified employment and economic growth to the Edmonton Region, including supporting business development in the Acheson, Fifth Meridian and Entwistle Industrial areas. In addition, agriculture, small and large businesses and natural resource industries contribute significantly to employment and economic growth in the County. As the County looks to attract, retain and expand employment opportunities, it will continue to support entrepreneurship, innovation and economic diversification through the provision of local services and infrastructure.

Businesses and related employment opportunities are encouraged to locate in concentrated areas of development, such as hamlets or existing business park areas. This development pattern minimizes the need for new County servicing and transportation infrastructure, and reduces the fragmentation of agricultural land for non-agricultural purposes. Providing opportunities for businesses and employment where there is an existing demand for services is essential to building synergies throughout the County.





ECONOMIC DIVERSIFICATION & INNOVATION



Economic diversification and innovation requires the interplay of four (4) areas. Focus of growth in all four (4) areas requires coordinated efforts to:

- ✓ **ATTRACT EMPLOYMENT**
- ✓ **RETAIN & EXPAND BUSINESS**
- ✓ **INCREASE CONNECTIVITY**
- ✓ **GROW KNOWLEDGE WORKFORCE**



ECONOMIC COMPETITIVENESS AND EMPLOYMENT

EMPLOYMENT AREAS

Major Employment Areas | Major employment areas accommodate significant concentrations of business and economic activities for commercial, light industrial and medium industrial development with regional significance. Major employment areas will provide municipal servicing and a higher intensity of employment opportunities. Major employment areas require significant transportation infrastructure and good access to regional and national markets. *Acheson Industrial and Fifth Meridian Industrial are major employment areas within Parkland County.*

Local Employment Areas | Local employment areas accommodate a concentration of industrial, commercial and institutional land uses with a locally significant concentration of employment. A rural industrial commercial park will accommodate land uses requiring larger lots and lower levels of infrastructure and amenities. *The Entwistle Business Park is a local employment area within the County.*

Local Services | Business sector growth within Parkland communities supports the provision of local services and jobs within the County's hamlets. The County strongly supports growth within its existing hamlets, including new employment and institutional uses which serve the everyday needs of the surrounding community and provide a wide range of services and amenities at a scale appropriate to the community.

Home-based Business | Home-based businesses provide economic opportunity and diversity throughout Parkland County. The County recognizes and supports home-based business as a viable lifestyle and economic development opportunity. The County recognizes and encourages home-based businesses throughout the County.

Corridor Development | Parkland County has an excellent transportation network which has enabled employment and economic growth in all areas of the County. Major transportation corridors provide opportunities for more intensive forms of development such as commercial, retail and institutional uses.

Natural Resource Extraction | Parkland County supports the responsible extraction of aggregates and other natural resources within its boundary. Responsible natural resource extraction operations effectively manage the environmental and off-site impacts of their operations while providing local employment and economic growth.





POLICIES**5.0.1 Encouraging
Economic
Competitiveness
and Employment
Opportunities**

- a. The County encourages economic and employment diversification throughout the County where businesses will be supported by adequate infrastructure and transportation networks.
 - b. The County will encourage local community economic development initiatives within the Rural Agricultural Area.
 - c. The County will encourage a range of commercial and industrial lot sizes and servicing standards to be located where appropriate in the County.
 - d. The County will maintain a 50-year supply of industrial and employment lands to ensure continued economic growth and employment within the County.
 - e. The County will encourage traditional agriculture, value-added agriculture, agricultural industrial businesses and processing and the development of agricultural products to grow and diversify agricultural uses and employment opportunities throughout the County.
 - f. The County will seek to foster partnerships with other governmental agencies and private industry to promote the economic opportunities available in Parkland County.
 - g. Employment and business development should locate in areas where the off-site impacts of the business on surrounding land uses can be mitigated to the satisfaction of the County.
 - h. The County supports an eco-industrial approach to new major and local employment areas. New eco-industrial areas in the County will strive to:
 - i. target growth that attracts similar or complementary businesses to create synergies;
 - ii. promote by-product reuse of materials and energy throughout the park to increase efficiency and to reduce the environmental impacts;
 - iii. promote the use of sensitive infrastructure and practices such as manufactured wetlands for stormwater management, and the reuse and recycling of water; and
 - iv. focus on network development to share services, such as marketing, transportation, research and monitoring services whenever possible.
-



ECONOMIC COMPETITIVENESS AND EMPLOYMENT

5.0.2 Major Employment Areas (Served Industrial)

- a. Major Employment Areas shall be located as shown on **Figure 7: Development Concept**.
- b. Major Employment Areas will support a range of intensive land uses including commercial, industrial and institutional uses that require full municipal servicing.
- c. Major Employment Areas must be planned and coordinated through an Area Structure Plan or other statutory plan.
- d. The County will encourage the extension of municipal services to the Acheson Business Park and Fifth Meridian Business Park.
- e. The County will seek to recover infrastructure costs through off-site levies or other cost recovery mechanisms.

5.0.3 Rural Economic Diversification - Local Employment Areas

- a. Local Employment Areas shall be located as shown on **Figure 7: Development Concept**.
- b. The County will support growth in Local Employment Areas to ensure a diversified tax base in the Rural Agricultural Area.
- c. Local Employment Areas must be planned and coordinated through an Area Structure Plan or other statutory plan.
- d. Businesses locating within the Rural Agricultural Area should locate in areas where their needs can be met with the available transportation network, shallow utilities, water and sanitary services. If infrastructure upgrades are required to support the growth of a new business, the developer shall play for their portion of any required infrastructure upgrades.
- e. Private on-site servicing may be considered for employment growth in the Rural Agricultural Area where appropriate.

5.0.4 Providing Local Services

- a. The County encourages new commercial and institutional developments in hamlets, communities and accessible locations within the Rural Agricultural Area to serve the everyday needs of the surrounding community.
 - b. Commercial and institutional uses are encouraged to locate in developed areas where they are compatible with the surrounding land uses and can manage off-site impacts.
 - c. Commercial, business and employment areas should be connected to residential areas through convenient pedestrian and cycling connections, such as multi-use pathways, whenever possible.
-



5.0.5 Growth in Home-based Business

- a. The County encourages home-based businesses in all areas of Parkland County.
- b. The County will seek to support home-based businesses through provision of adequate infrastructure, transportation network (road) access, economic development promotion and potential high-speed internet.
- c. Home-based businesses shall:
 - i. have adequate road access and parking;
 - ii. cause minimal impact on the environment, water, municipal infrastructure and neighbouring properties; and
 - iii. be secondary (in size and scale) to the residential use of the property.

5.0.6 Attractive Corridor Development

- a. Development along highways and major roads shall be planned in a comprehensive manner and be concentrated at highway intersections, near interchanges and in consideration of service road locations. Single parcel or dis-contiguous development along the highway and major County road corridors is generally discouraged.
 - b. Development that is highly visible from a major transportation corridor should enhance visual attractiveness through design features, such as landscaping, fencing, buffering and other design features, to the satisfaction of the County as regulated in the Land Use Bylaw.
 - c. The County may identify key transportation corridors for future corridor studies or may establish corridor development standards for key corridors.
-



ECONOMIC COMPETITIVENESS AND EMPLOYMENT

5.0.7 Responsible Natural Resource Extraction

- a. The County supports the responsible extraction of natural resources prior to surface development.
- b. Businesses involved in natural resource extraction must build and encourage ongoing, transparent communication and engagement with the communities in which they operate.
- c. New natural resource extraction operations will be required to identify how proposed activities respond to the existing land use context and environmental characteristics, mitigate off-site impacts and implement best practices for resource extraction.
- d. New or expanding natural resource operations may be required to undertake public consultation in accordance with County policy and any applicable provincial regulations.
- e. The County may undertake an Aggregate Resource Management Plan to guide the extraction of aggregate resources throughout the County.
- f. The County will discourage non-compatible uses from being developed adjacent to existing and known future pit areas.
- g. Applications for natural resource extraction activities shall be supported by a Master Site Development Plan (MSDP) and complete all technical studies as required by the County.
- h. All natural resource extraction operations must ensure compliance with municipal, provincial and federal regulations and permitting.

5.0.8 Power Generation Facilities

- a. The County supports the continued operation and adaptive reuse of power generation facilities within Parkland County as an important source of local employment opportunities.
 - b. Reclamation planning for coal extraction areas should consider ways to support local recreational and employment growth opportunities whenever possible.
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HAMLETS



6.0 HAMLETS



OBJECTIVE

To support growth in the County's hamlets as part of maintaining a rural character and lifestyle; **One Parkland: Powerfully Connected.**

Hamlets are unincorporated urban communities within the County that provide a range of land uses, housing types, employment and amenities to a local service area. Parkland County's seven hamlets range in both population size and service level.

Entwistle is the County's only identified Priority Growth Hamlet. The County's other hamlets include: Gainford, Duffield, Tomahawk, Fallis, Keephills and Carvel. These hamlets each have a unique history and relationship with their surrounding agricultural areas and are an important part of the County's identity. The County supports continued prosperity and growth in hamlets where adequate infrastructure and land is available.





HAMLET GROWTH

Priority Growth Hamlets | Priority Growth Hamlets are full-service rural communities with a range of land uses, housing types, rural services and minimum density requirements. Development in Priority Growth Hamlets is guided by the policies of this Municipal Development Plan and the Edmonton Metropolitan Region Growth Plan for growth hamlets. *Entwistle is identified as the County's only Priority Growth Hamlet.*

Growth Hamlets | Growth hamlets are smaller than Priority Growth Hamlets in size. They have some municipal servicing, amenities and alternative forms of housing. Prioritization for investment in Growth Hamlets will follow after Priority Growth Hamlets. These growth hamlets are anticipated to grow at or above traditional rates of growth. Growth Hamlets support a range of land uses and services where appropriate transportation and utility servicing are available. *Duffield and Tomahawk are identified as the County's Growth Hamlets.*

Rural Hamlets | Rural hamlets are communities that have been identified for growth that do not require municipal servicing and additional amenities. *Gainford, Fallis, Keephills and Carvel are identified as the County's Rural Hamlets.*

Greenfield Areas | Greenfield Areas in Parkland County shall be located in existing hamlets or where hamlet boundaries can be expanded to incorporate new growth. Greenfield Areas provide an opportunity for serviced residential development in a compact urban form which supports a mix of land uses. These areas are expected to be higher density in nature. Residential density and development in greenfield areas shall comply with the Edmonton Metropolitan Region Growth Plan.



HAMLETS

POLICIES

6.0.1 Growing the County's Hamlets	a. The County strongly encourages growth and development in the County's hamlets where the appropriate infrastructure and transportation networks are available. b. The County will prioritize investment in hamlets in the following order: i. Priority Growth Hamlets; ii. Growth Hamlets; and iii. Rural Hamlets. c. Priority Growth Hamlets, Growth Hamlets and Rural Hamlets are identified on Figure 7: Development Concept.
6.0.2 Vibrant Hamlets & Hamlet Character	a. Development within hamlets should complement and enhance the existing character of the hamlet through proper design measures, including scale, massing, architecture, landscaping and urban design.
6.0.3 Hamlet Boundaries	a. The County may support the expansion of hamlet boundaries where suitable conditions exist, including: i. proposed or existing developments are located adjacent to the hamlet boundary; ii. insufficient infill capacity exists to meet market demands; iii. employment or economic growth requires additional lands; iv. there will be a significant community benefit; v. orderly and sequential development is supported; and vi. there are viable infrastructure and servicing solutions for the additional lands.
6.0.4 Hamlet Housing	a. The County encourages a range of housing forms within hamlets, including but not limited to single detached dwellings, duplexes, tri-plexes, and four-plexes, manufactured homes, multi-residential dwellings (low rise apartments), secondary suites and garden suites. b. The County may develop Hamlet Design Guidelines to ensure compatibility of a range of housing forms and land use types within hamlets. c. The County encourages multi-parcel residential development to locate within hamlets where possible.



	d. Seniors housing and residential care facilities (i.e. assisted care facilities, continuing care facilities) are encouraged in hamlets to support the ability of residents to age-in-place.
6.0.5 Hamlet Open Space, Pathways and Trails	a. The County encourages the creation of public parks and pathways within hamlets. b. The County will seek opportunities to improve walking and cycling in hamlets through increasing the available active transportation infrastructure, such as sidewalks and pathways. c. The County will look for ways to coordinate planning and connectivity between hamlets and nearby provincial parks, protected areas and recreation areas. d. The County will establish standards for recreation facilities and open spaces in hamlets.
6.0.6 Supporting Mixed Use Development in Hamlets	a. Development within hamlets is encouraged to provide a full range of land uses, including: i. residential uses; ii. local commercial retail uses; iii. institutional and community uses such as schools, community halls, and religious assemblies; iv. recreational and cultural uses; v. light industrial uses where they are compatible with adjacent land uses; and vi. other uses as appropriate. b. Compatible land uses may be mixed within buildings or on individual sites. c. Local employment and services are an important part of maintaining viable hamlets. The County encourages employment opportunities and services to locate within hamlets as part of mixed use development. d. The County will foster innovative development forms and patterns that are compatible with the existing hamlet development.



6.0.7 Hamlet Infill

- a. The County encourages the efficient use of land and infrastructure through the promotion of infill and redevelopment of vacant and/or underutilized lots in hamlets.
- b. The County may investigate opportunities to offer incentives for landowners or developers to infill or redevelop vacant, under-utilized or brownfield lots within hamlets.

6.0.8 Greenfield Areas

- a. Greenfield Areas development shall be planned as complete communities as defined in the Edmonton Metropolitan Regional Growth Plan. Residential density and development in greenfield areas shall comply with the Edmonton Metropolitan Region Growth Plan.
- b. Greenfield Areas shall be located in existing hamlets or where hamlet boundaries can be expanded to incorporate new growth.
- c. Greenfield Areas should incorporate a range of housing types and densities and include consideration for local services such as retail commercial or institutional uses.
- d. As noted in MDP policy 4.1.10, an Agricultural Impact Assessment prepared by a professional shall be required for new area structure plans in areas of high capability agricultural land.
- e. Greenfield Areas development should provide a benefit to hamlet residents and minimize impact on existing County infrastructure.

6.0.9 Hamlet Area Redevelopment Plans

- a. The County will undertake Hamlet Area Redevelopment Plans for all identified growth hamlets to plan for growth. A HARP may plan for fringe areas outside of the hamlet boundary.
 - b. Hamlet Area Redevelopment Plans shall target inter-departmental projects at the County level that will revitalize and support hamlets for long-term vitality.
-



6.0.10 Priority Growth Hamlets

- a. The Hamlet of Entwistle shall be identified as the County's Priority Growth Hamlet providing a range of services and land uses that are supported in accordance with the policies of the Edmonton Metropolitan Region Growth Plan for growth hamlets.
- b. The County supports prioritizing hamlet investment in Entwistle, including servicing and fiber optic internet.
- c. Development in Priority Growth Hamlets must be municipally serviced with piped water and wastewater servicing.
- d. Infill in Entwistle shall be undertaken in accordance with the Edmonton Metropolitan Region Growth Plan.
- e. Residential density shall align with the Edmonton Metropolitan Region Growth Plan.
- f. A Conceptual Scheme is required for the development of more than a four (4) lot subdivision within Entwistle.
- g. The County encourages local and regional employment, commercial and residential development in the west portion of the County to locate within the Hamlet of Entwistle.

6.0.11 Growth Hamlets

- a. The Hamlets of Duffield and Tomahawk are identified as the County's Growth Hamlets.
- b. Development within Growth Hamlets may be municipally serviced with piped water and wastewater servicing.
- c. A range of residential densities and housing forms are encouraged within Growth Hamlets.
- d. The County encourages commercial and residential development that serves the local area to locate within the Hamlets of Duffield and Tomahawk.
- e. A Conceptual Scheme is required for the development of more than a four (4) lot subdivision within a Growth Hamlet.

6.0.12 Rural Hamlets

- f. The Rural Hamlets of Gainford, Fallis, Keephills and Carvel shall be developed as smaller rural communities. On-site private water and wastewater systems are allowed where suitable conditions permit their use.
 - g. A Conceptual Scheme is required for the development of more than a four (4) lot subdivision within a Rural Hamlet.
 - h. County investment in Rural Hamlets will be prioritized after Priority Growth Hamlets and Growth Hamlets.
-



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RURAL COMMUNITIES & HOUSING



7.0 RURAL COMMUNITIES & HOUSING



OBJECTIVE

To encourage residential development that meets varied housing and lifestyle needs; **One Parkland: Powerfully Connected.**

Parkland County's diverse and beautiful landscapes provide an ideal place to call home. The County's vast land base allows for a range of housing types that are often closely related to their natural setting.

Country residential housing is available largely in the eastern portion of the County, while there are many existing lakefront residential areas around Parkland County's many waterbodies.

Maintaining a range of housing forms, mix of land uses and affordability throughout the County is a priority to promote the sustainability of Parkland County's communities and the creation of healthy, accessible, and complete rural communities. The County will seek to provide for future housing needs through the provision of a diversity of housing types that align with the lifestyle needs of County residents and that are appropriately located, either in relation to amenities or to employment opportunities.

A mix of complementary land uses are encouraged in residential areas to support complete rural communities where residents of all ages and abilities have wide access to community amenities, can "age in place" and have access to local and regional economic opportunities.





RURAL COMMUNITIES AND HOUSING AREAS

Country Residential | Country Residential is a multi-parcel subdivision where servicing is provided either through on-site water and private sewage systems, municipal infrastructure or private communal systems. Country Residential developments offer opportunities for a quiet, rural lifestyle throughout Parkland County. Country Residential areas should be guided by a comprehensive planning approach that provides public open space and supports walking and biking.

Lakefront Residential | The County has a wide range of waterbodies with many opportunities for lakefront development. The County supports the development of lakefront areas provided they are sensitive to the health of the waterbody and associated watershed ecosystem, and their surrounding context.



7.1 Rural Communities and Housing

POLICIES

7.1.1 Country Residential Development

- a. Country Residential Areas shall be located as shown on **Figure 7: Development Concept**. Country Residential uses are encouraged to locate within these areas.
 - b. Country Residential development must be located within an approved Area Structure Plan or on lands already districted for Country Residential development at the time of adoption of this Municipal Development Plan.
 - c. Existing agricultural uses shall have the right to farm in Country Residential areas.
 - d. For residential development outside a hamlet, a Conceptual Scheme or Area Structure Plan is required for developments that propose more than four (4) lots per quarter section.
 - e. The County encourages alternative development forms, such as compact (and clustered) residential development or communities designed to conserve the natural landscape, to reduce the development footprint while maintaining a rural character.
 - f. New country residential development shall demonstrate how the proposed development addresses preservation of natural areas and principles of conservation subdivision design. An example of conservation subdivision design is shown in **Figure 10: Conservation by Design Subdivision**. Conservation by Design Subdivision incorporates economic, social and environmental considerations and generally includes the following steps:
 - i. identifying primary conservation areas;
 - ii. identifying secondary conservation areas;
 - iii. identifying development areas;
 - iv. identifying building sites; and
 - v. designing roads, trails and lot lines.
-



FIGURE 10 | CONSERVATION BY DESIGN SUBDIVISION



STEP 1 |
Identify primary conservation areas



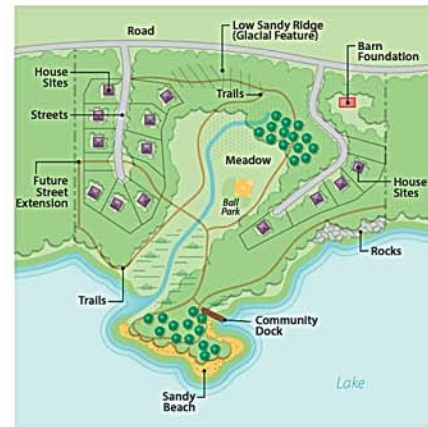
STEP 2 |
Identify secondary conservation areas



STEP 3 |
Identify development areas



STEP 4 |
Identify building sites



STEP 5 |
Design roads & trails and add lot lines

Adapted from: Randall G. Arendt, Conservation Design for Subdivision – A Practical Guide to Open Space Networks.



