APPENDIX A

BYLAW NO. 1871

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

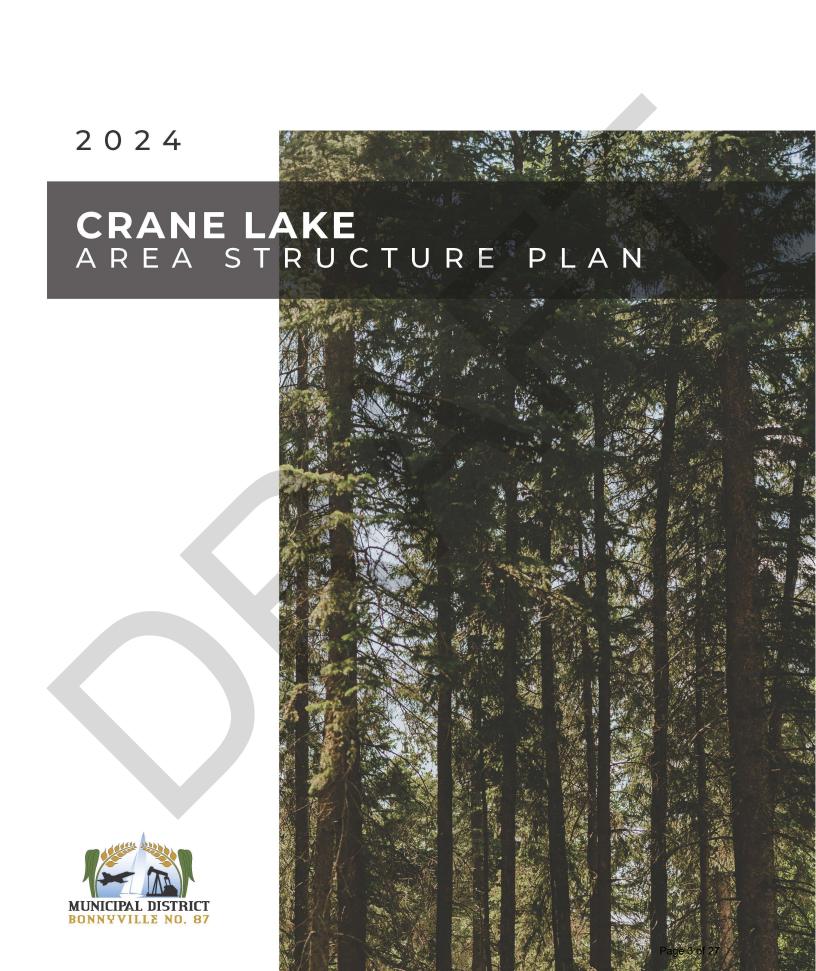
NOW THEREFORE, the Council of the Municipal District of Bonnyville No. 87, duly assembled in the Province of Alberta, hereby enacts the following:

- 1. That this document attached to, and forming part of Bylaw No. 1871, as Schedule "A" be adopted as the Crane 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 Upon third reading of Bylaw No. 1871, Bylaw No. 1341 and all amendments thereto are hereby repealed.
- 3. That this Bylaw shall come into force and have effect, from and after the date of the third and final reading thereof.

READ A FIRST TIME IN COUNCIL THIS	DAY OF	, 2024.
READ A SECOND TIME IN COUNCIL THIS	DAY OF	, 2024.

BYLAW NO. 1871

READ A THIRD TIME IN COUNCIL THIS _.	DAY OF	, 2024.
	REEVE	
	CHIEF ADMINISTRAT	IVE OFFICER



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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 Crane Lake Area Structure Plan (ASP) is in response to the changing context within the lands located adjacent to Crane Lake, within the Municipal District of Bonnyville No.87 (M.D.), since the adopting of the first ASP under the 1988 Moore (Crane) Lake Area Structure Plan, and the 2006 Crane Lake Area Structure Plan. The update is also the result of the M.D.'s full review of all planning documents in 2019, driven by the changes to the *Municipal Government Act* (MGA) as part of its modernization. The general location of the lake is illustrated in **Figure 1: Geographic Location of Crane Lake** on page 2.

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 updates to 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. Provide a framework for long-term growth and development of lands.
 - b. Protect the ecological integrity of the lake and the environmentally sensitive areas surrounding it.
 - c. Maintain key direction that reinforces Crane Lake as a local and regional recreation centre.
 - d. Balance preservation needs and opportunities for future development without imposing undue financial burdens on the M.D.

