



Garner Lake Area Structure Plan Bylaw No. 1227-11



Adopted: August 25, 2011

**SMOKY LAKE COUNTY
GARNER LAKE
AREA STRUCTURE PLAN
BYLAW NO. 1227-11**

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 repeal the existing Garner Lake Area Structure Plan and adopt a new Area Structure Plan for the Garner Lake area;

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

1. THAT Bylaw 1227-11, the Garner Lake Area Structure Plan- 2011, being Schedule "A" attached hereto, is hereby adopted.
2. THAT Bylaw 633-1982, the Garner Lake Area Structure Plan – 1982, is hereby repealed.

READ A FIRST TIME this 26TH day of May, AD 2011.

PUBLIC HEARING HELD this 25TH day of August, AD 2011.

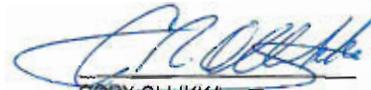
READ A SECOND TIME this 25TH day of August, AD 2011.

READ A THIRD TIME and finally passed by Council this 25TH day of August, AD 2011.



DARELD CHOLAK
REEVE

SEAL



CORY OLLIKKA
CHIEF ADMINISTRATIVE OFFICER

**SMOKY LAKE COUNTY
GARNER LAKE AREA STRUCTURE PLAN
BYLAW NO. 1227-11**

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SMOKY LAKE COUNTY GARNER LAKE AREA STRUCTURE PLAN BYLAW NO. 1227-11

Part 1 Plan Goals, Management Principles

1.1 Introduction, Purpose and Plan Objectives

In early 2008 in response to the steady increase in interest toward lake-oriented development in Smoky Lake County and the County of St. Paul, as well as a growing awareness of the importance of local environmental stewardship and healthy watersheds, both Counties began work on revising the existing Area Structure Plan for the Garner 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 three deliverables, a background report and two (2) ASPs: namely, an ASP which provides land use policies and management principles for that portion of the Garner Lake Plan Area that is situated in the County of St. Paul and this ASP, which provides land use policies and management principles for that portion of the Garner Lake Plan Area that is situated in Smoky Lake County.

The first deliverable, the preliminary study, is a supporting document containing baseline data and an analysis of the data gathered from the community and government stakeholders in order to determine appropriate land use and management principles for land situated within the Garner Lake area. The second and third deliverables, the ASPs, contain the resulting land use and land management policies for the ASP area.

1.1.1 Purpose

The purpose of the Garner Lake ASPs is to provide sustainable land use policies and management principles to guide development in the Garner Lake area for the next decade.

1.1.2 Project Phasing

The **first phase** of the project involved the gathering of detailed information on various aspects of Garner Lake and the Garner Lake area. This includes the lake's physical resources and critical lake planning issues. This information is contained in the 2010 Garner 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 Counties, as well as to the community 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 Garner 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 Garner Lake.
3. To establish a future development pattern for the Garner Lake ASP area.

Smoky Lake County recognizes that it has a key role to play in directing the responsible management of the Garner Lake area. Smoky Lake County Council can effectively guide the best and efficient use of Garner 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. A full day planning workshop was held in Spedden to provide information to the community about current planning issues and to gather additional feedback regarding the Garner Lake Area. 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 Garner Lake Today

Garner Lake is a desirable active recreation destination, although water quality and water levels of the lake have decreased in recent years. As a result, recreational use around the lake is changing from being “consumptive” to being “non-consumptive”. Subdivision has been restricted around the lake and as a result, residential development has not significantly increased over the last 30 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.

Lower water levels, which are a province-wide phenomenon, may have had a negative effect on the water quality at Garner Lake. Area residents indicated that water quality has deteriorated over time. Fish stocks and the general water-related recreational experience of Garner Lake lot-owners, residents and lake users have been affected. 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 deep. The shallow waters in the shore land areas limit the potential for developing boat launches. This has resulted in some conflicts around public access to the lake. Recreational fishing is a popular all season pursuit of area residents. 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. Residents have indicated, and site visits and consultation sessions with stakeholders confirm, that the inlet to and outlet from 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 southern, eastern and (in a more limited area) the northern shore lines 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 Garner 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 water quality and the orientation of the existing developments. However, there are a number of designated non-lake oriented recreational opportunities specifically located in Garner Lake Provincial Park and associated with the Iron Horse Trail.