- g. For new County Residential Development, the applicant shall provide a detailed rationale explaining how a Conservation by Design Subdivision approach has been considered in the plans for the proposed Country Residential area. The use of a conservation by design approach is required where the subject site is:
 - i. within or adjacent to a High-Priority Landscape or an identified Environmentally Significant Area (ESA);
 - ii. adjacent to or within a sensitive biodiversity, wetland or lakefront area; or
 - iii. in close proximity to amenities, transportation, and infrastructure networks.
- h. The County may investigate the creation of a density bonusing program to encourage developers to use a conservation by design approach to subdivision to protect on-site natural features.
- i. The County may explore the creation of a transfer of development credits (TDC) or transfer of subdivision density (TSD) program to preserve agricultural land, High Priority Landscapes and ESA areas within the County.
- j. Any proposed country residential development shall not exceed a maximum density of 50 lots per quarter section as required by the Edmonton Metropolitan Region Growth Plan.

7.1.2 Innovative Communities

- a. The County encourages innovative community development (e.g. shared systems, conservation design, shared servicing) throughout the County where it does not unduly impact agricultural operations or fragment agricultural land.

7.1.3 Mixed land uses and rural complete communities

- a. A mix of land uses may be supported in Country Residential and Lakefront Residential Areas to support the creation of rural complete communities. Where land uses other than residential are considered, all applicable MDP policies shall apply.
- b. The County will update Area Structure Plans and the Land Use Bylaw to support a greater mix of land uses in residential areas.

7.1.4 Innovative Housing

- a. The County promotes innovative housing forms to ensure the provision of a diversity of housing options and affordability levels to Parkland residents.
-



7.1.5	High Priority Landscapes & Environmentally Significant Areas	a. New residential development in High Priority Landscapes shall complete a Biophysical Impact Assessment process as part of any Conceptual Scheme, Area Structure Plan, redesignation, subdivision or development permit application, as outlined in <i>Appendix 2: Requirements for Technical Reports and Studies</i>. b. New residential development in Rural Agricultural Areas shall have regard for provincial and municipally designated Environmentally Significant Areas (see Figure 5: Environmentally Significant Areas). A Biophysical Impact Assessment process shall be required as part of any Conceptual Scheme, Area Structure Plan, redesignation, subdivision or development permit application where the proposed development is located within or adjacent to an Environmentally Significant Area, High Priority Landscape, watercourse, wetland or waterbody.
7.1.6	Community Parks, Recreation and Open Space	a. Conceptual Schemes and Area Structure Plans for multi-parcel residential development outside a hamlet must provide for public gathering places such as parks, open spaces and community facilities that are safe, accessible and, when practicable, linked to existing pathways and open space.
7.1.7	Buffering	a. Where a multi-parcel subdivision is to be located adjacent to existing non-residential uses, such as agriculture, industrial or commercial land uses, the developer shall incorporate buffering and landscaping elements to minimize impacts.
7.1.8	Emergency Services Considerations	a. All developments shall be properly serviced by fire services, including access roads and water sources, as required by the County. b. The County may require, as part of any residential subdivision or development proposal, the completion of a wildfire hazard study or a wildfire protection plan integrating FireSmart design principles.



7.1.9 Residential Development on Lakefront and Riparian Areas

- a. Residential uses are generally supported along lakefronts and riparian areas within the County where the health of the waterbody and watershed can be maintained.
 - b. Lakefront development shall be located in Country Residential and Lakefront Residential areas as shown on Figure 7: Development Concept, as well as where identified within the boundaries of the existing Jackfish Lake Area Structure Plan and Jackfish-Mayatan Area Structure Plan.
 - c. New development along lakefronts and riparian areas shall be designed to minimize impacts from silt and nutrient loading through consideration for best practices such as low impact development (LID) for storm water management, appropriate naturalized landscaping techniques, communal wastewater or self-contained tank and haul systems and appropriate yard maintenance techniques.
 - d. The County may require a developer to complete technical studies to determine potential impacts to adjacent waterbodies and watersheds when residential development is proposed on or near water features.
 - e. Lakefront development must comply with all provincial or federal regulations pertaining to waterbodies.
 - f. Proposals for new Lakefront Residential should consider opportunities to enhance public access to the lake for water-based recreational activities.
 - g. New residential development along lakefront and riparian areas shall have regard for provincial and municipally designated Environmentally Significant Areas (see **Figure 5: Environmentally Significant Areas**). A Biophysical Impact Assessment process shall be required as part of any Conceptual Scheme, Area Structure Plan, redesignation, redistricting, subdivision or development permit application.
 - h. New development along lakefront and riparian areas shall establish their maximum densities in an Area Structure Plan. The Area Structure Plan shall consider the following criteria in determining the allowable densities:
 - i. conservation by design principles as identified in MDP Figure 10.
 - ii. form and character of the proposed buildings and structures.
 - iii. the potential carrying capacity of the waterbody as determined through appropriate studies that examine the impacts on biodiversity and water quality as completed by the developer.
 - iv. other criteria as identified in MDP Appendix 1.1 Area Structure Plans.
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|---|---|
| 7.1.10 County Residential Inventory & Analysis Study | a. The County may undertake a Country Residential Inventory to identify and catalogue all types of Country Residential development in the County. The inventory will consider servicing availability, vacancies/undeveloped lots, lot size, housing type and proximity to community and natural amenities and features. |
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- | | |
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| 7.1.11 County Residential Area Structure Plans | a. The County may update Area Structure Plans for Country Residential areas, including North (Glory Hills) and Southeast (Woodbend-Graminia/Devon Dunes). Area Structure Plan updates will incorporate technical and financial analysis to support the growth of complete communities. |
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-



8:00



RECREATION & TOURISM DEVELOPMENT



8.0 RECREATION & TOURISM DEVELOPMENT



OBJECTIVE

To encourage growth in recreation and tourism development, including supportive services and community amenities, which enhance the character of the County's many unique landscapes; **One Parkland: Powerfully Connected.**

Parkland County is a destination for recreation and tourism in the Edmonton region and beyond. Residents and visitors alike enjoy an active lifestyle made possible by Parkland County's environmental assets, tourism and recreational opportunities.

The County operates a number of significant outdoor and indoor recreation areas and facilities such as Chickakoo, Hasse Lake, Jackfish Lake, Constable Chelsea Robinson, Prospector's Point day use areas and the Entwistle Pool. The County also operates several smaller day use areas found in the Ascot Beach, Kokomoko, Gainford, Rich's Point and Muir Lake areas. The County is also a joint owner to the TransAlta Tri Leisure Centre located in the City of Spruce Grove. Local programs are delivered across Parkland through funding provided to local community associations, cost-sharing agreements and other not-for-profit organizations.





RECREATION & TOURISM

Recreation and Tourism Development | Recreation and Tourism developments provide recreational opportunities to County residents and visitors. When developed sensibly, these developments bring a range of employment and community benefits to County residents. Examples of recreation and tourism development include campgrounds, spas, golf courses, seasonal recreational vehicle parks, motorized vehicle trails and parks, equestrian facilities and non-motorized and nature trails. These developments are located in the Rural Agriculture Area and Prime Recreation and Tourism Areas. Recreation and Tourism Developments may be considered in Country Residential and Lakefront Residential Areas contingent on all applicable MDP policies being met. Recreation and Tourism Developments consist of 4 or less subdivided lots.

Seasonal Resort Development | Seasonal Resort Development provides recreational opportunities that are seasonal in nature, offers non-permanent accommodation and is focused around a local or regional amenity. These developments must be sensitive to their local context. New seasonal resort developments shall be located within the County's Prime Recreation and Tourism Areas and adequately supported by infrastructure, community services, and transportation networks.





8.1 Recreation & Tourism – General

POLICIES

8.1.1 Supporting Recreation and Tourism Development	a. The County encourages the enjoyment of its many environmental assets through resort, tourism and recreation development that is sensitive to its environmental context. b. Recreation and Tourism development should benefit residents of all ages and abilities and be located in close proximity to transportation networks. c. The County may establish a Parks Classification System to support the future development of park areas within the County.
8.1.2 Coordination with Adjacent Provincial Areas	a. The County will seek to coordinate Recreation and Tourism development planning with adjacent provincial recreation or protected areas to ensure compatibility of land uses, protection of environmental areas, preservation of viewpoints and minimization of impacts from traffic, noise and other nuisances.
8.1.3 Controlled Lake Access	a. Responsible lake access management is critical to the long-term health of local waterbodies. The County will strive to ensure proper lake access management through the proper design and management of subdivision and development adjacent to waterbodies.
8.1.4 Agri and Eco-Tourism	a. Agri-tourism and responsible eco-tourism is supported throughout the County as a way of supporting agricultural operations, promoting agricultural products, preserving natural areas, encouraging economic diversification and showcasing the rural lifestyle.
8.1.5 Reclaimed Resource Extraction Areas	a. Reclaimed natural resource extraction areas should be considered for future recreational, tourism and resort purposes.
8.1.6 Providing a Local Benefit	a. Recreation and resort development should provide a local and regional societal community and/or employment benefit.
8.1.7 Public/Private Funding	a. Opportunities for public/private funding arrangements may be supported where Recreation and Tourism development provides opportunities for public use.



8.1.8 Regional and Intermunicipal Partnerships	a. The County supports regional and intermunicipal partnerships and cost-sharing arrangements that provide recreational opportunities for County residents.
8.1.9 Off-Highway Vehicles	a. The County should partner with local off-highway vehicle groups to identify designated locations for off-highway vehicle trails, staging areas and dedicated parks within County boundaries. Priority will be given to “Prime Recreation and Tourism” areas not in High Priority Landscapes (see Figure 11 and 14). Other areas may be considered where the proposed area is located a sufficient distance from the following features to minimize any impacts: i. existing or planned future residential development; ii. sensitive ecological features including ESAs and waterbodies; and iii. existing agricultural operations. b. The County may study and update policies and regulations pertaining to off-highway vehicles.



8.1.10 Subdivision and Development Requirements for Tourism and Recreation Developments

- a. Recreation and Tourism developments must be sensitive to its environmental and agricultural context.
- b. Recreation and Tourism developments shall be located in the Rural Agriculture Area and Prime Recreation and Tourism Areas as identified in MDP **Figure 7: Development Concept** and MDP **Figure 11: Prime Recreation and Tourism Areas**.
- c. Notwithstanding the above, Recreation and Tourism developments may be considered in Country Residential and Lakefront Residential Areas as identified in MDP **Figure 7: Development Concept** where the following has been met:
 - i. Proposed developments are compatible with existing and future land uses identified in MDP **Figure 7: Development Concept**, and does not limit the long-term residential development of the area;
 - ii. Site servicing and required transportation networking can be adequately addressed to the satisfaction of Parkland County;
 - iii. Proposed developments provide local and regional benefit as per MDP Policy 8.1.6; and,
 - iv. All other applicable MDP policies and County, provincial and federal policies and regulations have been met.
- d. Land uses related to Recreation and Tourism developments, such as local service commercial, hospitality or institutional uses, may be considered provided they have appropriate transportation and utility infrastructure, integrate with surrounding land uses and appropriately mitigate any off-site impacts.
- e. New Recreation and Tourism development along lakefronts must be designed to minimize impacts on the local watershed including adherence to applicable setbacks and considerations for low impact landscaping and controlled runoff.
- f. New Recreation and Tourism developments in High Priority Landscapes must:
 - i. Consider conservation design principles in site planning and building location;
 - ii. Adhere to and meet all MDP policies and requirements for development in High Priority Landscapes prior to subdivision and development occurring.
- g. Developments on more than 4 subdivided lots are considered Seasonal Resort Development and shall comply with MDP Policy 8.2.5 and all other applicable MDP policies.





8.2 Prime Recreation and Tourism Areas

Prime Recreation and Tourism Areas identify areas with unique environmental, agricultural and community qualities that make them well-suited for recreation and tourism. Prime Recreation and Tourism Areas are identified to support the growth of synergies between existing, planned and future development. The following policies apply to specific areas within the County as identified on **Figure 11: Prime Recreation and Tourism Areas**.

PRIME RECREATION AND TOURISM AREAS

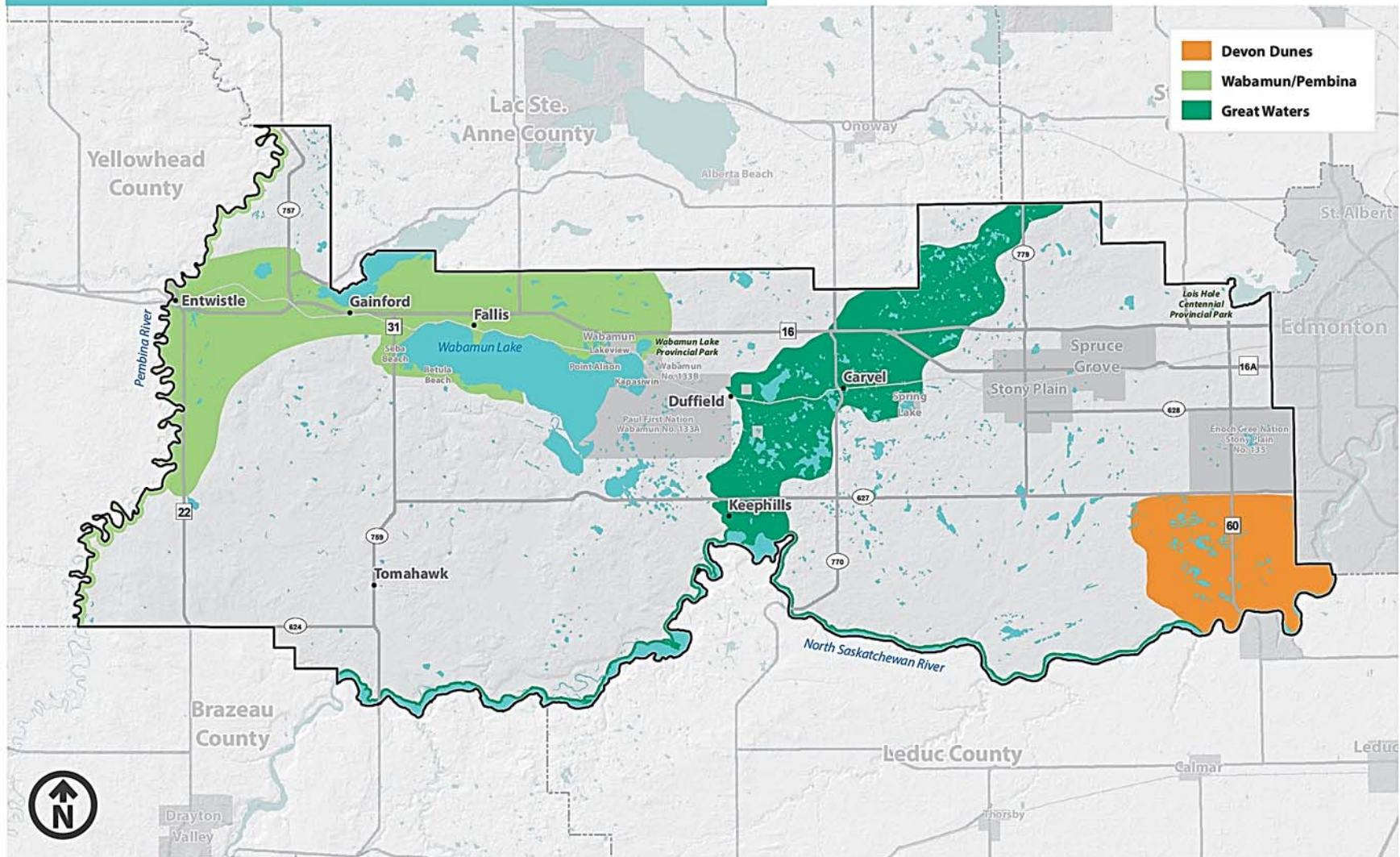
Prime Recreation & Tourism Area – Wabamun / Pembina is intended to support the existing tourism features of Wabamun and Wabamun Lake, Entwistle, Trestle Creek, Pembina River and reclaimed mine areas. The Prime Recreation & Tourism Area – Wabamun/Pembina is intended to support a concentration of resort, tourism, recreation amenities and other supportive uses.

Prime Recreation & Tourism Area – Devon Dunes is intended to support and enhance the existing tourism features of the Devon Dunes area such as the University of Alberta Botanic Garden, Clifford E. Lee Natural Area, Devonian Trail system, value-added agricultural operations (berry farms, agri-tourism operations), existing community facilities, and proximity to the North Saskatchewan River Valley, Bunchberry Meadows Conservation Area and surrounding amenities. Prime Recreation & Tourism Area – Devon Dunes is intended to support a concentration of agri-tourism, tourism, hospitality and other supportive uses.

Prime Recreation and Tourism Area – Great Waters is intended to promote a quiet waterfront lifestyle supported by recreational amenities in the County's central lakes area and along the North Saskatchewan River, such as Chickakoo, Hasse Lake, Jackfish Lake, existing boat launches and other features. These tourism areas provide places for fishing, boating, camping and other waterfront activities in a setting that is unique within the Edmonton region.



FIGURE 11 | PRIME RECREATION AND TOURISM AREAS





RECREATION & TOURISM DEVELOPMENT

POLICIES

8.2.1 Prime Recreation and Tourism Areas	a. Prime Recreation and Tourism Areas shall be located as shown on Figure 11: Prime Recreation and Tourism Areas and will include Prime Recreation & Tourism Area – Wabamun / Pembina, Prime Recreation & Tourism Area – Devon Dunes and Priority Recreation and Tourism Area – Great Waters. b. Significant public and private investment in recreation and tourism development not located within the County's hamlets should generally be directed to Prime Recreation and Tourism Areas. c. Future recreation and tourism developments shall be appropriately serviced based on their use and intensity. The County, through development of a Utilities Plan, will implement servicing standards for recreation and tourism uses.
8.2.2 Prime Recreation & Tourism Area – Wabamun / Pembina	a. Campgrounds, boating services, river tubing, pedestrian trails and parks, restaurants and hospitality uses, as well as other recreation and tourism supportive uses, are encouraged to locate in Prime Recreation & Tourism Area – Wabamun / Pembina
8.2.3 Prime Recreation & Tourism Area – Devon Dunes	a. Campgrounds, pedestrian trails and parks, agri- and eco-tourism, value-added agriculture, hospitality uses and other recreation and tourism supportive uses are encouraged to locate in Prime Recreation & Tourism Area – Devon Dunes.
8.2.4 Prime Recreation & Tourism Area – Great Waters	a. Campgrounds, cabins, pedestrian trails and parks, equestrian facilities and other recreation and tourism supportive uses are encouraged to locate in Prime Recreation & Tourism Area – Great Waters.



8.2.5 Seasonal Resort Development

- a. Seasonal Resort Developments provide recreational opportunities within the County to residents and visitors. Seasonal Resort developments are multi-parcel subdivisions that are seasonal in nature with non-permanent accommodation.
 - b. New Seasonal Resort Developments have levels of infrastructure which meet the requirements of municipal and provincial standards and regulations and limit the resort to seasonal use.
 - c. New Seasonal Resort Development must be sensitive to its local and environmental context and must be located:
 - i. within a Prime Recreation and Tourism Area as identified in Figure 11: Prime Recreational Tourism Areas;
 - ii. within, or redistricted to, a recreational district;
 - iii. where adequately supported by infrastructure, community services, and transportation networks; and,
 - iv. near or adjacent to a local or regional amenity
 - d. The County may require a developer to complete technical studies to determine potential impacts to adjacent waterbodies and watersheds where the development is proposed on or near waterfeatures.
 - e. New Seasonal Resort Development must comply with all provincial or federal regulation pertaining to waterbodies
 - f. New Seasonal Resort Development shall have regards to provincial or municipally designated Environmentally Significant Areas (see Figure 5: Environmentally Significant Areas). A Biophysical Impact Assessment process shall be required as part of any Conceptual Scheme, Area Structure Plan, redesignation, subdivision or development permit application.
 - g. New development along lakefront and riparian areas shall establish their maximum densities in an Area Structure Plan. Area Structure Plan shall consider the following criteria in determining the allowable densities:
 - i. conservation by design principles as identified in MDP Figure 10.
 - ii. form and character of the proposed buildings and structures.
 - iii. the potential carrying capacity of the waterbody as determined through appropriate studies that examine the impacts on biodiversity and water quality as completed by the developer.
 - iv. other criteria as identified in MDP Appendix 1.1 Area Structure Plans.
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TRANSPORTATION AND UTILITY INFRASTRUCTURE





9.0 TRANSPORTATION AND UTILITY INFRASTRUCTURE



OBJECTIVE

To provide safe, connected and efficient transportation and utility infrastructure that supports the community, economic diversification and future development;
One Parkland: Powerfully Connected.

