

Smoky Lake County

Date: August, 2009

Whitefish Lake

Area Structure Plan

Bylaw 1189-09



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**SMOKY LAKE COUNTY
WHITEFISH LAKE
AREA STRUCTURE PLAN
BYLAW NO. 1189-09**

WHEREAS

pursuant to the Municipal Government Act, R.S.A. 2000, a municipality in the Province of Alberta may adopt and amend an Area Structure Plan; and


WHEREAS


the Council of Smoky Lake County deems it desirable to adopt an Area Structure Plan for the Whitefish Lake area;

NOW THEREFORE the Council of Smoky Lake County, duly assembled enacts as follows:

1. THAT the Whitefish Lake Area Structure Plan, being Schedule "A" attached hereto, is hereby adopted.

READ A FIRST TIME this 18th day of June 2009.



REEVE


CHIEF ADMINISTRATIVE OFFICER

PUBLIC HEARING HELD this 20th day of August, 2009.

READ A SECOND TIME this 20th day of August, 2009.

READ A THIRD TIME and finally passed by Council this 20th day of August, 2009.



REEVE


CHIEF ADMINISTRATIVE OFFICER

**SMOKY LAKE COUNTY
WHITEFISH LAKE AREA STRUCTURE PLAN
BYLAW NO. 1189-09**

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SMOKY LAKE COUNTY WHITEFISH LAKE AREA STRUCTURE PLAN BYLAW NO. 1189-09

Part 1 Plan Goals, Management Principles

1.1 Introduction, Purpose and Plan Objectives

In early 2006 in response to the steady increase in interest toward lake-oriented development in Smoky Lake County, as well as a growing awareness of the importance of local environmental stewardship and healthy watersheds, Smoky Lake County began work on an Area Structure Plan for the Whitefish Lake Area.

This Area Structure Plan (ASP) was prepared through a process of compiling and analyzing stakeholder comments, case studies and area specific baseline data. The information collected was carefully considered in order to determine appropriate land use policies for the ASP area which conform to current municipal and provincial planning documents.

The ASP project resulted in the creation of two deliverables, a preliminary study and an ASP. The preliminary study is a supporting document containing baseline data and an analysis of the data gathered from the community, traditional and government stakeholders in order to determine appropriate land use and management principles for land situated within the Whitefish Lake area. The second deliverable; this ASP, contains the resulting land use and land management policies for the ASP area.

1.1.1 Purpose

The purpose of the Whitefish Lake ASP is to provide sustainable land use policies and management principles to guide development in the Whitefish Lake area for the next two decades.

1.1.2 Project Phasing

The **first phase** of the project involved gathering detailed information on various aspects of Whitefish Lake and the Whitefish Lake area, including the lake's physical resources, and critical lake planning issues. This information is contained in the 2008 Whitefish Lake preliminary study.

The **second phase** of the project involved a synthesis and analysis of the data gathered for the preliminary study.

In **phase three**, drafts of the preliminary study, mapping, and the ASP were prepared and circulated to the County, as well as to the community, traditional stakeholders and government stakeholders for comments.

The **fourth and final phase** of the project involved incorporating appropriate changes into the drafts and preparing the final preliminary study, ASP and maps.

1.1.3 Plan Objectives

The objectives of this plan can be described as follows:

1. To establish plan goals and land use management principles outlining a vision for the pattern of land management and development within the Whitefish Lake ASP area for the next 20 years.
2. To provide land use planning policies in the form of text and maps to promote and achieve the plan goals and land use management principles established for Whitefish Lake.
3. To establish a future development pattern for the Whitefish Lake ASP area.

Smoky Lake County recognizes that it has a key role to play in directing the responsible management of the Whitefish Lake area. Smoky Lake County Council can effectively guide the best and efficient use of Whitefish Lake through the preparation and implementation of this ASP.

1.1.4 Public Consultation

A number of opportunities for public engagement and involvement were provided over the duration of the project. Public open houses were held, surveys were circulated and meetings with stakeholder groups and individuals were conducted. The final draft of the plan incorporates recommendations and feedback received from Council, staff, stakeholders and the community throughout the entire duration of the project.

1.2 Whitefish Lake Today

Whitefish Lake is a quality active recreation experience although current water quality and water levels of the lake are having an impact on recreational use. As a result, recreational use around the lake is changing from being “consumptive” to being “non-consumptive”. The change may be the result of additional residential development around the lake. Subdivision has not been restricted around the lake in recent years as a result residential development has significantly increased over the last 15 years. In some developments sewage disposal systems have been of a high quality and in others illegal private sewage systems (pit toilets) have been a problem.

With the combination of lower water levels, which is a province wide phenomenon, and increased development around the lake the water quality at Whitefish Lake has deteriorated and the general water-related recreational experience of Whitefish Lake lot-owners, residents, and lake users has also deteriorated. The lake is too shallow in many areas to use for safe, unrestricted motor boating (except for small horsepower motors). While in other areas the lake is very deep. The shallow waters in the shore land areas limit the potential for developing boat launches. This has resulted in some conflicts about public access to the lake. Recreational fishing is a popular all season pursuit of residents in the area. Preserving the lake as a water resource and also preserving the resources (fish and water fowl habitat areas) within the lake were identified as high priorities by both current residents in the country residential communities and traditional lake users. Although the lake contains a variety of fish species, an assessment conducted by Fisheries and Wildlife staff in 2004 indicates that the Northern Pike and Walleye populations are in a vulnerable to collapsed state. Fisheries staff indicated, and site visits and consultation sessions with stakeholders confirm, that many of the inlets to the lake have dried up and spawning habitat areas have been altered and damaged as a result of cottages and camping activities taking place along the shore line adjacent to the southern half of the lake.

Water contact (swimming), and boating are also preferred activities at the lake. In recent years algae blooms have had a limited impact on the enjoyment of these activities. Over all, lake water quality is still high enough to support intensive lake oriented recreational activities.

The Whitefish Lake area may still be considered a recreation destination for lot owners and day users. The recreation experience provided is predominantly lake-oriented both as a result of the high water quality of the lake and the also, the low number of designated non-lake oriented recreational opportunities.

An analysis of the background information revealed that the lake is both a **recreation amenity** and a **landscape amenity**.

While the available background information indicates that there has been a decrease in lake water quality which is having a significant impact on fisheries stocks in the lake, it does not clearly identify which factor has caused the change. Several factors such as: cattle grazing, recreation property development, damage to fish spawning areas caused by boaters, inappropriate lawn and garden care, fertilizers, aging private sewage systems and illegal sewage disposal by some lakeside lot owners (allowing cuttings and fertilizers/pesticides into the lake, pit privies and "grey water" discharge), and the general reduction in surface water levels affecting the Smoky Lake region of Alberta have all had an impact on the lake. We can estimate that all of these factors have contributed to the general decrease in lake water quality, and damage to fish spawning areas and water fowl habitat.

The question to be answered in this ASP is: What kinds of future land uses are appropriate for the Whitefish Lake area? The land use designations shown on **Map 3** were established in order to ensure that the water quality, lake productivity and the overall enjoyment of the lake is protected for future generations of community members and traditional lake users. The policies and guidelines in this plan support zero or minimal further impact on the lake from biophysical materials (storm or sanitary sewage, de-forestation, etc.).

Additional use pressure on the lake (from would-be boaters or swimmers) must also be considered as a potential issue for water quality. The water quality of the lake is such that a quality recreational experience is still possible and future uses of the shore lands should be considered in relation to the impact they may have on the quality of the current recreational experience and the resource potential of the lake both for traditional users and existing community members.

The preliminary study indicates that stakeholders and landowners around the lake are notably concerned about additional development around the lake which could impact their experience of the lake, lake water quality, the resource potential of the lake, existing infrastructure and the overall quality of life within existing developments.

Conversations with traditional lake users indicate that receding water levels have caused lake inlets to dry up in recent years. As a result the shallow shoreland areas have become even more significant as spawning areas. The preservation of these environmentally sensitive areas will be imperative to ensuring the water quality and resource potential of the lake.

The ASP's goals, management principles and policies will determine the nature and intensity of development in the Whitefish Lake area. Currently, opportunities for further multi-lot country residential, commercial and industrial development are extremely limited within the ASP area as such; any changes in the quality of the Whitefish Lake environment or the quality of the Whitefish Lake recreational experience will not be as a result of the impact of new development on the lake or on lake capacity in existing, approved country residential developments because these areas have been almost entirely built out.

Whether biophysical opportunities for recreational/residential development at Whitefish Lake have been exhausted will require additional investigation. All future developers will be required to provide information about the potential biophysical impacts of proposed development for analysis prior to the issuing of any approvals for multi-lot country residential and commercial recreation developments. Still, it is clear from information gathered during the public consultation process that the socio-perceptual limits of the current lot owners and users for lake development are nearing capacity if not already exceeded.