AUTHORITY TO PREPARE THE PLAN

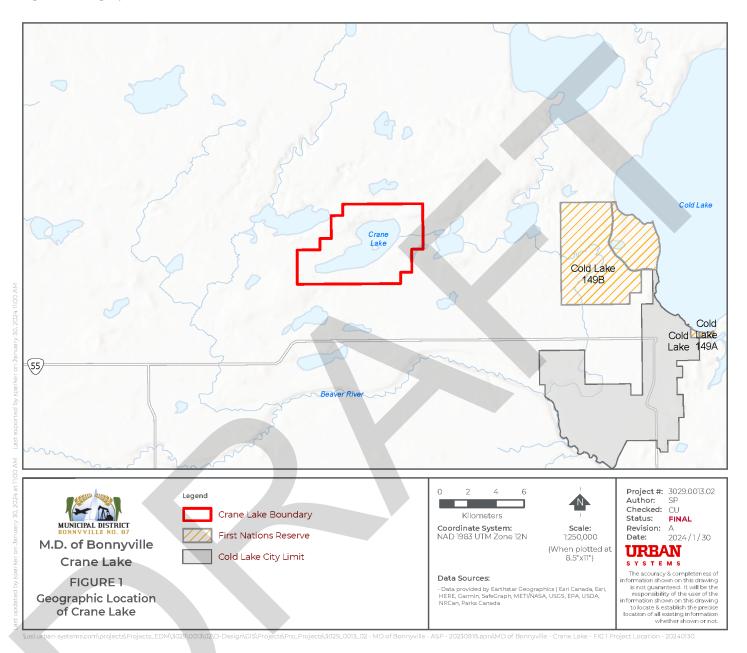
The authority for municipal planning, subdivision, and development control is established in Part 17 of the MGA. Section 633 allows municipalities to adopt Area Structure Plans to establish the following guidelines:

- 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 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.

Figure 1: Geographic Location of Crane Lake



Beyond the guidelines established throughout the ASP, the MGA also outlines the requirement for consistency between the ASP and any Regional Plan, Intermunicipal Development Plan, and Municipal Development Plan. A general overview of the hierarchy of planning documents is illustrated in **Figure 2: Hierarchy of Planning Documents** below.

Any information presented outside of specific policy directives are provided for information only. If there is any inconsistency between policy directives or any other text within the plan, the policy directive will take precedence. Additionally, all boundaries, symbols, and locations are intended as approximations and shall be interpreted as such.

It should be noted that the timing of specific developments may occur faster or slower than anticipated, depending on a variety of external influencing factors. The conditions that contribute to public and private sector decisions to make the necessary investments to facilitate growth and development guide the pace of development. The Plan does not specify timing, but outlines general sequencing of development, relative to priority infill areas.

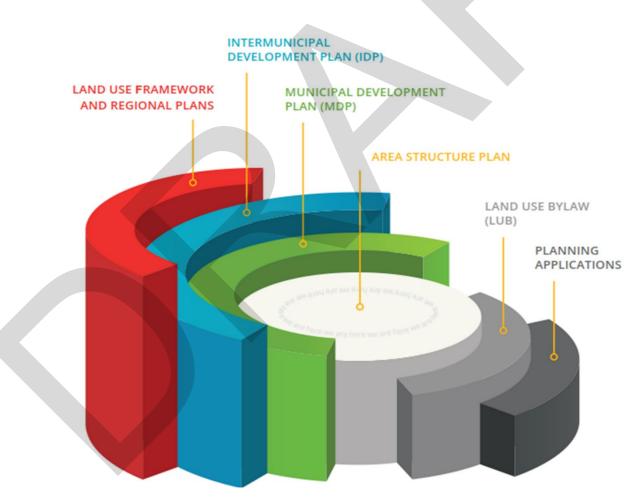


Figure 2: Hierarchy of Planning Documents

SUMMARY OF THE CURRENT CONTEXT

GEOGRAPHY

Crane Lake is located 280 km northeast of Edmonton, 20 km west of the City of Cold Lake, and 25 km northeast of the Town of Bonnyville. **Figure 3: Community Boundary** illustrates the plan area, northwest of Cold Lake. This linear shaped, headwater lake, running east to west, is relatively deep (reaching depths of 26 meters), and holds a small, hilly island (Doris Island) in the eastern portion of the lake. There is a small drainage basin and there are two small inlets, allowing for streaming water to flow through the lake on the northeast and west shores. The lake is approximately 1,000 ha in size, offering a good combination of gently sloping shorelines, sandy beaches, developable backshore areas, and high-water quality.

Crane lake east and west were former provincial areas, which were incorporated into the M.D., and the area now has two municipal campgrounds and one private campground along the south shore.

LOCAL CONTEXT

The original ASP was adopted in 2006. Since then, there have not been any formal updates to the ASP. The following changes in the local context have helped to inform this update.