Transportation and utility infrastructure services communities, employment areas, amenities and municipalities.

Transportation infrastructure can include roadways, rail, transit, airports, aerodromes as well as active transportation infrastructure (e.g. trails, pathways). Utility infrastructure systems, including water, wastewater and stormwater systems (overland drainage and piped systems), must be safe and reliable. Where municipal services are available, the County promotes a concentrated development pattern to reduce the cost of off-site infrastructure and maximize efficiency. Trade corridors also play a strong role in the planning of infrastructure and infrastructure upgrades. The County's municipal water and wastewater systems are identified in **Figure 12: Transportation Infrastructure** and **Figure 13: Utility Infrastructure**.

POLICIES

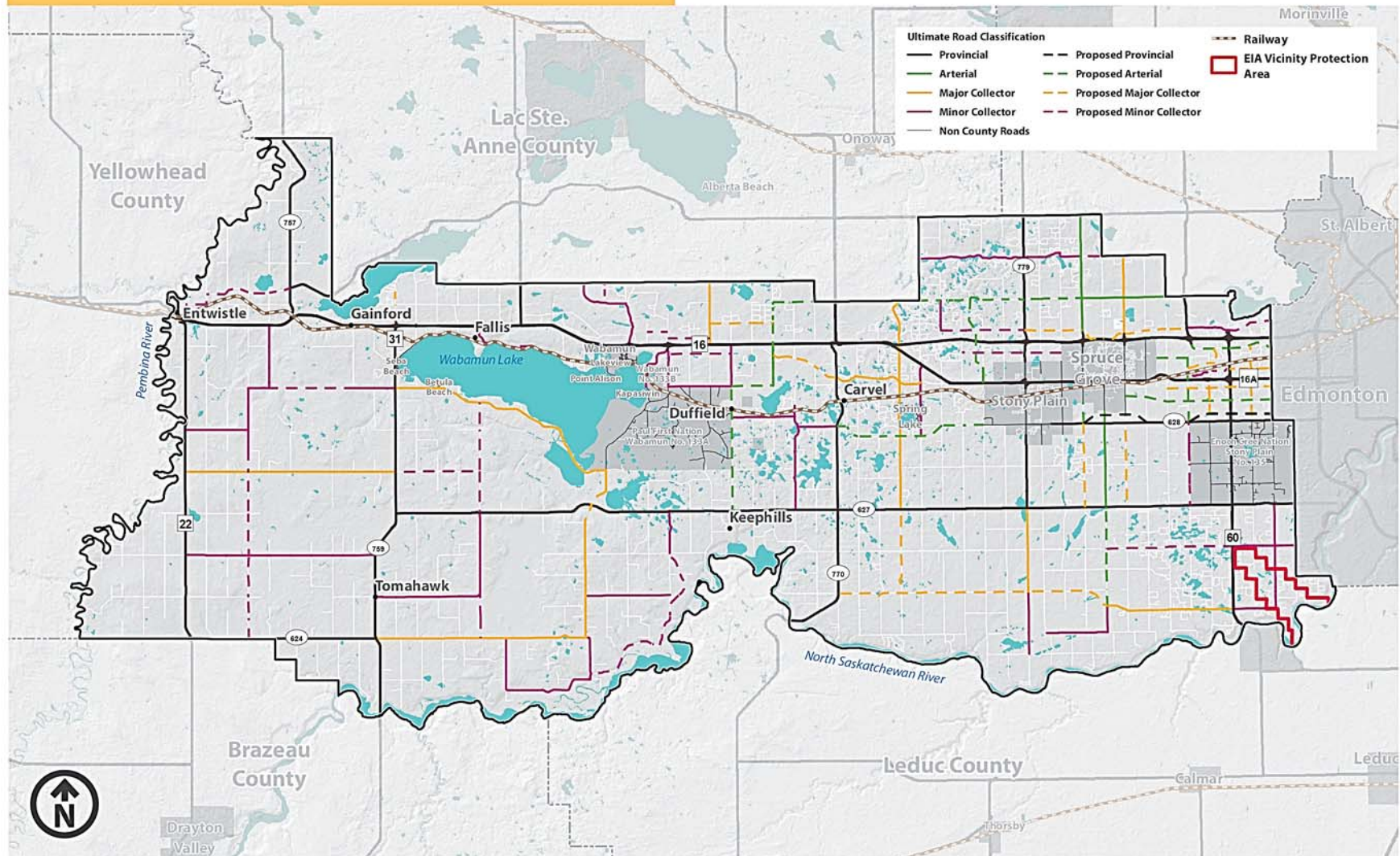
9.0.1 Made in Parkland Approach

- The County will employ life-cycle and sustainable development principles when planning future transportation and utility infrastructure projects to ensure the efficient use of materials and land use when constructing, operating and maintaining municipal infrastructure.





FIGURE 12 | TRANSPORTATION INFRASTRUCTURE





9.1 Transportation Infrastructure

Parkland County works with its partners at Alberta Transportation, Transport Canada, the Capital Region Board, and regional neighbours to advocate for strong and efficient transportation networks. County and regional transportation networks are identified on **Figure 12: Transportation Infrastructure**.

POLICIES

9.1.1	Creating a transportation system	a. The County will protect long-term transportation corridors to maintain a safe, coordinated, efficient and cost-effective road network. b. Planning for roadways should be coordinated with other modes of transportation including the rail network, transit systems, airports and aerodromes to the greatest extent possible.
9.1.2	Transportation Master Plan	a. The County will develop and maintain a Transportation Master Plan to ensure alignment with the Edmonton Metropolitan Region Growth Plan and this Municipal Development Plan. b. The Transportation Master Plan will identify and prioritize transportation and infrastructure upgrades, trade corridors and corridor routes and alignments.
9.1.3	Recovering Costs	a. The County will maintain current bylaws for off-site levies to recover the capital cost of providing roads, sanitary sewer, water, storm water systems and other services to new developments. Developers shall pay all outstanding levy fees as a condition of development. b. Developers will be responsible to front-end the costs of on-site and off-site infrastructure systems. The County will, where applicable, endeavor to assist in cost recovery of oversizing and extension of municipal improvements that accommodate future development.



9.2 Roadways

Roadways are the primary means of connecting County residents and businesses together. The County strives to maintain the efficient movement of goods and people. When approving new developments, it is important to consider the impacts on existing road infrastructure and long-term maintenance costs.

When making land use and development decisions, the County will consider the safe, efficient and cost-effective provision of transportation infrastructure services. Parkland County's primary road network is identified on **Figure 12: Transportation Infrastructure**.

POLICIES

9.2.1 Providing Safe and Efficient Services	a. When making land use and development decisions the County will consider the safe, efficient and cost-effective provision of transportation infrastructure services.
9.2.2 Visibility from Major Corridors	a. Development that is highly visible from a major transportation corridor may be required to reduce the visual impact of the development through design features such as landscaping, fencing, buffering and other site design features.
9.2.3 Avoiding Sensitive Areas	a. Developments may be required to design road networks as far away as possible from environmentally significant areas, wildlife corridors or habitats and prime agricultural lands while maintaining high standards for safety. Where a proposed development directly impacts these sensitive features, mitigation measures will be required to the satisfaction of the County.



TRANSPORTATION AND UTILITY INFRASTRUCTURE

9.2.4 Subdivision and Development Requirements for Sites with Roadways

- a. Development within the Rural Agricultural Area should efficiently manage the need for new or expanded County road infrastructure.
 - b. Legal and physical access must be provided by the Developer for any subdivision or development to the satisfaction of the County.
 - c. All external and internal roads used to serve a residential, multi-parcel lot or major development shall be paved to the satisfaction of Parkland County.
 - d. The County will require roadways to be developed to the current Engineering Design Standards of the County.
 - e. As part of a development, the County may require:
 - i. internal condominium roads to be paved to County standards; and
 - ii. buffering, fencing or landscaping to enhance public safety and mitigate noise annoyance caused by transportation infrastructure.
 - f. The use of a panhandle roadway to obtain legal and physical access shall be avoided.
 - g. At the time of subdivision the County shall identify any lands required for widening of municipal roads. The dedication of lands for road widening shall apply to all new and remnant parcels adjacent to identified municipal roads in accordance with County policies.
 - h. All future subdivision and development projects shall adhere to federal and provincial acts, standards and regulations including, but not limited to:
 - i. *Alberta Traffic Safety Act* and procedures;
 - ii. *Alberta Municipal Government Act*;
 - iii. Federal transportation acts and regulations;
 - iv. Alberta Building Code; and
 - v. CN Policy and Regulatory recommendations.
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9.2.5	Working with Alberta Transportation	a. The County will liaise with Alberta Transportation to facilitate network improvements where County roadways and provincial highways intersect. b. New developments shall comply with Alberta Transportation's standards for highway access management at the subdivision and development stage.
9.2.6	Multi-Use Roadways	a. The County supports active transportation across the County and may consider designing multi-use roadways with wider shoulders for non-motorized trail activity (such as walking, jogging, bicycling, snowshoeing and cross-country skiing) along new or upgraded rural roadways.

9.3 Transit

Parkland County's public transportation is safe, resilient and reliable utilizing effective partnerships and innovative service delivery opportunities to serve the County's key employment areas and residents.

POLICIES

9.3.1	Transit Service in Major Employment Areas	a. Support a safe, resilient and reliable transit service that provides connections to the County's major employment areas, including Acheson Industrial Area.
9.3.2	Transit service in the Rural Agricultural Area	a. The County supports and encourages community-led transit service programs, especially those for the elderly and people with accessibility needs.
9.3.3	Regional Transit Plan	a. The County supports the creation and implementation of a Regional Transit Plan.
9.3.4	Innovative Service Delivery	a. The County supports exploring public transportation innovations to deliver service to the County's businesses and residents in an effective and efficient manner.



9.4 Rail Infrastructure

Railways provide critical links between Parkland County and regional, national and international markets. Canadian National (CN) has an east-west main rail line that passes through Parkland County between Edmonton and the west coast. Rail infrastructure plays a critical role in long-term economic growth and the efficient and effective movement of goods. The County seeks to ensure that development around railways is compatible with their operation and encourages the development of additional railway infrastructure where it supports economic development and growth. The County will work with rail operators to ensure the continued viability of rail corridors.

POLICIES

9.4.1 Providing Effective and safe Rail Service	a. The County will collaborate with CN Railway and Transport Canada to maximize rail access to the Acheson Industrial Area, Entwistle and other future developments that may require rail access where it provides benefit to the County. b. The County and rail operations may participate in cost-sharing agreements related to infrastructure upgrades that are needed to ensure the safe operation of railways in the County where appropriate.
9.4.2 Grade Separated Crossings	a. The County will work with Alberta Transportation to support the development of grade-separated crossings at strategic locations within the County.
9.4.3 Subdivision and Development Requirements Around Railways	a. Sensitive or incompatible land uses such as multi-parcel residential subdivision development are discouraged within close proximity of a railway right-of-way. b. Proposals for sensitive uses, such as residential uses, within close proximity of a right of way should undertake a noise study and incorporate appropriate mitigation measures into the project design. The developer shall thoroughly investigate all available options including alternative site layouts and/or attenuation measures. c. All proposed development within close proximity of a railway right-of-way may be required to undertake a vibration study and subsequently to mitigate potential adverse effects from vibration that are identified. d. All proposed development adjacent to railways shall ensure that appropriate safety measures such as setbacks, berms and security fencing are provided to the satisfaction of the County and in consultation with the appropriate railway operator. e. Where applicable, the County will ensure that sightline requirements of Transport Canada and the railways are addressed. f. All new developments within close proximity of a railway shall comply with current Federation of Canadian Municipalities and the Railway Association of Canada <i>Guidelines for New Development in Proximity to Railway Operations</i>.



9.4.4 Abandoned rail corridors

- a. The County may consider purchase of any abandoned railway right-of-ways for the creation of public pathways, parks or other public use.

9.5 Airports and Aerodromes

The County has one operating airport within its boundaries. An airport is defined as any area of land, water (including a frozen surface) or other supporting surface used for aircraft landings or take-offs. Airports and aerodromes are primarily regulated by Transport Canada.

POLICIES

9.5.1 Compatible Land Use Development

- a. The County will endeavour to work with Transport Canada to ensure any new private airports, airstrips and aerodromes are compatible with existing and future development and follow current design and consultation guidelines.

9.5.2 Promote Growth Opportunities around Airports/ Aerodromes

- a. The County will consider its support of airport and aerodrome development based on potential off-site impacts and compatibility with adjacent land uses.

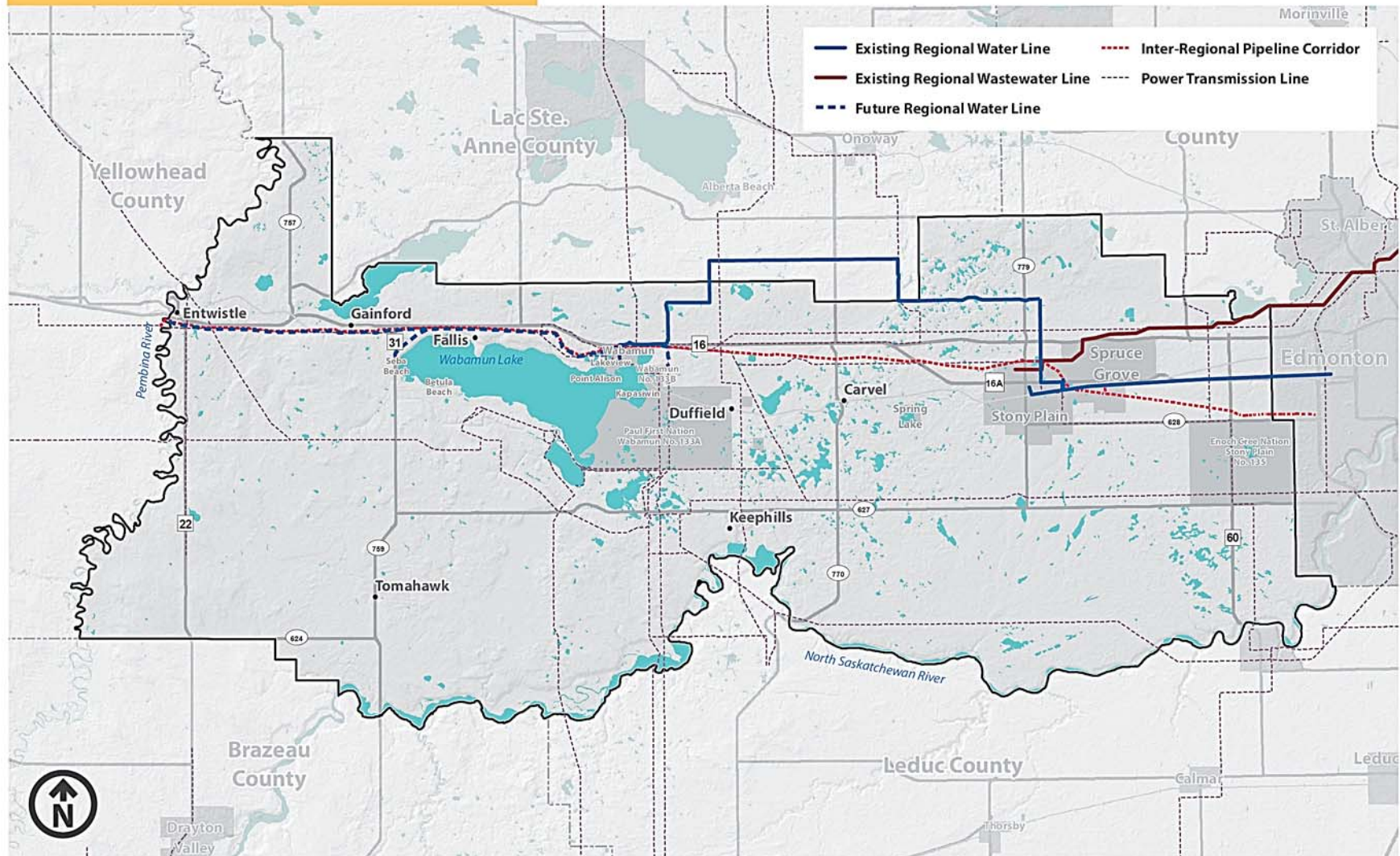
9.5.3 Subdivision and Development Requirements Around Airports/ Aerodromes

- a. Subdivision and development in the vicinity of private airports, airstrips and aerodromes shall be restricted to ensure the safe operation of the airport, airstrip or aerodrome.
- b. Multi-parcel development associated with an airport or aerodrome shall be planned as part of a Conceptual Scheme or Area Structure Plan.
- c. Subdivision and development on airport and aerodrome lands may be subject to federal, provincial and municipal requirements. Developments shall meet all federal, provincial and municipal requirements where applicable.



TRANSPORTATION AND UTILITY INFRASTRUCTURE

FIGURE 13 | UTILITY INFRASTRUCTURE





9.6 Water, Wastewater and Stormwater Servicing

Water, wastewater and stormwater servicing must be managed effectively to safeguard public health and prevent pollution and contamination of water, both surface and groundwater resources. Municipal water and wastewater servicing should be coordinated with land use planning and existing patterns of development in order to be efficient and cost-effective. The Capital Region Parkland Water Service Commission (CRPWSC) and West Inter-Lake District (WILD) water line offer development opportunities in areas including Acheson Business Industrial Park, Fifth Meridian Business Park and various residential areas north of Highway 16. The Alberta Capital Region Wastewater Commission (ACRWC) also services key parts of the County including Acheson and residential areas north of Highway 16. Regional servicing utility lines are identified on **Figure 13: Utility Infrastructure**.

POLICIES

9.6.1 Providing Safe Municipal Water and Wastewater Services

- a. The County will protect long-term infrastructure corridors to ensure infrastructure servicing that is efficiently integrated with planned land use.
- b. Development of future municipal water and wastewater systems shall comply with the Edmonton Metropolitan Growth Plan.
- c. The County will maintain membership in the WILD waterline, Capital Region Parkland Water Services Commission and the Alberta Capital Region Wastewater Commission.
- d. The County will ensure the regular maintenance of County owned and operated waste and wastewater facilities and infrastructure.
- e. The County shall develop and maintain a Water and Wastewater Master Plan to guide future servicing strategies, decision-making and investment in the County.