There is also some concern that additional development would limit the ability of Whitefish Lake to maintain current fish stocks or to provide opportunities for improving the water quality and resource capability of the lake. However, if additional development in the ASP area could be predominantly non-consumptive in nature, using the lake primarily as a landscape amenity rather than a recreational amenity, then the biophysical impact of further development could be minimized.

All future development within the ASP area should be designed and located so as to have almost no biophysical impact on the lake. All sewage effluents and waste products must be fully treated before being allowed to enter the natural environment. Additional development in the ASP area would add to the human use pressure on the lake, but that addition would be minimal and limited, to some extent, by the quality of the lake experience itself and limited public access points to the shoreland areas. The requirement for other recreational opportunities in the Whitefish Lake area would also mitigate additional recreation pressure on the lake.

As a result, this plan strives to reach a balance between addressing existing community concerns about the potential impacts of additional development on the enjoyment of the lake as an amenity and a resource while still providing some opportunity for future growth in locations that are not highly environmentally sensitive.

This plan also recognizes that even if no new development occurs in the ASP area the impacts of the existing developments on the lake must be addressed. It

has been observed that several portions of the Whitefish Lake area, which were specifically designated for intensive use, are being intensively used in contravention of the County's land use regulations and the intent of the County's Land Use Bylaw, thus adding to the pressures on the lake environment. Specifically, several lots within the multi-lot country residential developments are occupied for substantial parts of the year by a number of recreational vehicles or trailers, the location and use of which substantially increases the impact of these developments on the lake other community members. This pressure should be controlled if not relieved.

As well, it has been observed that several of the residential lots within the country residential developments may not have sewage disposal systems which are up to current standards or which may even be no longer lawful. Land owners should be encouraged to bring up to standard those sewage disposal systems which are not up to current standards and required to replace those sewage disposal systems which are illegal.

It has also been observed that several of the owners of residential lots within the Whitefish Lake Resort may be following practices that are not appropriate for ensuring high water quality in the lake (for instance, allowing vegetation cuttings or "grey water" to enter the lake) or following practices that are not lawful (for instance, back lot owners drawing water from the lake for gardening use). Land owners should be encouraged to end those practices which may negatively impact the lake's environment and be required to end those practices which are illegal.

Demand for water from the lake has also increased in the last 10 years. The Whitefish Lake First Nation and the Kikino Métis Settlement both utilize the lake as a water source for their communities. Any future consideration of development in this area must be cognizant of this increased draw and dependence on lake water by neighbouring communities.

Finally, it has been noted that hard and soft infrastructure services are challenging to provide and maintain in this part of the County. The County contributed a significant amount of resources and capital into improving existing roadways in the area over the last year (2008-9). The hilly terrain in some of the shoreland areas increases the maintenance cost of gravel roads. Providing emergency services, medical services, access to schools and school bus service to this part of the County is also challenging because of the long travel times. Any future consideration of development in this area must be cognizant of these servicing limitations and challenges.

1.3 Plan Goals, Management Principles

The goals of the ASP are based on the values expressed by County Council , the Whitefish Lake community and staff. There are seven (7) major plan goals for Whitefish Lake:

- Goal #1** To protect the water resources in the Whitefish Lake watershed.
- Goal #2** To maintain a healthy lake watershed.
- Goal #3** To enhance and maintain a range of sustainable public and private accesses within the Plan area in an environmentally, socially and economically responsible manner.
- Goal #4** To maintain functional rural residential/recreational values and development while allowing the evolution of sustainable land and water uses.
- Goal #5** To maintain agriculture as the primary use in the larger watershed.
- Goal #6** To protect environmentally significant ecosystems.
- Goal #7** To improve emergency preparedness in the area through the implementation of FireSmart policies.

The following management principles have been developed to achieve these plan goals:

Management Principles:

1. Water quality and resource conservation will be given high priority when assessing the suitability of future land uses.
2. All future residential and recreational development in the Whitefish Lake area shall be carefully controlled using cluster design guidelines so that minimal nutrient and recreational pressures are added to the lake as a result of development.
3. All future multi-lot country residential development in the Whitefish Lake area shall have associated with it some form of recreational opportunity other than consumptive, lake oriented recreational use of the lake to encourage connectivity and multi-modal transportation options within the community.
4. All future development in the Whitefish Lake area shall occur on the basis of the highest levels of municipal services available, in accordance with the County's policies on land development and subdivision.

5. Lake nutrient loading will be limited by appropriate watershed management practices, including the following:
 - i. controls will be implemented on shoreland clearing, development, and sewage handling;
 - ii. the provision of Environmental Reserves will be required with all new subdivisions in appropriate areas;
 - iii. new development will not be permitted on land identified as highly environmentally sensitive without appropriate mitigation measures; and
 - iv. the inlet to the south of lake will be protected.
6. The rights of the existing farming community, traditional lake users and existing community members will be recognized.
7. The County will take available steps within its jurisdiction to ensure that existing and future sewer systems conform to current provincial regulations.
8. Boating restrictions are necessary in certain locations in order to help reduce lakeuser conflicts.
9. Lake residents will be encouraged to modify or end those practices which may increase nutrient loading as a result of shoreland clearing, development, and water handling which may decrease water quality in Whitefish Lake. Lake residents will also be required to end those practices related to development and sewage or water handling which are not legal.
10. All future development in the Whitefish Lake area shall comply with FireSmart and Emergency Response Plans for the area.

Part 2 Land Use and Development Policies

The following land use and development policies shall apply to all lands and developments within the Whitefish Lake ASP area, and shall be used by Smoky Lake County to guide decision-making regarding all land use and development at Whitefish Lake.

Map 3, which is located in Appendix A, is the Future Land Use Concept Map. Land Use Designations for lands within the ASP area are indicated on this map.

2.1 Development

1. Residential development shall not be allowed on lands having critical development constraints. The following criteria shall be used in determining the suitability of land for residential development:
 - a) groundwater of sufficient quantity and quality shall be available to support the proposed development. No development shall occur in areas where reserves of potable water are inadequate;
 - b) development shall not be allowed in areas characterized by wetlands, swamps, muskeg, or saturated soils. Development shall also be prohibited in valleys, ravines, or seasonal draws;
 - c) development shall be prohibited on slopes in excess of 15% or on slopes which are subject to slippage or mass movement;
 - d) development is prohibited in or directly adjacent to important wildlife habitat areas; and
 - e) development is prohibited on soils which have extremely fast percolation rates and/or which might result in the possibility of groundwater contamination.
2. Only one permanent single family dwelling unit shall be allowed on each lot unless otherwise stated in a development agreement.
3. Density incentives will be made available to developers in the Residential Conservation (Cluster) District who incorporate the open space management guidelines outlined in Section 2.9 into their development concept and subsequent development.

4. The Municipality will insist that holding tanks or provincially approved packaged sewage treatment systems are used within all new country residential developments in the ASP area. The use of a leaching pit or cesspool for kitchen sink waste/ grey water disposal in new developments will not be allowed.
5. No development shall be allowed on public reserves if it does serve the interests of the general public.
6. Any development or structures (except for removable domestic piers or removable boatlifts) proposed on the lake shore or bed shall be required to obtain authorization from appropriate Provincial agencies.
7. Spaces for day use, overnight camping, and similar activities shall be suitably organized and clearly marked. Adequate lake access and parking facilities shall be provided where appropriate.
8. Retail commercial development shall be considered in accordance with the policies of this plan.

2.2 Concept Plan Requirement

The County shall require developers to prepare a development concept plan prior to considering an application to amend the Land Use Bylaw for multi-lot residential use. Terms of reference for the preparation of a concept plan are found in the County's Land Use Bylaw approved by County Council and as may be amended from time to time.

2.3 Studies Required

In preparing a development concept plan, the developer will be required to undertake the following:

- a) a land suitability assessment (LSA) must be submitted to the County as part of any development concept plan in order to determine the amount of environmentally significant lands and the amount of developable land on the site. *For more detailed information about LSA requirements refer to Section 2.9 (7) of this Plan.*

2.4 Additional Studies Required

In preparing a development concept plan, the developer may be required to undertake any or all of the following:

- a) a geotechnical study prepared by a qualified professional that confirms the site is suitable for the proposed development and describes the measures that are to be taken to safeguard any geotechnical limitations, such as setbacks from the top of bank of Whitefish Lake;
- b) a phase one (1) environmental site assessment conducted by a qualified professional in accordance with the Canadian Standards Association where the potential for prior contamination of a site exists;
- c) an environmental impact assessment prepared by a qualified professional for development proposed in or near an environmentally sensitive area or if the proposed development may, in the opinion of the County, result in potentially significant environmental effects;
- d) details of the buffering or interface treatment required to minimize impacts of commercial land uses on neighbouring land uses. A noise attenuation study conducted by a qualified professional may also be required;
- e) a groundwater supply study, conducted by a qualified professional, when potable water is to be provided through a private or communal water system. If a communal system is proposed, details must be provided as to how the system will be managed and operated;
- f) percolation and near surface water table testing conducted by a qualified professional where onsite private sewage systems are proposed; and
- g) a storm water management study prepared by a qualified professional describing how storm water runoff will be managed in terms of runoff rates, volumes, and water quality.

