

# APPENDIX A

## BYLAW NO. 1868

A BYLAW OF THE MUNICIPAL DISTRICT OF BONNYVILLE NO. 87, IN THE PROVINCE OF ALBERTA, TO ADOPT THE MOOSE LAKE AREA STRUCTURE PLAN OF THE MUNICIPAL DISTRICT OF BONNYVILLE NO. 87 HEREBY CITED AS THE MOOSE LAKE AREA STRUCTURE PLAN BYLAW.

**WHEREAS**, under the provisions of the Municipal Government Act, R.S.A 2000, Chapter M-26, and amendments thereto, a Council's power to pass a bylaw includes a power to amend or repeal a bylaw;

**AND WHEREAS**, under the provisions of the Municipal Government Act, R.S.A 2000, Chapter M-26, and amendments thereto, a Council may, by bylaw, adopt an Area Structure Plan for the purpose of providing a framework for subsequent subdivision and development of an area of land;

**AND WHEREAS**, notice of the intention of Council to pass a bylaw has been published in a newspaper circulating in the municipality advising of the date for a Public Hearing;

**AND WHEREAS**, persons claiming to be affected by the proposed bylaw and any other person wishing to make representations were afforded an opportunity to be heard by Council through Public Hearing at a public Meeting of Council prior to the final passing thereof;

**NOW THEREFORE**, the Council of the Municipal District of Bonnyville No. 87, duly assembled in the Province of Alberta, hereby enacts the following:

1. That this document attached to, and forming part of Bylaw No. 1868, as Schedule "A" be adopted as the Moose Lake Area Structure Plan, insofar as it affects lands within the Municipal District of Bonnyville No. 87 as shown in Figure 3: Community Boundary of Schedule "A".
2. Upon third reading of Bylaw No. 1868, Bylaw No. 923 and all amendments thereto are hereby repealed.
3. That this Bylaw shall come into force and have effect from and after the date of third and final reading thereof.

READ A FIRST TIME IN COUNCIL THIS 11<sup>th</sup> DAY OF JUNE, 2024.

READ A SECOND TIME, AS AMENDED, IN COUNCIL THIS \_\_\_\_\_ DAY  
OF \_\_\_\_\_, 2024.

**BYLAW NO. 1868**

READ A THIRD TIME IN COUNCIL THIS \_\_\_\_\_ DAY OF \_\_\_\_\_, 2024.

\_\_\_\_\_  
REEVE

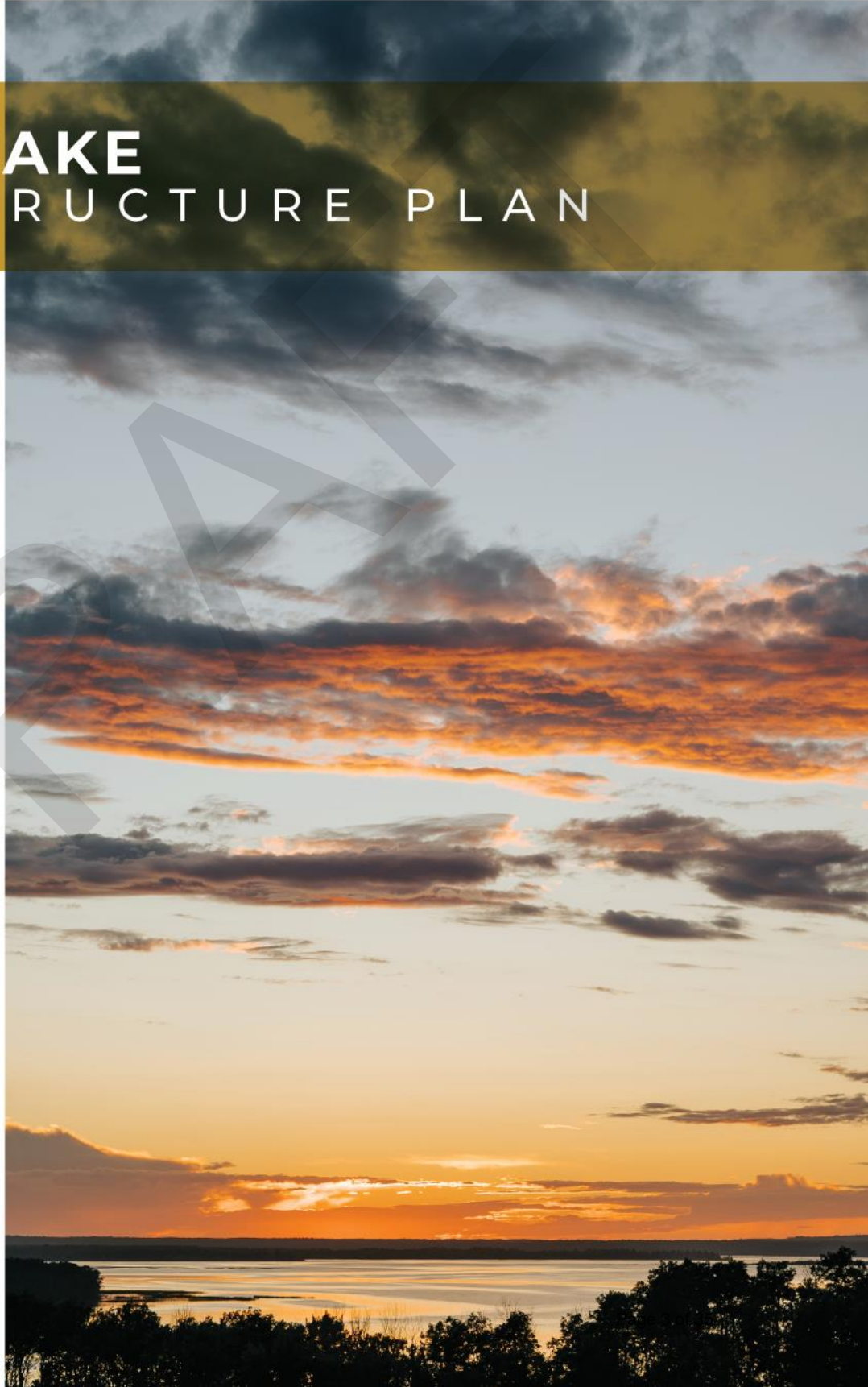
\_\_\_\_\_  
CHIEF ADMINISTRATIVE OFFICER

DRAFT

2024

**MOOSE LAKE**  
AREA STRUCTURE PLAN

DRAFT



## **CONTENTS**

<b>1.0 INTRODUCTION</b> .....	<b>3</b>
PURPOSE OF THE PLAN.....	3
AUTHORITY TO PREPARE THE PLAN.....	3
<b>2.0 SUMMARY OF THE CURRENT CONTEXT</b> .....	<b>6</b>
GEOGRAPHY.....	6
LOCAL CONTEXT.....	6
<b>3.0 COMMUNITY GUIDE</b> .....	<b>16</b>
DIRECTION OF THE PLAN.....	16
COMMUNITY ASPIRATIONS.....	17
GUIDING PRINCIPLES .....	18
<b>4.0 COMMUNITY PLAN</b> .....	<b>19</b>
LAND USE CONCEPT .....	19
POLICY DIRECTIVES .....	27
<b>5.0 COMMUNITY ACTIONS</b> .....	<b>33</b>
ADMINISTERING OF THE PLAN .....	33
AMENDING THE PLAN.....	33



### **PREPARED FOR:**

Municipal District of Bonnyville No. 87  
4905 50 Avenue  
Bag 1010  
Bonnyville, AB T9N 2J7

## **1.0 INTRODUCTION**

The review and update of the Moose Lake Area Structure Plan (ASP) stems from the changing context within the Municipal District of Bonnyville No. 87 (M.D.) as well as the Moose Lake area since the last review of the ASP in 1984. The update is also the result of the M.D.'s review of all planning documents, largely driven by the changes to the Municipal Government Act (MGA) in 2019 and includes an update to the Municipal Development Plan (MDP). The general location of the lake is illustrated in **Figure 1: Geographic Location of Moose Lake** on page 4.

### **PURPOSE OF THE PLAN**

The purpose of the update to the ASP is built around the following key areas:

1. Ensure the ASP reflects the MGA requirements for all municipal statutory planning documents.
2. Review the existing ASP relative to changes in the local context and update the land use and policy direction accordingly.
3. Design the plan to achieve the overall key objectives:
  - a. Reduce land use conflicts by promoting compatible development transitions.
  - b. Ensure that development is done in an orderly and efficient manner.
  - c. Provide clarity around the amount and type of development that may be supported in the community.
  - d. Provide guidance on decisions impacting land use, development, and capital investments in the community.