TRANSPORTATION AND UTILITY INFRASTRUCTURE

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| 9.6.2 Municipal Servicing in Employment Areas | <ul style="list-style-type: none">a. Development within the Acheson Business Industrial Park and Fifth Meridian Business Park shall be serviced by piped municipal water and wastewater servicing in accordance with the Edmonton Metropolitan Region Growth Plan and applicable Area Structure Plans.b. Notwithstanding the above, on-site servicing for future industrial and commercial developments shall be permitted in the Acheson Business Industrial Park on Lot 2 and Lot 3, Plan 9420960 and Fifth Meridian on Lot B, Plan 2980 RS, Pt NW 12-53-28 W4M and Lot C, Plan 5209 RS, Pt NE 12-53-28 W4M.c. The County may consider extending municipal water and wastewater servicing for new industrial and commercial developments to the Entwistle Business Industrial Park. The County may recover the costs of extending municipal servicing through an off-site levy bylaw or other cost recovery mechanisms. |
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| 9.6.3 Servicing Country Residential Development | <ul style="list-style-type: none">a. Country residential development may be serviced by on-site water and private sewage systems, municipal infrastructure or private communal systems. All systems shall be developed to provincial and applicable municipal standards. |
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| 9.6.4 Extending Utility Infrastructure | <ul style="list-style-type: none">a. The County may propose and develop extensions to utility infrastructure that:<ul style="list-style-type: none">i. support and enhance capacity in growth areas such as major employment areas, local employment areas, Priority Growth Hamlets, Growth Hamlets and populated multi-parcel subdivision areas;ii. are supported by the appropriate Commission or governing body and its members;iii. align with the overall direction outlined in this MDP and Council Strategic Plan; andiv. align with overall policy direction in the Edmonton Metropolitan Growth Plan. |
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| 9.6.5 Recovering Costs | <ul style="list-style-type: none">a. The County will develop and maintain current bylaws for off-site levies and redevelopment levies to recover the capital cost of providing roads, sanitary sewer, water, or storm water systems to new developments.b. Developers shall pay all outstanding levy fees as a condition of subdivision and/or development where fees have been established by the County.c. Developers will be responsible to front-end the costs of the on-site and off-site infrastructure systems. The County will, where applicable, endeavor to assist in cost recovery of oversizing and extension of municipal utility infrastructure that will accommodate future development. |
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9.6.6 Subdivision and Development Requirements for Municipal Servicing

- a. Multi-parcel subdivisions are required to connect to municipal water and wastewater systems where existing services are available.
- b. Multi-parcel development must be serviced by municipal infrastructure when located within the Metropolitan Area as identified within the Edmonton Metropolitan Region Growth Plan and identified on **Figure 3: Edmonton Metropolitan Region – Policy Tiers**.
- c. Costs associated with the extension of piped municipal services shall be borne by the Developer.
- d. Developers may be required to oversize infrastructure to support future growth. Infrastructure shall be developed to County standards.
- e. Utility infrastructure for all developments must be provided to the satisfaction of the County and in accordance with all municipal and provincial policies and regulations.

9.6.7 Private On-site Water and Wastewater Systems

- a. Private on-site water and wastewater systems shall comply with:
 - i. all relevant provincial legislation and regulations (e.g. *Alberta Health Act*, Private Septic Regulations, Alberta Environment);
 - ii. all relevant Alberta Building Code regulations; and
 - iii. all applicable County standards, bylaws, procedures, policies including this Municipal Development Plan and the County Land Use Bylaw.
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9.6.8 Communal Water and Wastewater Systems

- a. When a communally serviced development is proposed, the County may require a study on communal servicing that identifies the benefits and risks of such systems and specifies project ownership, maintenance requirements and recommended construction standards.
 - b. The County may consider full or partial communal systems to service future multi-parcel subdivisions in the following areas:
 - i. areas located in close proximity to built-up urban areas including hamlets;
 - ii. areas with an identified high susceptibility of groundwater contamination as identified in the Environmental Conservation Master Plan;
 - iii. areas within 100 m of a named waterbody or watercourse;
 - iv. innovative development proposals for higher-density multi-parcel development in areas where municipal water and wastewater systems are not available, at the discretion of the County; and
 - v. areas deemed unsafe or not suitable for on-site water or sanitary systems for reasons of safety, the environment or other considerations.
 - c. Communal water and wastewater systems shall be owned and maintained by a private condominium or cooperative corporation. The County shall not be responsible for the construction, on-going operation, improvement, maintenance or replacement of private communal systems. The operation, improvement, maintenance or lifecycle replacement of any type of communal system shall be the sole responsibility of a condominium corporation, cooperative or a third party utility company.
 - d. Infrastructure associated with communal systems shall be located on common property, open space, or public utility lots, and not on privately held property that is not of a common (communal) nature.
 - e. Proposals for communal systems shall, as part of their application, identify a plan for capital replacements, major rehabilitation, maintenance and construction that is acceptable to the County, and complete a fiscal impact assessment that considers life-cycle costs of maintaining the infrastructure required to service the subdivision and/or major development.
 - f. The installation, operation, improvement, maintenance and replacement of communal systems shall meet all Province of Alberta and County standards.
-



9.6.9 Stormwater Management Planning

- a. A storm water management plan, to be prepared by a qualified engineer, may be required to consider development impacts both on-site and within the larger surrounding drainage catchment area.
- b. When the need for a constructed storm water management facility is identified within a development proposal, these facilities should be designed with a naturalized appearance and may form part of the open space aspects of a development.
- c. Developments should incorporate low impact development techniques to maintain surface water quality and manage surface water quantity. These techniques may include rain gardens, swales, planters, trenches, cisterns and permeable pavement or other techniques.

9.6.10 Subdivision and Development Requirements for Stormwater Management

- a. On-site wetlands and low-lying areas should be incorporated into new subdivision planning and development to the greatest extent possible as a means of managing stormwater and mitigating the potential for overland flooding.
 - b. All future subdivisions shall adhere to *County Policy C-ES04 – Storm Water Management Facility Naturalization* as a condition of subdivision approval.
 - c. Alternative water conservation measures such as rain water collection and reuse are encouraged in new developments.
 - d. All subdivision and development must be in compliance with Alberta Environment regulations and standards.
-



9.7 Infrastructure Corridors

Key energy, infrastructure and multi-use corridors provide infrastructure services to the region while limiting conflict with other types of land uses. The County will be proactive in seeking to engage with industry and regulators to coordinate development around infrastructure corridors in ways that increase public safety, manage risk and promote the efficient use of land.

POLICIES

9.7.1 Promoting Multi-Use Corridors	a. The County will protect long-term energy, infrastructure and multi-use corridors, as identified in Figure 13: Utility Infrastructure, in collaboration with federal and provincial regulators, regional partners and utility and energy providers. b. Energy and utility infrastructure, such as high pressure pipelines, sour gas facilities and major power transmission lines should locate within energy, infrastructure and multi-use corridors wherever possible.
9.7.2 Compatible development around Corridors	a. Development in the vicinity of energy infrastructure and multi-use corridors should promote a safety and risk management approach to development through the application of setbacks, buffers and landscaping, and by promoting the location of population density and essential services away from multi-use corridors.



9.8 SMART Parkland

Internet connectivity is key to promoting residential and employment growth within the Rural Agricultural Area. The County supports the implementation of SMART Parkland which aims to get rural residents across the County connected to high-speed/broadband internet.

POLICIES

9.8.1 Promoting a hybrid open access model of fiber and towers	a. The County will continue to promote and evolve the broadband network through the combination of tower and fiber expansions. b. The hybrid model used by Parkland County will continue as an open access model to support future Wireless Internet Service Providers and other telecommunications, emergency services and industry providers.
9.8.2 Recovering Costs	a. The County will endeavor to offset operational and replacement costs of the infrastructure through co-location to a variety of tenants.
9.8.3 Regional and Provincial Broadband Plan	a. The County supports the creation and implementation of a Regional, Provincial, and Federal broadband plan.
9.8.4 Locating Communication Towers	a. Telecommunication towers are supported throughout the County where they are safely and appropriately located and designed to minimize visual, aesthetic and environmental impacts.



9.9 Sour Gas Facilities

In accordance with the *Municipal Government Act*, Parkland County recognizes the importance of safe planning around sour gas pipelines and facilities and the role of the Alberta Energy Regulator (AER) in regulating sour gas facilities located within the County and the role of the Alberta Energy Regulator (AER) in regulating sour gas facilities located within the County.

POLICIES

9.9.1 Sour Gas Facilities

- a. Setback guidelines for sour gas facilities will be in accordance with the setbacks established by the AER or other authority having jurisdiction.
 - b. The County will ensure all subdivision and development applications which are located within 1.5km of a sour gas facility are referred to the AER.
 - c. Pursuant to the *Municipal Government Act*, a license, permit, approval or other authorization granted by the AER will prevail over any bylaw or land use decision rendered by Parkland County.
 - d. Any subdivision or development will not be approved if the setback distance is less than the setbacks outlined by the AER, and pursuant to the *Subdivision and Development Regulation*, unless Parkland County receives written approval for a lesser setback distance.
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NATURAL ENVIRONMENT



10.0 NATURAL ENVIRONMENT

OBJECTIVE

To protect, preserve and/or enhance the County's High Priority Landscapes, Environmentally Significant Areas and other natural features through effective and appropriate conservation and management practices; **One Parkland: Powerfully Connected.**

The County is characterized by a diverse network of natural areas, including forests, lakes, wetlands and riparian areas, as well as many unique landform features.

Some of the more prominent landform features in the County include buried bedrock aquifer valleys such as the Beverly Buried Valley and the Onoway Buried Aquifer; glacial landforms such as the Devon Dunes, Carvel Pitted Delta and Smithfield Esker; as well as rare or unique marl ponds, including the Wagner Natural Area. These ecological features and landforms have helped direct and shape the current land use that we see today, from agricultural crop and livestock production, to acreages and lakefront property around the County's many lakes.

Maintaining and promoting the retention of unique landscape features, ecological goods and services and inherent biodiversity requires an integrated approach to land management. Landscapes near slopes and along Environmentally Significant Areas (ESAs), waterbodies and watercourses can offer a high level of amenity for development, but development must be planned with the safety of future users in mind and in ways that do not compromise the ecological integrity of these areas. For this reason, Parkland County emphasizes the importance of High Priority Landscapes and an integrated approach to environmental management.





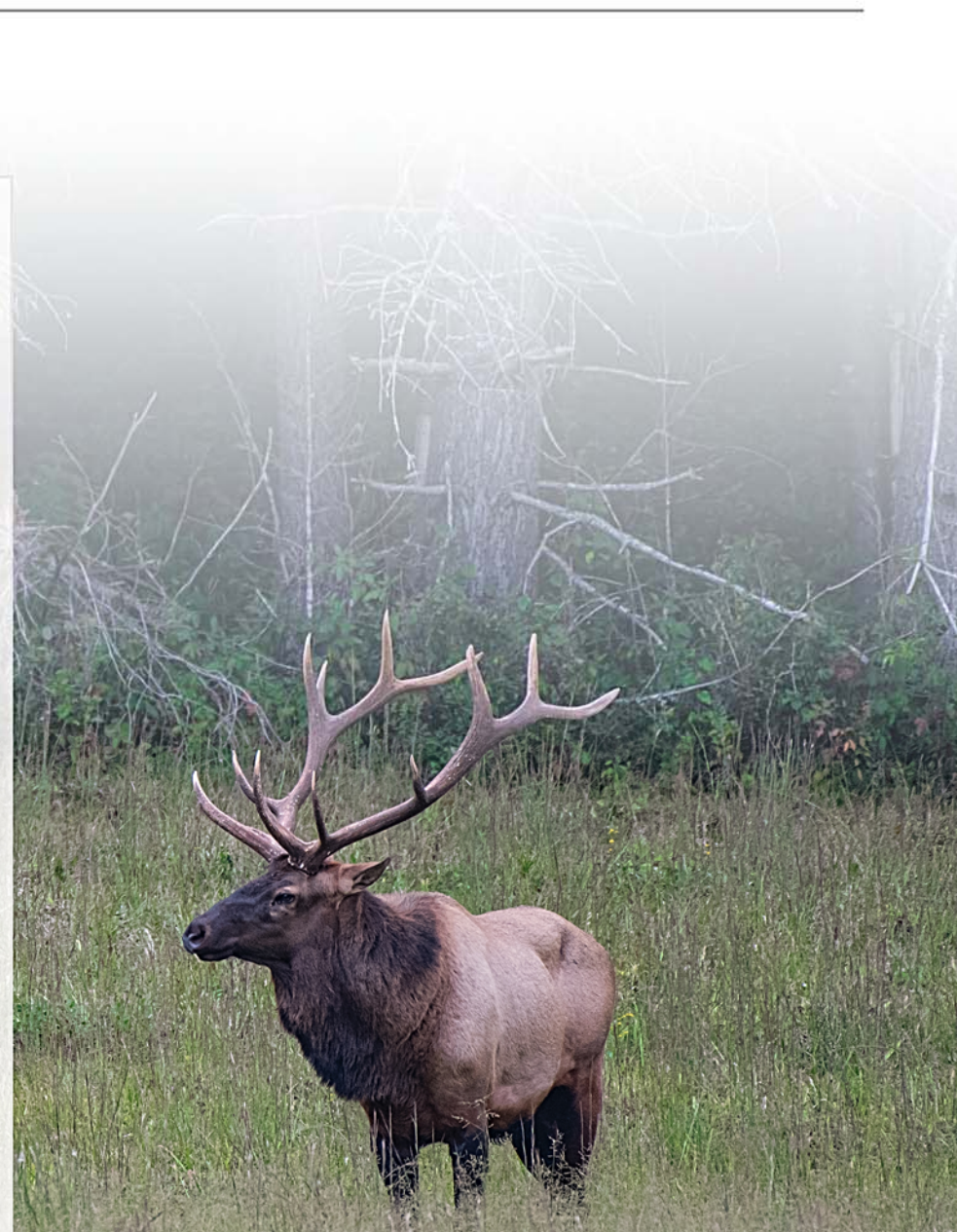
NATURAL ENVIRONMENT

High Priority Landscapes | High Priority Landscapes are characterized by overlapping features of ecological importance including multiple Environmentally Significant Areas (ESAs) of various significance, wetland complexes, biodiversity hotspots and landscape connectivity, sensitive surface and groundwater features, and sensitive landforms. High priority landscapes are ecologically complex and form a system that requires careful consideration to ensure their continued ecological function and the range of benefits provided by these landscapes are maintained.

Environmentally Significant Areas | Environmentally Significant Areas (ESAs) are priority areas for conservation as identified in the Environmental Conservation Master Plan (ECMP). The ECMP outlines management considerations for each ESA as part of its recommendations.

Biodiversity | Biodiversity is a short form for 'biological diversity,' and includes the variety of plants, animals and other living organisms in a particular area or region.

Natural Ecological Capital and Ecological Goods and Services | Natural Ecological Capital refers to all non-anthropogenic assets or the components of living ecosystems (land, air, water and biota) and their associated interactions and functions. Ecological goods and services are the output of natural ecological capital that provide benefits to all living things (by providing air, water, food, raw material), as well as human security and quality of life. Fundamental to ecosystem goods and services is biodiversity which underpins ecosystem resilience, integrity and functioning. It is imperative to maintain the integrity and health of ecological systems to ensure the production of ecological goods and services that sustain life in Parkland County and beyond.





HIGH PRIORITY LANDSCAPES ANALYSIS

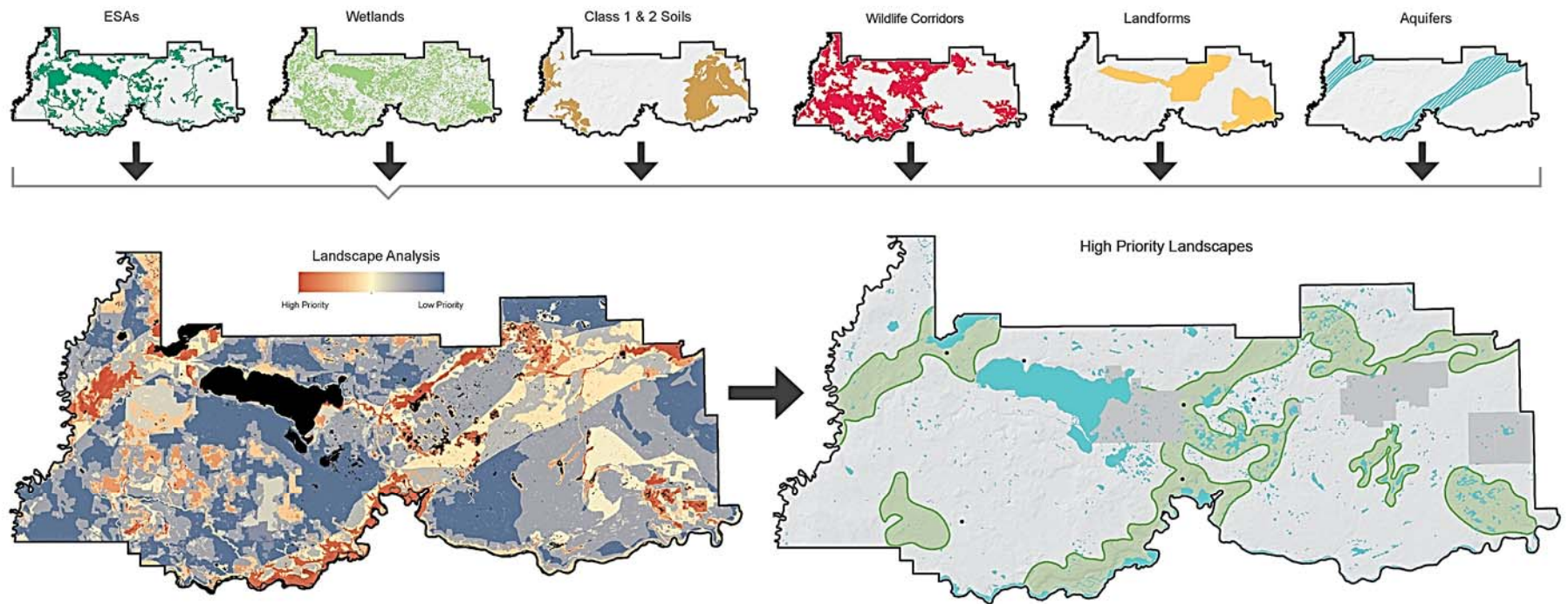
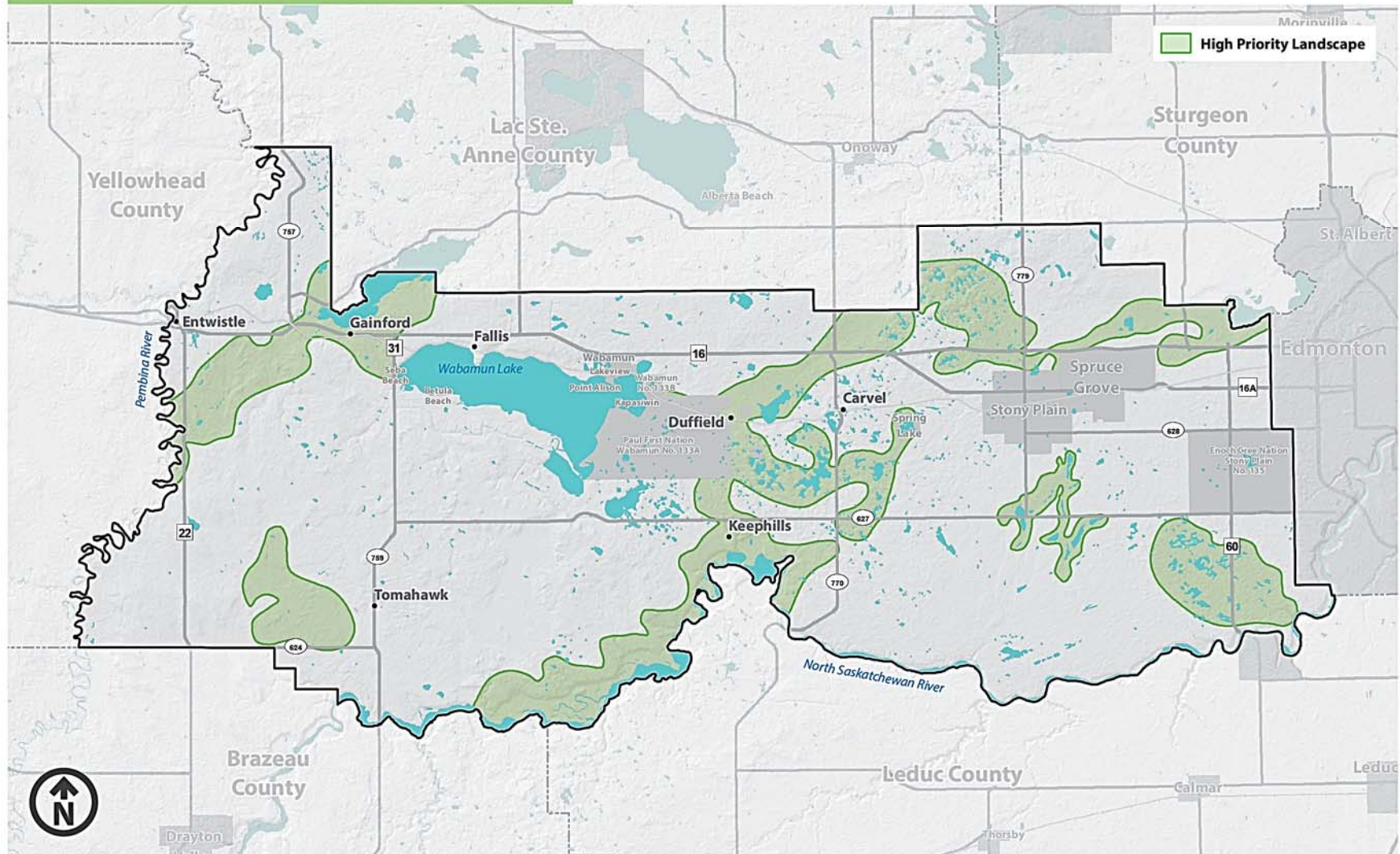




FIGURE 14 | HIGH PRIORITY LANDSCAPES





10.1 Healthy Ecosystems

Parkland County is committed to maintaining and promoting the retention of healthy ecosystems and their natural ecological capital, as these areas provide environmental, economic, social and cultural value. The purpose of the County's environmental policies is to retain the quality and abundance of Natural Ecological Capital (e.g., land, air, water and biodiversity) and the Ecological Goods and Services they provide - including carbon sequestration, flood and drought resilience, purification of air and water, and pollination of crops and other plants - in ways that conserve their inherent value. The County's High Priority Landscapes are identified on **Figure 14: High Priority Landscapes**, the County's Environmentally Significant Areas are identified on **Figure 5: Environmentally Significant Areas**, and the County's wetlands are identified on **Figure 6: Wetlands**.