2.5 Environmental Protection

1. Three categories of environmentally sensitive lands have been identified within the Study area. They represent areas of high, medium and low environmental sensitivity. **Map 1** illustrates the three (3) categories of environmentally sensitive lands. The environmental sensitivity of a parcel of land will be taken into consideration when assessing the acceptability of development proposals for lands within the study area.
2. Smoky Lake County shall request that appropriate Provincial government agencies regulate and monitor shoreline disturbance and nutrient loading from cattle grazing activity on public land, utilizing inputs from existing lease/permit holders and County officials.
3. The clearing of vegetation on lots shall be minimized in order to maintain aesthetic and visual buffers from neighbouring properties and to reduce soil erosion and nutrient runoff into Whitefish Lake. A site plan detailing the protection of treed areas shall accompany any application for a

development permit. The development of any lot shall not result in the loss of more than 40% of the vegetation (to be assessed at the time of application) on that lot.

4. A treed/vegetation buffer at least 500 feet (150 m) wide shall be maintained between agricultural lands and the lake shoreline.
5. A treed/vegetation buffer of at least 150 ft (45m) wide shall be maintained between any buildings and/or structures and the lake shoreline. If the subject site has minimal to no tree coverage when a development permit is applied for, additional landscaping and tree planting may be required, at the sole discretion of the Development Authority, as a condition of development approval.
6. Alterations to the bed and shore of Whitefish Lake shall not be undertaken without the necessary authorization and permits from appropriate Provincial agencies.
7. Recreational Activities such as ATVing and snowmobiling in the shoreland will not be allowed.
8. Smoky Lake County shall work with Alberta Environment in order to determine the feasibility of developing a method of maintaining lake water levels and enhancing water quality at Whitefish Lake.
9. Land owners shall be encouraged to bring up to standard those sewage disposal systems which are not up to current standards, and required to replace those sewage disposal systems which are not currently lawful.
10. Land owners shall be encouraged to end those gardening, water handling, and disposal practices which may negatively impact the lake's environment, and be required to end those practices which are not currently lawful.

2.6 Environmental Reserves

1. Setback from High-water Mark and/or Top of Bank

The County may require subdivision and development applications adjacent to water bodies and watercourses to prepare an engineering and/or geotechnical study to determine an adequate setback based on soil conditions and slope stability.

2. Recommended Environmental Buffer Along Water Bodies

An environmental reserve of not less than 30 m (98 ft) in width from the high water mark of water bodies and/or the top of bank of Whitefish Lake shall be required as a condition of subdivision approval. As a condition of development approval where there is no subdivision, a comparable setback of 30 m (98 ft) shall be required from the high water mark of Whitefish Lake and/or the top of bank of the lake to the wall of the nearest building. **Figure 1** illustrates the recommended water buffer adjacent to a large waterway.

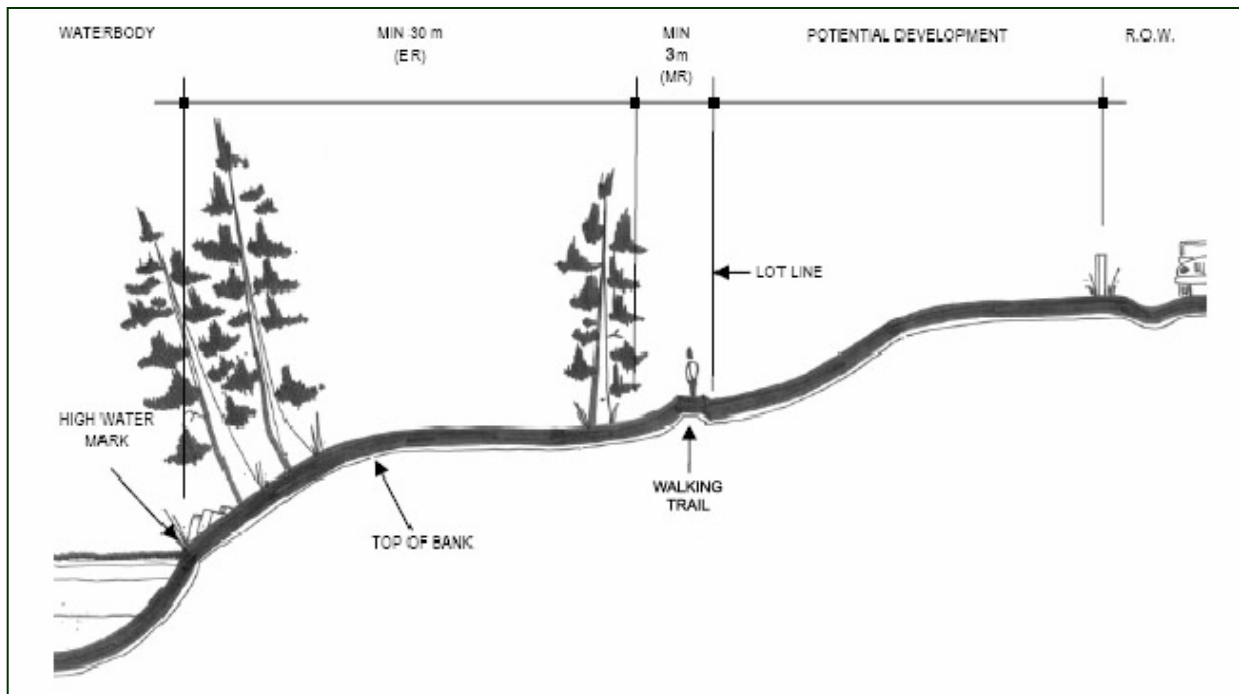


Figure 1: Recommended Environmental Setback

3. Additional Reserves

Additional reserve and/or setback may be required by the County based on the recommendations of any engineering and/or geotechnical study requested by the County. In these cases, the amount of reserves required will be determined using the guidelines for ER width developed by Sustainable Resource Development (See Appendix B).

2.7 Servicing

1. Smoky Lake County shall consider the clearing, posting, and maintenance of pedestrian walkways within the shoreland reserves to improve pedestrian access to the lake.

2. Smoky Lake County shall ensure that local access roads are developed, surfaced, and maintained to a high standard and in accordance with County policy.
3. The servicing priority areas are identified on **Map 2**. The priority areas will be taken into consideration when determining a timeline for municipal infrastructure upgrading within the study area.

2.8 Boating

1. Smoky Lake County shall ask appropriate authorities to limit all motorized boating activity and prohibit such activity within designated swimming areas in the country residential development areas.

2.9 Open Space Management

In order to be considered for re-districting to the Residential Conservation (Cluster) District in the County's Land Use Bylaw and the density bonusing incentives available in that district, concept plans must comply with open space management guidelines. The following open space management guidelines are supported by the County:

1. **Open Space**
Open space shall comprise at least 50% of the gross development area.
2. **Primary Conservation Area**
The following are considered primary conservation areas. Primary conservation areas must be included within the open space areas. Primary Conservation Areas shall include:
 - a. the 1:100 year floodplain;
 - b. buffer zones in the form of Environmental Reserves (ER) or Environmental Reserve Easements (ERE) around water features. The area of the buffer zone will be based on the *Recommended Guidelines for Minimum Environmental Reserve/Easement Widths* established by the Department of Sustainable Resource Development (SRD). The following chart summarizes the required buffer zones around water features:

Water Feature	Minimum ER or ERE width
Whitefish Lake	30 m from natural boundary
Swamp/Wetland	Variable, include wet meadow zone
Large River (15m or greater)	30 m +
Small River (6-15 m)	15 m
Medium Stream (3-6m)	10 m
Small Stream (3 m or smaller)	6 m
Ephemeral watercourse (no defined channel)	0 m
Braided Stream	10 m from the outside boundary of active floodway

* For more detailed information about requires setbacks refer to **Appendix B**.

- c. slopes above 25%;
- d. populations of endangered or threatened species, or habitat for such species;
- e. environmentally sensitive areas, as identified by Alberta Environment or Alberta Sustainable Resource Development; and
- f. archaeological sites, cemeteries, burial grounds, and historical sites.

3. Secondary Conservation Area

The following are considered secondary conservation areas. Secondary conservation areas may be included within the open space areas:

- a. existing healthy, native forests of at least 0.4 ha (1 ac.) contiguous area;
- b. other significant natural features and scenic viewsheds such as water bodies, ridge lines, peaks and rock outcroppings, particularly those that can be seen from public roads or public properties;
- c. agricultural lands with a farmland assessment ratio of 55% or greater of at least 2.0 ha (4.9 ac.) contiguous area; and
- d. existing trails that connect to neighbouring areas.