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 may be having an impact on fisheries stocks in the lake, it does not clearly identify which factor(s) have 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 and illegal private sewage disposal systems and the general reduction in surface water levels affecting the Smoky Lake region of Alberta have *certainly* 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 addressed by this ASP is: What kinds of future land uses are appropriate for the Garner Lake area? The land use designations shown on **Map 1** 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. 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 background report 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.

Community members are also concerned about receding water levels which 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 Garner Lake area. 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 Garner Lake environment or 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 Garner Lake have been exhausted will require additional investigation at the site level. 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 Garner 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 limit the 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 will add to the human use pressure on the lake, but that addition can be limited to some extent by the quality of the lake experience itself and limited public access points to the shoreland areas. The requirement for non-lake oriented recreational opportunities in the Garner Lake area will also mitigate additional pressure on the lake.

As a result, this plan strives to reach a balance between addressing community concerns about the potential impacts of additional development on the enjoyment of the lake 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 Garner Lake area, which were specifically designated for intensive use, are being 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 and 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 have sewage disposal systems which are not up to current standards or which may be unlawful. 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 Garner 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.

1.3 Plan Goals, Management Principles

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

- | | |
|----------------|--|
| Goal #1 | To protect the water resources in the Garner 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. |

1.3.1 Management Principles

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

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 Garner 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 Garner 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 Garner 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:
 - a. controls will be implemented on shoreland clearing, development, and sewage handling;
 - b. the provision of Environmental Reserves will be required with all new subdivisions in appropriate areas;
 - c. new development will not be permitted on land identified as highly environmentally sensitive without appropriate mitigation measures; and
 - d. the inlets and outlets to the 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 sewage disposal systems conform to current provincial regulations.
8. The Municipality shall encourage the provincial agency having jurisdiction to re-evaluate the existing boating restrictions in place at Garner Lake Provincial Park to ensure that the most appropriate restrictions are in place to safeguard use of the beach and boat launching areas.
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 Garner 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 Garner 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 Garner Lake ASP area, and shall be used by Smoky Lake County to guide decision-making regarding all land use and development at Garner Lake.

Map 1, 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

2.1.1. 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:

1. Potable water 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. It will be the responsibility of the developer to ensure potable water is available.
2. 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.
3. Development shall be prohibited on slopes in excess of 15% or on slopes which are subject to slippage or mass movement.
4. Development shall be prohibited in or directly adjacent to important wildlife habitat areas.
5. Development shall be prohibited on soils which have extremely fast percolation rates and/or which might result in the possibility of groundwater contamination.

2.1.2. Only one permanent single family dwelling unit shall be allowed on each residential lot unless otherwise stated in an approved development concept plan or area structure plan.

2.1.3. Density incentives will be made available to developers in the Residential Conservation (Cluster) District who incorporate the open space management guidelines outlined in the County's Land Use Bylaw into their development concept and subsequent development.

- 2.1.4. 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.
- 2.1.5. No development shall be allowed on public reserves if it does not serve the interests of the general public.
- 2.1.6. 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.
- 2.1.7. 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.
- 2.1.8. 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 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:

- 2.3.1. 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 the County's Land Use Bylaw.

2.4 Additional Studies Required

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

- 2.4.1. 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 Garner Lake;
- 2.4.2. 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;
- 2.4.3. 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;
- 2.4.4. 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;
- 2.4.5. 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;
- 2.4.6. percolation and near surface water table testing conducted by a qualified professional where onsite private sewage systems are proposed; and
- 2.4.7. 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

- 2.5.1. Three (3) categories of environmentally sensitive lands have been identified within the Study area. They represent areas of high, medium and low environmental sensitivity. **Map 2** 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.

- 2.5.2. 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.
- 2.5.3. 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 Garner Lake. A site plan detailing the protection of treed areas shall accompany any application for a development permit. The development of any lot should not result in the loss of more than 40% of the vegetation (to be assessed at the time of application) on that lot.
- 2.5.4. A treed/vegetation buffer at least 183 m (600 ft.) wide shall be maintained between agricultural lands and the lake shoreline.
- 2.5.5. A treed/vegetation buffer of at least 183 m (600 ft.) wide shall be maintained between any buildings and/or structures and the high water mark. 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. Additional setbacks may be required based on the suitability of the land for the proposed development.
- 2.5.6. Alterations to the bed and shore of Garner Lake shall not be undertaken without the necessary authorization and permits from appropriate Provincial agencies.
- 2.5.7. Recreational Activities such as ATVing and snowmobiling in the shoreland will not be allowed.
- 2.5.8. Smoky Lake County shall work with appropriate provincial government agencies in order to determine the feasibility of developing a method of maintaining lake water levels and enhancing water quality at Garner Lake.
- 2.5.9. 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.
- 2.5.10. 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.