POLICIES

10.1.1 Healthy Ecosystems

- a. Environmental stewardship is a County priority. The County will consider the ecological integrity of ecosystems, wildlife habitat and corridors and the potential cumulative impacts of development on the County landscape as a part of planning and development decisions.
- b. The County shall consider the ecological integrity of the County's natural environmental features, High Priority Landscapes, biodiversity, wildlife habitat and corridors and overall ecosystem health when undertaking or updating statutory plans, policies, bylaws and other planning documents.
- c. Planning and development projects initiated by the County or private developers that require municipal approvals will be required to undertake the following technical assessments related to the environment as requested or required by the County:
 - i. the County's Biophysical Assessment process, as outlined in *Appendix 2: Requirements for Technical Reports and Studies*, either a desktop or comprehensive biophysical assessment to be completed by a qualified professional;
 - ii. a Geotechnical Assessment to determine slope stability where unstable terrain or steep slopes (>15%) may be present;
 - iii. a Flood Hazard Study if all or part of a development site is located within the floodplain of a watercourse or water body; and
 - iv. a Phase 1 Environmental Site Assessment (ESA) as outlined in *Appendix 2: Requirements for Technical Reports and Studies*. If the results of the Phase 1 ESA indicate that a Phase 2 ESA is required, the Phase 2 ESA shall be completed as outlined in *Appendix 2*.



- d. All planning and development projects initiated by the County or private developers shall adhere to relevant federal and provincial acts, standards and regulations.
- e. The County will ensure its land holdings comply with the environmental standards outlined in the Alberta Tier 1 and Tier 2 Soil and Groundwater Remediation Guidelines.
- f. Best Management Practices, as outlined in the County's Environmental Conservation Master Plan, should be incorporated whenever possible to protect Natural Ecological Capital and support healthy ecosystems.

10.1.2 High Priority Landscapes

- a. High Priority Landscapes are environmentally significant areas that require a careful approach to development. High Priority Landscapes are identified on **Figure 14: High Priority Landscapes**. Developments in these areas should address the following to the satisfaction of the County:
 - i. integration with large natural ecosystem complexes and critical wildlife corridor linkages as identified in the County's Environmental Conservation Master Plan. Development proposals that may impact these systems should consider and integrate these landscape features as part of development projects;
 - ii. preservation of surface and ground water interactions and connectivity; and
 - iii. cumulative effects at the watershed and broader landscape scale.
- b. A Desktop or Comprehensive Biophysical Assessment process, as outlined in Appendix 2: Requirements for Technical Reports & Studies, shall be undertaken when multi-parcel developments are proposed within High Priority Landscapes as identified in **Figure 14: High Priority Landscapes**.



10.1.3 Environmental Reserve and Environmental Reserve Easement

- a. The dedication of Environmental Reserve and Environmental Reserve Easements shall be required as per Parkland County Policy C-PD15 Dedication and Use of MR, ER and ERE.
 - b. A Desktop or Comprehensive Biophysical Assessment and/or Parkland County's Riparian Setback Matrix model may be required to delineate the boundaries of Environmental Reserve and Environmental Reserve Easement parcels.
 - c. The County encourages the conservation of Environmentally Significant Areas and high value wetlands that do not qualify for environmental reserve dedication under the *Municipal Government Act* through environmental or conservation easements, transfers of development credits, Alternative Land Use Services (ALUS) and the Green Acres programs. Environmentally Significant Areas are identified on **Figure 5: Environmentally Significant Areas**.
 - d. The County may seek to conserve Environmentally Significant Areas and high value wetlands through the use of conservation reserves in accordance with the *Municipal Government Act*.
-



10.2 Environmental Stewardship

In Parkland County, environmental stewardship requires the recognition of a collective responsibility to ensure healthy ecosystems and landscapes are maintained for future generations. Parkland County takes a long-term approach to environmental stewardship and promotes the responsible use and conservation of important landscapes and ecosystems by balancing present-day needs with the needs of future generations.

POLICIES

10.2.1 Stewardship and Education Programs

- a. The County supports and encourages the use of the Alternative Land Use Services (ALUS) program and other education programs to retain, enhance or restore Natural Ecological Capital and the Ecological Goods and Services they provide.
- b. The County will promote the use of educational and community engagement programs to inform and educate residents on sustainability concepts and initiatives they can implement to retain, enhance or restore Natural Ecological Capital and associated Ecological Goods and Services.
- c. The County will partner with lake management groups to encourage lake stewardship initiatives.

10.2.2 Integrated Regional Planning

- a. The County will partner with the Government of Alberta, Indigenous communities, industry, non-government organizations and the public to ensure the protection of environmental features within and connected to Parkland County.
- b. The County will participate in regional environmental planning initiatives including the preparation of a North Saskatchewan River Valley Conservation Plan, updates to the Edmonton Metropolitan Region Growth Plan and the development of the North Saskatchewan Regional Plan.
- c. The County will continue to participate in regional watershed alliance groups to support regional watershed planning initiatives and management plans.



10.3 Biodiversity

Maintaining and promoting biodiversity requires an ecosystem approach to land management that balances development pressures with landscape connectivity, water quality and quantity and other environmental considerations.

POLICIES

10.3.1 Species Diversity

- a. The County shall maintain biodiversity and protection of Species-at-Risk at the species level by:
 - i. requiring development activities where Species-at-Risk may be located to undertake additional species surveys if identified as a need through either a Desktop Biophysical Assessment or a Comprehensive Biophysical Assessment;
 - ii. ensuring the County and Developers are aware of applicable federal and provincial regulations pertaining to Species-at-Risk; and
 - iii. supporting the use of non-regulatory mitigation measures (e.g., noise or light reduction) and regulatory setbacks (e.g., *Migratory Bird Convention Act*), or other federal or provincial setbacks to minimize disturbance to sensitive wildlife species.
-



10.4 Surface Water, Groundwater and Wetlands

Lakes, wetlands and watercourses are among the most defining and valued landscape features in Parkland County. Major waterbodies including Wabamun Lake, Isle Lake, Jackfish Lake, Mayatan Lake, Big Lake, Hubbles Lake and Hasse Lake, as well as watercourses such as the North Saskatchewan and Pembina rivers, and Kilini, Atim and Wabamun Creeks provide a wide range of ecosystem services. These ecosystem services include groundwater recharge functions - improving water quality, flood and drought resilience - as well as providing habitat for a diversity of plant and animal species. The County's diversity of surface waterbodies and wetland systems interconnect with, and contribute to, the natural ecosystems that provide important recreational and educational opportunities for residents and visitors. Wetlands are identified on **Figure 6: Wetlands**.

It is important to recognize that surface and groundwater resources are connected. Groundwater recharge areas, such as ephemeral and temporary wetlands, transfer water from the surface to groundwater aquifers, while groundwater discharge areas return water back to the surface in the form of springs, watercourses and lakes. As groundwater feeds many of the lakes in the County, groundwater quality is of great environmental, social and economic importance. Maintaining the quality and quantity of groundwater resources in Parkland County is critical to the health and well-being of ecosystems, communities and people in Parkland County.

POLICIES

10.4.1 Lake and Watershed Management

- a. The County will seek to protect, enhance and restore the water quality and aquatic ecosystems in the region whenever possible by:
 - i. retaining natural areas along waterbodies and watercourses;
 - ii. incorporating best practices to minimize soil erosion, to protect and enhance riparian zones and to conserve and enhance areas that contain habitat for federally or provincially listed plant or wildlife species; and
 - iii. conserving wetlands and establishing riparian setbacks around wetlands.
- b. The County shall prepare Sub-Watershed Lake Land Use Plans for Wabamun Lake, Mayatan Lake, Jackfish Lake, Isle Lake and Hubbles Lake as determined necessary by the County.



10.4.2 Wetlands

- a. The County will support the implementation of the Alberta Wetland Policy and prioritize wetland avoidance over minimization or replacement by:
 - i. retaining on-site wetlands, whenever possible; and
 - ii. protecting the County's highest value wetlands, as identified in the County Wetland Inventory & Historical Loss Assessment report, from incompatible development through the practice of avoidance and the use of environmental reserve and environmental reserve easement dedication, conservation reserves or conservation easements.
 - b. The County encourages net-gain of wetlands through stormwater management facility naturalization and other wetland restoration, replacement and enhancement activities on public and private land.
 - c. The County will prepare and implement a wetland policy and management plan consistent with the findings of Parkland County's ECMP and Wetland Inventory & Historical Loss Assessment.
-

10.4.3 Surface and Groundwater Resources

- a. The County will seek to maintain and protect the quality and quantity of surface and groundwater resources in the region by:
 - i. requiring all necessary technical studies concerning surface water or groundwater quantity or quality be completed to ensure any proposed planning and development processes and activities will not negatively impact surface water or groundwater resources, including recharge zones, in the area; and
 - ii. supporting the naturalization, retention and enhancement of natural drainage patterns during the subdivision and development approval process.
 - b. The County will support a no-net increase of post development nutrient discharges in sensitive groundwater areas, including waterbodies, wetlands and watercourses, as identified in the County's Environmental Conservation Master Plan.
-

10.4.4 Setbacks from Waterbodies and Watercourses

- a. Best Management Practices (BMPs) and Provincial guidelines as stated in the documents Stepping Back from the Water, On the Living Edge and the Wabamun Sub-watershed Land Use Plan should be incorporated into development and site plans where applicable.
 - b. The Parkland County Riparian Setback Matrix Model will be used, where appropriate, to determine site-specific setbacks for new developments adjacent to riparian areas, along wetlands, watercourses and waterbodies.
 - c. Development is prohibited within floodways to ensure the safety of residents and the health of the waterway. Lands within floodways will be dedicated as Environmental Reserve at the time of subdivision.
-



10.5 Renewable Energy and Sustainable Development

The County has a long history of supporting energy generation within its boundaries. The County supports the diversification of energy generation to include renewable energy as part of a strategy to reduce greenhouse gas emissions and to diversify the County's economic base. This is part of the County's overall commitment to reducing its environmental footprint.

POLICIES

10.5.1 Renewable Energy	a. The County supports the development of alternative/renewable energy industry as an economic generator and will support partnerships with industry and education institutions to establish energy pilot projects in Parkland County. b. The County promotes partnerships with industry to transition to alternative energy development by promoting the adaptive reuse of existing energy infrastructure, including previously disturbed lands and transmission networks. c. The County encourages the microgeneration of renewable energy sources in all areas of the County, including the use of agricultural land for small scale production of renewable energy.
10.5.2 Sustainable Infrastructure & Development	a. The County supports the growth, development and implementation of sustainable infrastructure or development projects including, but not limited to: i. Low Impact Development concepts such as bioswales, green roof technology and rain gardens; ii. energy efficient buildings; and iii. eco-industrial parks, compact community design or other innovative development models that reduce the overall environmental footprint of a development. b. The County may consider the use of incentives to encourage the use and implementation of sustainable infrastructure or development initiatives.
10.5.3 Climate Change Adaption and Mitigation	a. The County is committed to mitigating the effects of climate change and improving air quality by: i. collaborating with other organizations such as the Partners for Climate Protection (PCP) program, Mistakis Institute, Municipal Climate Change Action Centre and other environmental organizations; ii. developing and implementing a framework that outlines initiatives to reduce community and corporate air emissions; iii. encouraging energy efficiency within the community and corporately; and iv. developing a Community Climate Adaptation Plan



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COMMUNITY INFRASTRUCTURE & SERVICES



11.0 COMMUNITY INFRASTRUCTURE & SERVICES

OBJECTIVE

To promote active, inclusive, safe, vibrant and connected communities; **One Parkland: Powerfully Connected.**

Community infrastructure includes schools, parks, open spaces, recreation facilities, protective services and the social, cultural and institutional uses that help communities thrive.

Together, this physical infrastructure supports the provision of community services - such as art and culture, recreation services, health services and other important services - that are an essential part of a high quality of life. All residents should have access to quality community services.

In general, community infrastructure should be provided within hamlets to support their continued growth and development and to ensure they remain viable places to live and work. Hamlets offer a rural lifestyle and are a key element of the County's history. It will be important to maintain and foster the unique identities of hamlets over time.





11.1 Schools, Parks and Open Spaces

Schools, parks and open spaces often form the cornerstones of communities. Access to these key features builds community connections and active lifestyles. The provision of schools in the local area helps to support the presence of families in local communities and support their continued growth over the long-term. Public amenities like parks and open spaces establish a sense of community and create a sense of identity. The County will use all tools available through the *Municipal Government Act* to ensure the provision of accessible parks and open spaces for use by residents of all ages and abilities.

POLICIES

11.1.1 Providing Parks, Open Spaces and Recreation Facilities

- a. Low impact recreational activities, such as community playgrounds, interpretive trails and facilities, parks and community gardens are encouraged in the County's hamlets.
- b. New parks, open spaces, and recreation facilities should be planned to be multi-use areas and available to people of all ability levels whenever possible. Planning and design of parks and open spaces shall be consistent with findings from the County's Parks, Recreation and Culture Master Plan.

11.1.2 Schools

- a. The County will work cooperatively with the Parkland School Division and the Evergreen Catholic Separate School Division to determine the locations, sizes and configuration of future school sites.
- b. The shared use of existing County school sites is encouraged to promote community and recreational programs, continuing and distance education, and training and entrepreneurship programs.



11.1.3 Municipal Reserve Parcels

- a. The dedication of Municipal Reserve (MR) is required as per Parkland County Policy C-PD15 Dedication and Use of MR, Environmental Reserve (ER) and Environmental Reserve Easement (ERE).
- b. The County may update its Municipal Reserve policy to establish a network approach to the allocation of Municipal Reserve within the County, including consideration for High Priority Landscapes and natural features.
- c. When Municipal Reserve lands are acquired at the time of subdivision, the County will:
 - i. dedicate lands as Municipal Reserve where there is immediate benefit for public use; or
 - ii. defer the Municipal Reserve by caveat when the Reserve land is not needed at present but may be provided through future subdivision; or
 - iii. require the payment of cash-in-lieu in place of reserve land when the Reserve land is not required at present or in the future; or
 - iv. request a combination of land and cash-in-lieu.
- d. The acquisition, deferral and disposition of reserve land and use of cash-in-lieu shall adhere to County Policy, agreements with local school boards and the requirements of the *Municipal Government Act*.
- e. Municipal Reserve parcels shall, when possible, be located adjacent to Environmental Reserve, other Municipal Reserve parcels, or near waterbodies and watercourses to promote their access, use and enjoyment.
- f. Municipal Reserves shall be identified at the Area Structure Plan, Conceptual Scheme and subdivision stages.

11.1.4 Underused Land

- a. The County will examine, in partnership with community groups, innovative ways to adapt underused reserve land in multi-parcel subdivisions to benefit the local community.
- b. Vacant or underused lots may be purchased by the County on a site-by-site basis to provide additional amenity space in local hamlets when a need is identified.

11.1.5 Recovering Costs

- a. The County will consider cost-recovery mechanisms for providing community services, including adoption of an off-site levy bylaw for new and expanded community recreation facilities, libraries, fire hall facilities and police station facilities as allowed under the *Municipal Government Act*.
-



11.1.6 Connected Trail Systems

- a. The County will collaborate with regional stakeholders, neighbouring municipalities and adjacent provincially designated areas to develop an integrated regional trail system wherever possible.
- b. The County supports the development of trail systems on existing Municipal Reserve and Environmental Reserve parcels to enhance public access to natural and recreational areas.
- c. Trails on Environmental Reserve parcels will be restricted to non-motorized uses.
- d. Multi-purpose trails should be developed as part of new multi-parcel subdivisions. Multi-purpose trails:
 - i. may be proposed in Municipal Reserve parcels and along subdivision road rights-of-way;
 - ii. should be designed to allow access for people of all abilities and shall comply with County Standards; and
 - iii. should support connectivity between adjacent subdivisions and hamlets where possible.

11.1.7 Subdivision and Development Requirements for Parks, Recreation, Schools and Open Spaces

- a. Conceptual Schemes and/or Area Structure Plans must provide for public gathering places such as parks, open spaces and community facilities that are safe and accessible and create linkages between on-site and off-site pathways and open spaces, when practicable.
 - b. The County may require the dedication of right-of-ways at the time of subdivision or development to create strategic links for the County's wider parks, recreation and open space network.
-



11.2 Protective Services

The County is committed to providing an acceptable level of protective services to promote the safety and well-being of County residents. Protective services include policing, fire protection and health services.

POLICIES

11.2.1 Providing Effective Protective Services

- a. The County is committed to providing an acceptable level of protective services through the County.
- b. New community infrastructure required to facilitate the provision of protective services should be located within the County's hamlets.
- c. The County will support and maintain mutual-aid agreements with adjacent municipalities and its Indigenous neighbours to ensure the provision of protective services, fire and medical service provision for all County residents. Service standards are identified in the Parkland County Fire Services Master Plan.

11.2.2 Policing & Crime Prevention

- a. The County will collaborate with the RCMP and community groups to promote community policing in all parts of the County.
 - b. Site design for public facilities, such as recreation centres, campground and playgrounds, should consider Crime Prevention through Environmental Design (CPTED) principles, such as the reduction of blind spots and strategic placement of lighting, to improve safety.
-



11.2.3 Health Services	a. The County will collaborate with Alberta Health Services to ensure emergency and community health services are available to all parts of the County, and to assist in identifying the need for new or expanded community services or facilities.
11.2.4 Fire Protective Services	a. The County will continue to maintain a high standard of fire protection services to support all parts of the County. b. Future residential, multi-parcel subdivision developments and major developments shall demonstrate they meet County standards for emergency fire servicing to the satisfaction of the County. c. Where a proposed residential multi-parcel development is identified within a high risk wildfire area, the development is required to indicate how FireSmart principles will be implemented. d. The County may require a wildfire protection plan for proposed residential multi-parcel subdivisions.
11.2.5 Subdivision and development Considerations for Protective Services	a. Area Structure Plans and/or Conceptual Schemes must identify how protective services for the proposed development will be provided.



11.3 Social, Institutional and Community Services

The County encourages arts and culture programs to be provided throughout the County.

