

# Sylvan Lake Management Plan: 2000 Update

Adopted by: Lacombe County

Red Deer County Town of Sylvan Lake

Summer Village of Birchcliff Summer Village of Half Moon Bay Summer Village of Jarvis Bay

Summer Village of Norglenwold Summer Village of Sunbreaker Cove

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#### TABLE OF CONTENTS

Page 1

1.0 INTRODUCTION 1 1.1 1.2 PURPOSE OF PLAN ......1 1.3 1.4 2.0 CRITICAL LIMITING FACTORS FOR DEVELOPMENT .....4 2.1 INTRODUCTION 4 2.2 LAND-BASED LIMITING FACTORS......4 WATER-BASED LIMITING FACTORS......4 2.3 2.3.1 Water Quality......5 232 Water Levels ......5 2.3.3 Environmentally Sensitive Areas......5 2.3.4 Bathymetry/Morphology .......6 2.4 3.0 LAND USE AND MANAGEMENT POLICIES.....9 PLANNING PRINCIPLES......9 3.1 3.2 PLAN PROPOSALS......10 3.2.1 Land Use......10 Lake Development Area..... 10 Residual Watershed Area ...... 14 (ii) Urban (Growth) Area......15 Growth Management......15 3.2.2 3.2.3 3.2.4 3.2.5 Road Access.......21 3.2.6 3.2.7 Boating/Lake Use Conflicts......21 3.2.8 Water Quality/Sewage Disposal......23

Page 2

4.0	ADMINISTRATION AND IMPLEMENTATION . 26			
4.1	AUTHORITY OF PLAN			
4.2	STATUTORY PLANS/LAND USE BY-LAWS26			
4.3	MUNICIPAL CONSULTATION			
4.4	PLAN MONITORING AND REVIEW27			
4.5	DISPUTE RESOLUTION27			
4.6	PLAN AMENDMENTS28			
4.7	REPEAL OF PLAN29			
LIST OF MAPS				
Map 1: Map 2:	Regional Setting Plan Area (Existing Land Use)			
Map 3:	Land Use Plan			
Map 4:	Environmentally Sensitive Areas			

#### APPENDIX A:

GUIDELINES FOR ENVIRONMENTAL REVIEW

#### APPENDIX B:

GUIDELINES FOR VISUAL IMPACT ASSESSMENT

#### 1.0 INTRODUCTION

#### 1.1 BACKGROUND

Sylvan Lake continues to attract considerable interest from people wishing to pursue a variety of residential and recreational developments. With this demand expected to only increase, concerns have been raised about the lake's capability to support more intensive use. Also of concern is the ability of governments to provide adequate public access to the lake.

As the lake is governed by a number of different government authorities, it was recognized that these growth pressures would need to be addressed on a cooperative basis to ensure the long-term protection and sustainability of Sylvan Lake.

A review of the *Sylvan Lake Management Plan (1986)* was agreed to by the eight municipalities around the lake. The municipalities retained the services of a private consulting firm, IBI Group, to develop a new lake management strategy. The consultants were directed by a Steering Committee made up of elected and administrative officials from each municipality.

Based on a review of existing technical information and public input, a draft plan was prepared by the consultants for presentation at a public hearing. This initial draft was substantially changed by the Committee in response to the many public submissions made respecting the planning strategy proposed by the consultants.

#### 1.2 PURPOSE OF PLAN

The general purpose of the Sylvan Lake Management Plan 2000 (hereafter referred to as the "Plan") is to promote responsible land use and development around Sylvan Lake. Areas where new development may be considered are identified. However, no defined limits for development are set as the municipalities intend to rely on further site-specific analysis to determine the level or density of development that can be supported at any particular location.

No lake carrying capacity has been determined to define possible limits for development on the lake. Instead, the municipalities intend to monitor and assess the cumulative impacts of new

development to ensure that future growth occurs in an environmentally responsible and sustainable manner.

#### 1.3 PLAN AREA

Map 1 shows the regional setting for Sylvan Lake. The Plan area includes the lakefront and backshore areas of Sylvan Lake, as illustrated in Map 2. The Plan area is intended to approximate the boundary of the lake watershed.

### 1.4 PUBLIC PARTICIPATION

The importance of involving the public in the preparation of the Plan was recognized by the municipalities to ensure that the management of the lake reflects the broad interests and needs of the community and the public generally.

Four different methods were used to gather the public's views on development at Sylvan Lake. A **property owners survey** was mailed to more than 700 property owners in the Plan area in March 1997. Approximately 230 surveys were completed and returned for analysis.

Various community organizations, recreation user groups and environmental interests were interviewed by **telephone survey**.

In June 1997, an **open house/workshop** was held in the Town of Sylvan Lake to further identify and assess lake management issues. About 60 people discussed possible actions that could be taken to address the management issues.