- 2.5.11. The use of herbicides and inorganic fertilizers will be discouraged on residential lots within the Area Structure Plan area.
- 2.5.12. The County shall encourage the use of alternative energy such as but not limited to geothermal heating, small wind energy conversion systems and solar photovoltaic power.

2.6 Reserves

- 2.6.1. The location of all new Municipal and Environmental Reserve lots shall be clearly marked by the developer.
- 2.6.2. Alberta Sustainable Resource Development (SRD) guidelines for minimum environmental reserve/easement widths¹ (See Appendix B) shall be provided by the developer in all new subdivisions (where required) within the Area Structure Plan area unless:
1. the developer provides the County with a biophysical study which indicates that an alternative reserve amount is appropriate for the subject site; and
 2. the County's approving Authority determines that the alternative reserve amount is acceptable.
- 2.6.3. 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.
- 2.6.4. As per SRD Environmental Reserve guidelines, an environmental reserve, environmental reserve easement or combination thereof consisting of not less than 30 m (98 ft) in width from the high water mark and/or the top of bank of Garner Lake shall be required as a condition of subdivision approval. If the developer disputes this amount of reserves then the developer may provide the County with a biophysical study which indicates that an alternative reserve amount is appropriate for the subject site. The County will then carefully consider the additional information and make a determination regarding the most appropriate reserve area for the

¹ For more information about SRD Guidelines please refer to: "***Recommended Guidelines for Minimum Environmental Reserve/Easement Widths***" established by the Department of Sustainable Resource Development. [These guidelines have been included in Appendix B.](#)

site. **Figure 1** illustrates the recommended water buffer adjacent to a Garner Lake.

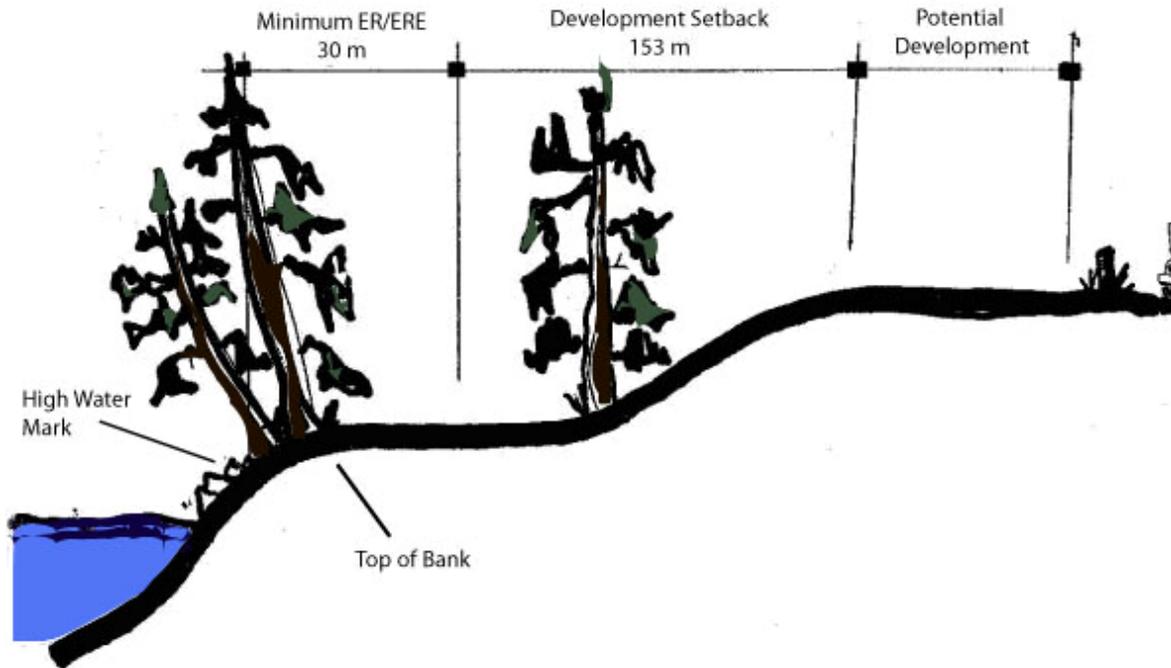


Figure 1: Recommended Environmental Setback

2.6.5. 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, or the environmental sensitivity of the area.