### **AUTHORITY TO PREPARE THE PLAN**

The authority for municipal planning, subdivision, and development control is established in Part 17 of the MGA and Section 633 allows municipalities to adopt Area Structure Plans to establish the following guidelines:

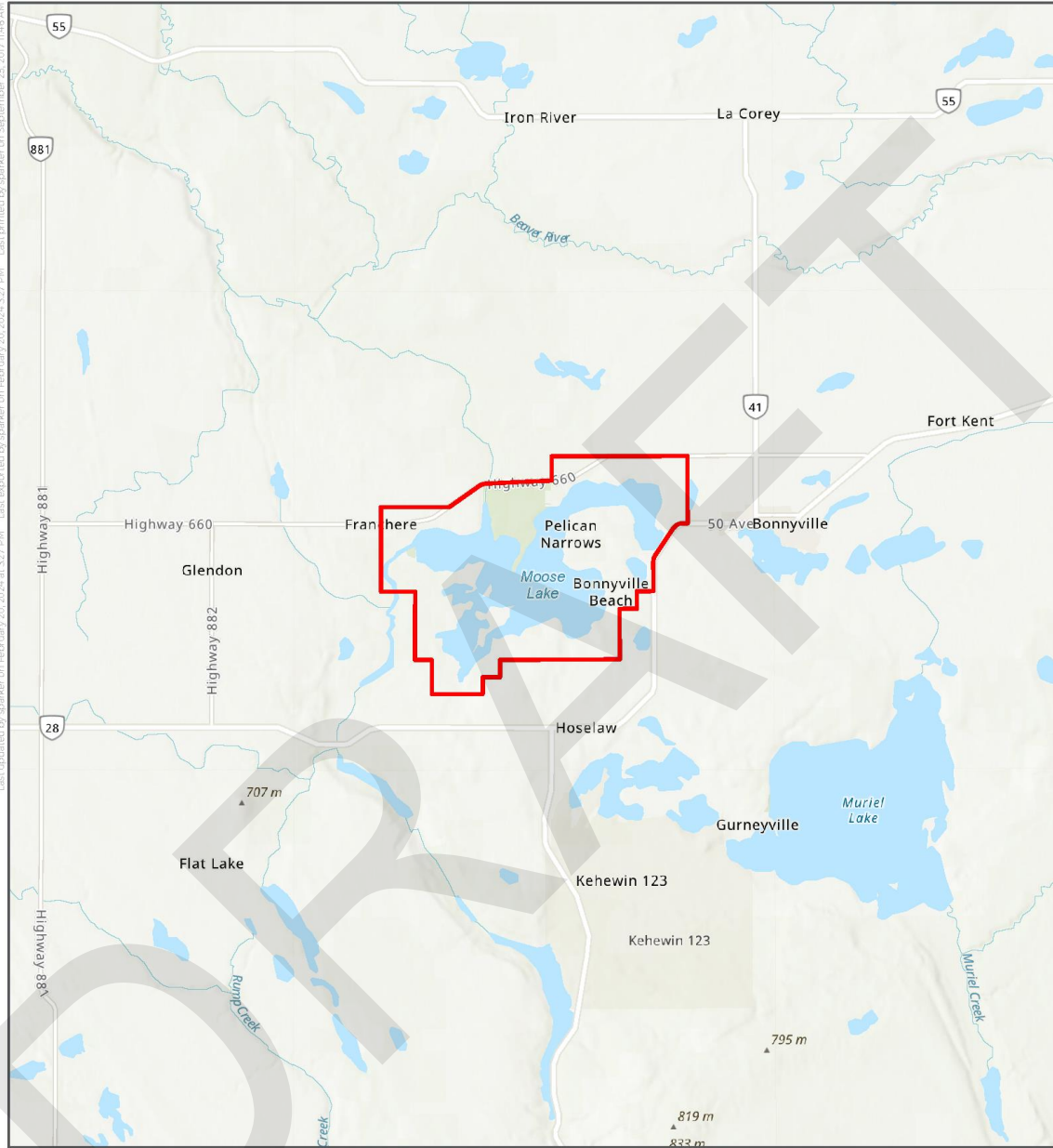
1. General land use pattern.
2. Proposed sequence of development in the area.
3. Overall density of population.
4. Transportation networks.
5. General framework for municipal services

The M.D. has a variety of well-developed policies and planning documents to guide the evolution of the plan area. These documents, combined with a commitment to structured and organized planning, provide a strong base for shaping the updates to the ASP.

The ASP provides a planning framework for land uses in the plan area and should be interpreted with flexibility regarding its purpose and objectives. Questions related to the interpretation or intent of policy may be presented to Council for their consideration.

**BYLAW NO. 1868  
Schedule "A"**

Figure 1: Geographic Location of Moose Lake



 <p><b>Municipal District BONNYVILLE NO. 87</b></p> <p><b>M.D. of Bonnyville</b></p> <p><b>Moose Lake</b></p> <p><b>FIGURE 1</b></p> <p><b>Location Map</b></p>	<p><b>Legend</b></p> <p> Moose Lake Boundary</p>	<p>0 2 4 6 Kilometers</p> <p><b>Coordinate System:</b> NAD 1983 UTM Zone 12N</p> <p><b>Data Sources:</b> - Data provided by Earthstar Geographics   Esri Canada, Esri, HERE, Garmin, SafeGraph, METI/NASA, USGS, EPA, USDA, NRCAN, Paris, Canada</p>	<p><b>Project #:</b> 3029.0013.02 <b>Author:</b> SP <b>Checked:</b> AV <b>Status:</b> <b>FINAL</b> <b>Revision:</b> A <b>Date:</b> 2024 / 2 / 20</p> <p><b>URBAN SYSTEMS</b></p> <p><small>The accuracy &amp; completeness of information shown on this drawing is not guaranteed. It will be the responsibility of the user of the information shown on this drawing to locate &amp; establish the precise location of all existing information whether shown or not.</small></p>
--	---	--	--

\\urban-systems.com\projects\Projects\_EDM\3029\0013\02\Design\GIS\Projects\Pro\_Projects\3029\_0013\_02 - MD of Bonnyville - ASP - 20230818.aprx\MD of Bonnyville - Moose Lake - FIG 1 Project Location - 20240220



## **2.0 SUMMARY OF THE CURRENT CONTEXT**

### **GEOGRAPHY**

Moose Lake is located approximately three (3) km west of the Town of Bonnyville and approximately 38 km southwest of the City of Cold Lake. Moose Lake is adjacent to Highway 28 and south of Highway 660. The general boundary of Moose Lake represents an area of approximately 11,220 ha. **Figure 3: Community Boundary** illustrates the plan area, east of the west of the Town of Bonnyville. Located along the northern edge of the lake is the Moose Lake Provincial Park. At approximately 1,650 Ha (4,077 Ac.), the provincial park is an additional amenity area that contains wildlife habitat, natural vegetation, and additional uses such as camping, hiking, and fishing.

### **LOCAL CONTEXT**

The original ASP was adopted in 1980 and was then updated in 1985. The following changes in the local context have helped to inform this update.

#### **Population and Housing**

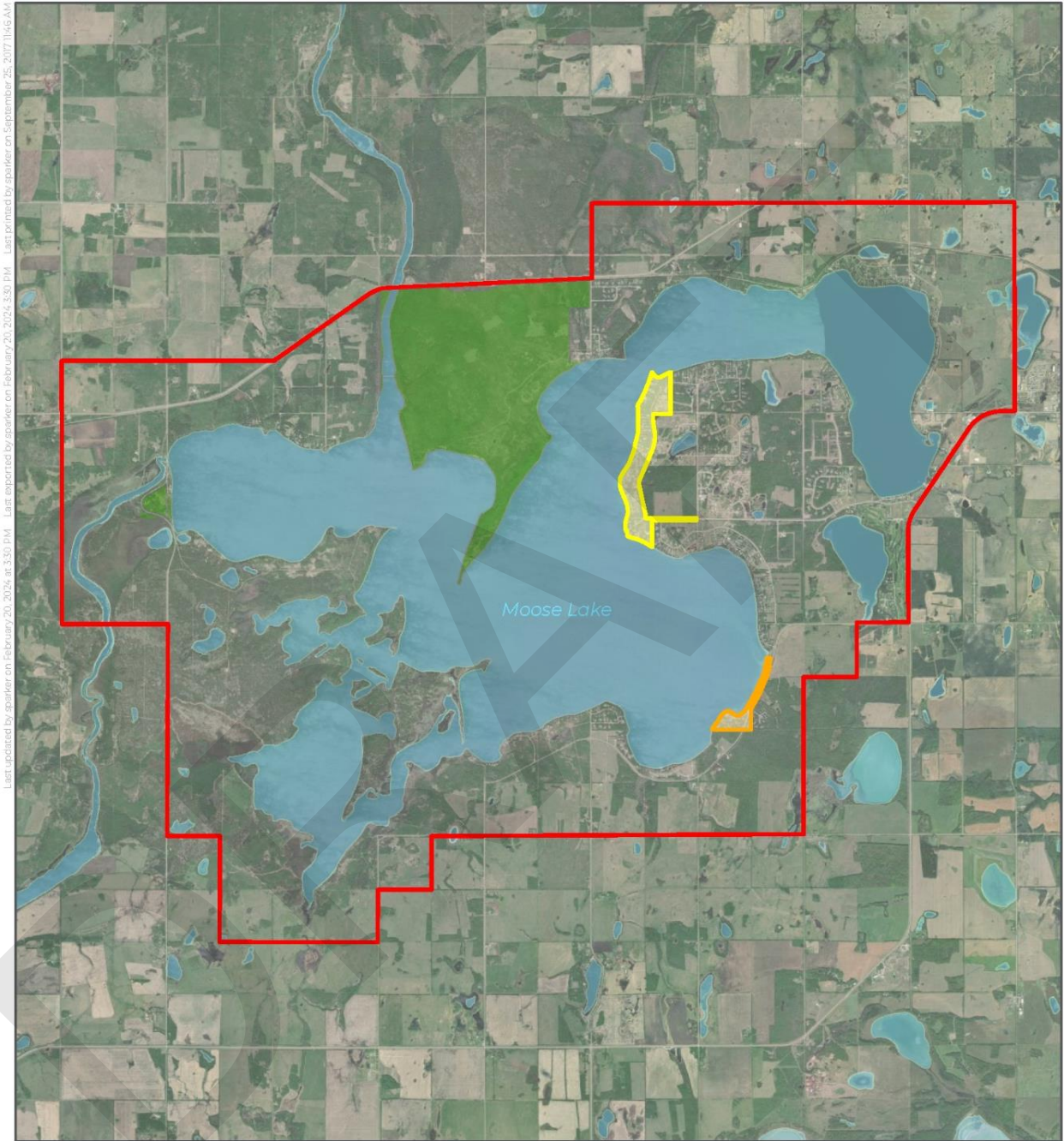
There are no official sources of population for the area. However, assessment data for Moose Lake indicates that there 1,023 total residences in the plan area, some of which are considered cabins and only seasonally occupied. There are some traditional country residential houses scattered among farm sites throughout the plan area, but most of the development is housed within multi-lot subdivisions that are established surrounding the lake.