A lake user survey was conducted in July 1997 at several recreation sites around the lake.

The feedback received provided a valuable insight into the many different issues affecting the management of Sylvan Lake.

Using this information, the consultants prepared a draft plan, which was presented to the public at a **second open house** held in October 1997. More than 90 people attended the meeting. The input received resulted in some changes.

A revised draft plan was presented to the municipal councils for comment. Further changes were made, and a final draft plan developed for review at a public hearing held in May 1998.

Twenty five submissions were received at the hearing, offering a broad range of views and opinions on further development.

With the election of several new municipal officials following local elections in 1998, the amended plan was presented to a second public hearing in January 2000. About 40 submissions were received, many of which demanded more opportunity be given for responsible development around the lake.

The final Plan responds to the general request for more flexible guidelines that allow for environmentally sustainable development to be considered.

#### 2.0 CRITICAL LIMITING FACTORS FOR DEVELOPMENT

#### 2.1 INTRODUCTION

The review by the consultants of existing resource information and the various public surveys identified several critical limiting factors to development. These factors are discussed in terms of land-based, water-based, and social constraints to development.

### 2.2 LAND-BASED LIMITING FACTORS

Various sources of planning and environmental data from previous studies of Sylvan Lake were analyzed, resulting in the identification of several land-based development constraints, including steep topography (i.e. slopes greater than 15%), adverse soil conditions, limited groundwater availability and environmentally sensitive areas.

In general, the shoreline topography around the lake varies with areas of gently sloping shoreline limited to the southeast part of the lake, Honeymoon Bay, portions of the west shore, and several other isolated areas. Much of the shoreline, however, has moderate to steep slopes.

Groundwater yields were found to vary substantially throughout the Plan area with predicted yields ranging from 5 to 25 imperial gallons per minute on the east side of the lake to 100 to 500 imperial gallons per minute along much of the shoreline area.

The extent to which these physical land factors will serve as constraints will be determined by more site-specific analysis undertaken at the time new development is proposed.

## 2.3 WATER-BASED LIMITING FACTORS

Water-based factors will limit the future development capability of Sylvan Lake. Although water quality, water levels and fish and waterfowl habitat are considered the most critical of water-based constraints, the morphology (shape) and bathymetry (depth) of the lake are also important factors.

#### 2.3.1 Water Quality

Alberta Environment has regularly monitored the water quality of Sylvan Lake since 1983. The data shows that Sylvan Lake is a low to moderately productive (mesotrophic) lake. This is considered an ideal level of productivity for a recreational lake as the water remains quite clear and there is usually enough aquatic vegetation to support a good fish population.

The results of the water sampling program have confirmed that the offshore water quality is excellent and superior to most other lakes in central Alberta. The water quality, however, does tend to be lower near the shore. Overall, conditions will vary from year to year and on a seasonal basis.

Nevertheless, concerns have been raised in recent years about water quality being affected by runoff from cottage developments and agricultural areas. According to Alberta Environment, there is no evidence that the water quality of Sylvan Lake is deteriorating, although it is acknowledged that the impacts of development may not become apparent for many years.

Developing a plan to protect the lake by controlling nutrient input from shoreline development and the surrounding watershed will therefore be important.

#### 2.3.2 Water Levels

Recent concerns about water levels in Sylvan Lake led to the establishment of the Sylvan Lake Advisory Committee in 1992.

Historically, Sylvan Lake water levels have fluctuated 1.2 metres (4 feet), in response to changing climatic conditions. This fluctuation is moderate in relation to other lakes in the area.

The Advisory Committee has examined different lake level management alternatives and has proposed improvements to the outlet creek channel to reduce the effects of high lake levels. This action will minimize the impact of lake water levels as a limiting factor to recreational opportunities.

#### 2.3.3 Environmentally Sensitive Areas

Environmentally sensitive areas were identified by the public during the public consultation process and from a review of

#### 2.3.4 Bathymetry/ Morphology

existing studies and mapping done for provincial agencies of key fish, waterfowl and wildlife habitats.

The type of recreation activity and the intensity of use which can be supported on a lake is determined partly by the bathymetry (depth) and the morphology (shape) of the lake.

General speaking, the lake is relatively deep reaching a depth of nearly 18 metres (60 feet) near Third Point. However, there are some parts of the shoreline which are relatively shallow, including areas:

- near the Sylvan Lake Natural Area
- immediately west of the Summer Village of Half Moon Bay
- between the Summer Villages of Half Moon Bay and Norglenwold
- by the lake outlet in the Summer Village of Jarvis Bay
- adjacent to the Summer Village of Birchcliff

### 2.4 SOCIAL LIMITING FACTORS

Social constraints were identified based largely on the responses received from the initial public surveys and open house meetings, and have been categorized as follows:

#### Land Use/Future Development

- Generally, those property owners and other lake users surveyed supported little further development around the lake. It was suggested that development should be restricted adjacent to the shoreline. Respondents also considered that the amount of development should be determined on the basis of the lake's ability to sustain such growth.
- Property owners expressed concerns about the increasing conflicts between different land uses around the lake. The need for transition or buffer zones to minimize conflicts was recognized by lake users.
- Public access to the lake is a very contentious issue with local residents acknowledging that there is a need for additional public access to the lake but not in agreement as to where such development should occur.