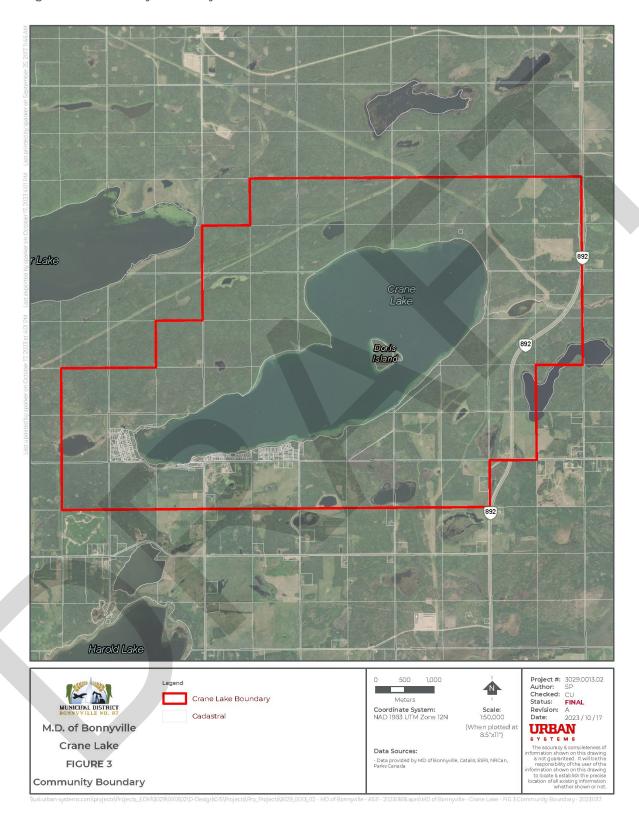
Population and Housing

There are no official sources of population for the lake, however mapping suggests that there are 66 permanent residences and 98 cabin or summer home properties in the plan area. Since the plan adoption in 2006, there have only been twenty (20) permanent residences and nine (9) cabin or summer home properties constructed, indicating low growth in the area since the time of adoption. The majority of the land north of the lake is Crown-owned, concentrating the housing and the remaining developable lands along the southern and western shores.

Infrastructure

The development pattern of Crane Lake is shaped not only by the recreational demands of the local and regional population and the need to harmonize development with the natural lake environment, but also the lack of municipal water and wastewater infrastructure. This limits the development potential to uses that can accommodate on-site water wells and wastewater treatment systems, focused on low-density residential and recreational uses.

Figure 3: Community Boundary



Built Constraints

As with most areas of the M.D., there is considerable oil and gas activity in the area. There are major pipelines that surround the lake and there are five (5) active wells and fourteen (14) that are abandoned and scattered throughout the plan area. While there are active oil and gas installations in the plan area, none pose any significant constraint to the lake's access or to any potential expansion of residential or recreation areas. Refer to **Figure 4: Built Constraints** for an illustration of the constructed features in and around the Crane Lake plan area.

Existing Land Uses

The lake is mostly surrounded by Crown Land and lands designated as agricultural. The available land for development is constrained to the southwest and western shores. These areas adjacent the lakeshore are mostly designated as Country Resort Residential, which is a specialized residential district to accommodate lakeshore residential development. There is an additional quarter-section to the south of the existing lakeshore residential area that is designated as Country Residential-1, which accommodates the more traditional rural residential development.

The lake remains a popular destination for boating and fishing activities and has two municipal areas designated for camping and recreation uses, as well as a private campground. The campgrounds include fire pits, camp kitchens, hand-powered water pumps, boat launch and dock, fish cleaning stand, day-use sandy beach, playground, and swimming areas. Refer to Figure 5: Existing Land Use for an illustration of the existing land use distribution within the plan area.