4. Low Priority Conservation Areas

All remaining lands will be considered low priority conservation areas. These areas are not required to part of the open space areas. If the entire site of a development proposal is identified as low priority conservation area, development should be directed to previously cleared and/or disturbed areas.

5. Use of Open Space Areas

Open space areas may be used for the following purposes:

- a. conservation of natural, archeological, or historical resources;

- b. conservation of meadows, woodlands, wetlands, wildlife corridors, game preserves, or similar conservation-oriented uses;
- c. walking or bicycle trails, provided they are constructed of porous paving and pervious materials;
- d. passive recreation, such as open fields;
- e. active recreation, provided that they are limited to no more than 10% of the total open space area, and provided further that they are not located within primary conservation areas. Active recreation areas may include impervious surfaces. These impervious areas shall not count towards the minimum open space requirement. Active recreation areas in excess of this limit must be located outside of the open space areas;
- f. agriculture, horticulture, or pasture uses, provided that all applicable best management practices are used to minimize environmental impacts and such activities are not conducted within primary conservation areas;
- g. non-structural storm water management practices and structural storm water management practices that allow for filtered groundwater;
- h. sewage disposal fields comprised of single or multiple septic tanks;
- i. enclosed sewage treatment facilities; and
- j. easements for drainage, access, and underground utility lines.

6. Open Space Management Plan

The development concept plan for a residential conservation (cluster) development shall include an open space management plan. The open space can be managed in a number of ways, including, but not limited to:

- a. municipal ownership (in Municipal and/or Environmental Reserve parcels);
- b. as a common unit (or units) within a bareland condominium plan;
or
- c. as a commonly owned unit provided that a conservation easement is placed on the lands.

A conservation easement is an agreement between a landowner and a qualifying organization to protect the natural values of land, for a specified time or in perpetuity.

The open space management plan will clearly indicate who shall be responsible for maintaining and managing the open space areas and how funding for the maintenance and management shall be collected, including any legal instrumentation of such responsibilities and funding. The open space plan will also indicate how, if the maintenance and/or management of the open space areas becomes neglected and/or if funding provisions

cannot be enforced, the County shall assume responsibility for maintenance and management of the open space areas, and, further, how the costs of such maintenance and management, including administrative costs, interest, and penalties, will be charged back against the landowners within the development.

Since such open space areas are not developable, their value will be reduced for assessment and municipal taxation purposes.

7. Land Suitability Assessment (LSA)

The development concept for a development shall include a land suitability assessment, usually in map form with some text describing the features of the map (or maps). Layout of the development should be based on the findings of the LSA.

The purpose of the LSA is to ensure that the important site features have been identified and that the proposed open space will meet the open space requirements of these policies. The LSA should include:

- a. site and property boundaries;
- b. all streams, rivers, lakes, wetlands, and other hydro-geological features (including seasonal water flow and ponding areas) within and adjacent to the site;
- c. topographic contours of no less than 3 m (9.8 ft.) intervals;
- d. all environmentally sensitive areas as identified by Alberta Environmental Protection and Alberta Sustainable Resource Development;
- e. general vegetation characteristics;
- f. soil drainage;
- g. farmland assessment ratios for the site;
- h. existing roads and road structures; and
- i. potential connections of open space, green spaces, and trails.

The LSA will be used to determine primary, secondary, and low priority conservation areas.

8. Form of Ownership

Though the form of ownership of the individual residential dwelling units may be the normal fee simple ownership, other forms, such as co-operatives, bare land condominiums, rental accommodation, societies, joint ownerships, to name a few, shall be considered. The form of ownership, and the implications of the form of ownership for the management and maintenance of any services and utilities, shall be identified in the development concept plan for a particular development.

9. Form of Ownership of Open Space

The form of ownership, and the implications of the form of ownership for the management and maintenance of any services and utilities, shall be identified in the development concept plan for a particular development.

The development concept plan will:

- a. allocate responsibility and guidelines for the maintenance and operation of the open space and any facilities located thereon including provisions for ongoing maintenance and long-term capital improvements. Facilities may include: water treatment facilities, recreation facilities and trail networks; and
- b. provide a strategy for the enforcement of the plan.

Any changes to the development concept plan must be approved by Smoky Lake County. The responsibility for maintaining the open space and any facilities located thereon shall be borne by the owner.

In the event that the party responsible for maintenance of the open space fails to maintain all or any portion in reasonable order and condition, Smoky Lake County may assume the responsibility for maintenance, enter the premises to take corrective action, and charge the costs to the previously responsible party. The County may also bill for administrative costs and penalties associated with the maintenance.

10. Legal Instrument for Permanent Protection

The open space shall be protected by a legally binding instrument such as a Conservation Easement which is recorded with the deed. The form of protection and the organization or entity to whom the instrument will be registered shall be identified in the development concept plan for a particular development. The instrument will be registered to one of the following:

- a. A land trust or conservation oriented non-profit organization with the legal authority to accept such easements. The organization shall be bona fide in perpetual existence and the conveyance instruments shall contain an appropriate provision for retransfer to the County in the event that the organization becomes unable to carry out its functions; and
- b. a government entity with an interest in pursuing goals compatible with the purposes of this policy. If the entity accepting the easement is not Smoky Lake County, then a third right of enforcement favoring Smoky Lake County shall be included in the easement.

The instrument for permanent protection shall include clear restrictions on the use of the open space. These restrictions shall include all restrictions included in this policy as well as any further restrictions the applicant chooses to place on the use of the open space.

Part 3 Land Use Allocation

The amounts of phosphorus entering the lake from the land depend mainly on the use of land in the watershed. Forested land contributes about 10kg/km²/yr. Farm land contributes 20 to 50 kg/km²/yr: less from hay land and more from crop land. Urban areas contribute about 100kg/km²/yr from surface runoff plus 0.1 to 0.9 kg per person depending on how sewage is treated¹.

The land use allocation pattern depicted in this Area Structure Plan (Map 1) has been developed from the plan goals and management principles. Each land use area has a stated purpose which is further defined by specific policies relating to the types of land use and development which are most appropriate for that area.

3.1 Rural Conservation Area

This designation identifies generally undisturbed lands which may have marginal agricultural capability, marginal recreational capability, and/or critical development constraints. The intent is that land uses and development activity allowed in this area should:

- ❖ complement the natural environmental features and the rural landscape quality of the area, and
- ❖ cause minimal disruption of vegetation and wildlife resources.

Uses which increase nutrient loading of Whitefish Lake shall be discouraged.

Residential development in this area shall be designed to fit into the existing rural landscape in a manner that will retain the land's capacity to grow crops, produce timber; provide wildlife habitat; prevent soil erosion; provide recreational open space; contribute to maintaining clean water and air; and preserve rural character. These features not only contribute to the health and welfare of County residents but also contribute to the economic base by providing jobs and revenues in resource-related and tourism-related enterprises. New buildings and roads shall be designed to enhance rather than to replace these important existing features. Site disturbance shall be held to a minimum.

¹ 1998. *Pigeon Lake Water Quality Study*: Lilley Environmental Consulting, Sherwood Park, Alberta, and Dr Chris Earle, Concordia University College, Edmonton, Alberta.

The following policies apply to lands designated as **Rural Conservation**:

1. The preferred uses within the Rural Conservation area shall be low environmental impact and low intensity recreational activities such as cross country ski trails hiking and walking trails. The negative impact of such activities will be minimal to the Whitefish Lake environment, Whitefish Lake water quality and existing development.
2. Higher intensity activities such as ATV and horse trails shall be permitted in areas located primarily 1.6 km back (1 mile) from the lake. These trails will be encouraged to locate outside of low lying wetland areas.
3. Agricultural operators will be encouraged to use best practices to limit nutrient inputs into Whitefish Lake. Agriculture has a significant impact on water quality and ground water supplies; however, the rights of the existing farming community must be respected. Any desired changes must be achieved through education and incentive, not compulsion.
4. New extensive agricultural activities which the County believes will have little impact on the Whitefish Lake environment or lake water quality may be allowed. New confined feeding operations such as feedlots, hog barns and poultry farms, etc. shall not be allowed. In order to implement this policy the County's Municipal Development Plan will be amended to prohibit confined feeding operations within this designation.
5. The preservation of forested land should be encouraged. Forested land contributes fewer nutrients per unit area than cleared land. Municipalities can provide incentives for landowners to maintain tree cover. This does not mean financial incentives: experience shows that allowing limited subdivision is a very effective way for maintaining tree cover. Parcels of 8.08 ha (20 ac.) should be allowed on tree covered land set back more than 1.6 km (1 mile) from the lake. Case study research indicates that parcels of this size set back from lake bodies have been an outstanding success in retaining tree cover. The County's Municipal Development Plan will be amended to allow 8.08 ha (20 ac.) agricultural parcels within this designation.
6. A single subdivision for country residential or agricultural use will be allowed in accordance with requirements of the Smoky Lake County Municipal Development Plan and Land Use Bylaw. Thus, development will be at the maximum density of two (2) parcels per quarter section.