 All respondents agreed on the need to separate recreational developments from residential uses.

#### Environment

- The increasing pressures on the shoreline by both residential and recreational users prompted several property owners to suggest that further development should not be allowed to encroach on what is perceived to be very limited natural areas remaining around the lake. Property owners were also generally in favour of limiting shoreline modifications associated with residential or other developments.
- Concern was expressed about the potential negative impacts of further development on the few remaining environmentally sensitive areas. Property owners and lake users agreed on the need to protect environmental resources.
- Several property owners had concerns with what they considered the deteriorating water quality of the lake caused by inadequate sewage disposal systems.
- Lake users generally did not perceive problems with lake water quality, focusing their concerns instead on beach areas used for public recreation.
- Noise pollution on the lake was also a concern of property owners. This concern generally resulted from the use of boats without proper noise abatement mechanisms, personal watercraft, cruise boats and water bombing aircraft practicing over Sylvan Lake.

#### Recreation

- Boating issues tended to be of more concern among property owners with the primary issues related to boating safety in higher use recreation areas and the encroachment of boaters on natural areas.
- Lake users were generally satisfied with the current level of recreational facilities around the lake, although some

- concerns were raised about the need to upgrade or provide additional facilities, such as boat launches/marinas.
- Property owners generally recognized the need to offer additional public recreation facilities around the lake but were concerned with the impact of new lake accesses on residential areas.

#### 3.0 LAND USE AND MANAGEMENT POLICIES

### 3.1 PLANNING PRINCIPLES

The management of Sylvan Lake will present municipalities with the challenge of balancing the increasing demands for residential and recreational development with the long-term protection of the lake's resources. In addressing this challenge, the Plan takes account of the following general principles:

- Generally, land bordering a lake, such as Sylvan Lake, should be used to support and take advantage of the residential and recreational potential of the lake.
- Sylvan Lake is a provincial recreation resource. Significant opportunities for public access and use of the lake must be maintained. However, it is recognized that new access areas will need to be carefully planned so as to minimize conflicts with surrounding land uses and not be detrimental to the lake.
- Direct private access to Sylvan Lake is not consistent with the function of the lake as a provincial resource, or with the protection of its shorelands.
- Residential and recreational developments are not necessarily incompatible with environmental protection. Limited development, subject to rigorous review and effective mitigation measures, may be considered in areas that are environmentally sensitive.
- Standards for development should be determined on the best information available. From a practical viewpoint, the cost of gathering and analyzing such information can only be economically justified on an individual development basis. Details regarding the form or density of development that may be appropriate at any particular location will therefore have to be determined following further site-specific analysis.
- Boating safety and growing conflicts amongst different lake users may necessitate the implementation of boating restrictions as well as a means of enforcing these regulations.

In order to protect the water quality of the lake, appropriate measures will need to be taken to minimize the nutrient input from agricultural and other developments.

#### 3.2 PLAN PROPOSALS

The different components of the management strategy have been organized in an issue-oriented format that describes the particular actions or requirements necessary to promote the responsible and sustainable use of the lake's resources.

Readers should note that any follow-up actions by government authorities will be contingent upon the availability of appropriate funding.

#### 3.2.1 Land Use

The Plan area has been divided into the following general land use areas:

- □ Lake Development Area
- Residual Watershed Area
- Urban (Growth) Area

These land use areas are shown on Map 3. Since the Plan is based on general information, the boundaries of the land use areas may be subject to further refinement based on more site-specific information and analysis done at the time development proposals are considered.

It is important that the management directions contained in the following sections are interpreted in conjunction with the policies and regulations contained in the Municipal Development Plans and Land Use By-laws of the individual municipalities

#### 3.2.1(i) Lake Development Area

This land use area refers to parts of the watershed where the municipalities consider that specialized planning directions are necessary to ensure that lake management issues are properly addressed in the land use planning process.

The Lake Development Area covers lands within approximately 1.6 kilometres (1 mile) of the lake. Defining this area has been somewhat subjective. However, the demand for residential and recreational development is expected to be high, drawn by the need for access to the lake or the opportunity for views of the lake. It is also the area where the risks of damage to the lake environment are the highest.

Map 3 generally identifies areas where further residential and recreational development may be considered. The Plan relies on more site-specific analysis of particular development proposals to determine the level or density of development that is deemed appropriate at any given location. Factors to be considered will include water supply, sewage disposal, drainage, road access, environmental impacts, compatibility with surrounding land uses and lake access.