When the plan was originally adopted in 1985, there were 289 residential buildings established. Since the plan adoption, there have been an additional 734 units constructed throughout the multi-lot subdivisions. Most of this expansion occurred between 2005 – 2015. Between the time the plan was adopted in 1985 through 2005 there was a total of 339 new units built, which roughly translates to 17 houses per year. Between 2005 and 2015 there was a total of 324 new units, which translated to 32 houses per year. The pace has slowed considerably and since 2015 there have only been 71 new units built, which roughly translates to nine (9) houses per year.



**BYLAW NO. 1868  
Schedule "A"**

Figure 3: Community Boundary



Last updated by speaker on February 20, 2024 at 3:30 PM. Last exported by speaker on February 20, 2024 at 3:30 PM. Last printed by speaker on September 25, 2017 11:46 AM.

 <p><b>M.D. of Bonnyville</b> <b>Moose Lake</b> <b>FIGURE 3</b> <b>Community Boundary</b></p>	<p><b>Legend</b></p> <ul style="list-style-type: none"> <li><span style="border: 2px solid red; display: inline-block; width: 15px; height: 10px; margin-right: 5px;"></span> Moose Lake Boundary</li> <li><span style="border: 2px solid yellow; display: inline-block; width: 15px; height: 10px; margin-right: 5px;"></span> Summer Village of Bonnyville Beach</li> <li><span style="border: 2px solid orange; display: inline-block; width: 15px; height: 10px; margin-right: 5px;"></span> Summer Village of Pelican Narrows</li> <li><span style="background-color: lightblue; display: inline-block; width: 15px; height: 10px; margin-right: 5px;"></span> Waterbody</li> <li><span style="background-color: green; display: inline-block; width: 15px; height: 10px; margin-right: 5px;"></span> Provincial Parks &amp; Protected Areas</li> </ul>	<p>0 1,000 2,000 Meters</p> <p><b>Coordinate System:</b> NAD 1983 UTM Zone 12N</p> <p><b>Scale:</b> 1:80,000 (When plotted at 8.5"x11")</p> <p><b>Data Sources:</b> - Data provided by Earthstar Geographics   Esri Canada, Esri, HERE, Garmin, SafeGraph, METI/NASA, USGS, EPA, USDO, NRCan, Parks Canada</p>	<p><b>Project #:</b> 3029.0013.02 <b>Author:</b> SP <b>Checked:</b> AV <b>Status:</b> <b>FINAL</b> <b>Revision:</b> A <b>Date:</b> 2024 / 2 / 20</p> <p><b>URBAN SYSTEMS</b></p> <p><small>The accuracy &amp; completeness of information shown on this drawing is not guaranteed. It will be the responsibility of the user of the information shown on this drawing to locate &amp; establish the precise location of all existing information whether shown or not.</small></p>
--	--	--	--

(\\us1.urban-systems.com\projects\Projects\_EDM\3029\0013\02\Design\GIS\Projects\Pro\_Projects\3029\_0013\_02 - MD of Bonnyville - ASP - 20230818.aprx\MD of Bonnyville - Moose Lake - FIG 3 Community Boundary - 20240220



## Infrastructure

The development pattern throughout the plan area is driven by the absence of municipal water and wastewater infrastructure, limiting the scale and intensity of growth. Any planned growth and development must be able to accommodate on-site water wells and wastewater treatment systems. While there are no major municipal infrastructure networks driving specific development areas, there is a network of paved roads connecting developed and agricultural areas, which does provide broader transportation connections and facilitate where growth can reasonably locate. Beyond the vehicular transportation network, there is also a network of trails that provide pedestrian connectivity and linkages throughout many of the developed areas in the eastern portion of the plan area.

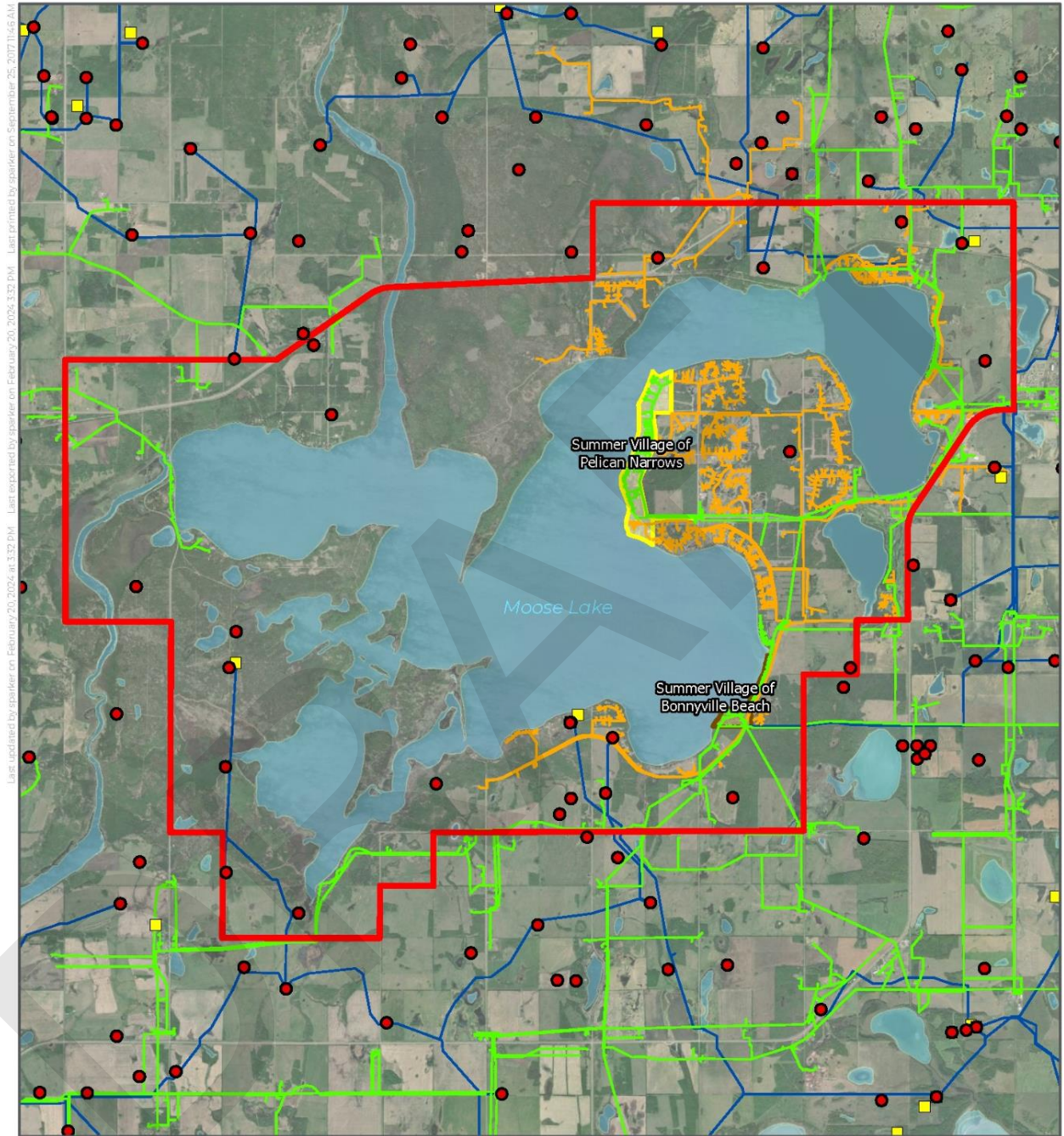
While the result is not a physical infrastructure system, the nature of the scale of development and proximity to the lake requires multi-lot subdivisions to incorporate stormwater management into the development to ensure pre-and-post-development runoff is managed and minimizing any impacts to the lake.


## Built Constraints

There is considerable oil and gas activity within and surrounding the plan area, including pipelines, facilities, and wells (whether active, suspended, or abandoned). The existing development pattern has largely avoided any significant conflicts with the existing networks or their legislated setback requirements, and they do not pose any major barriers to existing land uses, the natural features in the area, or future development opportunities. Refer to **Figure 4: Constructed Features** for an illustration of the constructed features in and around the Moose Lake plan area.

**BYLAW NO. 1868  
Schedule "A"**

Figure 4: Constructed Features



 <p><b>M.D. of Bonnyville</b> Moose Lake <b>FIGURE 4</b> Constructed Features</p>	<p><b>Legend</b></p> <ul style="list-style-type: none"> <li><span style="display: inline-block; width: 10px; height: 10px; background-color: yellow; border: 1px solid black; margin-right: 5px;"></span> AER Facility</li> <li><span style="display: inline-block; width: 10px; height: 10px; background-color: black; border-radius: 50%; border: 1px solid black; margin-right: 5px;"></span> AER Wells</li> <li><span style="display: inline-block; width: 10px; height: 2px; background-color: blue; margin-right: 5px;"></span> AER Pipelines</li> <li><span style="display: inline-block; width: 10px; height: 2px; background-color: orange; margin-right: 5px;"></span> LP Gas Distribution (Coop)</li> <li><span style="display: inline-block; width: 10px; height: 2px; background-color: green; margin-right: 5px;"></span> LP Gas Distribution (Apex)</li> <li><span style="display: inline-block; width: 10px; height: 10px; border: 2px solid red; margin-right: 5px;"></span> Moose Lake Boundary</li> <li><span style="display: inline-block; width: 10px; height: 10px; background-color: #f0e68c; border: 1px solid black; margin-right: 5px;"></span> Summer Village of Bonnyville Beach</li> <li><span style="display: inline-block; width: 10px; height: 10px; background-color: yellow; border: 1px solid black; margin-right: 5px;"></span> Summer Village of Pelican Narrows</li> <li><span style="display: inline-block; width: 10px; height: 10px; background-color: lightblue; margin-right: 5px;"></span> Waterbody</li> </ul>	<p>0 1,000 2,000 Meters</p> <p><b>Coordinate System:</b> NAD 1983 UTM Zone 12N</p> <p><b>Scale:</b> 1:80,000 (When plotted at 8.5"x11")</p>	<p><b>Project #:</b> 3029.0013.02 <b>Author:</b> SP <b>Checked:</b> AV <b>Status:</b> <b>FINAL</b> <b>Revision:</b> A <b>Date:</b> 2024 / 2 / 20</p> <p><b>URBAN SYSTEMS</b></p> <p><small>The accuracy &amp; completeness of information shown on this drawing is not guaranteed. It will be the responsibility of the user of the information shown on this drawing to locate &amp; establish the precise location of all existing information whether shown or not.</small></p>
--	---	---	--