7. The operation of the sewage disposal facility associated with the existing dwelling must be certified as conforming with current sewage disposal regulations prior to the final approval of any new subdivision application.
8. Transportation, communication, and public utility uses shall be considered discretionary. Such uses shall only be developed in such a manner as shall not adversely affect the Whitefish Lake environment, Whitefish Lake water quality, or existing development.

3.2 Agricultural Area

This designation identifies areas where existing higher quality agricultural lands are to be retained for continued agricultural crop production. Agricultural activities shall be protected from incompatible non-farm developments. At the same time, negative impacts of agricultural activity on Whitefish Lake water quality shall be minimized.

Residential development in this area shall be designed to fit into the existing rural landscape in a manner that will retain the land's capacity to grow crops, produce timber, provide wildlife habitat, prevent soil erosion, provide recreational open space, contribute to maintaining clean water and air and preserve rural character. These features not only contribute to the health and welfare of County residents but also contribute to the economic base by providing jobs and revenues in resource-related and tourism-related enterprises. New buildings and roads shall be designed to enhance rather than to replace these important existing features. Site disturbance shall be held to a minimum.

3.2.1 Policies

The following policies apply to lands designated as **Agricultural**:

1. The preferred use within the Agricultural Area shall be extensive agriculture and farm related uses. Intensive farming activities such as tree nurseries, apiaries, etc., which would not adversely affect the Whitefish Lake environment may be allowed. New confined feeding operations, such as feedlots, hog barns, poultry farms, etc. shall not be allowed. Agricultural operators will be encouraged to use best practices to limit nutrient inputs into Whitefish Lake.
2. Farmstead separation and single lot country residential subdivision may be allowed in accordance with requirements stated in the Smoky Lake County Municipal Development Plan and Land Use Bylaw. A maximum of two (2) country residential parcels will be allowed per quarter section.
3. A single subdivision for agricultural purposes will be permitted per quarter section. A maximum of two (2) Agricultural parcels will be allowed per quarter section. The minimum size of an agricultural parcel shall be in accordance with requirements stated in the Smoky Lake County Municipal Development Plan and Land Use Bylaw.
4. The operation of the sewage disposal facility associated with the existing dwelling must be certified as conforming with current sewage disposal regulations prior to the final approval of any new subdivision application.

5. Commercial development shall be considered discretionary and industrial development and/or subdivision shall not be allowed.
6. Transportation, communication, and public utility uses shall be considered discretionary. Such uses shall only be developed in such a manner as shall not adversely affect the Whitefish Lake environment, Whitefish Lake water quality, or existing development.

3.3 Residential Area

The primary purpose of the Residential Area designation is to recognize existing multi-lot country residential subdivisions and developments at Whitefish Lake rather than to allow for additional multi-lot country residential subdivision and development. Residential development is considered the primary development opportunity for this area.

3.3.1 Policies

The following policies apply to lands designated as **Residential**:

1. All seasonal and permanent residential development within this area must occur in a manner which is harmonious with the lake environment and the existing residential community.
2. Additional single lot country residential development, which meets all of the regulations of the County's Land Use Bylaw, may be permitted within existing multiple-lot country residential developments.
3. Seasonal and permanent single family dwellings shall be permitted developments. Associated buildings shall be discretionary developments.
4. The residential density of any residential development shall be directly related to the following:
 - a. the density of the land proposed for development as determined through a land suitability assessment of the site. Site density will be determined on a site by site basis having regard for site conditions, environmental considerations and impacts, and other factors that may be considered in the design of the proposal;
 - b. the maximum number of dwelling units allowed will be determined by dividing the developable area of the subject site by the minimum residential parcel size of **0.303 ha (0.75 ac.)**. The developable area of a site is the total gross area, less the area of:

- i. bodies of open water over 500 sq. m in area or greater;
 - ii. anticipated rights-of-way for roads and utilities;
 - iii. Environmental Reserve and Environmental Reserve Easement areas (if applicable; and/or
 - iv. Municipal Reserve areas (if applicable),
 - c. the suitability and availability of municipal services and infrastructure necessary to support the proposal;
 - d. the compatibility of the proposed density with that of the surrounding area and the character of the Whitefish Lake community as a whole; and
 - e. consistency with the provisions of any development concept plan and/or regional plan encompassing the subject lands.
5. Minimum lot size shall be **0.303 ha (0.75 ac.)**, regardless of proximity to a major body of water.
6. A minimum of 0.2 ha (0.5 ac.) of developable land shall be provided on each new residential lot. Developable land is considered to be land that is not susceptible to flooding hazard, erosion hazard or slumping hazard. Calculations of developable area will be determined by the Subdivision Authority at time of subdivision.
7. The design of all future residential developments will be required to retain the land's capacity to provide wildlife habitat, prevent soil erosion, provide recreational open space, contribute to maintaining clean water and air and preserve the recreational character of the community.
8. Within public reserve areas, public recreation facilities such as tennis courts, picnic grounds, public boat launches, swimming areas, etc. which are compatible with permitted uses shall be considered discretionary uses.
9. Only one single family dwelling shall be allowed on each lot. Guest houses shall not be allowed as they constitute a second dwelling unit.
10. The use of recreational vehicles within developments (other than the storage of one recreational vehicle for each dwelling unit within a development) shall be strictly regulated within the residential areas, and shall not be allowed unless specifically provided for in a development concept plan and considered within the residential density calculation in the development concept plan. For regulations regarding recreational vehicles please refer to the County's Land Use Bylaw.

11. ATV and snowmobile use shall be limited to recognized trails within the Residential Land Use Area in order to mitigate potential safety conflicts between pedestrians and motorized recreational vehicles.
12. Transportation, communication, and public utility uses shall be considered discretionary. Such uses shall only be developed in such a manner as shall not adversely affect the Whitefish Lake environment, Whitefish Lake water quality, or existing development.

3.4 Residential Conservation (Cluster) Area

The purpose of the Residential Conservation (Cluster) Area designation is to allow for additional low-impact multi-lot residential subdivision and development in environmentally appropriate locations. Emphasis is placed on ensuring that seasonal and permanent residential development within this area occurs in a manner which is harmonious with the lake environment and the existing residential and agriculture developments.

Residential development is considered the primary development opportunity for this area. The preferred residential land use district to be used in this area is the R-RCC Residential Conservation (Cluster) District.

The broad scale land suitability analysis conducted in the preliminary study indicated a number of areas with few or no environmental constraints to residential development. However, through consultation with the community and the County, a number of socio-perceptual constraints were identified. As a result, the total area of land designated residential conservation (cluster) area is not as large as it would be if land suitability were the only criterion. In the future, development in suitable areas may be considered subject to amendment to this ASP, amendment to the County's Land Use Bylaw, and appropriate development controls. Any future amendments to this plan will involve public notification and public meetings as required pursuant to the Municipal Government Act.

Residential development in this area shall be designed to retain the land's capacity to provide wildlife habitat, prevent soil erosion, provide recreational open space, contribute to maintaining clean water, and preserve the recreational character of the community. These features contribute to the health and welfare of county residents and also contribute to the economic base by providing jobs and revenue in tourism and recreation related enterprises. Any new buildings and roads shall be designed to enhance rather than to replace these important existing features. Site disturbance shall be held to a minimum.

3.4.1 Objectives

County Council recognizes the Residential Conservation (Cluster) Area as a special policy area within the Whitefish Lake ASP area. As such, special objectives have been identified as follows:

1. To encourage flexible residential design in order to promote environmentally sustainable and efficient use of the land.
2. To encourage the development of residential and recreational communities that incorporate sustainable building design principles and offer lifestyle choices.
3. To preserve as much as possible unique and sensitive natural resources such as ground water, floodplains, wetlands, streams, steep slopes, woodlands, wildlife habitat, and significant historical and cultural areas.
4. To reduce the amount of required infrastructure.
5. To reduce the footprint of residential developments by encouraging the clustering of dwellings and accessory facilities on less environmentally sensitive lands.
6. To encourage opportunities for community interaction and increased neighbourhood safety by clustering dwellings and locating them closer to roads, providing public gathering places, and supporting the use of parks and community facilities as focal points in neighbourhoods.
7. To reduce erosion and sedimentation by minimizing land disturbance and the removal of vegetation.
8. To promote interconnected and continuous greenways, walking trails, bike paths, and similar corridors throughout neighbourhoods and connecting neighbourhoods.
9. To conserve scenic views and reduce perceived density by maximizing the number of houses with direct views of open spaces.
10. To provide for watershed and water quality protection measures in connection with the principles outlined in the North Saskatchewan River Watershed Alliance Municipal Resource Guide.
11. To provide a mixture of housing forms and styles to accommodate the changing demographic needs.

