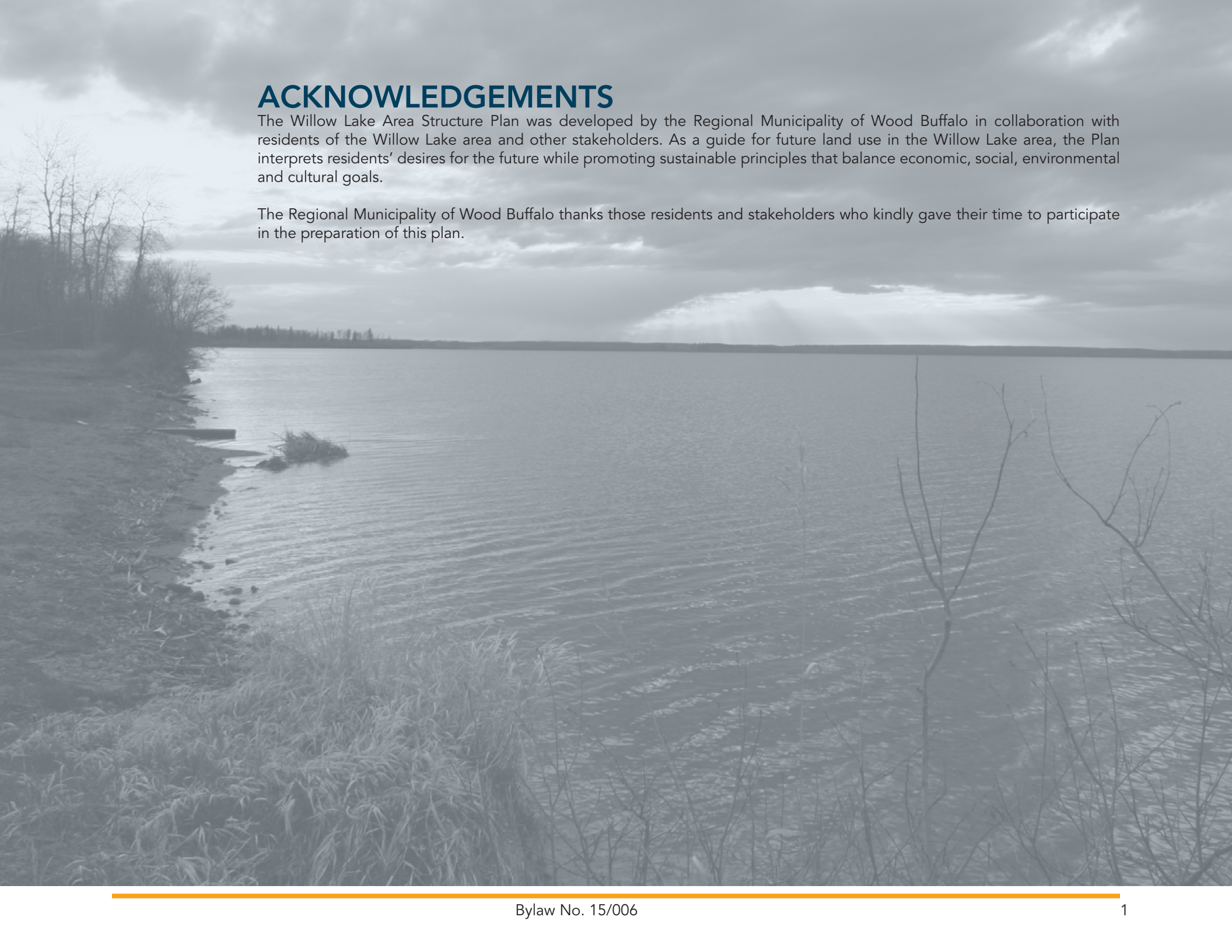


WILLOW LAKE AREA STRUCTURE PLAN

A grayscale photograph of a lake shoreline. In the foreground, there are tall reeds and grasses. The middle ground shows a calm lake with some small islands or patches of vegetation. The background features a distant shoreline with trees and a sky with scattered clouds. The overall tone is serene and natural.

ACKNOWLEDGEMENTS

The Willow Lake Area Structure Plan was developed by the Regional Municipality of Wood Buffalo in collaboration with residents of the Willow Lake area and other stakeholders. As a guide for future land use in the Willow Lake area, the Plan interprets residents' desires for the future while promoting sustainable principles that balance economic, social, environmental and cultural goals.

The Regional Municipality of Wood Buffalo thanks those residents and stakeholders who kindly gave their time to participate in the preparation of this plan.



PLAN PURPOSE

The Willow Lake Area Structure Plan (the “Willow Lake ASP”) is the principle document guiding land use in the Willow Lake area. The Willow Lake ASP is a statutory document prepared in accordance with the *Municipal Government Act* R.S.A. 2000 c. M-26.

The Willow Lake ASP intends to:

- establish policies that promote orderly and sustainable land use in the area, and
- integrate existing and future infrastructure requirements with proposed generalized land use classifications.

Although the plan is designed for the long-term, it will be reviewed periodically and be updated as needed to ensure the plan remains relevant to existing conditions.

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PART 1 SETTING THE STAGE

WILLOW LAKE

Willow Lake is located approximately 30 kilometres south of the Urban Service Area of Fort McMurray (see Map #1), it is one of the few accessible recreational lakes in the region and an important amenity for residents of the Regional Municipality. Willow Lake is the most widely used recreational lake in the Regional Municipality of Wood Buffalo. Recreational uses on Willow Lake during warm months include boating, rowing, canoeing, kayaking, seadooing, waterskiing, fishing, swimming, camping, hiking, picnics and other gatherings; in winter Willow Lake is used for hockey, skating, skidooing and cross country skiing. The area is the site of some events for the Western Canada Summer Games in 2015. Gregoire Lake Provincial Park is found on the northwestern side of the lake and is a popular recreational destination.

Inhabited by both the Cree and the Dené people for hundreds or even thousands of years, the wider Willow Lake area has long been a site for hunting, trapping and berry picking by First Nation peoples. Fur trading amongst the Cree and Europeans in the area dates back some 300 years.

Today, the majority of the land around Willow Lake is Crown land administered by the Government of Alberta (the Province).

Willow Lake Area Structure Plan

The Plan Area is shown on Map #2 and includes Gregoire Lake Estates, a residential community of around 275 residents located on the western shore of Willow Lake, it is the only Hamlet within the Plan Area. Outside of Gregoire Lake Estates, there are three recreational leases along the eastern and southern shores of Willow Lake. Gregoire Lake Provincial Park as established in the Provincial Parks Act is located in the northwestern corner of the Plan Area. Private holdings and residences, including a commercial campground, can be found on large parcels of land along Surmont Creek. The Plan Area is also bordered by the reserve lands of the Fort McMurray First Nation (FN 176, FN 176A and FN 176B), home to approximately 200 residents. Fort McMurray #468 First Nation is currently negotiating land claims within the Plan Area which could result in a change to the ASP boundary.

Regional Influences

Willow Lake is in close proximity to major oilsands projects. There are oilsands leases within and adjoining the ASP area, which may have direct and indirect impacts on the Plan Area in the future. Impacts may include activities such as: oil exploration, demand for housing and recreational facilities and consequentially increased traffic volumes. The Willow Lake Plan Area has seen relatively little development since the original subdivision of just over 80 lots in Gregoire Lake Estates. At the same time, the Regional Municipality as a whole has experienced significant growth in recent years, a trend that is projected to continue in the decades to come. As a result, the Willow Lake ASP must address the increasing pressure to provide recreational opportunities for the Regional Municipality's residents.

Anzac

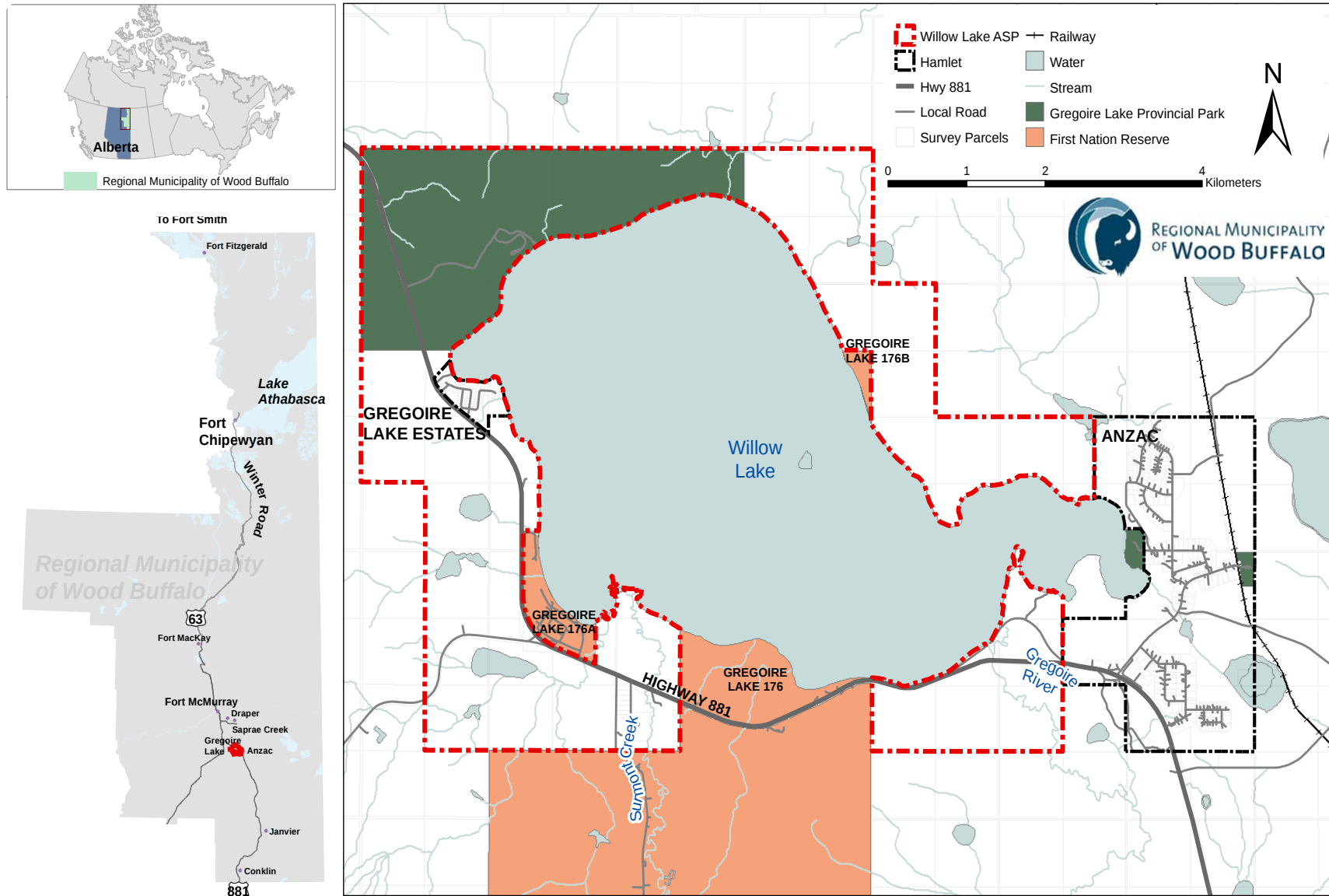
The Hamlet of Anzac, which lies on the eastern shores of Willow Lake, forms the eastern boundary of the Plan Area. Currently, Anzac is a primarily residential community of approximately 800 people; however, the Hamlet has the capacity to become a regional growth centre offering important services to both the wider Willow Lake area as well as the southern communities of Conklin and Janvier. An ASP for Anzac was adopted in 2012.