2.7 Servicing

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

2.7.2. Smoky Lake County shall ensure that local access roads are developed, surfaced and maintained to a high standard and in accordance with County policy.

2.8 Boating

The municipality shall encourage the Provincial Agency having jurisdiction to re-evaluate the existing boating restrictions in place at Garner Lake Provincial Park, so as to ensure that the most appropriate type of restrictions are in place to safeguard use of both the beach and boat launching 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, a development concept plan which complies with **open space management guidelines** in the County's Land Use Bylaw must be submitted by the developer and approved by Council.

For open space management guidelines please refer to the County Land Use Bylaw.

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 treated².

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 Garner 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.

² 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**:

- 3.1.1. 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 Garner Lake environment, Garner Lake water quality and existing development.
- 3.1.2. Excluding those trails located within Garner Lake Provincial Park, 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.
- 3.1.3. Agricultural operators will be encouraged to use best practices to limit nutrient inputs into Garner 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.
- 3.1.4. New extensive agricultural activities which the County believes will have little impact on the Garner 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.
- 3.1.5. 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.
- 3.1.6. 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.

- 3.1.7. 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.
- 3.1.8. 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 Garner Lake environment, Garner Lake water quality or existing development.

3.2 Agricultural Area

The intent of the agricultural area is to protect and allow for the enhancement of the valuable agricultural land resource, the agri-based economy and the rural lifestyle. Agricultural activities shall be protected from incompatible non-farm developments. At the same time, negative impacts of agricultural activity on Garner 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.

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

- 3.2.1. 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 Garner 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 Garner Lake.
- 3.2.2. 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.
- 3.2.3. 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.
- 3.2.4. 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.

- 3.2.5. Commercial development shall be considered discretionary and industrial development and/or subdivision shall not be allowed.
- 3.2.6. 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 Garner Lake environment, Garner Lake water quality or existing development.

3.3 County Residential Area

The primary purpose of the Country Residential Area designation is to recognize existing multi-lot country residential subdivisions and developments at Garner 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.

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

- 3.3.1. 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.
- 3.3.2. 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.
- 3.3.3. Seasonal and permanent single family dwellings shall be permitted developments. Associated buildings shall be discretionary developments.
- 3.3.4. 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 Garner Lake community as a whole; and
 - e. consistency with the provisions of any development concept plan and/or regional plan encompassing the subject lands.
- 3.3.5. Minimum lot size shall be **0.303 ha (0.75 ac.)**.
- 3.3.6. 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.
- 3.3.7. 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.
- 3.3.8. 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.
- 3.3.9. Only one single family dwelling shall be allowed on each lot. Guest houses shall not be allowed as they constitute a second dwelling unit.
- 3.3.10. For regulations pertaining to the use and storage of recreational vehicles refer to the County's Land Use Bylaw.
- 3.3.11. ATV and snowmobile use shall be limited to recognized trails and roadways, as per the County's Land Use Bylaw, within the Residential Land Use Areas in order to mitigate potential safety conflicts between pedestrians and motorized recreational vehicles.
- 3.3.12. 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 Garner Lake environment, Garner 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. At this time, the County has determined that there are no areas within the Plan Area that are appropriate for new multi-lot country residential subdivision. If, in the future, a developer wishes to develop new multi-lot country residential development they will be required to apply to the County for an ASP amendment and a Land Use Bylaw (LUB) amendment to both re-designate the subject site and redistrict the subject site to the Residential Conservation (Cluster) Area and District.

3.4.1 The following list of supporting documentation may be required to accompany an ASP and LUB amendment application:

1. a land suitability assessment which includes a map that indicates high, medium and low priority environmental management areas on the site;
2. the proposed Open Space area;
3. the proposed lot sizes and density; and
4. other supporting reports or documents required at the discretion of the Approving Authority.