\\s\urban-systems.com\projects\Projects\_E DM\3029.0013\02\Design\GIS\Projects\Pro\_Projects\3029\_0013\_02 - MD of Bonnyville - ASP - 20230818.aprx\MD of Bonnyville - Moose Lake - FIG 4 Constructed Features - 20240220



### Existing Land Uses

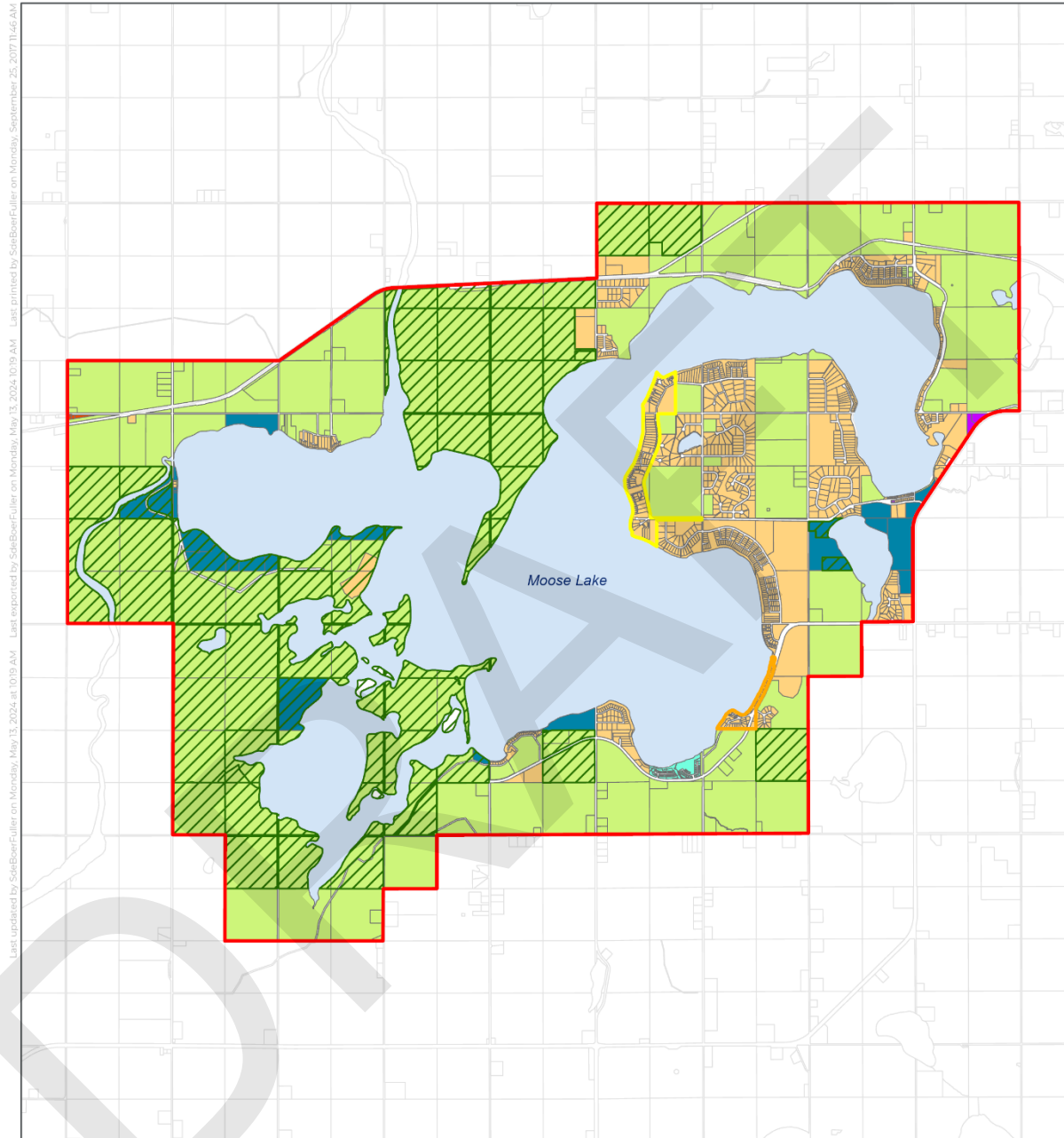
Moose Lake is surrounded primarily by agricultural and a variety of forms of country residential land uses. These residential developments range from larger-lot rural developments to more “resort”-style residential developments targeted to people looking for more of a rural-recreational lifestyle. The bulk of the residential uses are clustered in along and adjacent the eastern portions of the lake, creating the larger population cluster in the area closest to the existing Summer Villages and the Town of Bonnyville.


Beyond the agricultural and residential uses, there are also several intensive recreation uses (i.e., campgrounds, RV Parks, church camps, and recreation areas) that provide a variety of seasonal, temporary, and day use opportunities for access to the lake.

There are small land holdings clustered along the eastern boundary of the plan area that are designated as rural commercial and rural industrial, accommodating a variety of businesses located along the Highway 28 corridor toward Bonnyville. **Figure 5: Existing Land Uses** for an illustration of the existing land use distribution within the plan area.

**BYLAW NO. 1868  
Schedule "A"**

Figure 5: Existing Land Uses



 <p><b>M.D. of Bonnyville</b> <b>Moose Lake</b> <b>FIGURE 5</b> <b>Existing Land Uses</b></p>	<p><b>Legend</b></p> <p><b>Zoning</b></p> <ul style="list-style-type: none"> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: #90EE90; border: 1px solid black; margin-right: 5px;"></span> Agriculture</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: #FFDAB9; border: 1px solid black; margin-right: 5px;"></span> Country Residential</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: #FF8C00; border: 1px solid black; margin-right: 5px;"></span> Rural Commercial</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: #800080; border: 1px solid black; margin-right: 5px;"></span> Rural Industrial</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: #00CED1; border: 1px solid black; margin-right: 5px;"></span> Direct Control</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: #008080; border: 1px solid black; margin-right: 5px;"></span> Intensive Recreation</li> </ul>	<ul style="list-style-type: none"> <li><span style="display: inline-block; width: 15px; height: 10px; background: repeating-linear-gradient(45deg, transparent, transparent 2px, black 2px, black 4px); border: 1px solid black; margin-right: 5px;"></span> Crown Land</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: #ADD8E6; border: 1px solid black; margin-right: 5px;"></span> Waterbody</li> <li><span style="display: inline-block; width: 15px; height: 10px; border: 2px solid red; margin-right: 5px;"></span> Moose Lake Boundary</li> <li><span style="display: inline-block; width: 15px; height: 10px; border: 2px solid yellow; margin-right: 5px;"></span> Summer Village of Bonnyville Beach</li> <li><span style="display: inline-block; width: 15px; height: 10px; border: 2px solid yellow; margin-right: 5px;"></span> Summer Village of Pelican Narrows</li> </ul>	<p>0 1,000 2,000 Meters</p> <p><b>Coordinate System:</b> NAD 1983 UTM Zone 12N</p> <p><b>Data Sources:</b> - Data provided by MD of Bonnyville, Catalis, ESRI, NRCan, Parks Canada</p>	<p align="center">N</p> <p><b>Scale:</b> 1:80,000 (When plotted at 8.5"x11")</p>	<p><b>Project #:</b> 3029.0013.02 <b>Author:</b> SP <b>Checked:</b> AV <b>Status:</b> <b>FINAL</b> <b>Revision:</b> A <b>Date:</b> 2024 / 5 / 13</p> <p><b>URBAN SYSTEMS</b></p> <p><small>The accuracy &amp; completeness of information shown on this drawing is not guaranteed. It will be the responsibility of the user of the information shown on this drawing to locate &amp; establish the precise location of all existing information whether shown or not.</small></p>
	<p><small>\\urlurban-systems.com\projects\Projects_EDM\3029\0013\02\Design\GIS\Projects\Pro_Projects\3029_0013_02 - MD of Bonnyville - ASP - 20230818.aprx\MD of Bonnyville - Moose Lake - FIG 5 Existing Land Uses - 20240513</small></p>				