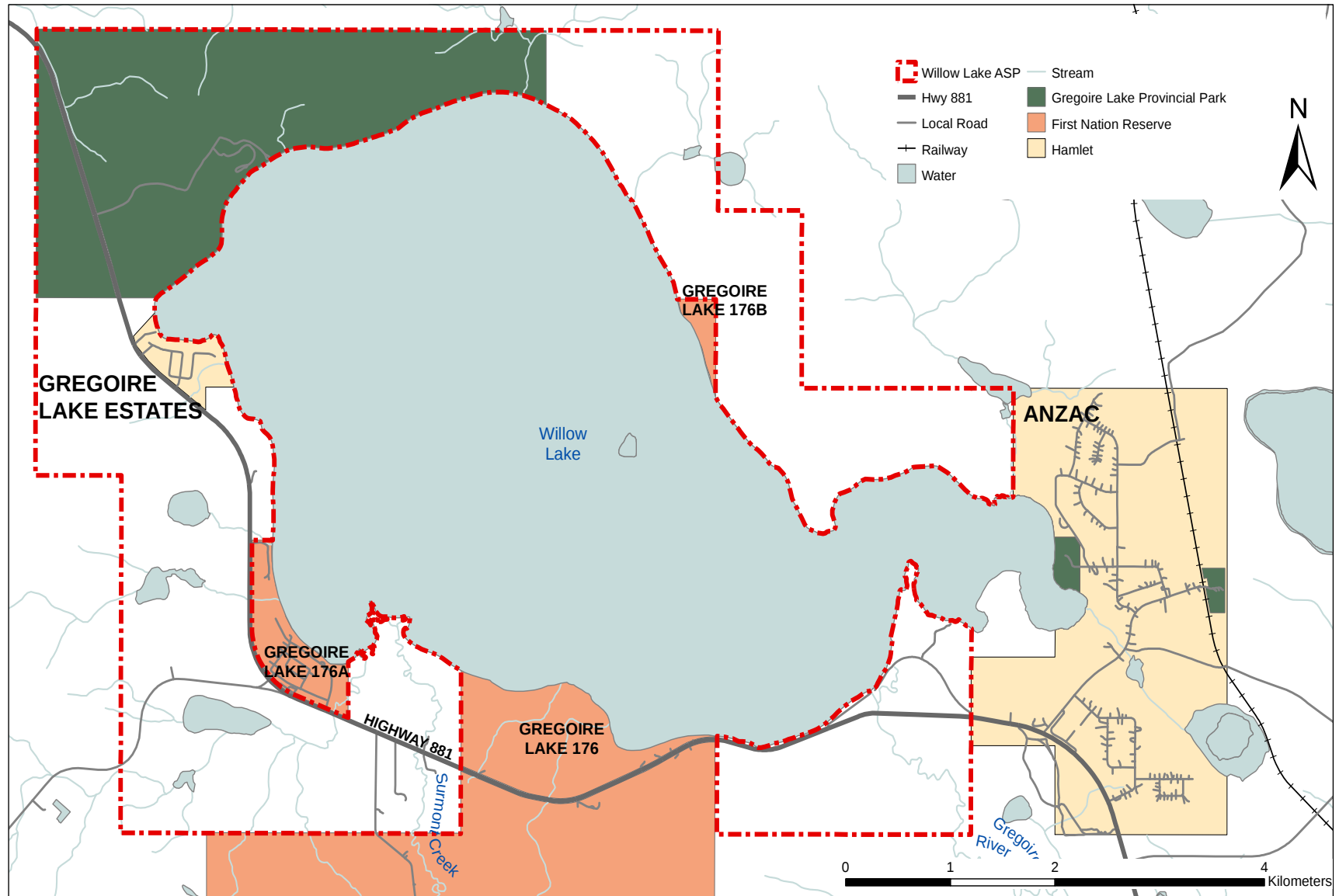
Willow or Gregoire?

Willow Lake became known as Gregoire Lake in the 1940s to reflect the name of the lake's only outlet, Gregoire River, which was itself named after an early settler to the area. In 1992, at the request of local residents, the lake's name was officially changed back to Willow Lake. It is still commonly known as Gregoire Lake and neither Gregoire Lake Provincial Park or the Hamlet of Gregoire Lake Estates have changed names to reflect the lake's official name change.

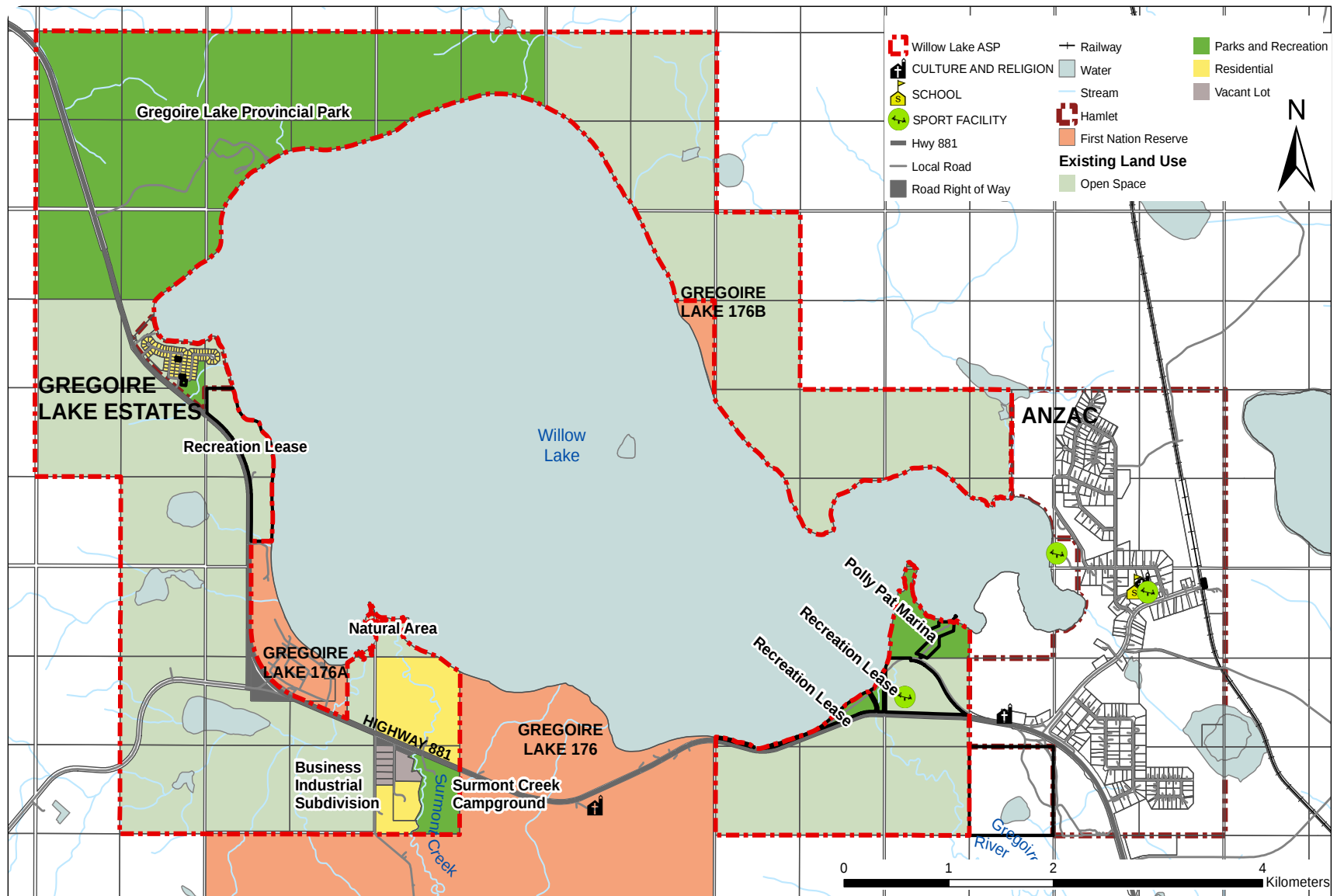
MAP 1: WILLOW LAKE REGIONAL CONTEXT



MAP 2: WILLOW LAKE PLAN AREA



MAP 3: EXISTING LAND USE



EXISTING CONDITIONS

Natural Environment

The Clearwater and Athabasca river valleys that form the distinct landscape surrounding Willow Lake resulted from melting glaciers around 10,000 years ago. The Willow Lake area is characterized by generally flat topography and a mix of well-drained soils and muskeg. Wetlands, streams and the lake itself are environmentally important features to the Plan Area.

Willow Lake is a large and shallow lake, covering a surface area of approximately 25.7 square kilometers. The mean depth of the lake is 3.9 metres and the maximum depth is 7.2 metres. The deepest water is located in the western portion of the lake. The lake also features an island of almost 600 square metres. The Willow Lake shoreline is composed mainly of gravel, with the exception of three large sandy beaches.

The lake has seven inlets, the largest of which is Surmont Creek, and only one outlet, Gregoire River. The drainage basin is mainly to the south and southwest of the lake and spans an area of 232 square kilometres.

Vegetation

The Willow Lake ASP area is located in the Boreal Central Mixed Wood Ecoregion. The predominant tree cover includes trembling aspen, balsam poplar, and white birch. Stands of jack pine are present in the sandy areas and black spruce stands in the poorly drained areas. There are several spruce/tamarack bogs on the southern shore of the lake. Aquatic vegetation is abundant along the shores of Willow Lake and there is thriving riparian vegetation along the banks of Surmont Creek. Aquatic vegetation in the eastern bay and western shore of the lake includes dense beds of swamp horsetail, yellow pond lily, bulrushes and common cattail; the list of submergent plants is dominated by pondweed.

Fish and Wildlife

A variety of fish species are known to inhabit Willow Lake, including: walleye, northern pike, yellow perch, lake whitefish, cisco, burbot, spottail shiner, and longnose sucker. Gregoire River is an important migration route and spawning area for the northern pike, longnose sucker, and white sucker. Willow Lake is also used for bald eagle nesting and as a staging area for migrating waterfowl. Wildlife found along the Gregoire River includes Northern Goshawk, red-tailed hawk, beaver, fox and moose. The Willow Lake area is located within the current range of the black bear, and is home to Woodland Caribou, which is an endangered species under the Province of Alberta's Wildlife Regulation.