Figure 4: Built Constraints

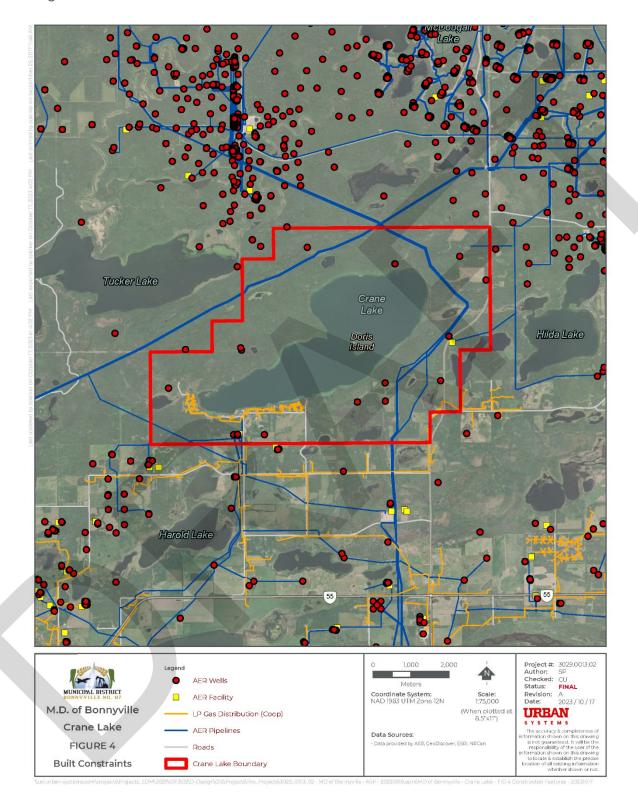
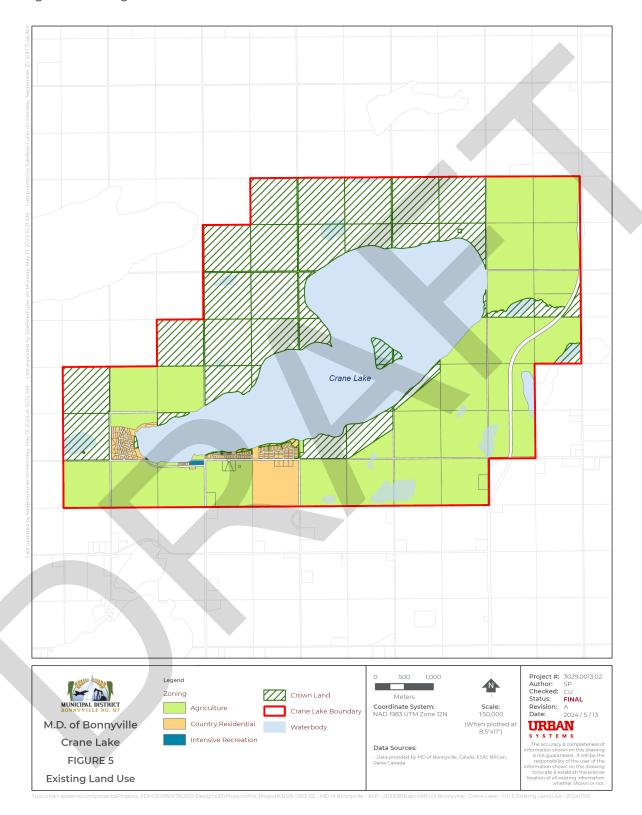


Figure 5: Existing Land Use





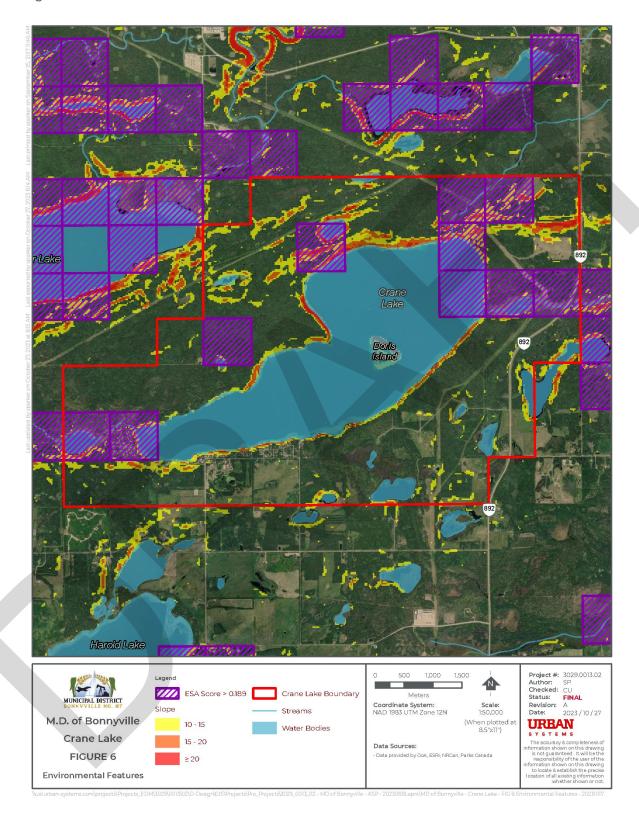
Environmental Constraints

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 quarter sections designated as environmental protection areas, recognized as having an ESA rating of higher than 0.189. These are represented by lands along the northern shore, easternmost shore, Doris Island, and the eastern river flowing out of Crane Lake. These are known to be fish and wildlife habitats, which impose constraints on the types of developments and usages around these recognized habitats. As the Crane Lake watershed area is four times larger than the lake itself, land uses within the watershed must consider their potential impact on the health of the lake. All development should be located beyond the 30-metre-high water mark and limit the removal of natural vegetation, to the extent feasible, as a protective measure for the lake's water quality.