3.4.2 Policies

The following policies will apply to lands designated as **Residential Conservation (Cluster)**:

1. Recreational Vehicles

The use of recreational vehicles within developments (other than the storage of one recreational vehicle for each dwelling unit within a development) shall be strictly regulated, and shall not be allowed unless specifically provided for in a development concept plan and considered within the residential density calculation in the development concept plan. For more specific regulations regarding recreation vehicles please refer to the County's Land Use Bylaw.

2. Environmental Conservation

- a. The natural topography and vegetation of the development area shall be conserved wherever possible;
- b. development will be directed to lands that are identified to be of lesser environmental significance, such as those areas which may be identified as low priority conservation areas;
- c. wildlife corridors or connections between all conservation areas shall be maintained wherever possible;
- d. the natural landscape and topography shall be considered and incorporated into the overall design of the development;



Figure 2: Example of the Design Process for a Residential Conservation (Cluster) Development

3. Infrastructure

- a. Internal road access shall be provided to each residential parcel, though the roads may be private in accordance with the policies of this area;

- b. the Municipality will require paved roads in all new multi-lot country residential developments;
- c. all new developments shall provide and pay for infrastructure and servicing improvements, as well as the extension of services to facilitate the development; and
- d. transportation, communication, and public utility uses shall be considered discretionary. Such uses shall only be developed in such a manner as shall not adversely affect the Whitefish Lake environment, Whitefish Lake water quality, or existing development.

4. Density Requirements

The residential density of any residential development shall be directly related to the following:

- a. the density of the land proposed for development as determined through a land suitability assessment of the site. Residential density will be determined on a site by site basis having regard for site conditions, environmental considerations and impacts, and other factors that may be considered in the design of the proposal;
- b. the maximum number of allowed dwelling units will be determined by dividing the developable area of the subject site by the minimum residential parcel size of 0.404 ha (1 ac.). The developable area of a site is the total gross area, less the area of:
 - i. bodies of open water over 500 sq. m in area or greater;
 - ii. anticipated rights-of-way for roads and utilities;
 - iii. Environmental Reserve and/or Environmental Reserve Easement areas (if applicable); and
 - iv. Municipal Reserve areas (if applicable).
- c. the suitability and availability of municipal services and infrastructure necessary to support the proposal;
- d. the compatibility of the proposed density with that of the surrounding area and the character of the Whitefish Lake community as a whole; and
- e. consistency with the provisions of any development concept plan and/or regional plan encompassing the subject lands.

5. Density Bonusing

Notwithstanding subsection four (4) above the maximum residential dwelling unit density in a residential conservation (cluster) development may be increased to a maximum of 160 residential dwelling units per quarter section if open space management guidelines are met. This density figure shall include all forms of residential dwelling units, including

recreational vehicles which are either immobile (that is, do not have a current license or have the wheels removed) or have some form of building or structure associated with them such as patio, shed, or garage. When density bonusing is granted, the preferred maximum parcel size shall be 0.202 ha (0.5 ac.). This maximum parcel size may be expanded at the discretion of the Subdivision Authority if the applicant can show, to the satisfaction of the County's Municipal Planning Commission (MPC) and the Subdivision Authority, that characteristics of the development area require larger lots.

6. Innovative Housing and Building Technologies

Smoky Lake County supports the use of alternative building methods and innovative housing concepts to encourage the development of more sustainable housing and reduce the amount of land consumed by residential development. Such alternatives may include:

- a. reduced site disturbance and heat island effects;
- b. increased water efficiency through such elements as eco-scaping, innovative wastewater technologies and water use reduction;
- c. reducing energy use through the use of renewable energy and "green" power;
- d. introducing materials and resources that are or can be recycled, thereby reducing construction waste; and
- e. improving indoor air quality through the use of low-emitting materials.

7. Private Recreation Facilities

Private recreation facilities shall be encouraged within the residential conservation (cluster) area in order to provide residential recreational amenity that are not lake intensive. Public recreation facilities (facilities open to the general public) shall be considered discretionary developments and shall only be developed if they are compatible with the environment and with nearby uses and developments.

8. ATV and Snowmobile Use

ATV and snowmobile use shall be limited within the residential conservation (cluster) area in order to mitigate potential safety conflicts between pedestrians and motorized recreational vehicles.

9. Diverse Housing Types and Densities

A variety of housing types including single family, duplex and multifamily housing may be permitted at the sole discretion of the Development Authority if they comply with provisions in an approved development concept plan.

3.5 Commercial Recreation Area – Campground

The purpose of the Commercial Recreation Area designation is to recognize the existing public recreation campgrounds (Paradise Cove and Whitefish Properties) and to allow the opportunity for full utilization of these existing public recreation areas.

3.5.1 Policies

The following policies apply to lands designated as **Commercial Recreation**:

1. The preferred use of this area shall be relatively high intensity recreation uses such as campgrounds, public boat launches, day use areas, and other similar uses.
2. Limited expansion or intensification of the campgrounds may be allowed if opportunities for expansion exist; however, such expansion or intensification shall not be based on lake oriented recreational use.
3. Prior to any campground expansion or redevelopment, a site plan and assessment shall be prepared and submitted to the County, outlining the nature of the proposed development and its impact on the Whitefish Lake environment. Similarly to the requirement for residential development, the design will be required to retain the land's capacity to provide wildlife habitat, prevent soil erosion, provide recreational open space, contribute to maintaining clean water and air and preserve the recreational character of the community."
4. Spaces for day use, overnight camping, and similar activities shall be suitably organized and clearly marked. Adequate lake access and parking facilities shall be provided where appropriate.
5. Any necessary facilities such as change houses, toilets, garbage disposal, and on-site water supply shall be provided. Such facilities shall receive approval from authorities having jurisdiction and shall be of sufficient size and adequate quality to handle anticipated use.
6. Limited commercial development may be allowed within this area, but it shall be oriented to the specific needs of the recreation community.

Part 4 FireSmart and Emergency Response Plan

4.1 General

1. New developments and substantial additions or renovations will be required to adhere to FireSmart and emergency response plan policies.
2. Existing structures are not required to adhere to FireSmart and emergency response plan policies *until and unless* a development permit is requested to make changes to an existing property. At that time it will be up to the County's Development Authority to determine if conformity with this section of the ASP is required in order for approval of the development permit application.

4.2 Vegetation and Fire Fuel Management Recommendations

1. It is recommended that annual grasses within 10 m (32 ft.) of a building should be mowed to 10 cm (3.9") or less.
2. It is recommended that dead or dying trees should be removed. The removal of these trees shall be the responsibility of individual lot owners.
3. It is recommended that firewood should be kept at least 10 m (32 ft.) from all buildings.
4. It is recommended that where possible, the minimum distance between trees and buildings should be 10 m (32 ft.).

4.3 Structural Requirements and Recommendations

- 1 All roofing materials used in new developments must be rated Class A, B or C.

Fire-resistance classifications measure roof assemblies' relative resistances to external fire exposures. Building codes cite these classifications to establish minimum fire-resistance requirements for different types of buildings and structures. To determine its classification, a product or roof assembly usually must be independently tested using the fire-resistance capacity tests stated in a building code.

- A **Class "A"** product is **effective against severe fire exposures**. Under such exposures, roof coverings are:
 - not readily flammable

- afford a fairly high degree of fire protection to the roof deck
 - do not slip from position
 - pose no flying-brand hazard.
 - **Class B** roof treatment is **effective against moderate fire exposures**. Under such exposures, roof coverings of this class are not readily flammable, afford a moderate degree of fire protection to the roof deck, do not slip from position and pose no flying-brand hazard.
 - **Class C** roof treatment is **effective against light fire exposures**. Under such exposures, roof coverings of this class are not readily flammable, afford a measurable degree of fire protection to the roof deck, do not slip from position and pose no flying-brand hazard.
2. All chimneys must have properly approved and installed spark arrestors.
 3. All chimney outlets must have a minimum 3 m (9.8 ft.) clearance from all vegetation.
 4. All chimney outlets must be 0.6 m (1.96 ft.) higher than any part of the roof that is within 3 m (9.8 ft.).
 5. It is recommended that siding materials be fire resistant.
 6. It is recommended that all windows and eaves have shutters that can be quickly installed in the event of a wildfire.
 7. Access must be provided to attics and crawl spaces to extinguish spot fires.
 8. It is recommended that balconies, decks and porches be built of non-combustible materials:
 - a. heavy timber should be used in place of 2x4s for stilts; and
 - b. access must be provided under balconies decks and porches to remove flammable debris.

4.4 Infrastructure

1. All dual access roadways must be kept clear at all times to permit the movement of emergency vehicles.
2. All internal roadways must have a horizontal clearance of 7.5 m (24.6 ft.) and a vertical clearance of 4.5 m (14.7 ft.).