Environmental Development Constraints

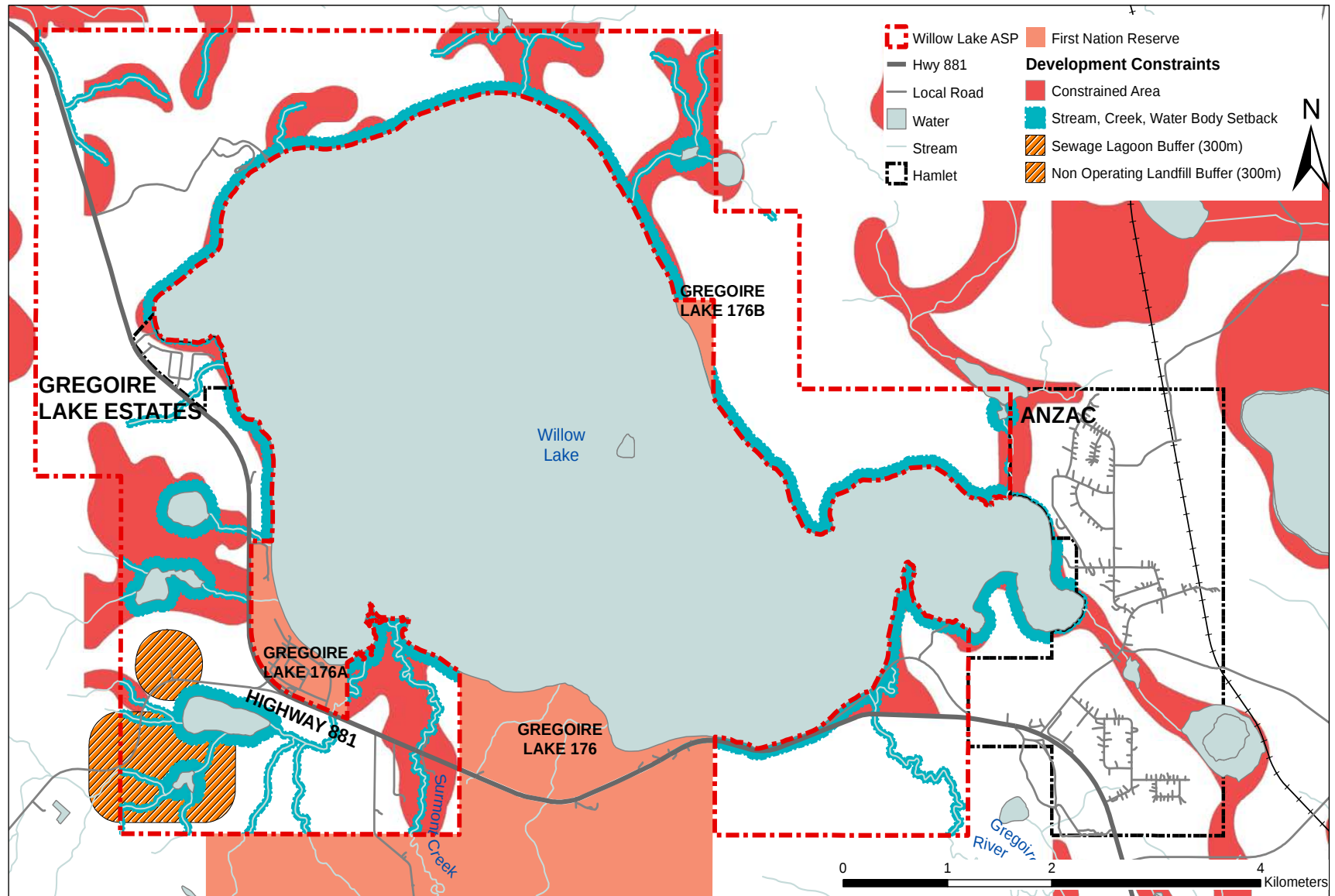
The overall environmental development constraints related to planning future developments within the plan area are summarized on Map #4. Lands identified as developmentally Constrained Area are highlighted in red are not recommended for development. Setbacks from riparian areas in the plan have been informed by a Biophysical Impact Assessment and Alberta Sustainable Resource Development Guidelines.



Surmont Creek

Surmont Creek is the major inflow into Willow Lake. Six other creeks flow into the lake, while the only outflow is Gregoire River on the southeastern side of Willow Lake. Surmont Creek flows through First Nation Reserve Land (FN 176) and large privately-held lots along Highway 881 before entering Willow Lake.

MAP 4: DEVELOPMENT CONSTRAINTS MAP



Historical Resources

The Listing of Historic Resources identifies lands that contain or are believed to contain historic resources, primarily archaeological and palaeontological sites, Aboriginal traditional use sites of a historic resource nature, and historic structures. Issued twice a year, it provides industry and other developers with advance notification of possible historic resource concerns. The Listing does not include all lands that may contain historic resources. When previously unknown historic resources are discovered, their locations are added to the Listing. In accordance with the Alberta Historical Resources Act, the Minister of Alberta Culture may require that any proposed activity likely to threaten the integrity of a historic resource, whether or not its location is on the Listing, be preceded by a Historic Resources Impact Assessment (HRIA). The Plan Area is considered to have high potential to contain archaeological, paleontological and Aboriginal traditional use resources. The most likely locations of historical resources in the Plan Area are shown on Map #5.

Early History

Inhabited by both the Cree (who came from the south) and the Dené (who came from the north) for hundreds or even thousands of years, the Willow Lake area has long been a site for hunting, trapping and berry picking by First Nations peoples. Fur trading among Cree and Europeans in the area dates back some 300 years.

Recent History

The Stony Mountain Royal Canadian Air Force radar station (known as "Site 800") was built in the Anzac area in 1957 as part of the mid-Canada early defense line set up to detect incoming Soviet bombers during the Cold War and provide early warning for a land based invasion. As a result, a 17-mile road was built from Anzac (which connected to the railway at the time) to the top of Stony Mountain near Willow Lake.

Built Environment

Land Ownership

Land ownership within the Plan Area is shown on Map #6. The majority of land is owned by the Province and includes Gregoire Lake Provincial Park. The Hamlet of Gregoire Lake Estates is currently at full build-out with each of the privately held lots developed. The Regional Municipality holds a small amount of undeveloped land within the Hamlet boundary. There are privately-held lots covering two quarter sections along Surmont Creek.

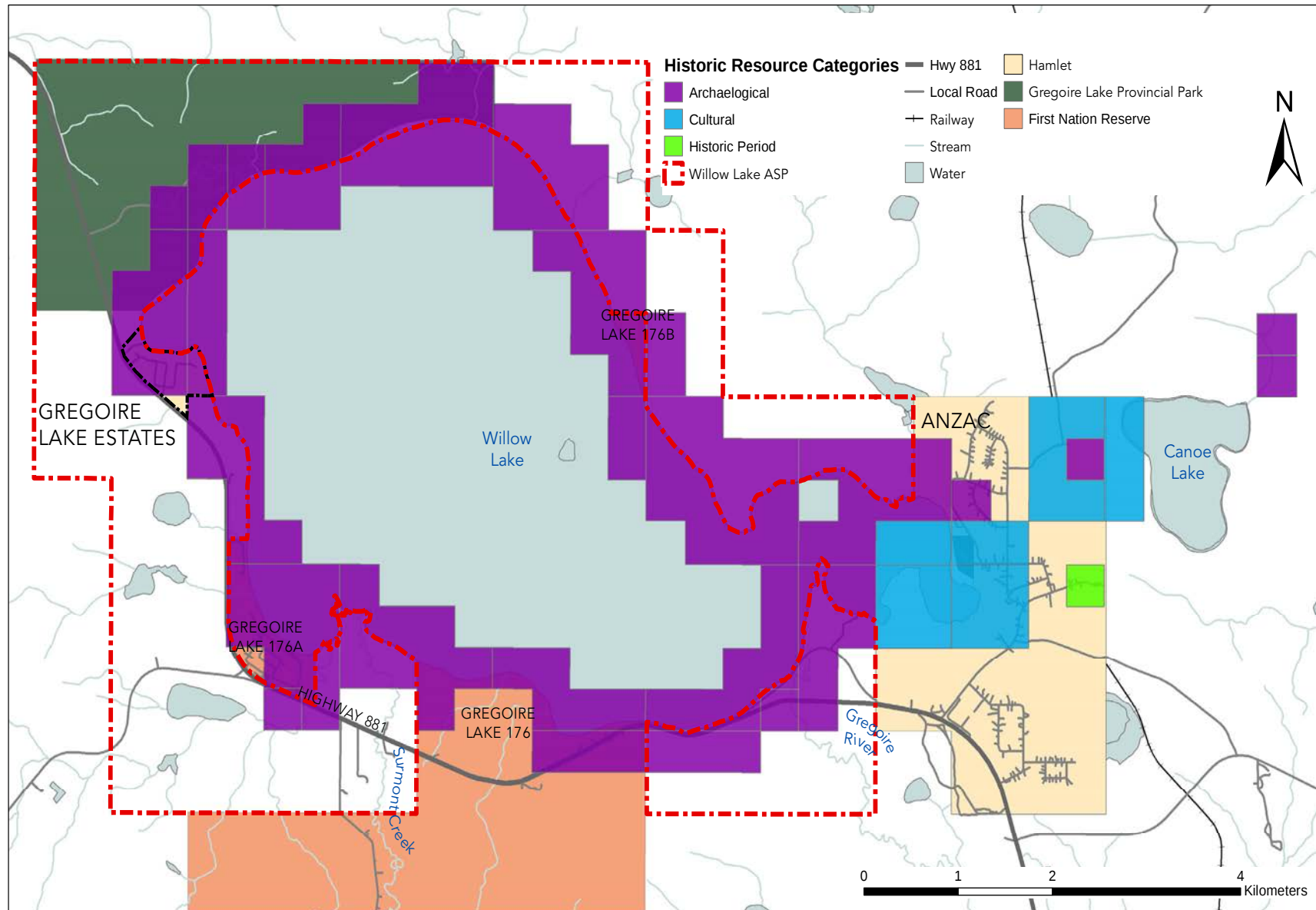
Existing Land Use (see Map #3)

Once a cottage community, Gregoire Lake Estates is now a community of single-family detached homes. Residents live in the community year-round and over 90% of residents are homeowners. Nearly each of the 84 lots in Gregoire Lake Estates is developed with a single-family detached home. There is an average of 3.2 residents per household in the community and 3 people per acre is the current gross population density. In 2030 gross population density is expected to increase to 3.275 people per acre.