The plan area contains stretches that have considerably steep slopes, between 10%-20% or more, focused along the northern shore of the lake. While the northern area is under Crown ownership, the sensitive aquatic habitats, steep gradients, along with rocky beaches reducing the recreation opportunities along the northern parts of the shoreline. These collective constraints limit any future expansions of the developable area to the northern shore. Refer to **Figure 6: Environmental Features** for an illustration of the environmental characteristics of the plan area.

Figure 6: Environmental Features



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 is limited agricultural activity within the plan area, and most non-Crown lands are assessed as poor to very poor (under 32% assessed value).

Additionally, soils around the base of the tributaries at the western and eastern shores indicate a high-water table and have poorly drained soil, created by the low grade. Refer to **Figure 7: Soil Characteristics** for an illustration of the soil quality and its distribution throughout the plan area.



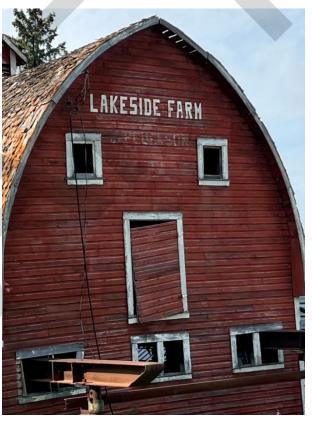
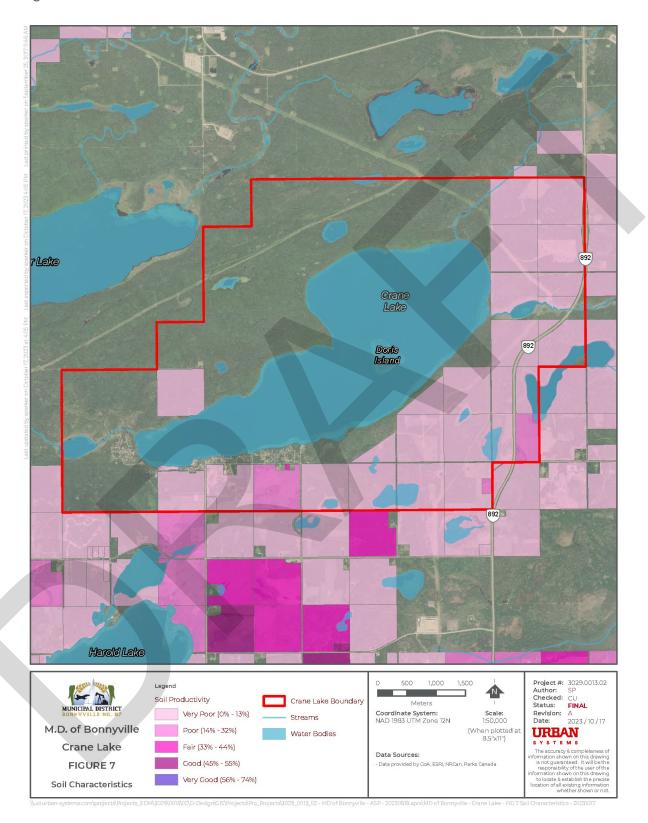


Figure 7: Soil Characteristics





2.0 COMMUNITY GUIDE

DIRECTION OF THE PLAN

The current plan was adopted in 2006 and was a replacement of the original plan that was prepared in 1988 and a response to local development proposals for a new campground and consideration of a traditional country residential subdivision located south of the developed area adjacent the lake.

Like many other lakes in the M.D., most of the lands surrounding the water body are Crownowned, with only a scattering of lands adjacent the south and western shores that are available for potential development. The lake has historically been a popular location for a variety of recreation activities.

Over time, the residential development pattern we see today, emerged incrementally. While development proposals spurred the plan update in 2006, there has been limited growth and development in the plan area. There are 48 lots that are subdivided and designated for country residential development, though remain vacant (20 within the eastern residential area and 28 within the western subdivision). Additionally, the lands proposed for traditional country residential development south of the existing developed area remain undeveloped and could accommodate considerable expansion of the existing residential area.

The area remains a strong recreational attraction within the region and has resort recreation development along with campgrounds on both the eastern and western sides of the south shore. There are limited agricultural operations surrounding the lake and the soils in the plan area are all classified as under 45%, with many areas experiencing high water tables.

Given the importance of the lake to the recreation opportunities in the M.D., preserving its quality is important. Given the prevalence of Crown land surrounding the lake and the limited growth and development pressure, the updates to the ASP take a balanced approach to managing growth opportunities with protecting the environmental and recreational value of the lake.