3. All approaches and gates must adhere to requirements in the County's Land Use Bylaw.
4. All gates must be located at least 9 m (29.5 ft.) from the public right of way and must not open outward.
5. All new roadways in multi-lot country residential subdivisions must be paved to support any fire apparatus likely to be on the roadway.

4.5 Water Supply

1. Whitefish Lake must be accessible to local fire response vehicles.

4.6 Utilities

1. A 3 m (9.8 ft.) clearance between power lines and vegetation must be maintained on private property;
2. Propane must be kept a minimum of 3 m (9.8 ft.) away from vegetation.
3. Propane must be kept a minimum of 10 m (32.8 ft.) away from any building.

4.7 Organization

1. Community members will be encouraged to form an emergency response committee responsible for providing FireSmart educational information to the community and communicating with Municipal and Provincial emergency response teams in the event of an emergency.

Part 5 Plan Implementation and Administration

5.1 Authority of Plan

1. Pursuant to the provisions of the Municipal Government Act, R.S.A. 2000, as amended, this plan shall be adopted by Smoky Lake County as the Whitefish Lake Area Structure Plan – 2009.
2. Subdivision, development, and redevelopment of lands within the planning area shall be in accordance with the provisions of this plan.
3. Council shall encourage the Provincial and Federal governments to have regard for the provisions of this plan in the development and redevelopment of public lands, and in the formulation of Provincial and Federal policies and programs, and in the issuance of any permits within the planning area.

5.2 Land Use Bylaw

1. In order to implement the policies of this plan, the County's Land Use Bylaw may be amended.

5.3 Plan Review and Amendment

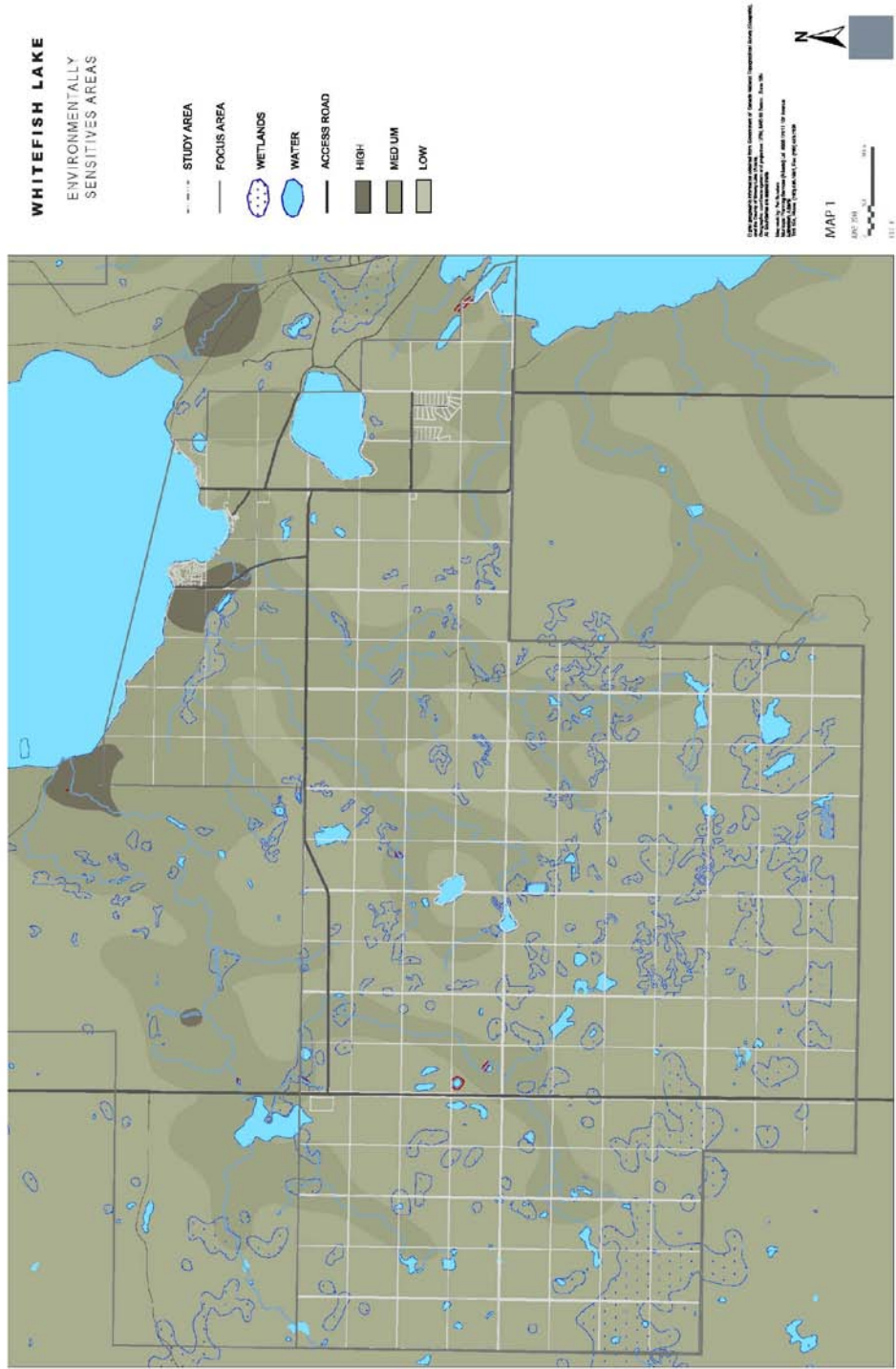
1. Smoky Lake County may amend this ASP to incorporate new goals, policies and land use. Council shall review and, when necessary, amend this plan at least once every five years.
2. When considering any amendment proposal to this plan, Smoky Lake County shall review and consider the plan goals, development constraints, surrounding land uses, and other pertinent information, shall refer any proposed amendments to concerned provincial agencies for review and comment, and shall consider such comments prior to the adoption of any amendments.

5.4 Interpretation

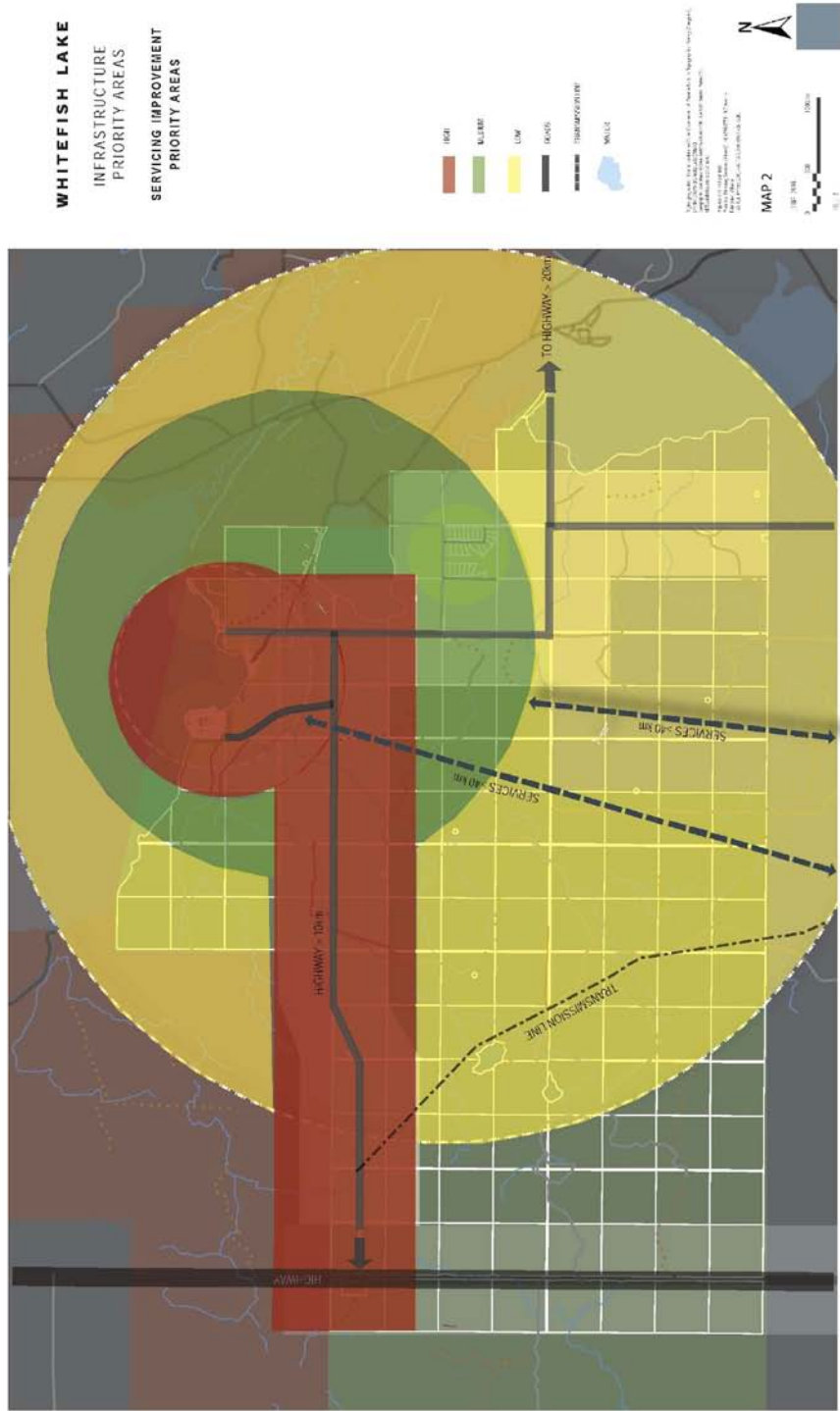
1. Definitions and requirements of the current Smoky Lake County Land Use Bylaw and the Municipal Government Act, R.S.A. 2000, as amended, shall be used in the interpretation of this ASP.
2. The examples of preferred uses for each land uses area are intended to illustrate the range of activities possible. Specific uses shall be defined in the County's Land Use Bylaw.
3. Land use designation boundaries outlined in this ASP may be considered to be approximate except where such boundaries coincide with roads, quarter section lines or clearly recognizable physical features. Minor deviations may be permitted to this plan, provided that such deviations do not alter the intent of this plan.