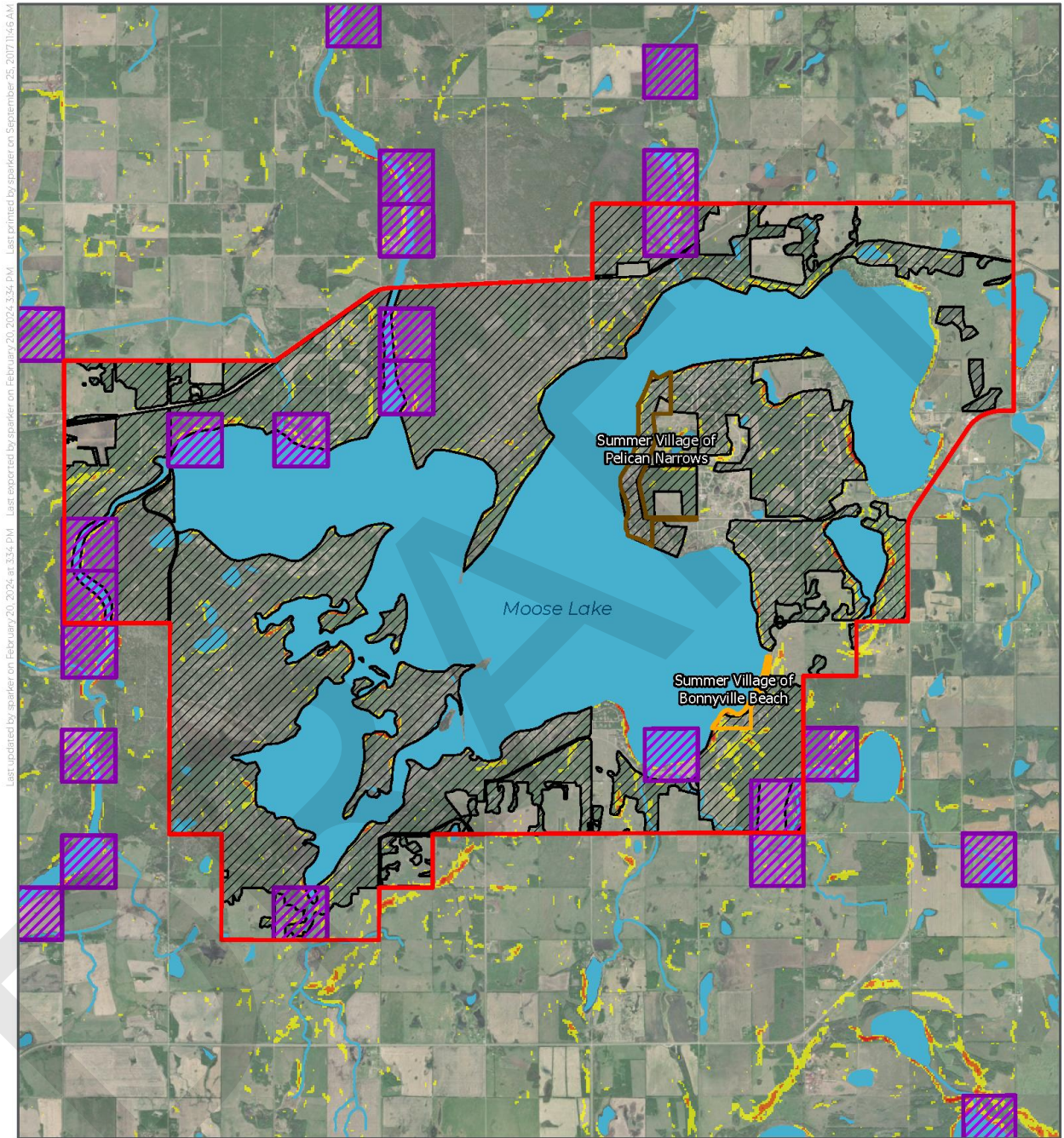
### Environmental Constraints

Environmentally Significant Areas (ESAs) are important for promoting the long-term maintenance and conservation of natural features and processes. They are areas that contain rare or unique elements in the province or include elements that may require special management considerations due to their conservation needs. ESAs are assigned scores based on four (4) criteria (areas with focal species, species groups or their habitats, areas with rare, unique, or focal habitat, areas with ecological integrity, and areas that contribute to water quality and quantity). Each quarter section in Alberta was evaluated for the four criteria and assigned a cumulative ESA score. A cumulative ESA score greater than 0.189 was used to designate areas as ESAs. ESAs do not represent government policy and are not necessarily areas that require legal protection, but instead, their identification on the landscape is intended to be an information tool to inform land use planning and policy at local, regional, and provincial levels.

There are ten (10) different quarter-sections that have an ESA score greater than 0.189. These are relatively equally distributed throughout the plan area, aside from the eastern portion of the lake with the majority of the developed area and focused on the tributary heads of water entry and outlet points of the lake. In some cases, there has been development on these quarter-sections, with vegetative buffers and development setbacks applied to the riparian areas of the tributaries. Refer to **Figure 6: Environmental Features** for an illustration of the environmental characteristics of the plan area.

**BYLAW NO. 1868  
Schedule "A"**

Figure 6: Environmental Features



 <p><b>M.D. of Bonnyville</b> Moose Lake <b>FIGURE 6</b> Environmental Features</p>	<p><b>Legend</b></p> <ul style="list-style-type: none"> <li> ESA Score &gt; 0.189</li> <li> Tree Cover</li> <li> Moose Lake Boundary</li> <li> Summer Village of Bonnyville Beach</li> <li> Summer Village of Pelican Narrows</li> <li> Streams</li> </ul>	<ul style="list-style-type: none"> <li> Water Bodies</li> <li><b>Slope</b></li> <li> 10 - 15</li> <li> 15 - 20</li> <li> ≥ 20</li> </ul>	<p>0 1,000 2,000 Meters</p> <p>Coordinate System: NAD 1983 UTM Zone 12N</p> <p><b>Data Sources:</b> - Data provided by GOA, ESRI, NRCan, Parks Canada</p>	<p>Scale: 1:80,000 (When plotted at 8.5"x11")</p> <p>Project #: 3029.0013.02 Author: SP Checked: AV Status: <b>FINAL</b> Revision: A Date: 2024 / 2 / 20</p> <p><b>URBAN SYSTEMS</b></p> <p><small>The accuracy &amp; completeness of information shown on this drawing is not guaranteed. It will be the responsibility of the user of the information shown on this drawing to locate &amp; establish the precise location of all existing information whether shown or not.</small></p>
	<p><small>Y:\us\urban-systems.com\projects\Projects_EDM\3029\0013\02\Design\GIS\Projects\Pro_Projects\3029_0013_02 - MD of Bonnyville - ASP - 20230818.aprx\MD of Bonnyville - Moose Lake - FIG 6 Environmental Features - 20240220</small></p>			



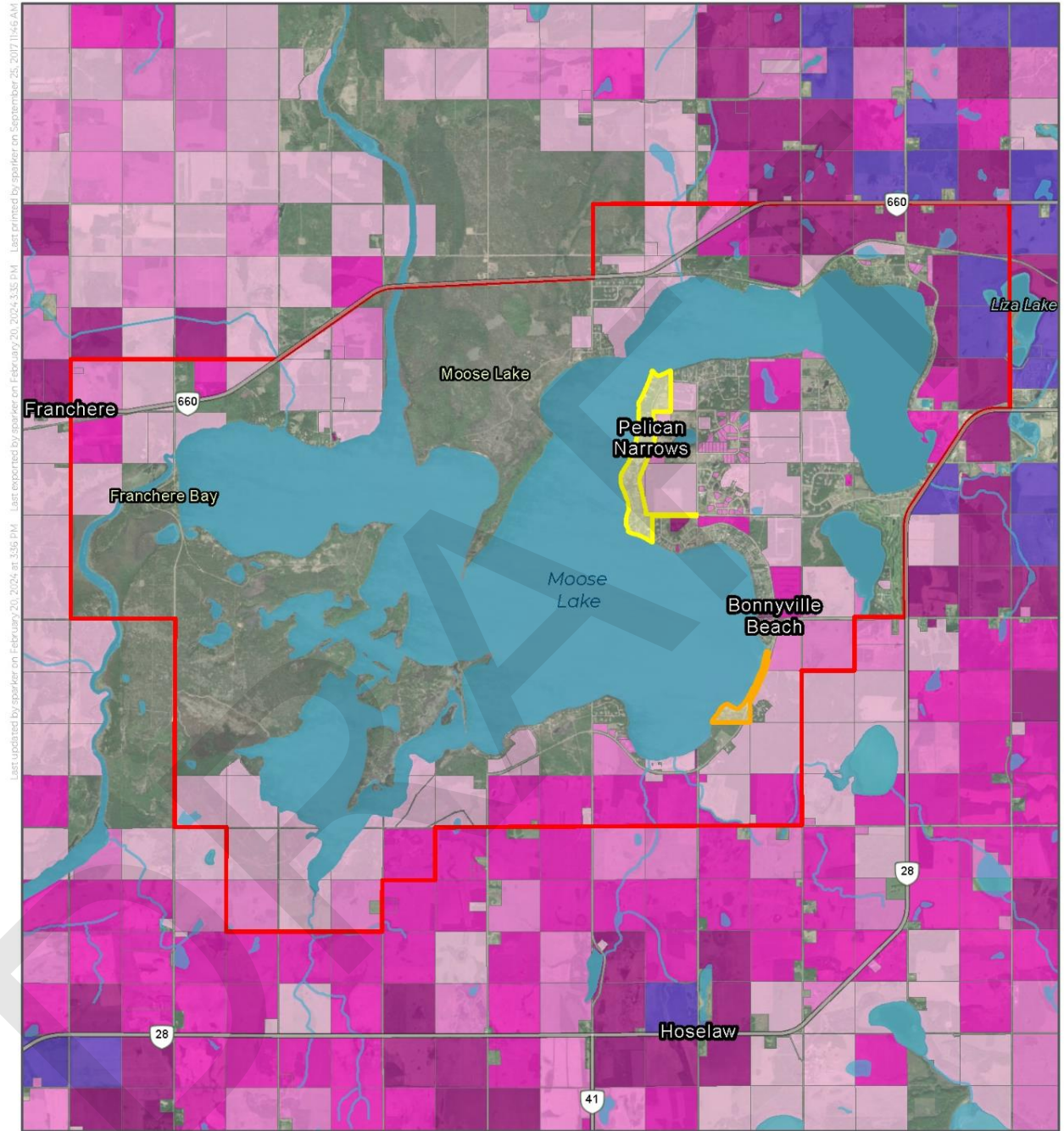
### Soil Characteristics


Soil ratings that are assessed at greater than 45% are considered “Better Agricultural Lands” and have been identified as a priority for preservation within the Municipal Development Plan. There are diverse agricultural operations scattered throughout the plan area, though the majority of the lands identified as “Good” agricultural lands (assessed between 45%-55%) are clustered along the northeastern boundary of the ASP. There are additional lands identified as “Fair” (assessed between 35%-45%) in isolated pockets and scattered along the southern edge of the boundary adjacent Township Road 604. Refer to **Figure 7: Soil Characteristics** for an illustration of the soil quality and its distribution throughout the plan area.