COMMUNITY ASPIRATION

The update to the Plan builds from the 2006 version, recognizing the original goals, focused on the sustainability and health of the lake and surrounding natural features, remain important to not only Crane Lake, but also the entire M.D. Retaining the ecological integrity of the lake and surrounding environment contributes to the overall vision of the M.D. and supports the direction in the MDP to leverage natural resources in the area to promote continued growth in recreation opportunities.

While the focus of the plan is on the maintenance and enhancement of the water quality, environmental features, and access to recreation opportunities, there remains a recognition of the importance to balance protecting natural areas with accommodating compatible and complementary development that allows for growth in the area that can sustain services, amenities, and facilities that already exist. The following community aspirations represent a filter to evaluate the contributions of new development to the health of the community:

- 1. Maintain the lake's role as a key recreation destination, serving the needs of the local and regional population.
- 2. Preserve the natural environment that supports the lake and contributes to sustaining water quality.
- 3. Provide opportunities for sustainable development to maintain the viability of existing community amenities and assets and strengthening the financial health of the M.D.

GUIDING PRINCIPLES

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

- 1. Harmonized Development Pattern with the Lake Environment: Promote orderly and well-planned development that protects the natural environmental features throughout the plan area that sustain the quality of the lake.
- 2. **Enhanced Access to Recreation Opportunities:** Maintain the area as an attractive destination to support local and regional recreation needs, while supporting the continued growth of tourism into the M.D.
- 3. **Development Contributing to the Long-Term Health of Community:** Accommodate growth that is compatible with the natural environment and recreational needs to ensure the enduring health of the existing facilities and establish the area as a sustainable community over the long-term.

3.0 COMMUNITY PLAN

LAND USE CONCEPT

The proposed land use concept for Crane Lake represents a conceptual framework that is general in nature and developed based on the following:

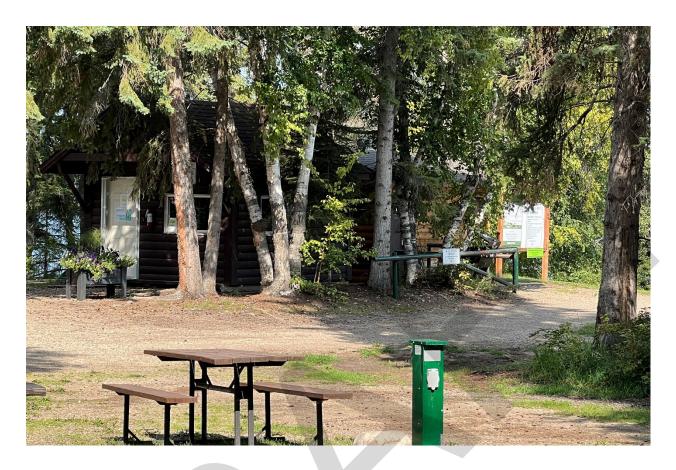
- 1. The aspirations and guiding principles outlined in Section 2.0.
- 2. The relationship and compatibility to the existing development pattern.
- 3. The natural and physical development constraints throughout the area.
- 4. The importance of the recreational qualities of the lake to meet local and regional demand.

RESIDENTIAL

The intent of this use is to provide options for new development for people seeking opportunity to locate in an area providing an amenity-based lifestyle, focused on the natural landscape. While growth is encouraged, new housing will maintain the existing development pattern, prevailing density, and housing type.

- 1. Consistency with the scale and character of existing development.
- 2. Natural site characteristics (i.e., trees, slopes, or other natural and topographical features) on individual lots should be retained to the extent possible to complement the character of the plan area and retain the ecological integrity of the lands.
- 3. Ensure that all development can accommodate on-site water and wastewater facilities based on the lot size requirements relative to the soil conditions and groundwater depth.
- 4. Support the development of existing vacant areas before considering the expansion of additional residential lands.
- 5. Ensure development is sited to minimize potential land use conflicts and any negative impacts on the environment.





PUBLIC USE AND RECREATION

Recreation uses are a key component of Crane Lake's land use and community identity. To maintain a recreation-based identity, the continued enhancement of recreation uses is critical to the long-term sustainability of the area as an attractive place to visit and live, maintaining its contribution to the M.D. as a tourist destination. While recreation can mean different things to different audiences, the focus within the plan area is on outdoor recreation that leverages the natural assets to support tourism. As use of the area continues, there may be opportunities to include small-scale commercial retail development that can cater to the expanded summer populations and, eventually, the full-time residents as the population expands.

- 1. Provide a range of recreation and open space opportunities that meets the needs of the local and visitor population and best leverages the assets and amenities of the area.
- 2. Identify connectivity opportunities for all community facilities, recreation areas, and open spaces to maximize accessibility and linkage with existing assets.
- 3. Consider commercial development that are appropriately located on the site and respect the natural and constructed amenities of the area.
- 4. Support recreation uses that can demonstrate their ability to provide larger community benefits and enhance local tourism.