POLICIES

11.3.1 Providing Social, Institutional and Community Services	a. The County shall work towards the implementation of the Parkland County Social Development Plan and its recommendations.
11.3.2 Diversifying Hamlets	a. New social, institutional and community services should be located within the County's hamlets where appropriate levels of servicing are available.
11.3.3 Supporting Arts and Culture	a. The County encourages growth in arts and culture programs throughout the County.
11.3.4 Heritage Planning	a. The County will partner with local heritage groups to complete a Municipal Heritage Plan to investigate ways to inventory, preserve and maintain historic sites and historic districts. b. New developments shall obtain <i>Historic Resource Act</i> Clearance from Alberta Culture and Community Spirit prior to land disturbance.
11.3.5 Age-Friendly Living	a. The County will support age-friendly initiatives, such as completing an Age-Friendly Community Assessment, in an effort to provide a safe and inclusive environment for residents of all ages and abilities. b. Parkland County will foster collaborative partnerships with non-profit housing organizations to ensure the housing needs of seniors are met.



11.4 Communication and Digital Networks

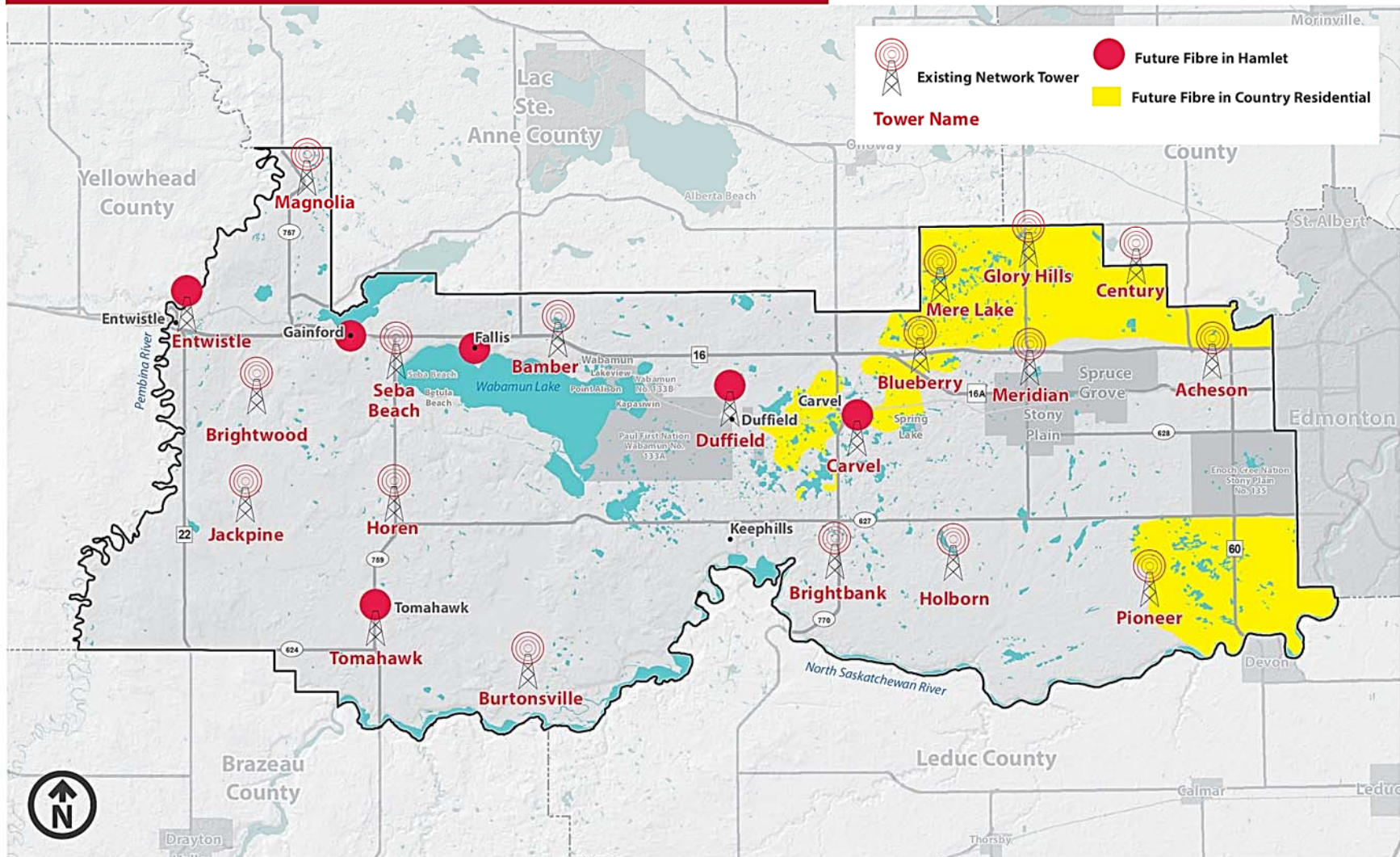
Reliable, connected and fast communications systems are an important part of daily life and business. The County is committed to working towards communications systems and digital networks that support interconnectedness that make small business, home occupations and community connections possible. Applications for communication facilities fall under the jurisdiction of Industry Canada but require the proponent of a new communication or amended facility to consult with the affected municipality. As part of its commitment to connecting residents digitally with high-speed internet and broadband networks, the County will continue supporting SMART Parkland.

POLICIES

11.4.1 Connectivity	a. The County supports development of a municipal rural broadband network through the use of tower and fiber infrastructure. b. The County shall prepare lifecycle and replacement plans to support the rural broadband infrastructure. c. The County supports the goal of having all municipal spaces supported by fiber optic internet. d. The County supports the creation of a long-term fiber and network strategy. e. The County will create a multi-trench policy and agreements to support the long-term growth of the broadband network.
11.4.2 Digital Economy and Knowledge Workforce	a. The County will support stakeholder relationships to sponsor knowledge workforce initiatives. b. The County will develop post-secondary partnerships to increase opportunities for residents, businesses and agricultural producers.
11.4.3 Innovation	a. The County will pursue external relationships to form innovation hubs that drive economic diversification and social capital. b. The County will work with external agencies to create a "living lab" within the community to encourage and support innovation.



11.4.4 Social Inclusion Through Digital Networks	a. The County will increase digital literacy among residents through partnerships and access to programming for participants. b. The County will continue to partner with local and post-secondary institutions to provide supported tools to foster digital inclusion.
11.4.5 Marketing	a. The County will collaborate with partners and stakeholders to advocate for rural broadband as an essential service and develop policy frameworks in support of this objective. b. The County will continue to partner with local and post-secondary institutions to provide supported tools to foster digital inclusion.
11.4.6 Advocacy	a. The County will work with regional and provincial partners to create a broadband toolkit and policy framework for advocacy. b. The County will work with regional, provincial and federal stakeholders to create a long term broadband strategy.
11.4.7 Environment	a. The County will continue with its e-waste diversion program. b. The County will continue to invest in smart infrastructure and products to minimize its environmental impact.


FIGURE 15 | SMART PARKLAND NETWORK




11.5 Recycling and Solid Waste

The County aims to provide every household with convenient, environmentally responsible and cost effective ways to dispose of solid waste through municipal transfer stations and intermunicipal partnerships.

POLICIES

11.5.1 Regional Waste Management	a. The County will cooperate with urban and rural neighbours in establishing and managing regional waste management and recycling systems.
11.5.2 Municipal Transfer Stations	a. The County will continue to operate and maintain municipal transfer stations. Where demand warrants, the County will explore new locations for transfer stations or expand existing stations.
11.5.3 Reduce, Reuse, Recycle	a. The County will expand awareness and education programs to encourage: i. home composting and residential recycling; and ii. commercial and industrial business recycling and by-product re-use. b. Businesses are encouraged to reduce energy and material consumption and increase the recycling of goods and by-products.





12:00



INTERMUNICIPAL COLLABORATION & LOCAL GOVERNANCE



12.0 INTERMUNICIPAL COLLABORATION & LOCAL GOVERNANCE

OBJECTIVE

To foster strong collaboration with municipal neighbours, regional and Indigenous partners and other levels of government; **One Parkland: Powerfully Connected.**

The County believes that working collaboratively with other municipalities, external agencies and its Indigenous neighbours is imperative to municipal and regional success.

The County will work with surrounding municipalities, Indigenous communities, the Capital Region Board, Province of Alberta and non-governmental organizations to undertake initiatives such as affordable housing, investments in major public facilities, tourism, transportation, economic development projects and environmental and recreational initiatives. In all of its endeavours the County is accountable to residents, businesses, stakeholders and visitors, and will conduct all matters related to County business with transparency and openness.

POLICIES

12.0.1 Collaborative Approach

- The County supports intermunicipal alliances and partnerships that facilitate the provision of joint transportation, utility and community infrastructure, economic diversification and environmental and recreational initiatives.
- The County will seek to resolve any intermunicipal or intergovernmental issues or disputes with an intent to achieve a resolution on the issue that is to the benefit of both parties.
- In the event of an intermunicipal dispute or disagreement over a development application, an escalating process of mediation of the issue or dispute will be followed. As a last resort, the dispute must proceed to a formal mediation as advocated in the *Municipal Government Act (MGA)* prior to proceeding to the Municipal Government Board (MGB).



12.0.2 Working with Neighbours	a. The County will continue to support the Inter-Municipal Cooperation Committee (ICC) with the City of Spruce Grove and Town of Stony Plain to expand joint agreements and cooperation. b. The County will continue to partner with Enoch Cree First Nation and the City of Edmonton to complete the Boundary Interface Protocols and Strategy (BIPS) project. c. The County will continue to participate in the Capital Region Board.
12.0.3 Indigenous Partnerships	a. The County will partner with neighbouring First Nations and Métis Nations on joint economic, community and planning projects that provide a mutual benefit to all residents.
12.0.4 Application Referral	The County shall send any of the following applications to adjacent municipalities or First Nations when the application affects lands within 0.8 km (0.5 miles) of an adjacent municipality or within 1.6 km (1 mile) of the City of Edmonton: i. a proposed Municipal Development Plan or amendment(s) to a Municipal Development Plan; ii. a proposed Area Structure Plan or any proposed Area Structure Plan amendments; iii. a subdivision application; or iv. a development application for a discretionary use. b. Notwithstanding the above policy, the referral distance may be greater than 0.8 km if the proposed development or subdivision creates off-site impacts that may affect the neighbouring municipality or First Nation.
12.0.5 Intermunicipal Planning	a. The County shall complete Intermunicipal Collaboration Frameworks (ICFs) and Intermunicipal Development Plans (IDPs) with adjacent municipalities that are non-members of the Capital Region Board as required under the <i>Municipal Government Act</i>.
12.0.6 Communication and Engagement	a. The County supports governance that is open, responsible and transparent. b. The County will share information with residents and stakeholders on major planning and development initiatives and decisions and will be transparent in communicating opportunities for feedback. c. County planning projects, initiatives and processes shall conform to the County's Public Engagement Policy and requirements under the <i>Municipal Government Act</i>.



13.0



IMPLEMENTATION



13.0 IMPLEMENTATION

OBJECTIVE

To establish the Municipal Development Plan as an effective tool to achieve the goals and objectives of Parkland County Council and the community; **One Parkland: Powerfully Connected.**

This Municipal Development Plan is intended to be a living document and remain a current and effective tool for achieving the goals and objectives of Council and aspirations of the community.

The MDP will be monitored and reviewed regularly through an evaluation of key indicators of success. It is expected that updates will be brought forward to Council through an annual report, or as otherwise requested by Council.

POLICIES

13.0.1 Priorities and Budgeting

- a. Council will determine the top priorities for public funding and phasing of development, in accordance with the County's annual capital and operating budget.
- b. The County may undertake an asset management plan to determine the life-cycle costing of County infrastructure systems and to assist with establishing infrastructure priorities.

13.0.2 MDP Review

- a. The MDP shall be monitored and reviewed through an annual report prepared by the County Administration for Council review.
- b. As part of an annual report, the County will develop a framework for review and monitoring of the MDP based on performance indicators. Performance indicators should include baseline measures, appropriate targets and a methodology of measurement for the indicators.
- c. A major MDP review should be undertaken every five (5) years to ensure the goals and policy directions denoted in the MDP reflect current growth forecasts, market trends and community values.



**13.0.3 Statutory Plan
and Development
Applications Prior to
Adoption of Municipal
Development Plan**

- a. In conjunction with the preparation and adoption of a new Municipal Development Plan (MDP), it is important to ensure that applications which are currently being processed are dealt with in a fair and equitable manner:
 - i. Where a bylaw to approve an Area Structure Plan, Area Structure Plan amendment or Land Use Bylaw (LUB) amendment has been considered by Council at a Public Hearing, prior to the date on which this MDP is adopted, and where the Area Structure Plan, Area Structure Plan amendment or LUB amendment would be inconsistent with this MDP, Council may proceed with further readings and adoption of the bylaw, provided that final adoption occurs no later than two (2) years from the date on which this MDP is adopted;
 - ii. Where an Outline Plan/Conceptual Scheme/LUB amendment application has been submitted and is deemed complete, prior to the date on which this MDP is adopted; Council may proceed with adoption of the Outline Plan/Conceptual Scheme/LUB amendment, provided that adoption of the Outline Plan/Conceptual Scheme by resolution and final reading of the LUB amendment occurs no later than two (2) years from the date on which this MDP is adopted;
 - iii. Area Structure Plans and Outline Plans/Conceptual Schemes adopted prior to the date of adoption of this MDP shall follow the policy direction of this document wherever possible; and
 - iv. Where an application for subdivision has been deemed complete prior to the date on which this MDP is adopted, and where the proposed subdivision would be inconsistent with this MDP, the Approving Authority may proceed with approval of the subdivision in accordance with the MDP Bylaw 37-2007 provided that the approval occurs no later than six (6) months from the date on which this MDP is adopted. The Approving Authority must not grant any extensions to the one (1) year approval period for any subdivision approvals under this clause; and
 - b. The County will amend the Acheson/Big Lake Area Master Drainage Plan and the Acheson Big Lake Area Water Servicing Study to include Agricultural Area A and B as identified in the Acheson Industrial Area Structure Plan Bylaw 2014-29.
-



IMPLEMENTATION

13.0.4 Completing and Updating Plans and Studies	a. The County's Environmental Conservation Master Plan will be reviewed every five (5) years and updated as needed. b. The County will review the Wetland Inventory and Historic Loss Assessment document every five (5) years and update as needed. c. The County will update the Transportation Master Plan to align with the Edmonton Metropolitan Region Growth Plan and this Municipal Development Plan. d. The County will complete a Water and Wastewater Master Plan. e. The County will complete a Stormwater and Drainage Master Plan for the Acheson Special Study Area. f. The County shall prepare and maintain Sub-Watershed Lake Land Use Plans for Wabamun Lake, Mayatan Lake, Jackfish Lake, Lake Isle and Hubbles Lake as determined necessary by the County. g. The County shall regularly review the Wabamun Lake Sub-Watershed Land Use Plan and update as needed. h. The County shall complete Intermunicipal Development Plans with adjacent municipalities that are non-members of the Capital Region Board as required under the <i>Municipal Government Act</i>.
13.0.5 Area Structure Plans	a. The County will prioritize Area Structure Plan (ASP) reviews and update ASPs as needed.
13.0.6 Hamlet Area Redevelopment Plans	a. The County will complete Hamlet Area Redevelopment Plans (HARPs) for the Hamlets of Entwistle, Duffield, and Tomahawk. Completion of these plans will align with the County's Hamlet Reinvestment Strategy.
13.0.7 Inventory and Analysis	a. The County may also undertake the following additional inventories and analysis to support future growth: i. feasibility analysis for communal servicing and locations; ii. inventory of existing Country residential types; iii. market analysis of agricultural (residential acreage) parcel sizes; and iv. feasibility analysis for the location of future (potential) transfer of development credit programs.
13.0.8 Land Use Bylaw	a. The County shall ensure the Land Use Bylaw aligns with the MDP. Amendments to the County's Land Use Bylaw may be required to ensure alignment with the MDP.
13.0.9 Community Partnerships	a. The Council will partner with community committees, associations and other community organizations to support the implementation of the Municipal Development Plan at the local scale.





14.0



GLOSSARY



14.0 GLOSSARY

The following definitions apply to terms in this document.

Active Transportation	means human-powered travel, such as walking and cycling, as well as the use of mobility aids, including motorized wheelchairs or comparable devices.
Aerodrome	means any area of land, water (including frozen surface) or other supporting surface used for aircraft landings or take-offs. Airports and aerodromes are primarily regulated by Transport Canada.
Affordable Housing	means rental or owned housing that is affordable and targeted for long term occupancy costing less than 30% of before tax household income. Shelter costs include the following: for renters (rent and any payments for electricity, fuel, water and other municipal services); and for owners (mortgage payments for principal and interest, property taxes, and any condominium fees, along with payments for electricity, fuel, water and other municipal services).
Aging in Place	means the ability to live in one's own home and community safely, independently, and comfortably through the years without relocating to a supportive care facility.
Agricultural Impact Assessment	means an assessment to determine if a development proposal will adversely affect existing and future agricultural activities on-site and in the surrounding area. The assessment describes the proposed development, the on-site and surrounding land uses, and the physical and socio-economic components of the agricultural resource bases; identifies the direct and indirect impacts of the proposed development on existing agricultural operations and on the flexibility of the area to support different types of agriculture; considers mitigation measures for reducing any adverse impacts; considers compensation such as the provision of agricultural protection easements; and makes recommendations in that regard. It has consideration for the cumulative effects of other potential development.
Agriculture	means the growing, raising, managing and /or sale of livestock (cattle, pigs, sheep, horses, game animals, poultry (hens, chickens, turkeys, chicks, game birds, other poultry), crops (hay, field crops, tree fruits or nuts, berries or grapes, vegetables, seed), foods or other agricultural products (e.g., trees, greenhouse or nursery products, mushrooms, sod, honey), horticulture and agri-food related value added enterprises.



Agriculture, Industrial	means agriculture with higher levels of input and output per unit of agricultural land area.
Agriculture, Value-added	means the addition of a process or service to an agricultural raw material being produced by the farmer (producer). This may include some form of processing (milling, drying, cleaning, sorting, slaughtering, distilling (winery) or direct marketing such as farm gate sales, farmer's markets or direct distribution).
Agri-Tourism	means tourism activities intended to attract visitors into agricultural areas to view and experience agriculturally-based operations.
Alternative Renewable Energy Resources	is energy generated from renewable natural sources such as wind, solar or geothermal process.
Area Redevelopment Plan (ARP)	means a statutory plan adopted by a municipality by bylaw in accordance with the MGA to provide a framework for the future redevelopment of a defined area of land. This includes a Hamlet Area Redevelopment Plan (HARP).
Area Structure Plan (ASP)	means a statutory plan adopted by a municipality by bylaw in accordance with the MGA to provide a framework for the subsequent subdivision and development of a defined area of land.
Biodiversity	is a short form for 'biological diversity,' and includes the variety, of plants, animals and other living organisms in a particular area or region.
Communal Servicing Systems	means the provision of communal or community piped and treated water or waste water infrastructure to service a residential multi-parcel subdivision that is privately owned and operated.
Compact Development or Compact Form	means a land use pattern that reflects efficient use of land, walkable neighbourhoods, mixed land uses (residential, retail, workplace and institutional), multi-modal transportation access and the efficient use of infrastructure. Compact development may include detached and semi-detached houses on small lots as well as townhouses and walk-up apartments, multi-story commercial developments, and apartments or offices above retail.
Compatible development/land uses	means development or land uses that are able to exist in close proximity without conflict or undesirable off-site impacts to adjacent or nearby properties.