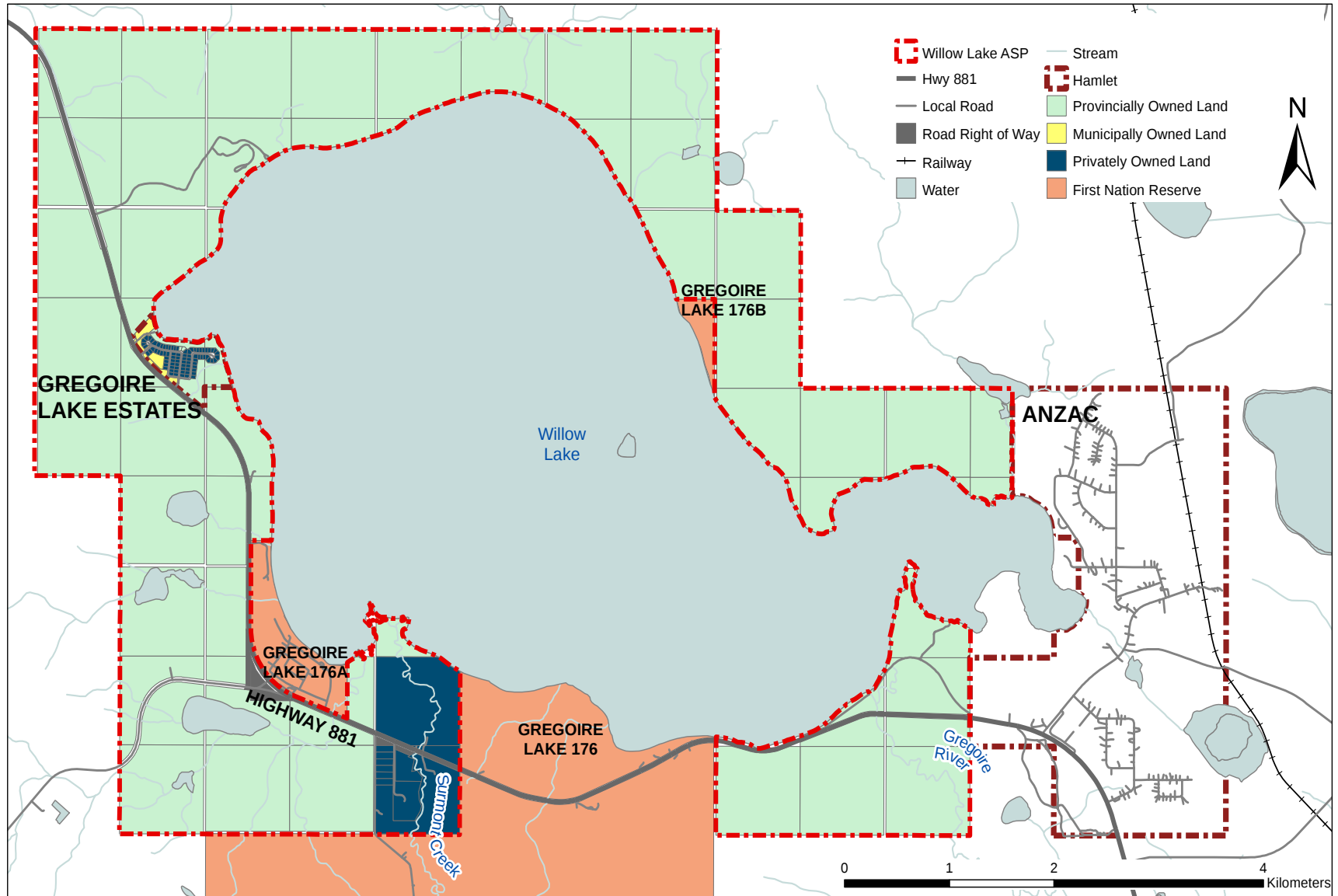
The Surmont Creek Campground, with a planned capacity for 96 sites, is a campground in the Plan Area. This year-round campground was opened in 2010 and operates on privately held land along Surmont Creek south of Willow Lake. Additionally, the Willow Lake Marina, formerly called Polly Pat Marina, is a privately-operated facility on the southeast shore of Willow Lake. It is located on leased Crown land and is used as a seasonal camping site, wharf, and boat launch.

There are no commercial developments in Gregoire Lake Estates. Gas stations exist in both Anzac and on First Nation Reserve 176A, while other services such as a restaurant, variety store and liquor store exist in Anzac.

MAP 5: HISTORICAL RESOURCES



MAP 6: LAND OWNERSHIP



Recreation

Parks

The 650-hectare Gregoire Lake Provincial Park was opened in the early 1970s. Access to the park is located on Highway 881, 30 kilometres south of Fort McMurray and 12 kilometres west of Anzac. The park is particularly busy during summer months as it offers a 140-site campground, day use area, beach, and hiking trails. There are two main trails at the park: a 5-kilometre loop along the north shore of the lake and a 1.2-kilometre woodland interpretive trail. In the winter, the park is used for cross-country skiing and snowmobiling.

Based on the Lower Athabasca Regional Plan, future expansion of the boundary and upgrades of Gregoire Lake Provincial Park are part of the planning process by Alberta Parks Division of ESRD. Improvements to the campsites including added power sites and a south shore boat launch have already occurred.

Camp Many Trees is located on the west shore of Willow Lake, just north of FN 176A. The land is owned by the Province and leased by the YMCA of Wood Buffalo. In the late 1990s, the YMCA made use of the land for day camps, but the camp is no longer operational. There are no utilities or sanitary facilities set up at the camp. The YMCA plans to refurbish the facility in the future.

Two day use areas are found on the southern shore of the lake: the South Shore Campground and Windsurfer Beach. These recreation destinations are located on Crown land that has been leased to the Municipality in the past, and is currently leased to the Province. Both the South Shore Campground and Windsurfer Beach are open to the public, although they are not currently being maintained regularly as conversations around future responsibility for the facilities are ongoing.

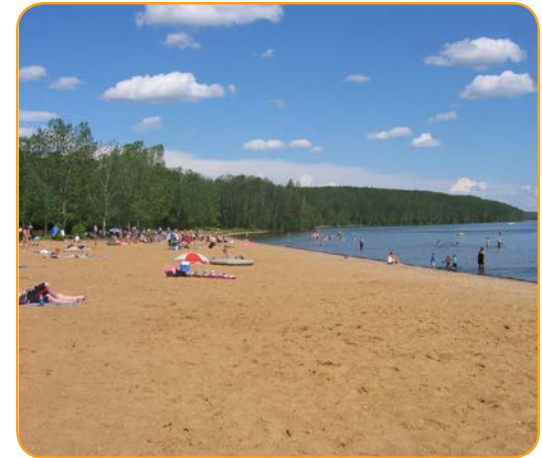
The community of Gregoire Lake Estates has one playground. This playground was completed in 2009 using a community grant and funding provided to the Hamlet by the Regional Municipality, the Anzac Recreation and Social Society and the Province.

Trails

The Regional Municipality does not currently operate any trails within the Plan Area. Informal trails exist along the lake but are not maintained by the Regional Municipality and are located on Crown land.

Sports Facilities

Residents have access to a new facility opened in Anzac, which includes a number of sports fields, trails, a covered ice rink and a multi-use recreation facility.



Willow Lake

Willow Lake is the most widely used recreational lake in the Regional Municipality of Wood Buffalo, with most visitors accessing the lake through Gregoire Lake Provincial Park. The lake permits both motorized boats and fishing. In the winter, it is used for ice fishing, snowmobiling and skating.

Institutional and Services

Schools

There are no schools in the Plan Area. Anzac currently has an elementary school and high school. Both of these schools can accommodate the current and projected population of youth in the Willow Lake Plan area. Alternatively, youth in the Plan Area can also attend school in Fort McMurray.

Health Facilities

There are no health services in the Plan Area and residents depend on health services provided in Anzac and Fort McMurray. The nearest clinic and family doctor are available in Fort McMurray, which also provides ambulance services to the Plan Area.

Religious Institutions

There are no religious institutions in the Plan Area, however Anzac has one Baptist church and Fort McMurray offers a wide range of religious institutions.

Emergency Services

Fire protection for the Plan Area is provided by the Anzac volunteer fire department, a strong group of volunteer fire fighters serving Anzac and the surrounding area.

Infrastructure and Servicing

Transportation

Highway 881 travels along the southern shore of Willow Lake and provides two access points to Gregoire Lake Estates and the only road access to Gregoire Lake Provincial Park. This two-lane highway has an approximate volume of 4,800 Annual Average Daily Traffic (AADT) and is the primary highway linking Fort McMurray and the southern Hamlets in the Regional Municipality. In 2006/2007, the Highway was paved from Anzac to Lac La Biche providing a viable alternative to Highway 63 for north-south travel in the region. Alberta Transportation recommends twinning highways when they reach a volume of 15,000 AADT. Stony Mountain road connects Highway 63 to Highway 881 near FN 176A.

Alberta Transportation currently has plans to upgrade Highway 881 between Anzac and Gregoire Lake Estates. Improvements consist of road resurfacing completed in 2014, the addition of a service road through FN176, as seen on Map #7, and the elimination of access points to the highway by removing the northwestern access to Gregoire Lake Estates.

Stormwater Management

Stormwater management in the Plan Area, including the Hamlet of Gregoire Lake Estates, is managed using natural drainage courses and surface ditches along Highway 881.

Potable Water

Residents in the Plan Area currently receive potable water via truck haul from the Anzac truck fill station. The construction of the Southeast Regional Water Supply Line from Fort McMurray to Anzac has brought piped water through the Plan Area, as seen on Map #7.

The Southeast Regional Water Supply Line was built to a capacity of 4,500 residents assuming future populations of 300 residents in Gregoire Lake Estates, 3,000 residents in Anzac, and 1,000 residents on the First Nation reserves. The Regional Municipality is currently designing a secondary water supply line to Anzac that will follow the alignment of Highway 881. The Regional Municipality has plans for installation of a full pressure piped water service to Gregoire Lake Estates. There is the possibility that development along Surmont Creek will be able to tie into the new water supply line in the future.

Wastewater Treatment

Residents in Gregoire Lake Estates use pump out tanks and vacuum truck service to dispose of their domestic wastewater. Wastewater is then dumped at the sewage lagoon in Anzac, as seen on Map #7. The 1991 Gregoire Lake Area Structure Plan identified that the use of septic mounds contributed to increased aquatic vegetation growth in Willow Lake. A Municipal-grant in the mid-1990s helped residents move to pump out tanks from septic mounds.