CONSERVATION

Protecting the natural environment is important to conserve the ecological function of the area. To continue supporting the lifestyle the area has to offer, the priority needs to focus on protecting the water quality and natural hydrology, minimizing habitat disturbances, and preserving the qualities that make Crane Lake a desirable place to live and visit. The purpose of this area is to recognize undisturbed lands which have limited development capabilities but provide significant value to the ecological integrity of the lake environment. While the preservation and protection of these environmentally sensitive areas is the key objective on these lands, there may be opportunities for public access that does not compromise the sensitive ecosystems.

- 1. Focus conservation on environmentally significant lands and riparian areas.
- 2. Maintain vegetative buffers adjacent water bodies.
- 3. Any recreational development should have limited impact on the environment.
- 4. While the intent is to retain this area in its largely natural state, there may be opportunities to explore locally sensitive development that focuses on pedestrian facilities that minimize the intrusion into natural areas.



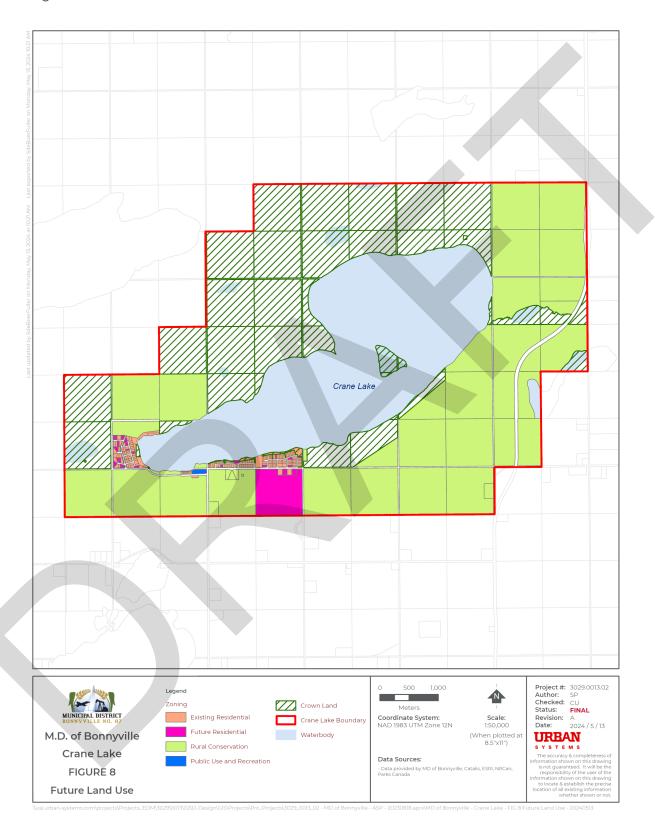
RURAL CONSERVATION

The intent is to identify and conserve lands with limited development capabilities and to simultaneously protect the integrity and function of the lake and surrounding, recognizing the interconnection of the entire plan area and its impact on the lake's water quality. Most of this use is recognized as Crown Land, and therefore has restrictions on the types of land uses supported through lease agreements. Beyond preserving lands in this area in their natural state, the continued operation of agricultural uses, that do not adversely affect the natural environment, will continue to be the predominant use in the plan area.

- 1. Preserve large, contiguous agricultural parcels from further fragmentation.
- 2. Retain land for agricultural operations that contribute to the maintenance of a healthy environment.
- 3. Consider any proposed use on individual parcels through their potential impact at a watershed vs. site-specific level.



Figure 8: Future Land Use



POLICY DIRECTIVES

Principle 1: Harmonized development pattern with the lake environment.

Objective 1.1: Protect and preserve the ecological integrity of the lake.

- Policy 1.1.1: Maintain a 30-metre setback, as a minimum, from the high-water mark of Crane Lake and all other water bodies in the plan area.
- Policy 1.1.2: Maintain land within the setback in its natural state, providing opportunities for low impact development (i.e., walking trails, picnic tables, viewing platforms, etc.) where they can demonstrate any impacts to the natural qualities of the land can be mitigated.

Objective 1.2: Enhance protection of environmentally sensitive areas to minimize the impact on the lake's water quality.