APPENDIX A - MAPS

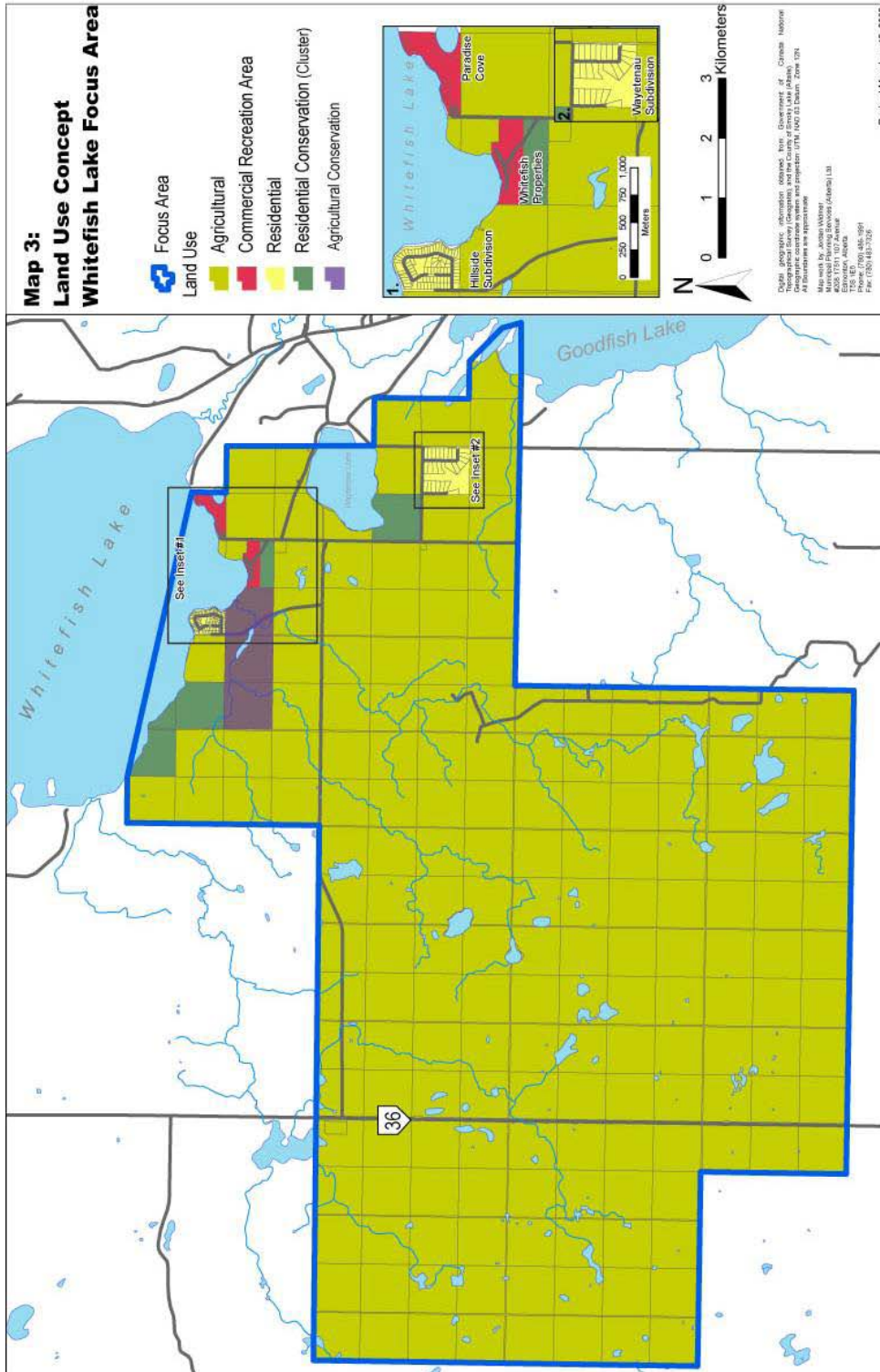
MAP 1 ENVIRONMENTALLY SENSITIVE LANDS CLASSIFICATION



MAP 2 INFRASTRUCTURE PRIORITY AREAS



MAP 3 FUTURE LAND USE CONCEPT



APPENDIX B – SRD Environmental Reserve Guidelines

Sustainable Resource Development Recommended Guidelines for Minimum Environmental Reserve/Easement Widths

In reference to Section 664 of the *Municipal Government Act*, the following are recommended where a boundary to a proposed subdivision is a water body or watercourse.

Table 1. Standard recommended minimum widths for Environmental Reserves or Environmental Reserve Easements based on type of water feature.

Water Feature	Minimum ER Width ¹	Notes
Reservoirs & Regulated Lakes	30 m from right of way or easement boundary	A regulated lake is a lake where water levels are established to a predetermined elevation and actively managed through use of a licensing requirement (e.g. to pump water into the water body).
Lake (natural & controlled)	30 m from natural boundary	On controlled lakes, 30 m from sill elevation of licensed control structure.
Swamp/wetland ²	Variable, include wet meadow zone	Wet meadow zone can be extensive in some situations, and in these instances the ER should be wide enough to preserve ecological function.
Large River (≥ 15m width)	30+ m	See additional requirements for hazardous lands.
Small River/Large Stream (6-15 m)	15 m	See additional requirements for hazardous lands.
Medium Stream (3 - 6 m)	10 m	See additional requirements for hazardous lands.
Small Stream (≤ 3 m)	6 m	See additional requirements for hazardous lands.
Ephemeral watercourse (no defined channel)	0 m	Use by law to regulate tree cutting within a defined distance from feature to maintain riparian vegetation and drainage.
Braided Stream	10 m from outside boundary of active floodway	

¹ Sustainable Resource Development views the term "swamp" to mean any area with hydrological conditions of sufficient duration to have developed saturated soils and hydrophytic vegetation (i.e. wetlands or peatlands).

² In addition to the recommended ER width for the water feature itself, associated landscape features may require the ER width to be modified to factor in additional inherent hazards to development.

For lands described in section 664(1)(b) of the *Municipal Government Act* (unsuitable for development because they are subject to flooding, have high risk of erosion, or have existing topographical or geo-technical constraints) the following are recommended.

Table 2. Additional factors that may necessitate an increase in the width of an Environmental Reserve or Environmental Reserve Easement.

Hazardous Lands	ER Modifier	Notes
Floodplain	<ul style="list-style-type: none"> The width of the 1:100 year flood line or 30m from the natural boundary of a watercourse or lake, whichever is less. The width of meander belt for watercourses that tend to meander or entire floodplain if it is highly constrained within a confined valley. 	<ul style="list-style-type: none"> Residential development within a floodplain is discouraged. Development within flood fringe area should only be considered if flood proofing undertaken to reduce risk of flood damage. Flood risk mapping or delineation of the 1:100 year flood line generally defines the extent of expected flood occurrence (see Alberta Environment policy and guidelines). The width of a meander belt is determined by multiplying bankfull width by 20 for each reach, and is split equally on either side of creek along axis of meander belt.
Erosion prone areas	Provide for a toe erosion allowance.	Consider highly erosive soils and annual recession rates.
Gully, ravine, coulee, or valley escarpments	Provide for a stable slope allowance. Apply construction and building setbacks from this line.	Boundary of stable slope allowance measured from top of crest of plateau (terrace), valley slope or tableland.
Steep Slopes (>15%)	3X escarpment height or as recommended by a geotechnical report on slope stability, rate of erosion, etc.	

September 2007