**BYLAW NO. 1868**  
**Schedule "A"**

Figure 7: Soil Characteristics



 <p><b>M.D. of Bonnyville</b> <b>Moose Lake</b> <b>FIGURE 7</b> <b>Soil Characteristics</b></p>	<p><b>Legend</b></p> <p><b>Soil Productivity</b></p> <ul style="list-style-type: none"> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: #f8d7da; border: 1px solid #c6c8ca; margin-right: 5px;"></span> Very Poor (0% - 13%)</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: #f3c3c3; border: 1px solid #c6c8ca; margin-right: 5px;"></span> Poor (14% - 32%)</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: #e79c9c; border: 1px solid #c6c8ca; margin-right: 5px;"></span> Fair (33% - 44%)</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: #d46161; border: 1px solid #c6c8ca; margin-right: 5px;"></span> Good (45% - 55%)</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: #c0392b; border: 1px solid #c6c8ca; margin-right: 5px;"></span> Very Good (56% - 74%)</li> </ul>	<ul style="list-style-type: none"> <li><span style="display: inline-block; width: 15px; height: 10px; border: 2px solid red; margin-right: 5px;"></span> Moose Lake Boundary</li> <li><span style="display: inline-block; width: 15px; height: 10px; border: 2px solid orange; margin-right: 5px;"></span> Summer Village of Bonnyville Beach</li> <li><span style="display: inline-block; width: 15px; height: 10px; border: 2px solid yellow; margin-right: 5px;"></span> Summer Village of Pelican Narrows</li> <li><span style="display: inline-block; width: 15px; height: 10px; border-bottom: 2px solid blue; margin-right: 5px;"></span> Streams</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: #add8e6; margin-right: 5px;"></span> Water Bodies</li> </ul>	<p>0 1,000 2,000 Meters</p> <p><b>Coordinate System:</b> NAD 1983 UTM Zone 12N</p> <p><b>Scale:</b> 1:80,465 (When plotted at 8.5"x11")</p> <p><b>Data Sources:</b> - Data provided by CoA, ESRI, NRCAN, Parks Canada</p>	<p><b>Project #:</b> 3029.0013.02 <b>Author:</b> SP <b>Checked:</b> CU <b>Status:</b> <b>FINAL</b> <b>Revision:</b> A <b>Date:</b> 2024 / 2 / 20</p> <p><b>URBAN SYSTEMS</b></p> <p><small>The accuracy &amp; completeness of information shown on this drawing is not guaranteed. It will be the responsibility of the user of the information shown on this drawing to locate &amp; establish the precise location of all existing information whether shown or not.</small></p>
--	---	---	---	--

\\ust.urban-systems.com\projects\Projects\_EDM\3029\0013\02\D-Design\GIS\Projects\Pro\_Projects\3029\_0013\_02 - MD of Bonnyville - ASP - 20230818.aprx\MD of Bonnyville - Moose Lake - FIG 7 Soil Characteristics - 20240220



## **3.0 COMMUNITY GUIDE**

### **DIRECTION OF THE PLAN**

The original plan was adopted in 1980, with an amended version adopted in 1985 as a refresher of the initial ASP and reflection on whether the direction and key policies remained relevant. There have been no amendments to the plan since this time, though there has been an increase in the total developed area since 1985.

The M.D. recognizes Moose Lake, and its adjacent lands, as significant assets to the municipality. While the total amount of development has increased, the general direction and intent remains the same and focused on protecting the integrity of the natural areas and ecological assets, as they are the key drivers of expansion of the residential areas and key to the sustainable future of the plan area.

As outlined in Section 2.0, there were 289 residential units in place (and that remain today) at the time of adoption in 1985, and 153 of those are considered as seasonal residences. Since 1985 there have been another 794 residential units constructed, though only 96 of those are considered seasonal, with a much larger proportion of development contributing to a larger permanent population.

While the main purpose of the plan update is to reinforce the importance of protecting the ecological integrity of the lake and the surrounding natural features, the increasing scale of development in this area of the M.D. has created a population hub. Beyond the growing residential population, the lake continues to act as an attraction for a variety of recreation uses and provides the backdrop for the Summer Villages of Pelican Narrows and Bonnyville Beach.

**BYLAW NO. 1868**  
**Schedule "A"**

The agricultural operations and mix of commercial and industrial uses closer to the Town of Bonnyville, demonstrate the size and diversity of the plan area. Given the importance of the health of the lake, the update to the ASP requires a proactive approach to growth management, focused on the following key drivers:

- Focus on developing vacant, subdivided lots in the plan area, that have already been planned for residential uses and should be prioritized prior to further re-designations and/or subdivisions converting agricultural lands.
- Maintain or improve the quality of the local environment, including the quality of the lake, through growth management and incorporating recommendations from the Moose Lake Watershed Management Plan.
- Maintain or improve the quality of recreation experience and suitable development on and around the lake.
- Consider the fiscal sustainability of development patterns as the area continues to grow and evolve.

## **COMMUNITY ASPIRATIONS**

In contributing to the overall vision of the M.D., this ASP has been developed around the understanding that the long-term prosperity of Moose Lake requires wisely managed change, and that new development makes productive use of land and considers strategies to balance the importance of preserving the natural environment and the lake as a critical community and regional asset with supporting the evolution of Moose Lake as a sustainable community.

Efficient land use supports strong and healthy communities, protects natural areas, and minimizes conflicts between incompatible uses. In setting the direction for the sustainability of Moose Lake, the following community aspirations represent a filter to evaluate the contributions of new development to the health of the community:

1. Protect the long-term health of the lake's water quality and other natural systems, through preservation efforts focused on the shoreline, biodiversity, and wildlife habitat.
2. Promote development that is compatible with the lake environment, and existing residential and recreational land uses.
3. Build on the growing concentration of existing land uses to reinforce the local character and establish a community identity that contributes to the health and wellbeing of the region.



## **GUIDING PRINCIPLES**

While not intended as a detailed prescription, the following principles can act as a guide to support decisions on future development inquiries and applications in support of the community aspirations:

**Environmental Integrity:** Prioritize water quality and resource conservation when evaluating the suitability of any future land uses that emphasizes the importance of the long-term health and sustainability of the lake as a critical ecological asset and recreational resource.

**Community Character and Citizen Retention:** Enhance the local character through development opportunities that increase a mix of land uses and builds an identity of Moose Lake as a strong and healthy rural community.

**Recreational Access:** Sustain connectivity and public access to the lake for recreational uses, recognizing the importance of the quality of all development in the area to ensure the lake provides a healthy and safe environment for all users.

## **4.0 COMMUNITY PLAN**

### **LAND USE CONCEPT**

The proposed land use concept for Moose Lake represents a conceptual framework, where the boundaries of the different land use classifications are general in nature. The land use concept has been developed based on the following:

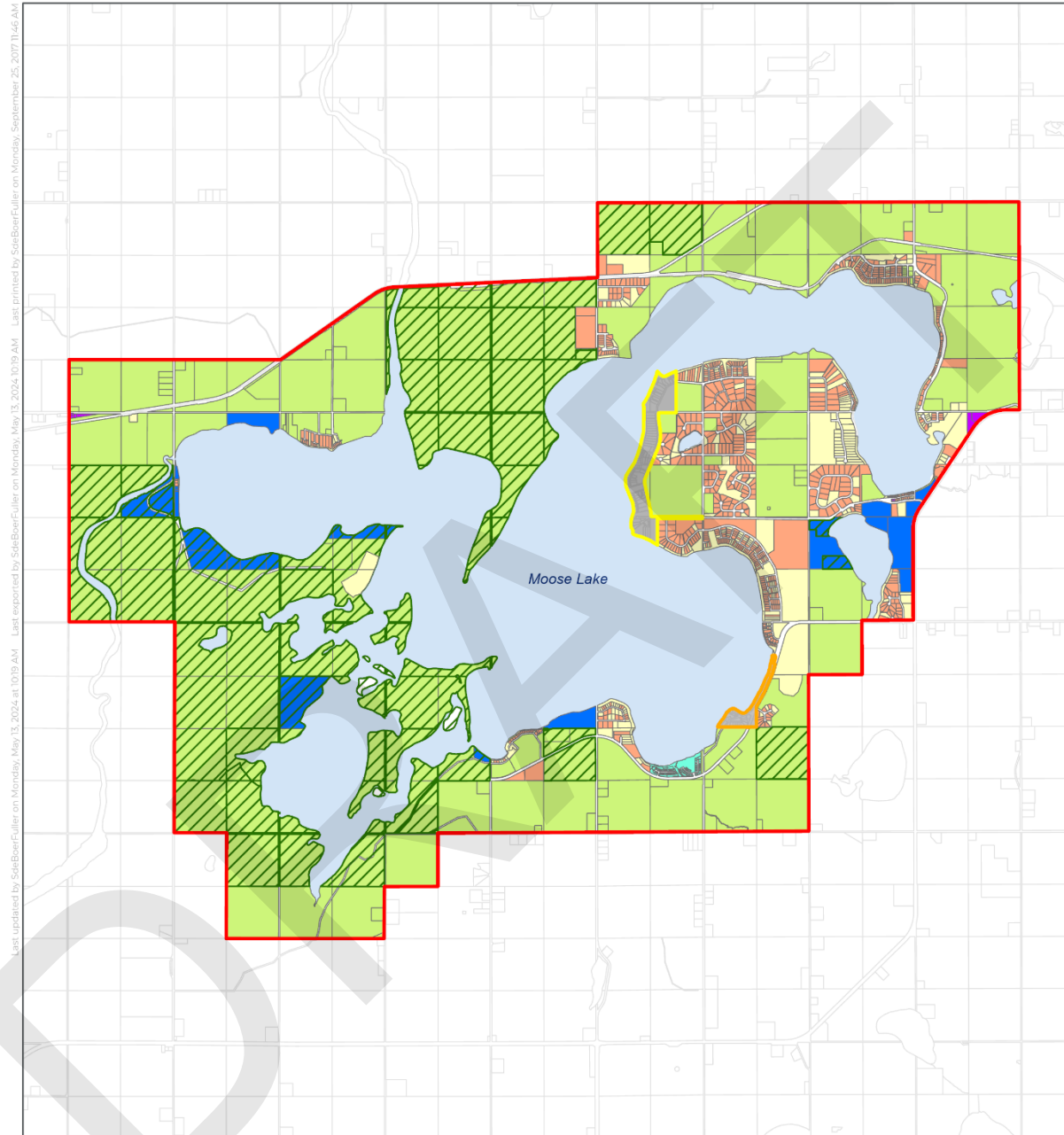
1. The natural and physical development constraints throughout the area.
2. The aspirations and guiding principles outlined in Section 3.
3. The relationship and compatibility to the existing development pattern with considerations focused on planned development on vacant lands.