Part 4 FireSmart and Emergency Response Plan

4.1 General

- 4.1.1. New developments and substantial additions or renovations will be required to adhere to FireSmart and emergency response plan policies.
- 4.1.2. 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

- 4.2.1. It is recommended that annual grasses within 10 m (32 ft.) of a building should be mowed to 10 cm (3.9") or less.
- 4.2.2. It is recommended that dead or dying trees should be removed. The removal of these trees shall be the responsibility of individual lot owners.
- 4.2.3. It is recommended that firewood should be kept at least 10 m (32 ft.) from all buildings.
- 4.2.4. 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

- 4.3.1 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.

- 1. **Class A** roof treatment 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 and pose no flying-brand hazard.

2. **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.
 3. **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.
- 4.3.2. All chimneys must have properly approved and installed spark arrestors.
 - 4.3.3. All chimney outlets must have a minimum 3 m (9.8 ft.) clearance from all vegetation.
 - 4.3.4. 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.).
 - 4.3.5. It is recommended that siding materials be fire resistant.
 - 4.3.6. It is recommended that all windows have shutters that can be quickly installed in the event of a wildfire.
 - 4.3.7. Access must be provided to attics and crawl spaces to extinguish spot fires.
 - 4.3.8. It is recommended that balconies, decks and porches be built of non-combustible materials:
 1. heavy timber should be used in place of 2x4s for stilts; and
 2. access must be provided under balconies, decks and porches to remove flammable debris.

4.4 Infrastructure

- 4.4.1. All dual access roadways must be kept clear at all times to permit the movement of emergency vehicles.
- 4.4.2. 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.).
- 4.4.3. All approaches and gates must adhere to requirements in the County's Land Use Bylaw.
- 4.4.4. All gates must be located at least 9 m (29.5 ft.) from the public right of way and must not open outward.

4.4.5. 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

4.5.1. Garner Lake must be accessible to local fire response vehicles.

4.6 Utilities

4.6.1. A 3 m (9.8 ft.) clearance between power lines and vegetation must be maintained on private property;

4.6.2. Propane must be kept a minimum of 3 m (9.8 ft.) away from vegetation.

4.6.3. Propane must be kept a minimum of 10 m (32.8 ft.) away from any building.

4.7 Organization

4.7.1. 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

- 5.1.1. Pursuant to the provisions of the Municipal Government Act, R.S.A. 2000, as amended, this plan shall be separately adopted by the County of St. Paul and Smoky Lake County. The County of St. Paul shall adopt this plan as the Garner Lake Area Structure Plan – 2011.
- 5.1.2. Subdivision, development and redevelopment of lands within the planning area shall be in accordance with the provisions of this Area Structure Plan.
- 5.1.3. 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, 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

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

5.3 Plan Review and Amendment

- 5.3.1. The planning process is a dynamic process, subject to inevitable change. It is intended that this Plan will be subject to periodic review, initiated in the following ways:
 1. a complete or partial review upon amendment;
 2. a review of this document to be conducted by County Council every five years; or
 3. a complete or partial review whenever, due to economic, social, technical developments or environmental considerations, the Plan is considered by Council not to meet the long term goals of the County.

- 5.3.2. When considering any amendment proposal to this Plan, the 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.
- 5.3.3. Among other matters, in dealing with an amendment to this Area Structure Plan to change the designation of an area to Residential Conservation Area, Council will consider what it believes will be the impact of the proposed development on Garner Lake, as well as the impact of the development of those lands within the Plan area which may have already been approved for development, but which might not yet have been sold, leased or developed. The proponent of the amendment shall be responsible for providing the information necessary for Council to make that assessment, and County staff will work with the proponent to provide what information it can to help Council in this consideration.
- 5.3.4. Upon receipt of an application for substantial subdivision and/or development within the Area Structure Plan Area, the County shall circulate the proposal to the County of St. Paul for review and comment. The subdivision and/or development shall not be approved until comments are received from the County of St. Paul.