- Policy 1.2.1: Retain the natural quality of lands throughout the watershed to minimize the potential for increased runoff and nutrient loading entering the lake.
- Policy 1.2.2: Support coordinated communication with the community, the province, and other stakeholders to protect lakes, streams, wetlands, natural vegetation, and fish and wildlife habitats across the plan area.
- Policy 1.2.3: Discourage the removal of vegetation and any alterations to the drainage pattern in areas adjacent riparian zones.
- Policy 1.2.4: Any development shall preserve existing vegetation in riparian areas to reduce erosion, minimize the fragmentation of habitats, and protect water quality.
- Policy 1.2.5: Encourage agricultural operations to mitigate the effects of impervious surfaces, resulting in increased runoff that impact stormwater management offsite and increase the potential contamination of tributaries entering the lake.

Objective 1.3: Protect the community from environmental hazards.

- Policy 1.3.1: Future development may be required to incorporate FireSmart preparedness guidelines.
- Policy 1.3.2: Any proposed development may be required to prepare an environmental assessment to ensure mitigation measures are in place for any potential adverse impacts. The assessment may include, but is not limited to:
 - a. Biophysical Impact Assessment.
 - b. Geotechnical study.
 - c. Drainage patterns.
 - d. Vegetation retention.
 - e. Any other assessment deemed relevant by the M.D.
- Policy 1.3.3: Stormwater management plans may be required for all new development that demonstrates the following, to the satisfaction of the M.D.:

- a. How the site design minimizes stormwater generation.
- b. How the site design maximizes stormwater absorption on site.
- c. How the site design minimizes the impact of stormwater on adjacent lands.

Principle 2: Sustained and enhanced access to recreation opportunities.

Objective 2.1: Support recreation uses and activities that do not negatively impact environmental sensitive features.

- Policy 2.1.1: Require the development of new recreation uses and facilities, or the expansion of existing ones, to demonstrate, to the satisfaction of the M.D., how the scale, use, and siting minimize impacts on the natural environment.
- Policy 2.1.2: When considering subdivision applications, the M.D. shall consider municipal reserve dedication based on the greatest potential impact to enhancing recreational opportunities in the community, which take the form of site-specific land dedications or cash-in-lieu, to be used elsewhere.
- Policy 2.1.3: Support opportunities to sustain pedestrian connectivity and access to the lake, parks, and recreation areas and facilities.

Objective 2.2: Support a variety of recreation development that is compatible with existing land uses.

- Policy 2.2.1: For any proposed recreation development, the evaluation of its suitability shall consider the following:
 - a. The scale and intensity of the proposed use.
 - b. Compatibility with existing and future land use patterns.
 - c. Proximity and integration of the proposed development to natural features and existing recreational amenities.
 - d. Suitability of the site to accommodate the proposed use, subject to the appropriate environmental assessment.
 - e. Demonstrated ability to address any municipal servicing required on-site.
 - f. Existing and proposed access.
 - g. Any other matter deemed relevant by the M.D.

Principle 3: Development contributing to the long-term health of the community.

Objective 3.1: Preserve the existing character of the Crane Lake area.

Policy 3.1.1: Support development of Crane Lake as a sustainable lakeside community in a way that respects the natural environment and serves the needs of the community and the vision of the M.D.

Objective 3.2: Support sustainable development opportunities that contributes to the diversity of uses that would support the sustainability of the community over the long term.

- Policy 3.2.1: Locally oriented commercial development will be considered based on all other policies within the plan, as well the following criteria:
 - a. Siting and orientation of the building to the road.
 - b. Access points.
 - c. Any necessary parking and loading facilities.
 - d. Signage, lighting, fencing, and building design relative to existing development.
 - e. Ability to accommodate the proposed development with on-site water and wastewater services.
 - f. Mitigation strategies for any potential impacts to environmentally sensitive areas.
- Policy 3.2.2: Proposed subdivision or development applications may be required to submit a traffic impact assessment to support an evaluation of the compatibility based on the following:
 - a. Anticipated changes to traffic volumes.
 - b. Assessment of the cumulative impacts of changes to the transportation system.
 - c. The need for any intersection upgrades stemming from the increased traffic volumes.
- Policy 3.2.3: New proposals for residential subdivisions or developments will be considered based on the following considerations:
 - a. Ability to provide an adequate supply of potable water on site.
 - b. Ability to demonstrate the ability to provide an approved onsite wastewater disposal system.
 - c. Adequate site drainage through approved stormwater management plan.
 - d. Compatibility with adjacent land uses.
 - e. Provision of safe access onto a municipal road.
 - f. The proposed use can demonstrate its ability to mitigate any adverse impacts on the natural areas of the subject or adjacent lands.





4.0 COMMUNITY ACTIONS

ADMINISTERING OF THE PLAN

It is difficult to know how development will proceed in the plan area, 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, based on the limited development that has occurred since the adoption of the last ASP and the changing context in the M.D.

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.

The M.D. of Bonnyville shall refer any proposed amendements to the concerned provincial agencies for review and comment and shall consider such comments prior to the adoption of any amendments.

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.