The following classifications represent general descriptions of proposed land uses surrounding Moose Lake, respecting existing developed areas, and providing proposed future opportunities within the undeveloped areas. The following land use classifications represent general descriptions of proposed land uses throughout the plan area, respecting existing developed areas. Each land use category describes a general form of future development and do not correspond to any specific land use districts. Refer to **Figure 8: Land Use Concept** for an illustration of the generalized future land use concept.

DRAFT

**BYLAW NO. 1868  
Schedule "A"**

Figure 8: Land Use Concept



 <p><b>M.D. of Bonnyville</b> <b>Moose Lake</b> <b>FIGURE 8</b> <b>Land Use Concept</b></p>	<p><b>Legend</b></p> <p><b>Zoning</b></p> <ul style="list-style-type: none"> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: orange; border: 1px solid black; margin-right: 5px;"></span> Existing Residential</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: yellow; border: 1px solid black; margin-right: 5px;"></span> Vacant Residential</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: lightgreen; border: 1px solid black; margin-right: 5px;"></span> Agriculture</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: blue; border: 1px solid black; margin-right: 5px;"></span> Public Use and Recreation</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: purple; border: 1px solid black; margin-right: 5px;"></span> Light Industrial / Commercial</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: cyan; border: 1px solid black; margin-right: 5px;"></span> Direct Control</li> </ul> <ul style="list-style-type: none"> <li><span style="display: inline-block; width: 15px; height: 10px; background: repeating-linear-gradient(45deg, transparent, transparent 2px, green 2px, green 4px); border: 1px solid black; margin-right: 5px;"></span> Crown Land</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: lightblue; border: 1px solid black; margin-right: 5px;"></span> Waterbody</li> <li><span style="display: inline-block; width: 15px; height: 10px; border: 2px solid red; margin-right: 5px;"></span> Moose Lake Boundary</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: grey; border: 1px solid black; margin-right: 5px;"></span> Summer Village of Bonnyville Beach</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: yellow; border: 1px solid black; margin-right: 5px;"></span> Summer Village of Pelican Narrows</li> </ul>	<p>0 1,000 2,000 Meters</p> <p><b>Coordinate System:</b> NAD 1983 UTM Zone 12N</p> <p><b>Scale:</b> 1:80,000 (When plotted at 8.5"x11")</p> <p><b>Data Sources:</b> - Data provided by MD of Bonnyville, Catalis, ESRI, NRCan, Parks Canada</p>	<p><b>Project #:</b> 3029.0013.02 <b>Author:</b> SP <b>Checked:</b> CU <b>Status:</b> <b>FINAL</b> <b>Revision:</b> A <b>Date:</b> 2024 / 5 / 13</p> <p><b>URBAN SYSTEMS</b></p> <p>The accuracy &amp; completeness of information shown on this drawing is not guaranteed. It will be the responsibility of the user of the information shown on this drawing to locate &amp; establish the precise location of all existing information whether shown or not.</p>
--	--	---	---

\\us.lurban-systems.com\projects\Projects\_EDM\3029\0013\02\Design\GIS\Projects\Pro\_Projects\3029\_0013\_02 - MD of Bonnyville - ASP - 20230818.apr\MD of Bonnyville - Moose Lake - FIG 8 Land Use Concept - 20240513



## RESIDENTIAL

Like most recreational areas, Moose Lake has attracted a variety of seasonal and permanent residences, as well as recreational campgrounds. A primary concern that emerges from growing development pressures is how to accommodate increasing demand for housing without affecting the lake environment.

The suitability of development proposals needs to reflect not only the potential impact on the site conditions of the subject lands, reflected through the quality of the development, but also on the cumulative impacts of development on the health of the lake environment.

The area identified for residential use represents existing development as well vacant subdivided lots that have been approved for future housing. Beyond the existing development, the area can accommodate approximately 150 additional lots, based on existing approved subdivisions. There are also approximately 52 ha (130 ac) of unsubdivided lands designated for residential use. Depending on soil conditions and the ability to accommodate on-site servicing, this provides the potential for an additional 85-175 residential lots.

**BYLAW NO. 1868**  
**Schedule "A"**



***Development Guidelines***

1. Promote clustered site development to increase the efficient use of land, while conserving as much natural vegetation as possible in its natural state.
2. The area identified for residential development is intended for seasonal and permanent residences and, subject to land use designation and subdivision approval, shall be reserved for:
  - a. Country residential development.
  - b. Municipal parks.
  - c. Public uses.
  - d. Neighbourhood-scale commercial development.
  - e. Commercial development, subject to redesignation, within residential neighbourhoods may be supported for uses that include:
    - i. Convenience stores.
    - ii. Recreation-vehicle and boat storage.
    - iii. Restaurants.



**BYLAW NO. 1868**  
**Schedule "A"**

3. Appropriate residential and commercial development options are encouraged, provided the proposed uses can demonstrate the following, to the satisfaction of the M.D.
  - a. Consistency with the scale and character of the community.
  - b. Ability to accommodate on-site water and wastewater servicing.
  - c. No negative impacts on the capacity of the transportation network to serve the community.
  - d. Stormwater management that addresses pre-and-post-development flows that minimizes any impacts to the lake and surrounding water bodies.
  - e. Appropriate buffers for any transition between commercial and residential uses.
  - f. Accommodations for on-site parking for proposed commercial development that does not impact vehicle traffic on the internal road network.





## **PUBLIC USE AND RECREATION AREAS**

Moose Lake is a natural landscape with significant environmental features that collectively contribute to maintain the natural state of the lake which strengthens its attractiveness for not only residential development, but also considerable recreational opportunities. Beyond the natural features that serve a recreational role, seasonal recreational developments have always had a significant presence in the plan area and demand continues to grow. The plan looks to continue accommodating this form of development, provided it does not have a negative affect on the lake environment.

### ***Development Guidelines***

1. Identify connectivity opportunities for all community facilities, recreation areas, and open spaces to maximize accessibility and linkage with existing assets.
2. Evaluate proposed open spaces for their ecological function and connectivity when evaluating potential development proposals.
3. New overnight recreational developments shall demonstrate an adequate demand for additional sites to maintain the sustainability of existing developments and minimize any potential negative impacts on the lake.
4. Any trail development or extensions should be constructed, to the satisfaction of the M.D., based on the following:
  - a. Asphalt, shared-use trail is the preferred standard for network development unless an alternative format is determined more appropriate based on the relationship to adjacent natural areas.
  - b. Associated pedestrian-related infrastructure (i.e., benches, waste receptacles, signage, etc.) should be included as part of any trail construction.

## **LIGHT INDUSTRIAL/COMMERCIAL**

Most of the commercial needs of the Moose Lake area population can be served by the Town of Bonnyville. As the nature of residential development increasingly shifts to permanent residents, providing neighbourhood-scale commercial developments becomes more important to sustain the area as a rural community. While this type of commercial use is distinct from any other development in the area, it is anticipated that neighbourhood-scale commercial development will largely be addressed as part of more detailed site planning within proposed residential areas. Beyond the smaller-scale commercial development, there are clusters of commercial and industrial uses located along the eastern boundary of the plan area, along Highway 28, and near the Town of Bonnyville. While not a significant growth area, the location of existing developments of this type, present challenges, and potential conflicts for any other type of use, representing opportunities for further non-residential employment uses. This area has been identified for potential future commercial expansion within the Intermunicipal Development Plan between the M.D. and Town of Bonnyville, indicating its long-term potential for regional benefit.

### ***Development Guidelines***

1. Focus development opportunities in the area on a mix of commercial and light industrial uses that provide employment and enhance and diversify the local economy, without negatively impacting the character of the highway corridor.
2. Supporting commercial and light industrial growth and development in the area is focused on the following guidelines:
  - a. Traffic from the proposed development will ensure safe access to the adjacent transportation network, minimizes impacts to traffic flow on Highway 28.
  - b. Any development adjacent to Highway 28 shall be expected to demonstrate a higher level of aesthetic design as a gateway into the community through landscaping and/or building design to the satisfaction of the M.D.
  - c. Incorporate appropriate buffers at the interface of any land use transition, demonstrating proposed measures to mitigate any nuisance factors (i.e., noise, odours, etc.) residential areas south of Township Road 611.
3. While regulated by the Alberta Energy Regulator (AER), the M.D. will not support oil and gas exploration and attraction within the plan area in proximity to any permanent watercourse draining into Moose Lake.



## **AGRICULTURAL**

There are a variety of agricultural operations and activities scattered throughout the plan area, though, aside from the northeast corner, most of the agricultural soils are considered to be of poor quality. While the soils are not prioritized for preservation, the presence of agricultural uses contributes to the rural character and identity of the plan area and prematurely converting these areas to non-agricultural development could affect the environmental balance of the area and increase the strain on the water quality of the lake.