GLOSSARY

Complete Community	means an a pattern of land use development, located within a single concentrated area or within a subregion, that provides a range of housing types with easy access to jobs, local amenities, services, community facilities and access to a multi-modal transportation system. The elements of a complete community vary depending on the size and scale of a community and its location within a rural or urban area.
Complete Region	means the Edmonton Metropolitan Region that is made up of complete communities at varying levels of service, which together provide a diversity of jobs, housing, services, institutions and amenities to meet residents' daily and occasional needs.
Conservation Design	means a planning best practice that conserves or enhances environmentally or agriculturally significant areas within the community or site design to the greatest extent possible.
Conservation Reserve	definition as per the <i>Municipal Government Act</i> (MGA).
Contiguous lands	means lands that share a common border, are touching or connected through an unbroken sequence.
County	means Parkland County unless otherwise noted.
Development	means a change of use of land or a building; the construction of a building; an extraction or stockpile; or change in intensity of use, as per the definition in the MGA.
Eco-Industrial	means an industrial development designed to reduce both its environmental footprint and direct impacts. Eco-industrial approaches can include a closed loop production cycles that maximize energy and resource reuse (e.g., using excess heat production from industrial processing to heat adjacent buildings) as a means to tackle a broad set of environmental challenges such as soil and water pollution, species preservation, energy management, resource efficiency and air quality.
Ecological Goods and Services	means the tangible benefits arising from the ecological functions of ecosystems that provide benefits to all living things, such as food, water and raw material, as well as flood and drought mitigation, air and water purification, soil formation and pollination.
Ecosystem	means a community of living organisms interacting with each other and the nonliving, physical components of the environment (e.g., air, soil, water and sunlight) as system within a defined geographical space.



Eco-Tourism	means tourism activities intended to attract visitors into natural areas to view and experience environmentally-sensitive landscapes with an emphasis on supporting conservation efforts and opportunities for wildlife observation.
Edmonton Metropolitan Growth Plan	means the Edmonton Metropolitan Growth Plan, with which all member municipalities of the Capital Region Board must comply.
Employment Area, Local	means a localized area with industrial, commercial and/or institutional land uses that have locally significant business and economic activities and generate a small concentration of employment for the local area or surrounding; or rural areas with existing resource based economic assets resulting in dispersed employment through agricultural activities, mining activities (coal, sand and gravel) and forestry activities, etc. Local Employment Areas may be located within an existing urban community, or outside of urban communities in the rural area.
Employment Area, Major	means an area with a concentration of industrial, commercial and/or institutional land uses that have regionally significant business and economic activities and high levels of employment.
Environmental Reserve	definition as per the <i>Municipal Government Act</i> (MGA)
Environmental Reserve Easement	definition as per the <i>Municipal Government Act</i> (MGA)
Environmentally Significant Areas (ESA)	means geographic areas with important or unique environmental characteristics as identified in the County's Environmental Conservation Master Plan (ECMP).
Farmstead	means the subdivision of a parcel of land (typically out of a quarter section) where there is an existing residence and associated improvements.
Fragmentation	means the process of reducing the size and connectivity of an area. In the context of rural lands or undisturbed natural areas, fragmentation occurs when a contiguous agricultural or undisturbed natural area is divided into isolated parcels separated by non-agricultural land uses, and can impact the productivity or ecological integrity of the land. Fragmentation can also occur within a given agricultural parcel of land by access roads, oil and gas developments and/or linear infrastructure.



GLOSSARY

Garden Suite	sometimes called a granny flat, means a self-contained dwelling without a basement. It is installed in the rear or side yard of a lot with an existing, permanent, single detached house as defined in the Land Use Bylaw.
Green Development	means a method of development that carefully considers social and environmental impacts. It is defined by three sub-categories: environmental responsiveness, resource efficiency, and community and cultural sensitivity.
Greenfield Area	means an area for future urban growth in an urban community located outside of the built-up urban area or previously planned areas. Greenfield areas in Parkland County shall be located in existing County hamlets or where hamlet boundaries can be expanded to incorporate new growth.
Groundwater	means saturated and unsaturated areas beneath the Earth's surface (i.e. soil pore spaces and in the fractures of rock formations) consisting of water that has seeped down from the surface and is considered the primary method of supplying and recharging aquifers.
Hamlet, Growth	means a hamlet identified for growth by the County that has some municipal servicing, amenities and alternative housing forms and supports a range of land uses and services where appropriate servicing is available.
Hamlet, Priority Growth	means a hamlet identified for priority investment and growth by the County that has full-services and a range of land uses, housing types, rural services and minimum density requirements.
Hamlet, Rural	means a Hamlet identified for some growth by the County and is without municipal servicing or additional amenities.
High Priority Landscape	means an area characterized by overlapping features of ecological importance including multiple Environmentally Significant Areas (ESAs) of various significance, wetland complexes, biodiversity hotspots and landscape connectivity, sensitive surface and groundwater features and sensitive landforms. High priority landscapes have a complexity of ecological factors and considerations which elevate the need for careful planning in order to integrate and maintain the cumulative benefits of the inherent ecosystem services that are provided by these landscapes.
Home Based Business	means the operation of a business or occupation within a dwelling and/or its accessory building(s). may also mean the operation of a business or occupation , or on a parcel on which a dwelling is located and where one or more residents of the parcel is/are involved in the occupation or business.
Infill	means the development of vacant lots within previously developed areas.



Infrastructure & Multi-use corridors	means an identified right-of-way for energy, electricity and other utility infrastructure. Also referred to as Energy Corridors by the Edmonton Region Growth Plan.
Infrastructure, Municipal	means the land, pipes, storm ponds, treatment plants, and other related municipal facilities for the provision of roads, water, storm water, and waste water services.
Institutional	means a use by or for an organization or society for public or social purposes.
Intensification	means development at a higher density than currently exists in built-up urban areas, major employment areas and local employment areas through: redevelopment; the development of underutilized lots within previously developed areas; infill development; or the expansion or conversion of existing buildings (See Infill and Redevelopment).
Intermunicipal Development Plan (IDP)	means a statutory plan adopted by two or more municipalities by bylaw in accordance with the MGA that applies to lands of mutual interest to the participating municipalities, typically along their shared boundaries. An IDP includes: procedures to resolve or attempt to resolve conflicts between the participating municipalities; procedures to amend/ or repeal the IDP; and provisions relating to administration of the IDP. It may also prescribe future land use and development as well as other matters considered necessary by the municipal councils.
Landscape Connectivity	means the degree to which the landscape facilitates the movement of native plant and animal species between corridors and habitat patches.
Low Impact Development (LID)	means a land planning and engineering design approach for managing stormwater runoff. LID emphasizes conservation and use of on-site natural features to protect water quality. This approach implements engineered small scale hydrologic controls to replicate the predevelopment hydrologic regime of watersheds through infiltrating, storing, evaporating, and detaining runoff close to its source.
Low Impact Landscaping	means landscaping that is designed to be both attractive and in balance with the local environment and requires minimal resource inputs; thus, the design must be functional, cost-efficient, visually pleasing, environmentally friendly and easy-to-maintain.
Major Development	means development of a large property that may have off-site impacts, including but not limited to, traffic, noise, odour and dust.



GLOSSARY

May	means a permissive and/or discretionary term that denotes a choice in applying the policy.
Metropolitan Area Tier	(Defined in the Edmonton Metropolitan Growth Plan) means the area surrounding the metropolitan core, including portions of county lands, urban communities, major and local employment areas and intervening undeveloped areas that are socio-economically tied and that share industry, housing and infrastructure.
Metropolitan Region	(Defined in the Edmonton Metropolitan Growth Plan) means an area consisting of a densely populated urban core and its less populated surrounding area, interconnected by industry, infrastructure, and housing. A Metropolitan Region generally comprises multiple jurisdictions and municipalities, and may include one or more urban areas, as well as satellite cities, towns and intervening rural areas that are socio-economically tied to the urban core, typically measured by commuting patterns.
Multi-Modal Transportation	The availability or use of more than one form of transportation, such as automobiles, walking, cycling, transit, rail (commuter/freight), trucks, air and marine.
Municipal Development Plan (MDP)	means a statutory plan adopted by a municipality by bylaw in accordance with the MGA that: addresses future land use and development within the municipality; coordinates land use, growth patterns and infrastructure with adjacent municipalities (if there are no IDPs in place); and provides for transportation systems, municipal services and facilities (either generally or specifically).
Municipal Government Act (MGA)	means the <i>Municipal Government Act - Revised Statutes of Alberta</i> 2000 Chapter M-26 and amendments thereto, also referred to as The Act. The MGA sets out the legislated roles and responsibilities of municipalities and elected officials.
Municipal Reserve	definition as per the <i>Municipal Government Act</i> (MGA)
Must	means a directive term that indicates the action is mandatory.
Natural Ecological Capital	means all components of the living ecosystems (land, air, water and biota) and their associated interactions and functions.
Natural Environment	mean a system of natural features and areas that are linked and connected by natural corridors necessary to maintain biological and geological diversity, natural functions, viable populations of Indigenous species (including flora and fauna), and ecosystems. These are areas where growth should not be anticipated and specific mitigation measures may be required.



Natural Living System	See Natural Environment
Non-Statutory Plan	means a plan adopted by a municipality by resolution to address land use planning or master planning needs.
Off-Highway Vehicle (OHV)	means a type of vehicle that was designed specifically for use off road. OHVs come in all shapes and sizes with anywhere from 2 to 8 wheels, or even tracks. Motorcycles, jeeps, quads and trucks may all be considered OHVs when used off municipal or provincial roadways.
Open Space	means a passive and structured leisure and recreation areas in the Region that enhance the aesthetic quality and conserve the environment. Open space includes parks, recreation and tourism attractions and natural areas.
Piped Municipal Services	means the pipes and related facilities associated with municipal water, storm water and waste water infrastructure.
Policy Tiers	Defined in the Edmonton Metropolitan Growth Plan as means a planning framework to reflect, respond and plan for the diversity and different contexts within the Edmonton Metropolitan Region. It is a mechanism to tailor growth policies to respond to size and scale of communities across the Region. The policy tiers reflect different levels of service in the Region and are informed by a regional land need analysis.
Private on-site services	means a private water well or private septic system serving an individual lot.
Recreation Corridor/Areas	means a public and private lands acquired in the public interest to conserve and protect natural features, landscapes and resources, and/ or to provide passive recreation space with limited or no development (e.g., school yards, public parks, parks adjacent to water courses and/or water bodies and recreation areas).
Redevelopment	means the creation of new units, uses or lots on previously developed land in existing urban communities, including brownfield sites.
Require	means a directive term that indicates the action is mandatory.
Residential, Country	means a multi-parcel subdivision of lands for residential purposes where servicing is provided either through onsite water and private sewer systems, municipal infrastructure, or private communal systems. Country Residential areas are located in areas as identified in Figure 7: Development Concept .
Residential, Lakefront	means a multi-parcel subdivision of lands for residential purposes adjacent to or within close proximity to a waterbody.



GLOSSARY

Multi-parcel Subdivision	means the subdivision of lands that consists of more than four lots.
Seasonal Resort Development	means any seasonal multi-parcel subdivision containing a campground or planned recreational bare land condominium subdivision that may be serviced with privately owned communal piped water and wastewater services for seasonal, non-permanent accommodation.
Resilience	means the capacity of a system to withstand and bounce back intact from environmental or human disturbances.
Responsible Growth	means development that incorporates land uses and resources to enhance quality of life for current and future generations; and is accountable to the long term financial implications including the operation, maintenance and capital costs associated with growth; and the management of resources and agricultural land base.
Rural	means an area with a lower concentration and dispersed of settlement pattern compared to urban areas. Rural areas typically include farms, natural areas, rural residential uses (e.g., acreages, country residential subdivisions and lakeshore residential subdivisions), resource extraction areas, recreation areas, and rural industrial developments (including agri-business).
Rural Area Tier	means lands outside of the metropolitan area within the wider Edmonton Metropolitan Region, consisting of rural working landscapes with agricultural lands, major employment areas and local employment areas, natural living systems, recreation areas and resource extraction areas, counties, towns, villages, incorporated hamlets and country residential development with some local levels of service and community amenities.
Rural Centre	means an urban area in the rural area that provides a local level of service to serve their own community, with potential to accommodate higher density mixed use development, appropriate the size and scale of the community. Rural centres include the central areas of towns, villages and some growth hamlets.
Secondary Suite	means a self-contained living unit created within a single-family home as defined by the Land Use Bylaw.
Shall	means a directive term that indicates the action is mandatory.
Should	means a directive term that indicates a preferred outcome or course of action but one that is not mandatory.
Social Capital	means the web of cooperative relationships between individuals that help solve community problems.



Social Housing	means primarily rental housing that requires ongoing operating subsidies to make it affordable to households with incomes that are generally between 65–80% of the median renter income for their household size.
Species at Risk	means species that are either federally or provincially listed as Endangered, Threatened or Species of Concern, under Canada's <i>Species at Risk Act</i> (SARA), the Committee on the Status of Endangered Wildlife in Canada (COSEWIC), the <i>Alberta Wildlife Act</i> or <i>Alberta Wild Species General Status-2015</i> .
Statutory Plan	means a plan adopted by a municipality by bylaw in accordance with the MGA including IDPs, MDPs, ASPs and ARPs.
Sub-Regional Services	may include: broad base of employment; local and commuter transit service; convenience and major retail and entertainment uses; all levels of primary and secondary education; social and supportive services to support non-market housing; major community centres and recreation facilities; some government services; and hospitals or community health centres.
Urban	means areas where there is a concentration of people and buildings, such as cities, towns and villages as well as unincorporated urban communities such as urban services areas or hamlets.
Watershed	means an area of land, bounded by topographic features, where water drains into a shared basin such as a river, stream, lake, pond or ocean. The size of a watershed can be tiny or immense and the boundaries and velocity of water flow are determined by land forms such as hills, slopes and mountain ranges that direct where water will flow. Within each large watershed there are many smaller watersheds.
Wetlands	means land saturated with water long enough to promote formation of water altered soils, growth of water tolerant vegetation and various kinds of biological activity that are adapted to the wet environment.
Will	means a directive term that indicates the action is mandatory.

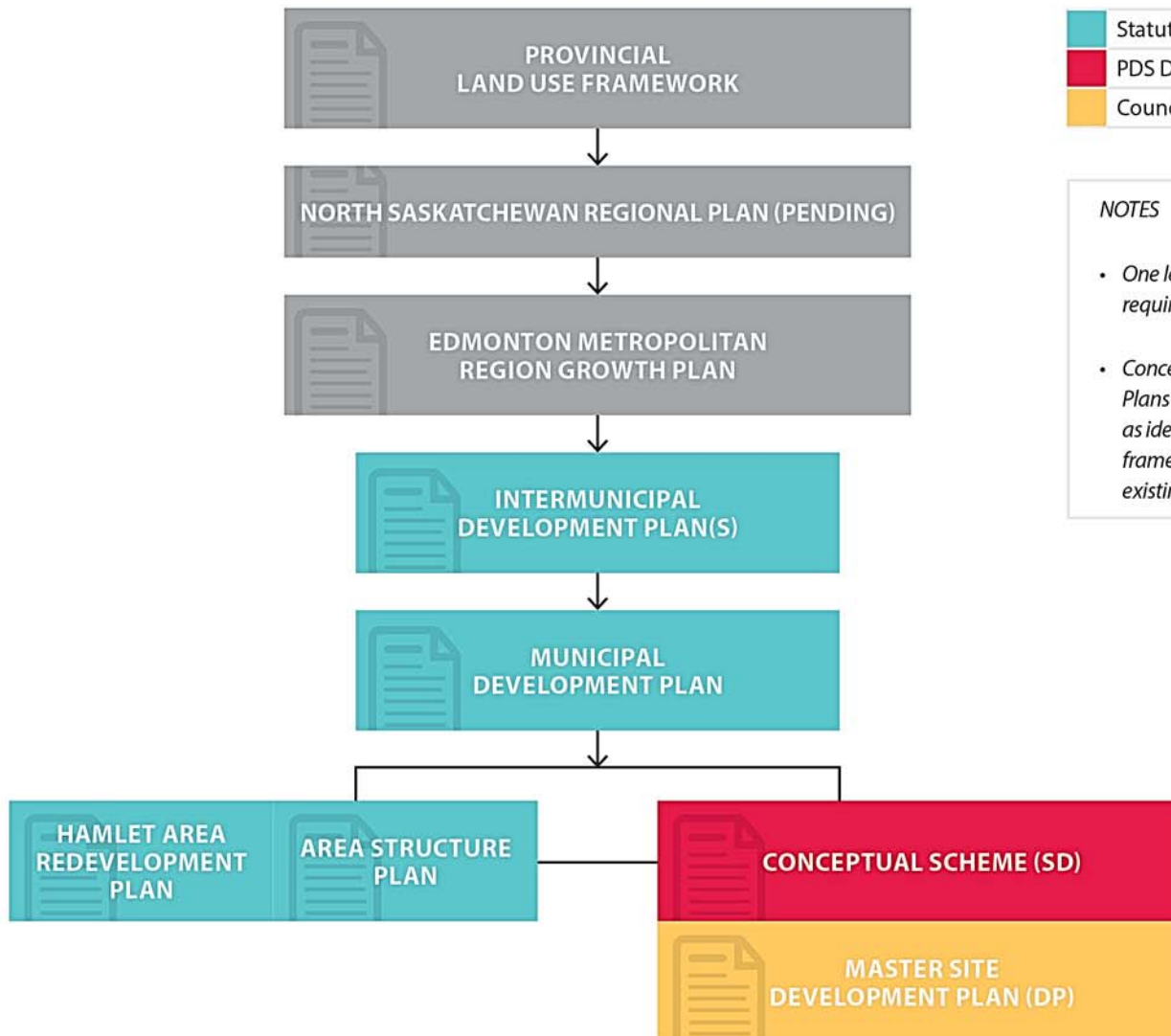




APPENDIX



APPENDIX 1 | PROPOSED PLAN FRAMEWORK & HIERARCHY



Statutory Bylaw

PDS Director Approval

Council resolution or PDS Director Approval

NOTES

- One level of Statutory Plan, amendments are made as required
- Conceptual Schemes and Master Site Development Plans may be required for subdivision or development as identified in this MDP for both lands within the policy framework of an ASP, and lands where there is no existing ASP.



1.1 AREA STRUCTURE PLANS (ASPS): WHAT IS AN ASP AND WHEN IS IT REQUIRED?

AREA STRUCTURE PLAN (ASP)

- A long-range land use and servicing plan, adopted by bylaw and prepared in accordance with the *Municipal Government Act*, for a large land base, typically with a longer than five-year anticipated build out and covering at least one quarter section of land. It provides a high-level framework for land use patterns and infrastructure provision.
- It could be initiated by either a developer or the County. A larger-impact bareland condo development, especially a resort development, will require an ASP.

HAMLET AREA REDEVELOPMENT PLAN (HARP)

- A long-range land use, servicing and community plan, adopted by bylaw and prepared in accordance with the *Municipal Government Act*, for hamlets. It provides a high-level, community-oriented framework for land use patterns, infrastructure provision and community development.

WHEN DO WE REQUIRE SUCH A DOCUMENT?

- Large scale areas typically greater than one quarter section in size, and with a range of land uses and servicing considerations (ASP).
- For Growth Hamlets identified in this MDP (HARP).

WHAT THE DOCUMENT MUST ADDRESS?

1. Plan Purpose and rationale, description of Plan Area and Location and Scope of Plan.
2. Compatibility with *Municipal Government Act*, Capital Region Growth Plan (as required), Parkland County Municipal Development Plan, other Parkland County plans and policies.
3. Site Context and development considerations including existing site conditions, topography, constraints and adjacent development.
4. Proposed Development / Land Use Concept
5. Engineering Design Brief including transportation/ connectivity networks and servicing infrastructure and capacities
6. Density and Phasing of Land Development and Infrastructure
7. Environmental and biophysical impact
8. Reserve land
9. Archaeological or historic impact
10. Public engagement

WHAT THE DOCUMENT MAY NEED TO ADDRESS?