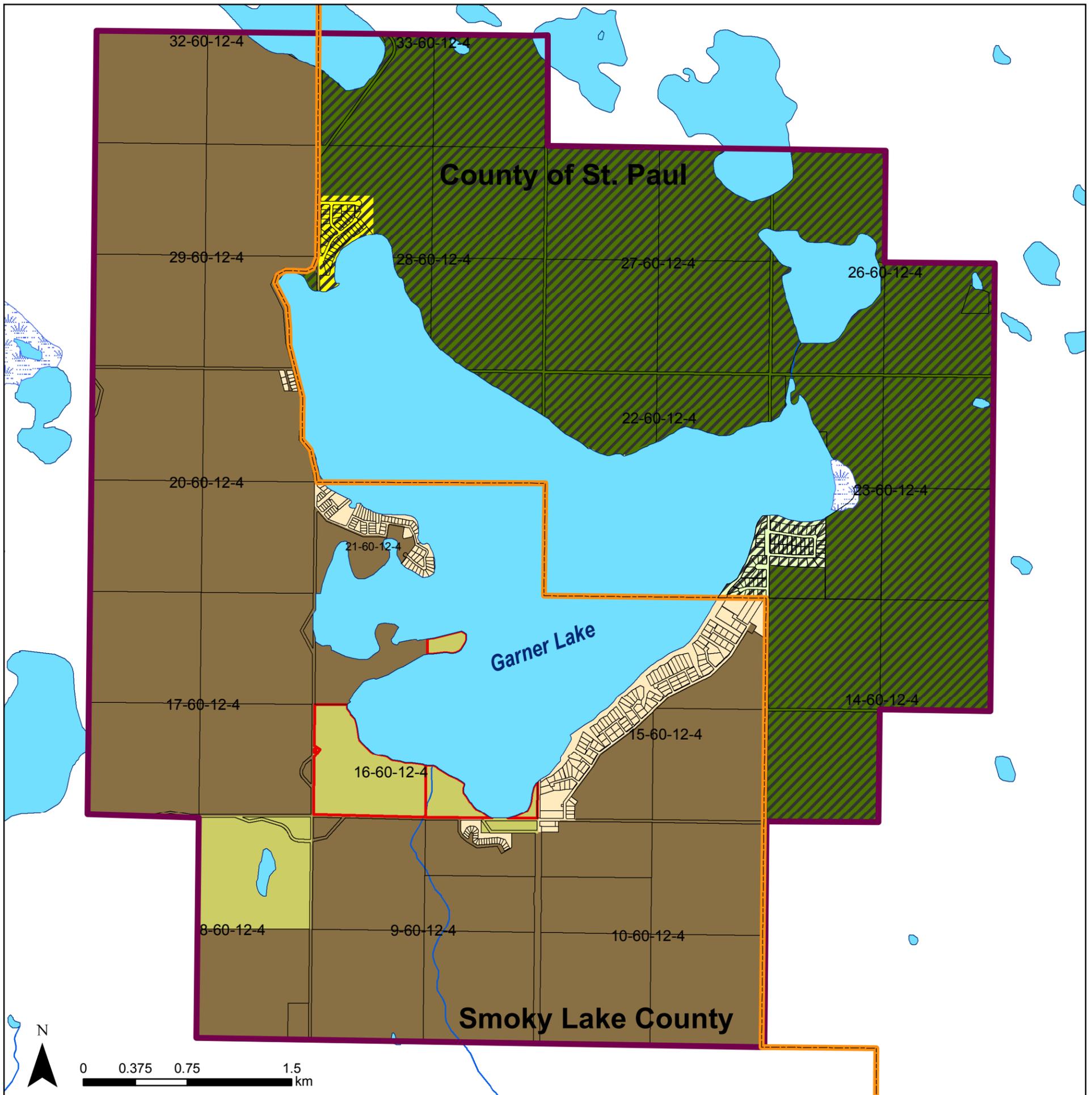
5.4 Interpretation

- 5.4.1. 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.
- 5.4.2. The examples of preferred uses for each land use area are intended to illustrate the range of activities possible. Specific uses shall be defined in the County's Land Use Bylaw.
- 5.4.3. 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