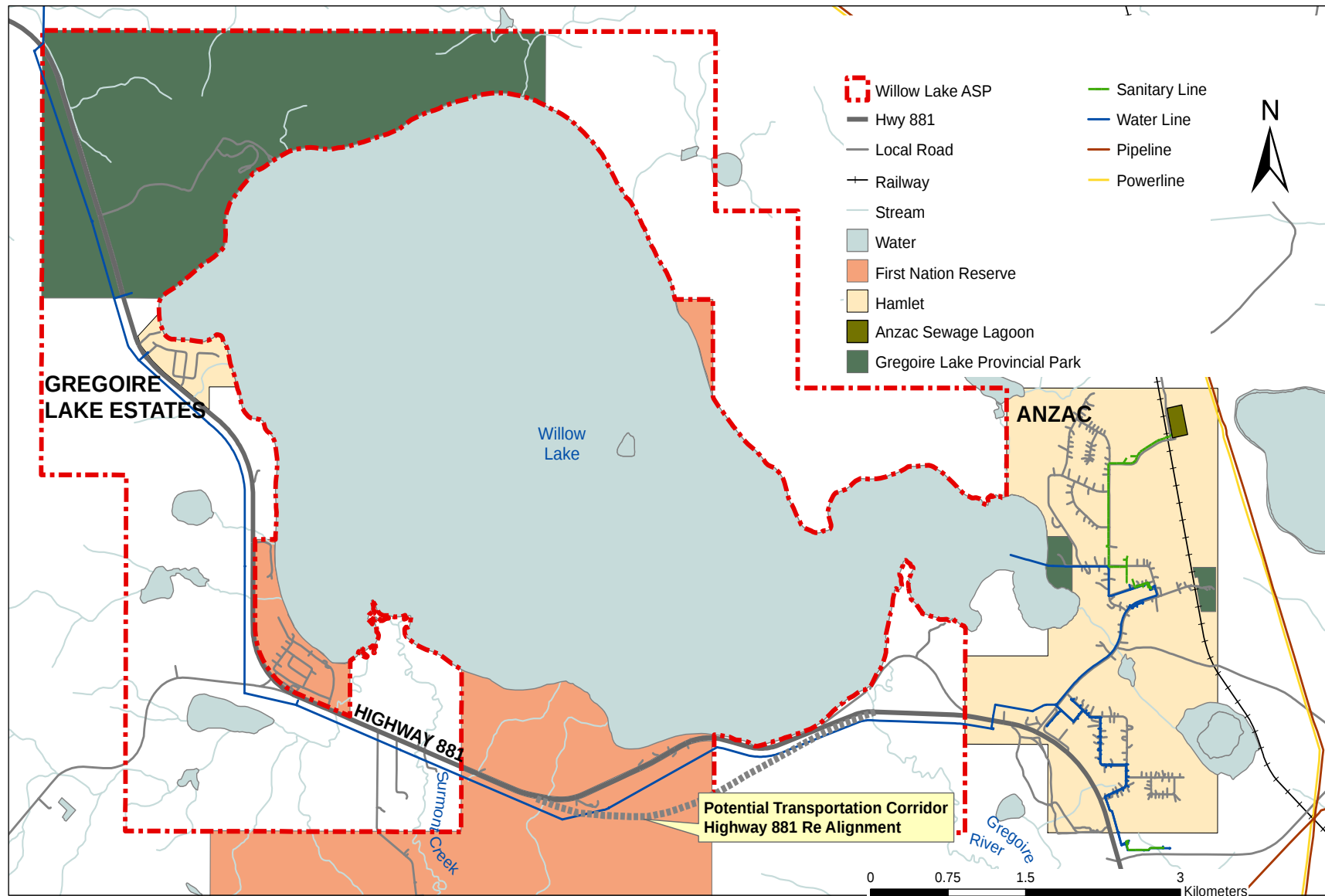
The Regional Municipality has plans for installation of a gravity sewer system in Gregoire Lake Estates that will tie into the new wastewater treatment plant in Anzac.

Property owners on large lots along Surmont Creek use septic fields to handle wastewater currently. There may be opportunity for these areas to tie into the new proposed piped service as well.

Franchised Utilities

Buried and overhead utilities are provided by ATCO Gas, ATCO Electric and Telus. Residents have access to 3-phase power running along Highway 881 provided by the Hangingstone substation.

MAP 7: INFRASTRUCTURE



PLANNING AND POLICY FRAMEWORK

Municipal Government Act

The Municipal Government Act (the “MGA”) enables municipalities to prepare statutory plans, such as area structure plans.

The requirements for area structure plans are outlined in Section 633(3) of the MGA. An area structure plan must describe:

- the sequence of development proposed for the area,
- the land uses proposed for the area, either generally or with respect to specific parts of the area,
- the density of population proposed for the area either generally or with respect to specific parts of the area,
- the general location of major transportation routes and public utilities,

and may contain any other matters the council considers necessary.

As outlined in Section 638 of the MGA- all statutory plans adopted by a municipality must be consistent with each other.

Section 638.1 states: In the event of a conflict or inconsistency between (a) a statutory plan or land use bylaw, and (b) an ALSA regional plan, the ALSA regional plan prevails to the extent of the conflict or inconsistency.

Lower Athabasca Regional Plan (2012-2022)

The Lower Athabasca Regional Plan (“LARP”) identifies a strategic 10 year direction for a large region including the Regional Municipality. It is a statutory plan based on Alberta’s Land Use Framework, which was released in 2008 and sets out an approach to managing land and natural resources. Most importantly, it sets out seven planning regions and requires that regional plans be developed for each of those regions. The LARP is the result of that provincial direction and applies to all persons, including the Crown and local government bodies. The Regulatory Details Plan requires local government bodies to consider the Strategic Plan and Implementation Plan found within the LARP.

Under the LARP, Willow Lake, referred to as Gregoire Lake, has been identified as a Provincial Recreation/Tourism area. Provincial Recreation areas will be managed to minimize industrial land disturbance and to ensure quality recreational experience. Petroleum and natural gas tenure and recreational leases will be honoured consistent with existing policy. Such leases include all subsurface activities needed to explore, develop and extract resources. The LARP specially designates a large area around the shorelines of Willow Lake as a potential provincial park expansion.

Recreation/Tourism areas are intended to provide diverse, enjoyable, outdoor recreation opportunities that contribute to healthy lifestyles and will be managed to minimize industrial disturbance and ensure quality recreational experience.

Municipal Development Plan (Bylaw No. 11/027)

The Regional Municipality adopted a municipal development plan in 2011. The Municipal Development Plan (the “MDP”) is a regional, urban and rural plan combined into one comprehensive document. As a result, the MDP addresses issues at a variety of scales, providing integrated direction to the urban area, the distinct rural communities and vast tracts of hinterland.

The MDP outlines a strategic path forward to manage growth. It does not directly identify capital projects or infrastructure spending, nor does it provide specific zoning requirements. Rather, it will be used to guide both short and long term decision making at the Regional Municipality over the next few decades until the year 2030.

The 2011 MDP provides statutory direction for the Willow Lake ASP with a vision to make the region “a global model for sustainable living in the north.” The MDP provides direction on regional and rural community growth management, as well as building sustainable communities, to which this plan aligns.

The MDP designates the Hamlet of Gregoire Lake Estates as an area of stability. The Regional Municipality will work to protect the existing pattern of development characterized by single family housing, (MDP strategy C.3.3). Along with this, no physical expansion of the community will be accommodated. Community access to Willow Lake will be enhanced while ensuring minimal impact on the lake environment and other natural features.

Anzac has been designated as a priority growth area in the MDP. Anzac is not within the Willow Lake ASP; it is however, directly adjacent to the eastern boundary. It is expected that most development can be accommodated within Anzac as opposed to within the Willow Lake ASP boundaries.

Adjacent Plans

Other plans in the vicinity of the Willow Lake ASP include:

- Anzac Area Structure Plan (Bylaw 12/018), 2012. The planning process involved close cooperation to ensure compatibility.
- Highway 63/881 Corridor ASP (Bylaw no. 07/050), 2007.



VISION

A vision for Gregoire Lake Estates was developed through community engagement. The vision reflects how area residents would like to describe their community 20 years in the future. In this case, the vision identifies a community that is close-knit and has plenty of opportunity to enjoy the rich natural surroundings. Much of what is desired by the community currently exists.

In 2010, the Regional Municipality adopted an Integrated Community Sustainability Plan, Envision Wood Buffalo. Contained within this plan is a region-wide vision for sustainable development. The Statement of Sustainability is a declaration by the Regional Municipality that it will work to ensure a healthy future not only for current residents, but for future residents as well, paying specific attention to the economic, environmental, social and cultural pillars that form the fabric of the region.

From here, Generalized Land Use Classifications have been created as well as Principles, Objectives and Policies for the Willow Lake Plan Area.

The Regional Municipality's commitment to sustainability is emphasized in the Willow Lake ASP. The Willow Lake ASP presented here makes an effort to protect and repair riparian zones and address environmentally sensitive areas. It also ensures that the impact of future development on the natural environment is addressed through the appropriate studies. These measures are aimed at preserving the health of Willow Lake and ensuring its value as a recreational amenity for residents of this region for many years to come.

Vision for Gregoire Lake Estates

Gregoire Lake Estates is a quiet and safe community where our residents value the rich natural setting and close relationships with neighbours. Set on the shores of beautiful Willow Lake, we take tremendous pride in an ongoing commitment to preserve the natural landscape that surrounds us and is integral to our active rural lifestyle. The foundation of our small residential community is built on strong friendships, community pride and neighbours that look out for one another. Trails and community access to the lake provide us with excellent recreational opportunities throughout the year. The level of residential servicing in Gregoire Lake Estates meets the needs of the community. We maintain access to the amenities in neighbouring Anzac and Fort McMurray while retaining the privacy and high quality of life that we enjoy so much.

Statement of Sustainability

We value living in a region that is safe, healthy, inclusive of all residents and provides local opportunities. We have a strong economy, a healthy environment, a rich culture and an abundance of social capital that together form the pillars of sustainability and contribute to quality of life and well being.

We strive to find balance in our economic, environmental, cultural and social systems and to live within their natural limits. We make decisions that reflect an understanding of the interdependence of these systems and consider residents long-term needs to ensure the resources of today are sustainable into the future.

GUIDING PRINCIPLES

The vision for Gregoire Lake Estates, the direction of the MDP, and the input of residents and stakeholders during the planning process, form the foundation of the Willow Lake ASP.

The Willow Lake ASP will be guided by the following five principles:

1. Protect and Preserve the Natural Environment
2. Preserve Existing Character of Willow Lake Area
3. Enhance Local Recreational Opportunities
4. Provide Safe Transportation Networks and Coordinate Municipal Services and Public Infrastructure
5. Promote Community Health and Safety

These principles act as a guide for future development in the area and form the basis of the Generalized Land Use Classifications as well as Objectives and Policies.

PART 2

ACHIEVING THE VISION



GENERALIZED LAND USE CONCEPT

Generalized Land Use Concept and Policies for the Willow Lake ASP promote the potential of the Plan Area as an important natural and recreational amenity, while minimizing the impact of human activity on the natural environment. For the most part, development in the area should be focused on recreational uses, while other uses such as recreation with commercial elements or industrial development can be considered if this activity does not adversely affect water quality of lakes or streams, or limit the recreational potential of the surrounding area.

Map #8 shows the generalized land use concept for Willow Lake. This is a conceptual map that provides general description and approximate location of proposed future land uses. The following are the descriptions of the land use classifications:

Established Neighbourhood

The intent of the Established Neighbourhood Land Use classification, is to maintain the existing development pattern and prevailing density in the form of a single detached house on an individual lot.

Business Industrial

The Business Industrial classification is intended to accommodate a range of commercial businesses and general industrial uses compatible with surrounding areas, which may include general office buildings, light manufacturing, lay-down yards and service uses that support nearby development and industrial activity.