1. Rural by Design principles
2. Agricultural Impact
3. Community impact
4. Market study
5. Nuisance attenuation e.g. noise
6. Recreation and open space
7. Fiscal impact, market demand
8. Community services
9. Pedestrian/cycling connectivity
10. Population
11. Housing types and density
12. School sites and population
13. Non-residential square footage
14. Employment
15. Transit



1.2 WHAT ARE CONCEPTUAL SCHEMES AND MASTER SITE DEVELOPMENT PLANS AND WHEN ARE THEY REQUIRED?

CONCEPTUAL SCHEME (CS)

- Plan for a proposed multi-parcel subdivision and how it relates to existing and future parcels, future subdivision and development of adjacent areas, access, servicing and reserves. These may be for urban industrial or rural development. The urban industrial Conceptual Schemes will be approved by Council resolution. Rural Conceptual Schemes will be approved by the Director of Planning and Development Services.

MASTER SITE DEVELOPMENT PLAN (MSDP)

- Design proposal for how a large property will look when development and construction is complete, or how a resource/aggregate extraction business will operate. These will be approved by the Director of Planning and Development Services.

WHEN DO WE REQUIRE SUCH A DOCUMENT?

- Large scale or multi-parcel subdivision (of more than 4 lots) (CS) or large-scale facility or campus-like development (MSDP)
- Some Redistricting applications (CS or MSDP)
- Approximate plan area size is no more than a quarter section, could be single parcel, multi-parcel (CS) or bareland condo (CS and/or MSDP may be required based on type/scale of development).
- For urban industrial multi-parcel subdivisions in the Acheson ASP area, In such a case, a Conceptual Scheme must cover a section of land in size at a minimum.

- Is likely to create significant off-site impacts in terms of traffic generation, environmental impact and similar effects (CS and/or MSDP).
- Required in areas with an existing ASP and no ASP (CS and/or MSDP). Can be in place with or without an ASP.

WHAT THE DOCUMENT MUST ADDRESS:

- | | |
|---|--|
| 1. Purpose | • Transportation network study and connectivity/impacts off-site |
| 2. Compatibility with MDP, ASP, and other County policies | • On-site servicing scheme and connectivity/impacts off-site |
| 3. Master land use plan map including site, parcels, buildings, uses, amenities, roadways | • Drainage |
| 4. Engineering Design Brief including: | 5. Impact on adjacent development |
| | 6. Phasing |

WHAT THE DOCUMENT MAY NEED TO ADDRESS:

- | | |
|--|--|
| 1. Conservation Subdivision design principles | 7. Environmental and/or biophysical impact |
| 2. Reserve land | 8. Description and evaluation of site characteristics such as landscaping and parking |
| 3. Dwelling units, commercial/ industrial floor space, population, employees | 8. If there is a building or multiple buildings, the architecture, elevation and placement |
| 4. Agricultural impact | 10. For aggregate operations, proposed haul routes, activities and hours of operation |
| 5. Community Impact | |
| 6. Parks and Open spaces | |



APPENDIX 2 | REQUIREMENTS FOR TECHNICAL REPORTS & STUDIES

2.1 BIOPHYSICAL ASSESSMENT PROCESS REQUIREMENTS

The biophysical assessment process shall be applied to all planned developments within the County which require municipal approvals and will follow the developed administrative procedures.

DESKTOP BIOPHYSICAL ASSESSMENT

A desktop biophysical assessment may be required for simple subdivisions, as well as any stripping, filling, excavation, grading activities, tree clearing, or creation of a pond or dugout if the proposed activities take place within or adjacent to an Environmentally Significant Area, High Priority Landscape, watercourse, wetland or water body. The desktop biophysical assessment is a simple assessment based on publicly available information that is used to identify if any environmental triggers are present that require mitigation measures, further investigation or additional permits/approvals from other government agencies. The desktop biophysical assessment is a one page assessment form that can be completed by the County Biologist or by a qualified external environmental professional.

COMPREHENSIVE BIOPHYSICAL ASSESSMENT

A comprehensive biophysical assessment shall be required for all Area Structure Plans, Outline Plans/Conceptual Schemes, multi-parcel subdivisions, master site development plans, and resource extraction activities. The Comprehensive Biophysical Assessment shall, at a minimum, include:

- a. an in-depth assessment of potential impacts to the existing environmental associated with a proposed development project;
- b. completion of desktop studies, as well as detailed field surveys for specific environmental disciplines where applicable (e.g., soil surveys, vegetation and listed plant surveys, wetland assessments, species-specific wildlife surveys, fish habitat surveys, hydrological and water quality surveys);
- c. identification of key issues or environmental sensitivities; and
- d. identification of proposed Best Management Practices (BMPs) and mitigation measures that will be implemented, as well as the rational of how those BMPs and mitigation measures will avoid or minimize potential development impacts.



APPENDIX

The Comprehensive Biophysical Assessment must be completed by a qualified environmental scientist and should follow the suggested Table of Contents provided below:

1. Introduction
 - a. Project Overview and Scope (description of the project purpose and rationale; proposed location)
 - b. Project Description (description of the project in terms of what is proposed – concept design and design considerations, extent of alteration/construction, timing of construction works)
 - c. Regulatory Information Requirements (Municipal, Provincial, Federal)
2. Study Area (description of regional ecological setting (e.g., natural subregion, general physiography, climate, surrounding landscape)
3. Assessment Methods (information review; data sources; field survey methods)
4. Overview of Existing Environment
 - a. Terrain and Soils (description of soil and landform classification)
 - b. Hydrology and Water Quality
 - i. Surface Water (describe ephemeral and permanent drainage patterns; describe any known water quality issues)
 - ii. Ground Water (describe potential for groundwater recharge; groundwater vulnerability)
 - c. Wetlands (describe all mineral and organic wetlands)
 - i. Historical Air photo Review (dating back to 1950, note: can be a summary from the WAIR)
 - ii. Wetland Delineation and Classification (note: can be a summary from the WAIR)
 - iii. Identification of high value wetlands (rated as having Excellent or Very Good ecological function) from Parkland County Inventory
 - d. Uplands (describe existing plant community types, listed plants, invasive plants (weeds))
 - i. Vegetation Communities
 - ii. Listed Plants
 - iii. Invasive Plant Species
 - e. Wildlife and Wildlife Habitat (describe wildlife habitat potential including landscape connectivity and any wildlife species observations; species specific survey results (where required); provincially and federally listed wildlife species of concern)
 - f. Fish and Fish Habitat (where applicable, describe potential for fish or fish habitat – only applicable if waterbody/watercourse has fish or is connected to a fish bearing watercourse/waterbody)
5. Key Environmental Sensitivities and Proposed Mitigation
 - a. Terrain and Soils
 - i. Environmental Sensitivities (describe potential impacts to soils associated with erosion, compaction; indirect effects of soil stockpiling)
 - ii. Proposed Mitigation
 - b. Hydrology and Water Quality and Surface Water
 - i. Environmental Sensitivities (describe potential impacts to water quality, flow)
 - ii. Proposed Mitigation



c. Groundwater

- i. Environmental Sensitivities (describe potential impacts to groundwater recharge)
- ii. Proposed Mitigation

d. Wetlands

- i. Environmental Sensitivities (describe potential impacts to wetlands)
- ii. Proposed Mitigation (following the provincial wetland mitigation directive for avoidance, minimization, replacement)

e. Uplands

- i. Environmental Sensitivities (describe potential impacts to vegetation, listed plants)
- ii. Proposed Mitigation

f. Wildlife

- i. Environmental Sensitivities (describe potential impacts to wildlife species, wildlife habitat)
- ii. Proposed Mitigation

g. Fish and Fish Habitat (describe potential impacts to fish species/ habitat, if applicable)

- i. Environmental Sensitivities
- ii. Proposed Mitigation

6. Conclusions and Recommendations

- i. Summary
- ii. Wetland mitigation (avoidance, minimization , avoidance, where applicable)
- iii. Setback recommendations for water bodies (including wetlands)/ watercourses (where applicable)
- iv. Conservation Recommendations (for environmental reserve, municipal reserve, conservation easements)



2.2 SHALLOW WATER TABLE/ PERCOLATION TESTING

The consultant must be a professional engineer or professional geologist or geophysicist (as defined in the *Engineering, Geological and Geophysical Professions Act*), whose area of competence lies within the groundwater field, and who is a member of the Alberta Association of Professional Engineers and Geoscientists of Alberta (APEGA).

The Shallow Water Table/Percolation Testing shall identify the following:

- a. the area of developable land located on the parent parcel defined as lands with a water table that is 2.13m or deeper below ground surface;
- b. the area of each individual lot that is considered developable land containing a water table that is 2.13m or deeper below ground surface; and
- c. the appropriate on-site septic systems based on the existing soil conditions.

2.3 DOMESTIC GROUNDWATER ASSESSMENT

The consultant must be a professional engineer, professional geologist or professional geophysicist (as defined in the *Engineering, Geological and Geophysical Professions Act*), whose area of competence lies within the groundwater field, and who is a member of the Alberta Association of Professional Engineers and Geoscientists of Alberta (APEGA).

The Domestic Groundwater Assessment shall identify:

- a. quantity and quality of Groundwater Available to Households within the Proposed Subdivision;
- b. potential Interference with Existing Groundwater Users; and
- c. consistency with an Applicable Approved Water Management Plan.

The Domestic Groundwater Assessment shall include:

- a. collection, summary and assessment of existing local groundwater data ;
- b. aquifer testing if existing local groundwater data insufficient; and
- c. three major conclusions. The consultant should clearly state in the conclusion of the report:
 - i. whether groundwater in the underlying Proposed Subdivision Area can supply water for household purposes to each proposed lot and associated household during peak demand periods and over the long term (where each household has its own water well; each household can use a maximum of 1250 cubic metres of water per year);
 - ii. whether the diversion of 1250 cubic metres of water per year for household purposes under section 21 of the *Water Act* for each of the households within the subdivision will interfere with any household users, licensees or traditional agriculture users who exist when the subdivision is approved; and
 - iii. whether the diversion of groundwater by the proposed subdivision's households is consistent with an applicable approved water management plan.



2.4 FLOODPLAIN (1:100 YEAR) ANALYSIS

Flood Plain (1:100 Year) Analysis is required for proposed multi-parcel and major development applications on sites located adjacent to a significant waterbody. The assessment shall be prepared by a qualified hydrologist, and shall confirm:

- a. Where the floodplain and flood-prone/fringe areas are;
- b. How often the floodplain will be covered by water;
- c. How long the floodplain will be covered by water; and
- d. At what time of year flooding can be expected.

2.5 ENVIRONMENTAL SITE ASSESSMENT (ESA)

Professionals who conduct Phase I or Phase II ESAs shall possess knowledge based on an appropriate combination of formal education, skills, experience, and training in order to provide a technically sound and rational ESA. A competent practitioner is an individual who has acquired a combination of education and work experience relating to specific activities that results in the individual having the ability to undertake, at an appropriate level, one or more component(s) of the reclamation or remediation work.

PHASE 1 ENVIRONMENTAL SITE ASSESSMENT

The Phase 1 ESA shall at a minimum contain the following:

- a. a records review, including but not limited to, a historical aerial photograph review, title search; regulatory information;
- b. a site visit;
- c. interviews;
- d. an evaluation of information and reporting; and
- e. shall conclude one of the following:
 - i. no evidence of contamination in connection with the property;
 - ii. evidence of potential contamination in connection with the property (listed and described);
 - iii. evidence of actual contamination in connection with the property (listed and described); or
 - iv. evidence of actual and potential contamination in connection with the property (listed and described).



APPENDIX

If evidence of potential contamination is identified, the Phase 1 ESA shall recommend if a Phase 2 ESA is required.

PHASE 2 ENVIRONMENTAL SITE ASSESSMENT

The Phase 2 ESA shall at a minimum include::

- a. confirmation of Phase I ESA findings;
- b. identify contaminants that are present;
- c. develop a basic understanding of the site geology and hydrogeology, often referred to as developing a “hydrogeological conceptual site model.” The specific nature and level of detail required of such an understanding, and the level of effort required to achieve this depends on the specific study objectives and site conditions;
- d. identify the properties of media (e.g., soil texture classification) that will affect the generic or property-specific (i.e., as determined by a risk assessment) guidelines applicable to the property;
- e. measure the concentration of each contaminant;
- f. understand the fate and transport mechanisms for contaminants of concern and delineate the nature and extent of any contamination. This will include determining the spatial distribution of the potential contamination. It includes characterization of the chemical composition of potential contaminants and the media in which the potential contamination may be found (i.e., soil, groundwater or other media), and identifying and describing the origin or source of the contaminants;
- g. complete spatial delineation of any contaminant plume, whether on-site or off-site; and
- h. interpretation of the environmental impact(s), if any, based on comparison against relevant regulatory guidelines for the affected media.



2.6 GEOTECHNICAL EVALUATION

The consultant must be a professional engineer, professional geologist or professional geophysicist (as defined in the *Engineering, Geological and Geophysical Professions Act*), whose area of competence lies within the geotechnical field, and who is a member of the Alberta Association of Professional Engineers and Geoscientists of Alberta (APEGA).

The Geotechnical shall include:

- a. test hole location plan and soil logs for each test hole;
- b. results of the tests noted above;
- c. water table contour map;
- d. recommendation on suitability of site for the proposed development;
- e. comments on the soil bearing capacity and recommended setbacks from escarpments for various types of building foundations;
- f. recommendations with regard to trench excavation, backfill specifications; and road pavement structure requirements.

2.7 HISTORICAL RESOURCE IMPACT ASSESSMENT

The Historical Resources Impact Assessment shall meet all the requirements and standards of Alberta Culture and Tourism, including, but not limited to:

- a. historical resource inventory review;
- b. survey observations and results;
- c. historic resource sites; and
- d. recommendations for protection.

2.8 HYDROLOGIC ASSESSMENT

Hydrologic assessment are required for proposed multi-parcel and major development applications on sites located in areas with a medium or above groundwater susceptibility rating as shown on the Groundwater Susceptibility map within Parkland County's Riparian Setback Matrix Model (RSMM). The assessment shall be prepared by a qualified water resource engineer or hydrologist, and shall identify:

- a. sensitive groundwater features such as kettle depressions, drainage courses, wetlands, recharge zones, and shallow aquifers;
- b. existing surface and groundwater conditions;
- c. the potential for impacts and cumulative impacts of development and natural fluctuations in environmental conditions (e.g. drought or flood) on sensitive features;
- d. the potential for impacts to shallow aquifers vulnerable to contamination from overuse; and
- e. appropriate mitigation and management to ensure groundwater is not contaminated, this may be addressed collectively by multiple developers.



2.9 NOISE IMPACT STUDY

The Noise Impact Study should include, but is not necessarily limited to:

- a. details of assessment criteria;
- b. methods and assessment locations and the appropriate figures and charts showing the detailed results including how the development complies with the parkland county community standards bylaw and any other published criteria, guidelines and acceptable noise levels at similar land uses in parkland county;
- c. identification and analysis of the impact of noise from the proposed development on adjacent streets, parks and properties;
- d. identification and analysis of the impact of all noise generated from the immediately surrounding area, including without limiting the foregoing, the operations of the airports, transportation/rail infrastructure, corridors and yards, waste management facilities, industries and other noise generating uses on the proposed development;
- e. identification and analysis of the impact of all noise generated within the proposed development on itself; and
- f. recommendations for noise mitigation and any adjustments to the site plan and architectural design, as are necessary to comply with relevant regulations and standards including the need for filing certificates of approval (air & noise) to Alberta Environment.

2.10 RISK ASSESSMENT

The Risk Assessment shall include:

- a. hazard identification;
- b. frequency analysis;
- c. consequence analysis;
- d. risk analysis; and
- e. conclusions

2.11 SERVICING STUDY

The consultant must be a professional engineer, professional geologist or professional geophysicist (as defined in the *Engineering, Geological and Geophysical Professions Act*), whose area of competence lies within the servicing field, and who is a member of the Alberta Association of Professional Engineers and Geoscientists of Alberta (APEGA).

The Servicing Study shall comply with Parkland County Engineering Design standards. The study shall include information regarding:

- a. the proposed water services; and
- b. the proposed sanitary systems for the proposed development.



2.12 SLOPE STABILITY ASSESSMENT

The consultant must be a professional engineer, professional geologist or professional geophysicist (as defined in the *Engineering, Geological and Geophysical Professions Act*), whose area of competence lies within the geotechnical field, and who is a member of the Alberta Association of Professional Engineers and Geoscientists of Alberta (APEGA).

The assessment shall include:

- a. the location of significant slopes over 15%;
- b. the assessment of the factor of safety (FS) for the existing slope or the proposed design slope profile;
- c. the assessment of a safe set-back or buffer zone back from the crest and from the toe of the slope;
- d. if the development is proposed to be constructed on a slope, the geotechnical engineer shall recommend a suitable FS for the on-slope development, based on a specific risk assessment of the proposed development;
- e. if the FS for a slope or proposed setback is less than that recommended by the geotechnical engineer, the slope may be modified using remedial measures recommended by the geotechnical engineer. any remedial measures to increase the FS must consider the effect on adjacent man-made and natural features and be approved by the geotechnical engineer;
- f. slope stability analysis report must give clear and concise recommendations on the suitability of slopes for the intended use, and the recommended building setback distances;
- g. the report must also address post development conditions and recommend means and methods of mitigating any potential problems;
- h. the potential for a slope failure caused by septic fields, irrigation, access construction, stormwater erosion and other like considerations must be investigated and discussed; and
- i. the report should must clearly state whether the site is suitable prior to, during and post development phases. The report shall contain analytical methodology, test hole logs, pertinent calculations and other relevant available information for County review.



2.13 STORMWATER MANAGEMENT REPORT

The consultant must be a professional engineer, professional geologist or professional geophysicist (as defined in the *Engineering, Geological and Geophysical Professions Act*), whose area of competence lies within the drainage field, and who is a member of the Alberta Association of Professional Engineers and Geoscientists of Alberta (APEGA).

The following check list identifies the typical requirements to be addressed in the Stormwater Management Plan for Multi Parcel Developments:

- outfall points;
- overland flow routes and flow rates;
- ponding depths;
- flood profiles for lakes and ravines for 5 year, 10 year, 25 year, 100 year and critical historical storm events for interim and ultimate development; and
- details of minor drainage system including:
 - outfall points
 - alignments
 - pipe sizes
 - pipe grades, profiles and invert elevations
 - pipe capacities
 - manholes;
 - 25 year and 5 year peak flows for interim and ultimate development;
 - road grades;
- calculation of flows captured by minor system during 100 year storm and associated hydraulic grade lines, with particular attention to locations where there is increased potential for outflows from the system (manholes and inlets at relative low points);
- unusual factors affecting operation and maintenance costs;
- proposed flood control;
- land requirements - easements, public utility lots;
- controlled discharges from stormwater management facilities;
- hydrographs at outfalls;
- pre-development versus controlled post-development flows at outfalls;
- determination of type of storage, e.g. constructed wetland, wet or dry ponds;
- details of storage facilities, including landscaping and vegetation in constructed wetlands;
- proposed stormwater management facilities maintenance;
- details of constructed wetlands; earthwork balance assessment;
- vegetation plan for constructed wetlands;
- vegetation management plan for constructed wetlands;
- proposed water quality control;
- an erosion and sedimentation control plan;
- hydraulic aspects of pond inlets and outfalls - for example spillways;
- staging/implementation plan;
- details of any oversizing for adjacent areas;
- preliminary costs of trunk sewers and major system components; and
- financing considerations regarding cost shareable trunk sewers and facilities.



2.14 TRAFFIC IMPACT ASSESSMENT

The consultant must be a professional engineer (as defined in the *Engineering, Geological and Geophysical Professions Act*), whose area of competence lies within the Transportation field, and who is a member of the Alberta Association of Professional Engineers and Geoscientists of Alberta (APEGA).

The Traffic Impact assessment shall include:

- a. location plan of the subject property;
- b. property description;
- c. owner/consultant contact;
- d. transportation context for horizon year and time periods for analysis;
- e. estimate of travel demand generated by different development scenarios;
- f. evaluation of transportation impacts of site-generated traffic/transit demands;
- g. identification of transportation system improvements required to mitigate adverse impacts;
- h. assessment of active transportation modes (e.g. cycling, walking);
- i. assessments of parking and access issues; and
- j. supporting data used in the analyses



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