### ***Development Guidelines***

1. Minimize agricultural practices adjacent to water bodies that influence the environmental integrity of the lake or watershed.
2. Minimize agricultural development that alters or fragments contiguous natural areas, functions, or habitats.
3. Evaluate agricultural operations that are adjacent to or drain into water bodies that flow into the lake to reduce point-source pollutants and the total maximum daily load entering the water bodies.
4. While confined feeding operations (CFO) are regulated by the Natural Resources Conservation Board, any proposed application for a CFO is not supported within this ASP.



## **POLICY DIRECTIVES**

### **General Policies**

Objective G.1: Ensure higher order policy and regulatory documents in the M.D., as well as provincial regulations, are incorporated into planning and development decisions.

Policy G.1.1: Notwithstanding any policy direction within this ASP, the Municipal Development Plan and Land Use Bylaw shall guide and determine the suitability of redesignation and subdivision applications.

Policy G.1.2: Notwithstanding any policy direction within this ASP, other M.D. environmental plans and policies, as well as the Municipal Land and Reserves Bylaw, shall be used as part of the review of all proposed development and use of lands in the plan area.

Policy G.1.3: Any proposed subdivision shall confirm setback and development restrictions associated with operating or abandoned pipelines, well sites, and facilities with Alberta Energy Regulatory requirements.

Policy G.1.4: Prior to subdivision or development approval, the M.D. may require additional studies to address any potential site contamination and necessary remediation.

## Principle 1: Environmental Integrity

Objective 1.1: Manage growth and development in the plan area to support the lake's water quantity and quality through the protection of riparian areas and minimizing contaminants entering the lake.

- Policy 1.1.1: Stormwater management plans may be required for new development, at the discretion of the M.D., to identify retention requirements and overland flow routes and manage the discharge of stormwater into Moose Lake. All stormwater management requirements shall be the responsibility of the developer.
- Policy 1.1.2: Any proposed subdivision or development application may be required to demonstrate, to the satisfaction of the M.D., that the individual lot can provide the following:
- a. A suitable building site.
  - b. An adequate long-term supply of potable water derived from an onsite or municipal source.
  - c. Soil and topographical conditions suitable for onsite wastewater disposal.
- Policy 1.1.3: Any proposed subdivision or development application may be required to demonstrate through their site plan, to the satisfaction of the M.D., that the proposed building does not result in the fragmentation of any of the following:
- a. Contiguous natural features.
  - b. Water bodies.
  - c. Wetlands.
  - d. Wildlife habitat or corridors.
- Policy 1.1.4: Any proposed site plan as part of a subdivision or development application shall demonstrate, to the satisfaction of the M.D., how the application proposes to minimize the removal of natural vegetation and alterations to the natural drainage of lands.
- Policy 1.1.5: Consider the impacts of development on the lake's water quality from a watershed perspective, through maintenance of upland vegetation, natural riparian areas, contributing tributaries, and surrounding wetlands to improve filtration and the quality of surface water runoff.
- Policy 1.1.6: Minimize the loss of wetlands through maintenance of surface water delivery tributaries and the maintenance and enhancement of naturally occurring wetlands.

**BYLAW NO. 1868**  
**Schedule "A"**

Objective 1.2: Utilize reserve dedication and appropriate easements for the protection of natural features, aquatic vegetation, and wildlife habitats to minimize pollutants entering the lake and provide accessible open spaces for compatible public use.

Policy 1.2.1: Maintain natural riparian buffers around wetlands, tributaries within the plan area, and broader watershed, and the lakeshore to preserve the water quantity and quality.

Policy 1.2.2: Maintain the contiguity of natural areas to sustain the value of wildlife habitats and maintain connectivity through sustained corridors and riparian areas.

Policy 1.2.3: The M.D. shall require a 30-metre setback designated as Environmental Reserve adjacent the lakeshore and all permanent water bodies within the plan area.

Policy 1.2.4: Notwithstanding policy 1.2.3, the setback may be expanded based on the presence of steep slopes adjacent water bodies or the presence of shallow groundwater tables.

Policy 1.2.5: The M.D. shall consider the size of the Environmental Reserve setback adjacent intermittent, temporary, or seasonal water bodies on a case-by-case basis.

Policy 1.2.4: Where environmentally significant areas (ESA) have been identified, the proposed site plan shall demonstrate how these areas have been effectively protected through environmental reserves or other protective easement and how the proposed development does not negatively impact the integrity of the ESA.

Objective 1.3: Increase public awareness and engagement around the shared responsibility of environmental stewardship, toward mutually beneficial goals of preserving the natural areas and promoting sustainable development.

Policy 1.3.1: Support public outreach and education that increases awareness on the following mutually beneficial best practices to maintain and enhance the water quality around the following areas of concern:

- a. Maintain natural vegetation in yards.
- b. Remove improvements from any identified reserve, easement, or natural riparian area.
- c. Removal of any invasive species or noxious weeds that could spread into native habitats.
- d. Limiting the use of herbicides and inorganic fertilizers.
- e. Proper maintenance and upgrades to on-site wastewater treatment systems.

Policy 1.3.2: Encourage stewardship, collaboration, and partnerships toward achieving common goals around the preservation of natural areas through sustainable development patterns.



## Principle 2: Community Character and Citizen Retention

Objective 2.1: Consider development proposals through the lens of building a sustainable rural community at Moose Lake.

Policy 2.1.1: The M.D. may encourage future development proposals to support the creation of an intentional community in a rural setting through considering a mix of land uses that includes opportunities for convenience commercial businesses that are compatible at the neighbourhood scale.

Policy 2.1.2: All proposed subdivision and development applications shall be required to demonstrate the incorporation of high-quality public amenity and recreation spaces and facilities that can contribute to the long-term attractiveness of the community and support the retention and attraction of a local population that can maintain the sustainability of the permanent residences.

Policy 2.1.3: The M.D. shall ensure the ongoing maintenance of public amenity and recreation spaces and facilities to retain the quality and attractiveness of the community to support citizen retention and attraction of the existing stock of permanent residences.

Policy 2.1.4: All proposed subdivision applications shall demonstrate integration with adjacent developments to improve connectivity and accessibility to public amenity and recreation spaces and facilities.

Policy 2.1.5: Maintain agricultural operations as a critical component of the community character and rural identity by requiring any development adjacent existing agricultural lands establish a transitional separation distance (maintaining a vegetated buffer where possible) between different land uses to minimize the impact on agricultural operations.





Objective 2.2: Consider the fiscal sustainability of the development pattern to ensure long-term sustainable service delivery to the area.

Policy 2.2.1: Support the integration of locally appropriate commercial uses into the community development pattern to increase non-residential tax assessments that contribute to the fiscal health of the plan area.

Policy 2.2.2: Retain high standards of development that ensure the continued attractiveness of the community to retain a sustainable population base that can support sustainable service delivery.

Policy 2.2.3: Incorporate the long-term maintenance and replacement costs of existing transportation and recreation facilities, as well as the localized costs of service delivery into a Moose Lake asset management plan to support the inclusion of fiscal sustainability as part of subdivision and development approvals.

### **Principle 3: Recreational Access**

Objective 3.1: Accommodate the demand for recreational access to natural areas without negatively affecting the lake environment.

Policy 3.1.1: All recreational development, public spaces, and recreational facilities shall demonstrate sustainable and ecologically sensitive design to minimize any potential impacts on the natural environment.

Policy 3.1.2: The M.D. shall encourage the expansion of the trail network as part of new developments, requiring connectivity to existing segments, public recreation spaces and facilities, and sustainable access to natural assets.

**BYLAW NO. 1868**  
**Schedule "A"**



Objective 3.2: Evaluate proposals for additional recreational development based on the demonstrated demand and the sustainability of existing uses.

- Policy 3.2.1: The M.D. shall evaluate any proposed campground, recreation vehicle campsite, or seasonal camp based on the following:
- a. Demonstrated demand for the proposed use.
  - b. Impact on the natural landscape and ecological integrity of the lake and surrounding water bodies.
  - c. Impact on the sustainability of existing recreational developments.

- Policy 3.2.2: Ensure the site plan for any proposed recreational development outlines the following site characteristics, to the satisfaction of the M.D.:
- a. Internal circulation requirements and road widths.
  - b. Site access and egress
  - c. Parking and storage areas
  - d. Emergency access
  - e. Pedestrian circulation
  - f. Location and distribution of public amenities
  - g. Location and distribution of recreation facilities
  - h. Site layout of campsites.

## **5.0 COMMUNITY ACTIONS**

### **ADMINISTERING OF THE PLAN**

It is difficult to know how development will proceed, with the timing largely based on the intent of individual landowners and whether the socio-economic context supports new development. Market conditions and the costs of community services have a considerable influence over the timing and scale of new development.

While there may be periods of larger population growth, the community will likely develop incrementally over a series of smaller phases during the next twenty years.

Flexibility in phasing is important, but growth will be prioritized in areas that:

- a. Have the appropriate land use designation and have already been subdivided.
- b. Have the appropriate land use designation but have not yet been subdivided.
- c. Adjacent to existing and compatible development on lands that require redesignation and do not contain environmentally significant areas.

Overall, the Plan directs development to vacant or underutilized lots within the existing built-up community.

### **AMENDING THE PLAN**

Any proposed amendments to the ASP shall follow the process defined within the MGA. The M.D. will engage with the community in accordance with the Public Participation Policy prior to any decision on amending the plan.

The Plan will be reviewed and updated as needed to ensure the Plan remains relevant. At a minimum, it is recommended the plan is reviewed every five years to ensure that the information, policies, and mapping remain relevant.

Beyond any changes resulting from the ASP review and initiated by the M.D., any amendments can be brought forward by individual landowners should they want to consider any changes to the direction or land use of the plan.