Garner Lake

Smoky Lake County - Future Land Use Concept - Map 1



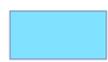
Legend

 County Boundaries

 Focus Area

 Wetlands

 Streams

 Water Bodies

 Garner Lake Provincial Park

County of St. Paul Land Use Concept

 Recreational Residential

 Residential Conservation

 Rural Conservation

Smoky Lake County Land Use Concept

 Agricultural

 Agricultural Conservation

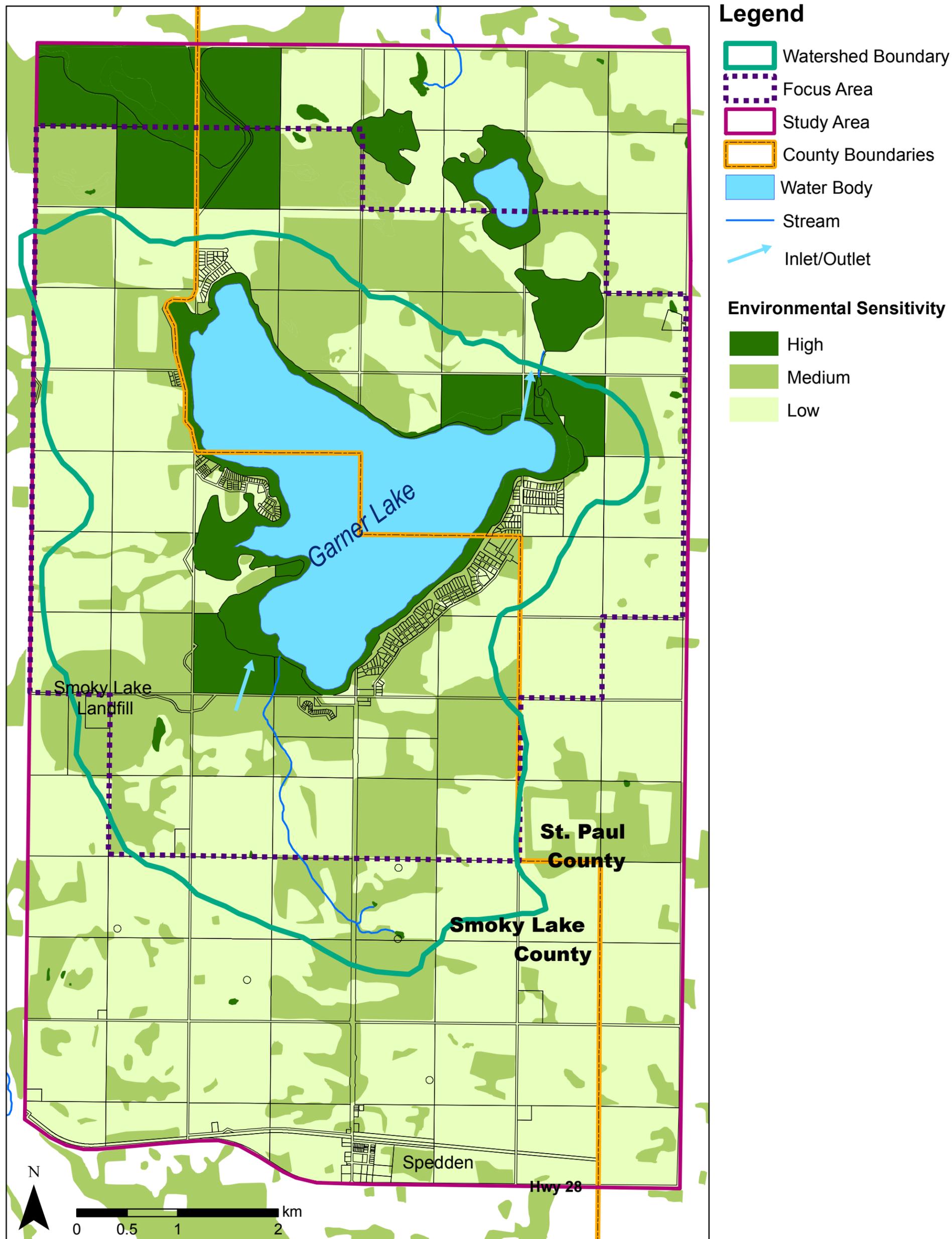
 Residential

Digital geographic information obtained from: Government of Canada National Topographical Survey (Geogratis), and the County of Smoky Lake and the County of St. Paul (Altalis and Accurate Assessment). Geographic coordinate system and projection: UTM, NAD 83 Datum Zone 12N. All Boundaries are approximate.

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Garner Lake

Environmental Sensitivity - Map 2



Digital Geographic Information obtained from: Government of Canada National Topological Survey (Geobase and Geogratis), Smoky Lake (Altalis) and County of St. Paul (Altalis).
Geographic coordinate system and projection: UTM. NAD 83 Datum. Zone 12 N

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April, 2011

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.
Sleep Slopes (>15%)	3X escarpment height or as recommended by a geotechnical report on slope stability, rate of erosion, etc.	

September 2007