GENERALIZED LAND USE CONCEPT

The Willow Lake ASP endeavors to address the significance of the lake as a key feature of this region and one that will provide recreational opportunities for residents for years to come. In doing so, the Willow Lake ASP strives to maximize the recreational potential of the Willow Lake area while minimizing impacts on the natural environment. The Willow Lake ASP will also ensure the protection of the areas many historical resources. As such, it is anticipated that the area will retain much of its natural character and future development will be limited.

Open Space

The intent of the Open Space classification is that land will remain in its natural state and allow for the protection of environmental features and wildlife. A major portion of this area has some or significant constraints to development. These constraints include low lying wet terrain, shallow to deep muskeg coverage or areas prone to flooding. Development within the Open Space area will be restricted to uses, such as walking trails that have low impact on the environment.

Environmental Preservation

The intent of the Environmental Preservation classification is the preservation and the protection of environmentally sensitive areas. The area in its natural state may be used as a park or walking trails.

Parks and Recreation

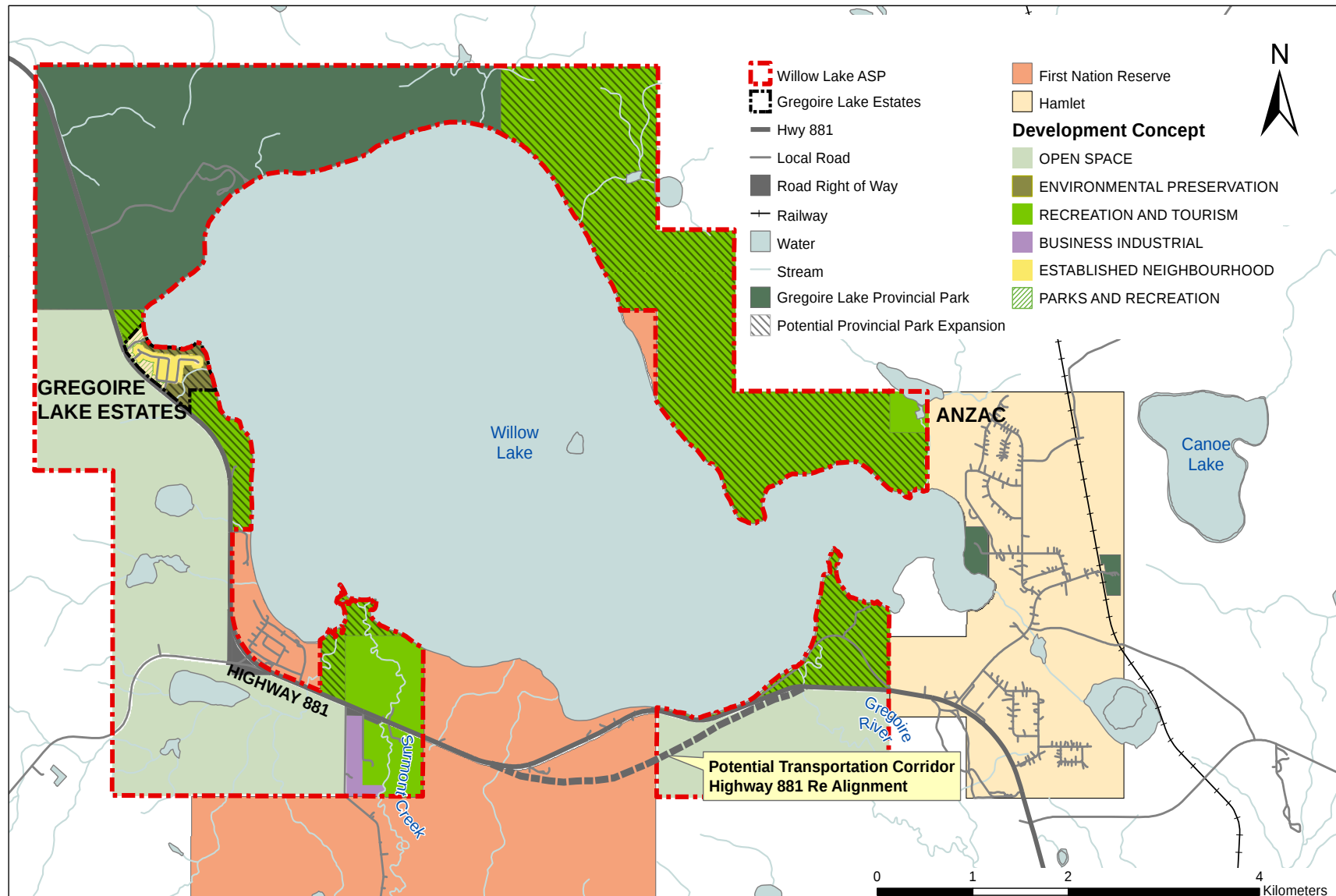
The Parks and Recreation classification is intended to allow for parks and recreation facilities. Parks, trails, outdoor recreation facilities, and playgrounds are examples of uses considered.

Recreation and Tourism

The Recreation and Tourism classification influenced by the LARP is intended to allow for outdoor recreation facilities that also include commercial elements for tourism purposes, such as boat launches and recreational campgrounds. The classification applies to a large part of the Plan Area, much of which is undeveloped Crown land.

MAP 8: WILLOW LAKE GENERALIZED LAND USE CONCEPT MAP

The following map represents the Generalized Land Use Concept for the Willow Lake Area Structure Plan.



PRINCIPLE 1: PROTECT AND PRESERVE THE NATURAL ENVIRONMENT

Ecological integrity and protection of environmental features are fundamental components of the Willow Lake ASP vision. There is a strong desire within the community to ensure environmental features are preserved, protected and enhanced for future generations to enjoy. The community shares a special bond with the surrounding water and land based environment and prides itself in the relationship community members share with natural areas.

Willow Lake is of fundamental importance to the immediate adjacent land uses within the Willow Lake ASP area, including the Hamlet of Gregoire Lake Estates, Gregoire Lake Provincial Park, day use areas and camp grounds, as well as land uses outside the Plan Area, including the First Nation's Reserves and the Hamlet of Anzac. The lake provides habitat for fish and wildlife. Willow Lake also provides a desirable setting for the adjoining uses and opportunities for recreational uses including day use facilities, camping and fishing.

The Gregoire River, that flows from the Lake, eventually flows into the Athabasca River. Surmont Creek is the major inflow into Willow Lake. Environmental protection of Willow Lake and the riparian areas adjoining the lake, Gregoire River, Surmont Creek, other streams and creeks and the lake's drainage basin together with responsible land use management will ensure that the lake's amenities are protected for the enjoyment of future generations.

Objective 1.1 Protect Willow Lake, Gregoire River and all associated tributaries and watercourses

In the Hamlet of Gregoire Lake Estates:

- 1.1.1 A 30 metre development setback will be required as a minimum from the top of bank of Willow Lake and all other water bodies.

In the Plan Area outside of the Hamlet of Gregoire Lake Estates:

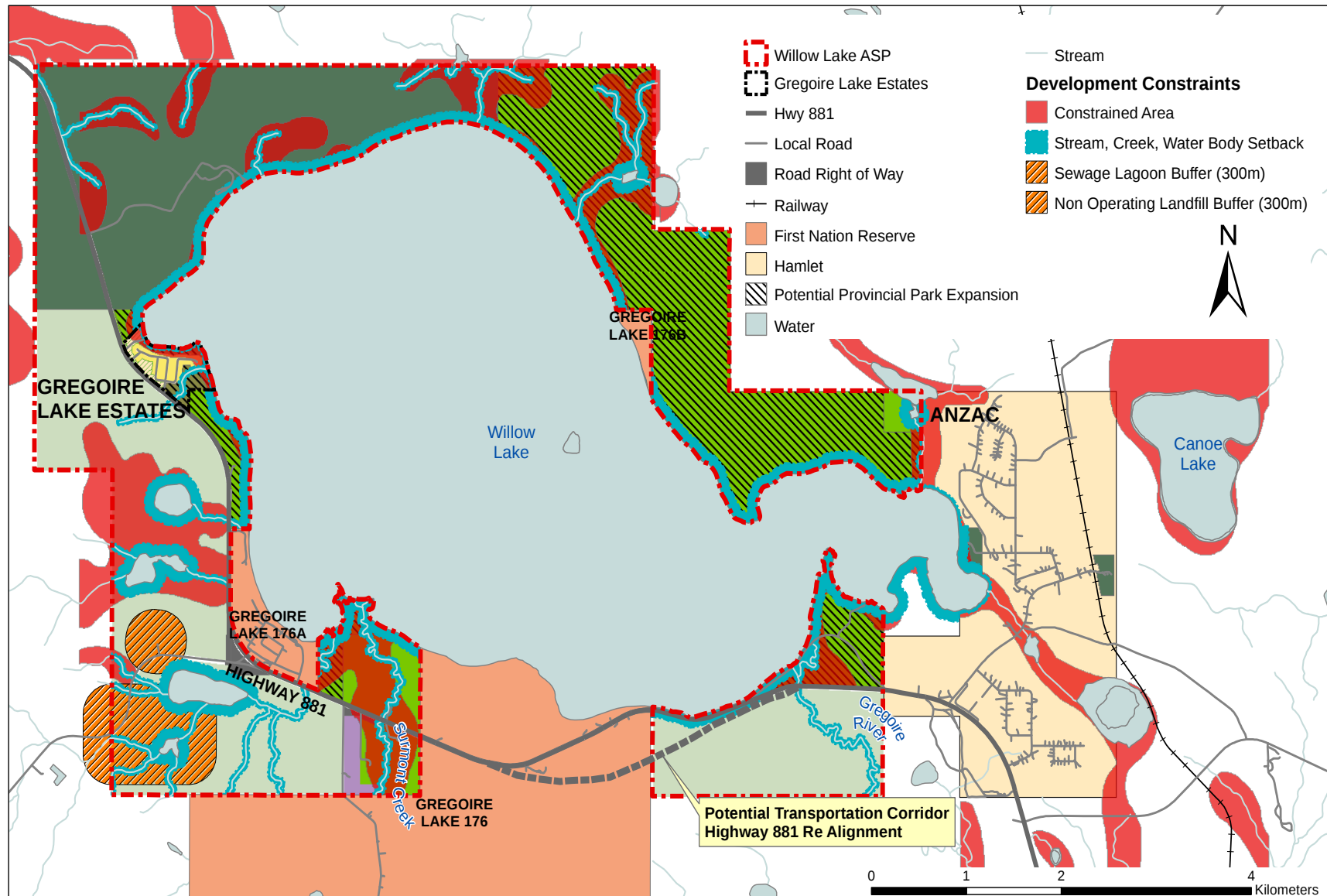
- 1.1.2 A 100 metre development setback will be required as a minimum from the top of bank of Willow Lake and all smaller lakes.
- 1.1.3 A 30 metre development setback will be required as a minimum from the top of bank of Gregoire River, Surmont Creek and all other streams and creeks.
- 1.1.4 Land within the development setback is to remain in its natural state. Low impact development such as walking trails and equipment associated with day use activities (picnic tables, boat launches and viewing platforms) may be allowed.

- 1.1.5 An application for development within areas identified as Constrained Area will require an environmental assessment to ensure measures are taken to mitigate any potential adverse environmental impacts.

- a) An environmental assessment may include but is not limited to:
 - i) biophysical impact assessment,
 - ii) geotechnical study,
 - iii) any other assessment required by the development authority.
- b) The environmental assessment studies and analysis must be prepared by an accredited professional.

- 1.1.6 The Regional Municipality will endeavor to encourage Alberta Environment and Sustainable Resource Development to maintain and restore vegetation in riparian areas of the rivers, streams and creeks within the drainage basin of Willow Lake.

MAP 9: DEVELOPMENT CONSTRAINTS OVERLAY



Objective 1.2 Promote stewardship of the environment

Within the Plan Area:

- 1.2.1 The Regional Municipality will endeavor to work closely with the community, Alberta Environment and Sustainable Resource Development, and other stakeholders to protect lakes, streams, natural vegetation, fish and wildlife habitats.
- 1.2.2 The Regional Municipality will endeavor to encourage Alberta Environment and Sustainable Resource Development and other interest groups to monitor:
 - i) water quality in Willow Lake; and
 - ii) fish habitat in Willow Lake and Gregoire River.
- 1.2.3 The Regional Municipality will endeavor to encourage the Province to complete a Lake Management Plan for Willow Lake, based on the principles of Integrated Land Management. The Plan may address the following:
 - i) shoreline management;
 - ii) water quality;
 - iii) fisheries management;
 - iv) wildlife management; and
 - v) public access
- 1.2.4 To safeguard the natural drainage pattern and reduce soil erosion and nutrient runoff into Willow Lake and all other water bodies, the Regional Municipality will:
 - a) Discourage the removal of vegetation and any alterations to the drainage pattern in areas adjacent to riparian zones; and
 - b) Encourage lot clearing to be kept to a minimum
- 1.2.5 The use of environmentally friendly technologies and practices will be encouraged. These may include the use of Low Impact Development standards for storm water management and energy conservation.

Objective 1.3 Preserve and protect wildlife habitats and corridors along with native vegetation

Within the Plan Area:

- 1.3.1 The Regional Municipality will encourage the community and other stakeholders to work with Alberta Environment and Sustainable Resource Development to preserve intact habitat types (i.e. riparian areas, wetlands, and forests) and maintain wildlife corridors.
- 1.3.2 Landowners will be required to manage invasive, weedy and/or non-native species of plants on their lands to prevent their establishment and to minimize their spread. The planting of non-native species is discouraged.
- 1.3.3 Developers will be required to dedicate Environmental Reserve, in accordance with section 664 of the MGA, at the time of any future subdivision.

In the Environmental Preservation Area:

- 1.3.4 Only development that has a low impact on the natural environment will be allowed. Appropriate land uses include parks and walking trails.

Objective 1.4 Enhance environmental protection of water features flowing into Willow Lake

Within the Plan Area:

- 1.4.1 Developers must demonstrate that the development will not detrimentally impact the water quality and riparian areas of all streams, creeks, rivers and Willow Lake. Factors that will be taken into consideration when determining a development application include, but are not limited to:
 - i) type of land use and potential for contamination of the site and groundwater
 - ii) on-site stormwater management
 - iii) site layout

PRINCIPLE 2: PRESERVE EXISTING CHARACTER OF WILLOW LAKE AREA

A specific function of the Willow Lake ASP is to recognize and protect the qualities of rural living enjoyed by area residents. Willow Lake and its associated water courses are important features of the environment and frame the desired lifestyle of its residents. The shoreline of Willow Lake has seen minimal disturbance by residential development, although currently some recreation and tourism activity is located along the lakeshore. The Plan Area is considered to have high potential to contain archaeological, paleontological and Aboriginal traditional use resources. Given this potential any future development could result in impact to undisturbed, significant historic resource sites.

Since the adoption of the 1991 ASP (Ministerial Order #477/91), development in the Plan Area has been limited by development restrictions and public ownership of large parcels of land. The 1991 ASP restricted all development in areas south of the Willow Lake and limited redevelopment within Gregoire Lake Estates by not allowing new residential lot subdivisions. A change in the pattern of development occurred when approximately 16 hectares of privately owned land west of Surmont Creek received subdivision (2008) and redesignation (Bylaw 08/042) approvals that allowed industrial uses.

The MDP designates the Hamlet of Gregoire Lake Estates as an area of stability. The Regional Municipality will work to protect the existing pattern of development characterized by single family housing. Along with this, no physical expansion of the community will be accommodated. Community access to Willow Lake will be enhanced while ensuring minimal impact on the lake environment and other natural features. In the MDP, Anzac has been designated as a priority growth area. Anzac is not within the Willow Lake ASP; it is however, directly adjacent to the eastern boundary. It is expected that most development can be accommodated within Anzac as opposed to within the Plan Area.

Objective 2.1 Provide for appropriate development in the Plan Area

Within the Plan Area:

- 2.1.1 The development of project accommodations and structures intended to be used for such purposes will not be accommodated.
- 2.1.2 The redesignation of land for the expansion of or the development of residential, commercial or industrial uses shall not be accommodated.

- 2.1.3 An outline plan may be required for all subdivision applications where two or more lots are contemplated. Outline plans must include, but are not limited to a future land-use scenario, servicing strategy and open space connections, development phasing, development constraints analysis and proposed strategy to deal with identified actions, consistent with this plan.

In areas identified as Established Neighbourhood:

- 2.1.4 The redevelopment of a residential building will be required to be in keeping with the character, housing form and density of the area.
- 2.1.5 The subdivision of existing lots will not be allowed.

In areas identified as Business Industrial:

2.1.6 Business and industrial uses will be allowed that are deemed compatible with the rural character and have minimal impact on the environment. These may include general office buildings, light manufacturing, lay-down yards and service uses that support nearby development and industrial activity.

a) Development may be considered incompatible for reasons such as those listed below unless appropriate mitigation measures are adopted, to the satisfaction of the development authority:

- i) emissions of fumes and odor;
- ii) continuous and excessive noise;
- iii) emission of air or water pollution and other contaminants;
- iv) creation of dust;
- v) light pollution; and
- vi) inappropriate volume or type of traffic

In areas identified as Open Space:

2.1.7 Only development that has low impact on the natural environment, such as walking trails will be allowed.

In areas identified as Parks and Recreation:

2.1.8 Recreational facilities for use by the community will be allowed. Such uses include parks and playgrounds, trails and outdoor recreation facilities, which may include tennis courts, bowling greens, ice surfaces or rinks.

In areas identified as Recreation and Tourism:

2.1.9 Outdoor recreation facilities that also include commercial elements for tourism purposes, such as boat launches, parks and recreational campgrounds, will be allowed.



Objective 2.2 Protect culturally and historically significant areas

Within the Plan Area:

2.2.1 The Municipality will promote the preservation and enhancement of cultural and historical resources.

a) At the time of application for development or subdivision, developers will be required to demonstrate compliance with the provisions of the Historic Resources Act.

PRINCIPLE 3: ENHANCE LOCAL RECREATIONAL OPPORTUNITIES

Willow Lake is an important recreational amenity in the region. The Lake and surrounding areas provides recreational activities year-round including fishing, boating, swimming, day use facilities, camping, cross country skiing, ice fishing and snowmobiling. Residents from the wider region, especially Fort McMurray, which is located a short driving distance of 30 kilometres to the northwest of the Willow Lake area, are frequent visitors and make use of the recreational amenities.

Gregoire Lake Provincial Park, one of the region's major parks and recreation destination for Fort McMurray residents forms a greenbelt around the Lake. There are plans to expand the Provincial Park around the north and south shore of Willow Lake and provide low impact recreational uses through trail development.

There is also potential for a trail system connecting the Provincial Park with the Hamlet of Gregoire Lake Estates and other areas within the Willow Lake ASP. This trail would provide greater access to the Willow Lake shoreline. There is a need to work within the community to determine where trails should be located.

There is an opportunity for new recreational uses to provide more recreation facilities for the growing population of the region. New recreational uses and redevelopment of existing recreational uses will need to respect the carrying capacity of the lake and be mindful not to detrimentally impact on the natural environment.

Objective 3.1 Support and enhance recreational uses that complement the natural environment

In areas classified as Recreation and Tourism:

- 3.1.1 The Regional Municipality will support Provincial plans to extend the area of Gregoire Lake Provincial Park and expand the range of facilities available with the Provincial Park.
- 3.1.2 The development of new recreational uses and facilities or the development or expansion of existing recreational uses and facilities must not have a detrimental impact on the natural environment.

Objective 3.2 Enhance trail linkages and access to the Willow Lake waterfront

In the Plan Area:

- 3.2.1 The Regional Municipality will work with the Province and the community to identify potential locations for future trails that will provide access to the Willow Lake waterfront.
- 3.2.2 Trails must be compatible with the protection and preservation of natural areas and with adjacent land uses.
 - a) In Constrained Areas, riparian areas or areas of cultural or historic significance, only walking trails will be allowed.
- 3.2.3 The use of Off-Highway Vehicles must be only on designated trails. Trails may be designated based on considerations such as impact on riparian areas, cultural and historic sites and adjacent land uses.

PRINCIPLE 4: PROVIDE SAFE TRANSPORTATION NETWORKS AND COORDINATE MUNICIPAL SERVICES AND PUBLIC INFRASTRUCTURE

The ability of residents and visitors to use various means of transportation to move around the Plan Area has important consequences for the social well-being, environmental health and economic prosperity of the ASP area. Transportation related issues include safe highway access, the condition of local roads, pedestrian safety and provision for cyclists and off highway vehicles.

The vehicular traffic on the section of Highway 881 within the Plan Area will increase as a result of the projected population growth in the Hamlet of Anzac and the projected increase in recreational use of Willow Lake.

There are opportunities to provide walking trails in Gregoire Lake Estates and as part of recreational development. A key consideration must be given to the development of a safe non-vehicular network of trails, paths and sidewalks throughout the Plan Area.

To be sustainable, municipal services and infrastructure must be efficient and durable, while creating minimal impacts on the environment and meeting both the present and future needs. Willow Lake is in close proximity to major oilsands projects, which will have direct and indirect impacts on the Plan Area in the future. This will include increased traffic volumes.

The Regional Municipality has plans for the installation of a full pressure piped water service to Gregoire Lake Estates. There is the possibility that development along Surmont Creek will be able to tie into the new water supply line in the future. The Regional Municipality has plans for installation of a gravity sewer system in Gregoire Lake Estates that will tie into the new wastewater treatment plant in Anzac. Property owners on large lots along Surmont Creek use septic fields to handle wastewater currently. There may be opportunity for these areas to tie into the new proposed piped service as well.

Objective 4.1 Encourage Highway 881 upgrades and improvements

In the Plan Area:

- 4.1.1 The Regional Municipality will endeavor to work with Alberta Transportation and the community to
 - a) help facilitate future upgrades and improvements to highway 881;
 - b) ensure provision for additional safety measures and improvement to the access points to Gregoire Lake Estates and areas of development along Surmont Creek.

Objective 4.2 Require road improvement as a result of development

In the Plan Area:

- 4.2.1 A developer may be required to provide a Traffic Impact Assessment (TIA) based on the criteria set out in the Regional Municipality's Engineering Traffic Impact Assessment Guidelines.
 - a) The TIA must be carried out by an accredited professional.
 - b) The developer will be required to implement the improvements in accordance with the Traffic Impact Assessment, and align as well with Engineering Servicing Standards.

Objective 4.3 Create a safe pedestrian environment

In the Plan Area:

- 4.3.1 The Regional Municipality will work towards creating a pedestrian-friendly environment on local roads which include, but is not limited to the provision of pedestrian pathways and road access connections, such as sidewalks and crosswalks.

Objective 4.4 Provide municipal services in an efficient, economical, environmentally friendly and coordinated manner

In the Plan Area:

- 4.4.1 The Regional Municipality will encourage private development to develop sound environmental practices by:
- a) Incorporating principles of Low Impact Development (LID),
 - b) Integrating storm water best management practices such as vegetated swales, bioretention gardens and engineered wetlands to capture and treat storm water run off.
- 4.4.2 The use of life cycle analysis techniques to assess the capital and operating costs of alternative investment options for infrastructure will be supported.

- 4.4.3 The provision of appropriate servicing options for water and sewer will be explored.

- 4.4.4 Proposed subdivision and development will be evaluated based on the criteria established by the Regional Municipality, which includes but is not limited to:
- i) proposed density (e.g., people per unit);
 - ii) planned site development for parking;
 - iii) submission of Environmental Assessment;
 - iv) Traffic Impact Assessment; and
 - v) Outline Plan showing all proposed phases and future uses



PRINCIPLE 5: PROMOTE COMMUNITY HEALTH AND SAFETY

The high quality of life the Willow Lake area provides for its residents is one of the most valuable elements of living in the community for many residents. This high quality of life includes the feeling of community safety for residents.

Fire protection for the Plan Area is provided by the Anzac volunteer fire department, a strong group of volunteer fire fighters serving Anzac and the surrounding area. The emergency response time standard may be extended in the Plan Area due to geographical constraints.

Local knowledge suggests that flooding is a potential hazard within the Willow Lake ASP in low lying riparian areas, specifically in areas along Surmont Creek.

Objective 5.1 Support the provision of appropriate social and emergency services

In the Plan Area:

- 5.1.1 The Regional Municipality will work in partnership with the community and emergency responders in maintaining appropriate emergency response services.

Objective 5.2 Protect the community from environmental hazard

In the Plan Area:

- 5.2.1 Future subdivision and development shall incorporate fire preparedness measures, such as FireSmart guidelines prepared by the Province.
- 5.2.2 An application for development within a Constrained Area will require an Environmental Assessment to ensure measures are taken to mitigate any potential adverse environmental impacts. The Regional Municipality will adhere to the recommendations set out in the required Environmental Assessment, which may include restrictions with regard to:
 - i) development of permanent structures,
 - ii) removal of vegetation; and
 - iii) the alteration of the natural drainage pattern

PART 3

MAKING IT WORK



IMPLEMENTATION STRATEGY

Principles and policies contained in the Willow Lake ASP are consistent with those in the overarching Lower Athabasca Regional Plan and the MDP. The ASP policies provide guidance regarding growth and development within the Plan Area and reflects the community's interests. All new subdivision plans and development proposals must be evaluated in terms of the intent of this ASP.

Although the Willow Lake ASP is intended to be a long term document whose principles and policies will be valid into the long-term, it will be reviewed and updated as required to ensure it remains relevant. At a minimum, it is recommended that the Willow Lake ASP be reviewed every five years. The purpose of review is to identify any major changes to the Plan's assumptions. The review will also ensure there are not any major conditions that have changed within the Plan Area or changes to the surrounding areas that will require a substantial change to the Vision, Principles, Objectives and Policies.

The implementation of the Willow Lake ASP is not intended to interfere with the Fort McMurray #468 First Nations's right to make a claim on lands within the Plan Area. Should these lands be granted reserve status, the Willow Lake ASP will be amended to remove these lands from the Plan Area.

A major component of implementation is the Land Use Bylaw. Land designations based on the policies and the Generalized Land Use Concept, Map #8, will be implemented through the Land Use Bylaw.

This section encourages aligning the policies and key priorities in the ASP with the Regional Municipality's capital budget planning and preparation process as an important step towards implementation.

PROPOSED DEVELOPMENT SEQUENCING

Future development and subdivision will be based on consideration of the following:

- Environmental suitability of vacant lots with appropriate designation,
- Availability of existing access,
- Servicing capacity of existing infrastructure and,
- Contiguity to existing development, infrastructure, servicing capacity and access

GLOSSARY OF TERMS

Area Structure Plan (ASP)	A plan adopted by council as a bylaw in accordance to the Municipal Government Act that provides a framework for future development of an area or community.
Biophysical Impact Assessment	A study undertaken when projects have the potential to incur negative environmental impacts to environmentally significant or sensitive areas, in order to ensure adequate protection of environmentally significant areas and natural areas with ecologically diverse components and prevent and/or minimize environmental impacts
Constrained Area	Area ranked as sensitive to development due to multiple physically and biologically valuable factors present. The majority of these areas occurred along watercourses and wetlands and their riparian areas or lowland habitat muskeg.
Drainage Basin	The area of land where runoff surface water from rain, melting snow or ice converges to a single stream, lake or other water body
Engineering Servicing Standards	The Regional Municipality of Wood Buffalo standards that define the minimum expectation for public infrastructure
Environmental Assessment	A report that assesses all environmental characteristics of an area and determines what effects or impacts will result if the area is altered or disturbed by a proposed action. In instances where an Environmental Impact Assessment is not required under federal or provincial law, an environmental assessment may be required to help the Municipality consider the environmental impacts of a proposed plan, and consider alternatives or appropriate mitigation strategies during the planning stage. It is based on information from a desktop review and field reconnaissance. An environmental assessment may include but is not limited to a biophysical impact assessment, geotechnical study, any other assessment required by the development authority.
Environmentally Friendly Technologies	Practices that conserve the natural environment and resources; thereby, reducing the negative impacts of human development
Environmental Reserve (ER)	Environmental Reserve shall be as defined in the Municipal Government Act
Environmental Stewardship	Managing and protecting sensitive natural areas, including watersheds, wetlands, and riparian areas, while valuing the integrated role our natural environment plays in the health of the region
FireSmart Guidelines	Recommendations of FireSmart Canada directing rural land use to protect communities from wildfires
Full Build-Out	The development of land to its full potential or theoretical capacity as permitted under the Area Structure Plan
Geotechnical Study	A study that identifies geotechnical risks and mitigation measures, carried out by an Accredited Professional, which must acknowledge that the Municipality may rely upon the study when making decisions

GLOSSARY OF TERMS

Greenbelt	A designated area of largely undeveloped natural or agricultural land around a community on which development is restricted
Gross Population Density	A measure of population density as calculated by dividing the total population of a community by the total area of that community.
Historic Resource	Historic Resource shall be as defined in the Historical Resources Act.
Integrated Land Management	The strategic planned approach to managing and reducing the human caused footprint on public land. Goals are to reduce land use disturbances relative to what would occur in the absence of integrated efforts and to foster stewardship ethic in all land users
Land Use Bylaw (LUB)	A bylaw adopted by Municipal Council pursuant to the Municipal Government Act for the establishment of land use districts and the regulation of development, used for implementing statutory plan policies including the Municipal Development Plan, Area Structure Plans and Area Redevelopment Plans.
Life Cycle Analysis	A technique to assess the environmental aspects and potential impacts associated with a product, process or service by compiling an inventory of relevant energy and material input and environmental releases along with environmental impact
Low Impact Development (LID) Standard	A land management strategy that emphasizes conservation by use of on-site natural features integrated with engineering controls. Development aligns closely to pre-development stages. The LID is intended to prevent harm to streams, lakes, and wetlands from commercial, residential, or industrial development. This allows land to still be developed in a cost-effective manner that helps mitigate potential environmental impacts
Muskeg	Waterlogged, spongy ground, consisting primarily of mosses and acidic, decaying vegetation that may develop into peat
Municipal Development Plan (MDP)	A plan that functions as a municipality's overall policy guide for future growth and development. It is a statutory plan adopted by a Municipal Council under the authority of the Municipal Government Act. The plan outlines the direction and scope of future development, the provision of required transportation systems and municipal services, the coordination of municipal services and programs, environmental matters, and economic development
Natural Habitat	An ecological or environmental area that is inhabited by a particular species of animal, plant or other type of organism
Off-Highway Vehicle (OHV)	A motor vehicle registration class for vehicles including all-terrain vehicles, off-highway motor cycles, and off-road vehicles such as 4x4 trucks or jeeps
Outline Plan	An intermediate planning document, required in specific circumstances, in order to bridge the gap between large scale Area Structure Plan and an individual plan of subdivision

GLOSSARY OF TERMS

Project Accommodation	A residential complex of mobile units, excluding campgrounds, used to provide basic living facilities for workers on a temporary basis
Park	Land or premises used for conservation, horticulture or public recreation, including picnic areas, playgrounds, pedestrian and bicycle paths, landscaped areas and public washrooms
Riparian Area	Areas around lakes, estuaries and streams that function as transition areas between land and water, and host a wide array of plant and animal life. These areas are likely to have an influence on the total ecological character and functional process of a watercourse or water body
Setback	The minimum required horizontal distance between a development and a property line or any other features of a site, including, but not limited to, lease boundaries, watercourses, slopes, and other environmental features
Sustainability	The World Commission on the Environment and Development (1987) defines sustainability as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs."
Top of Bank	Top of Bank means the point closest to the boundary of the active floodplain of a lake, stream, or other body of water where a break in slope of the land occurs such that the grade beyond the break is flatter than 3 (horizontal) to 1 (vertical) at any point for a minimum of 15 metres measured perpendicularly from the break. Where banks are not well defined (e.g. in the case of lakes, wetlands or ponds), the top of the bank is equivalent to the high water mark or active floodplain, whichever is greater
Traffic Impact Assessment	The purpose of a Traffic Impact Assessment (TIA) study is to determine the transportation impacts a particular development will have on the existing roadway network system. A TIA study identifies the need for any improvements and mitigating measures to the adjacent and nearby roadway system to maintain a satisfactory Level of Service (LOS) and safety of the roadway network in the vicinity of the proposed development. It also identifies improvements needed to integrate the proposed development within the pedestrian and cyclist pathway system
Wetland	Those areas that are inundated or saturated by surface water or ground water sufficient to support a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include, muskeg, swamps, marshes, bogs and similar areas
Wildlife Corridor	A protected route that allows wildlife to move safely between areas of suitable habitat
Water Bodies	Any location where water flows or is present, whether or not the flow or the presence of water is continuous, intermittent or occurs only during a flood

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