The Plan offers the following broad guidance for development in the Lake Development Area:

#### **Policy Directions**

 All major multi-lot residential or other significant development proposals will be subject to an environmental review. Guidelines for conducting such a review are included in Appendix A of the Plan. The purpose of the review is to assess all potential impacts of the development and the extent to which these impacts may be mitigated through project design, construction procedures and operational (or management) practices.

An environmental review referred to in this Plan is distinct and separate from an environmental impact assessment described under provincial or federal legislation.

The municipality in which the development is proposed will provide the other municipalities with an opportunity to review and comment on the proposal.

The application will also be referred to other appropriate government authorities for their views prior to any decision being made.

- As general policy, no development will be considered for approval, unless the following criteria are met:
  - (a) the integrity of the natural environment and ecosystems is protected, sustained and if possible, enhanced. Development will not be permitted if it detrimentally affects an environmentally sensitive area;
  - (b) the land is not subject to flooding, subsidence, erosion, or other physical condition which could cause property damage or damage to the environment if developed upon;
  - (c) there is a sufficient groundwater supply available on-site to meet the needs of the proposed development, and not interfere with any existing surrounding water users;
  - (d) soil conditions are suitable for the proper operation of a private sewage disposal system so that sewage or effluent does not present a risk to public health or the environment where the development is not intended to be serviced by a communal sewer system;
  - (e) surface water run-off will be managed and controlled so as not to adversely affect properties within or outside the development area;
  - (f) the municipal road system is capable of safely accommodating the traffic generated by the development, or will be made to do so through required improvements to the road system;
  - (g) reasonable public access is available to the lake for residents of the development as determined by the local municipality; and
  - (h) the development is designed to protect significant stands of trees, drainage courses, wetlands, wildlife corridors or other natural features through the dedication of reserves, the use of conservation or environmental reserve easements or other means acceptable to the local municipality.
- It is anticipated that different zoning approaches may be required to ensure the broader interests of the community and the public generally are addressed.
  - A direct control district, for example, would allow a municipality to exercise as much flexibility and control as it

- considers necessary or appropriate to deal with recreational and residential developments around the lake.
- Developers will be expected to provide opportunities for improved public access to the lake as an integral part of their proposed developments.
- Where feasible to do so, a clustered pattern of development will be encouraged to minimize the impact of the development on both lakeshore and upland areas, leaving the majority of any natural areas undisturbed.
- 6. Development will generally be set back from the water's edge a suitable distance as determined by the local municipality to protect riparian areas and to reduce nutrient input into the lake. The dedication of municipal and/or environmental reserve (or easements) will be considered along the shoreline.
- In order to protect views (both to and from the water) and natural characteristics of shorelines, developers may be required to conduct a visual impact assessment. Guidelines for conducting such a review are included in Appendix B of the Plan.
- 8. Every lot (or unit in a bare land condominium development) will be required to have an environmentally suitable development area to accommodate a residence, access road, well and sewage system. Residential lot sizes shall otherwise be in accordance with the zoning requirements set by the local municipality.
- Recreational developments shall be primarily limited to campgrounds and day use facilities which focus on lake recreation and complement the natural qualities of the lake and surrounding environment.
- New recreation facility or private camp development will not be permitted in environmentally sensitive areas.
- No intensive commercial recreation developments will be allowed on lands adjacent to the shoreline.

Intensive commercial recreation developments are generally considered developments which generate significant concentrated use, such as waterslides, golf courses, etc.

- 12. The municipalities will establish uniform development standards for fixed roof and other forms of overnight accommodation in recreational camp developments.
- Recreational facilities and private camps shall be designed in such a manner that they minimize conflicts with adjacent uses.
- 14. Before considering the expansion of any private camp, the municipality will require the camp operator to undertake a comprehensive assessment of the building site potential, sewage capacity, water supply requirements and impact on adjacent residential uses.
- Developers will be encouraged to consult with the public prior to the submission of any significant development proposal.

#### 3.2.1(ii) Residual Watershed Area

It is the intent that any development proposed in the residual watershed area be considered on the basis of existing policies and regulations in the Municipal Development Plan and Land Use By-law of the respective County. Some additional restrictions on development, however, are deemed necessary to help protect the lake environment.

#### Policy Directions

- Any development proposed in the residual watershed area will be subject to careful scrutiny for any potential negative impact on Sylvan Lake.
- Before approving any such development, it must be demonstrated to the satisfaction of the local municipality that the development and any proposed mitigation measures will result in no negative effect on the lake.

3. No new intensive livestock operations will be permitted in the Plan area. The expansion of an intensive livestock development may, however, be considered in the Residual Watershed Area if it can be demonstrated to the satisfaction of the local municipality that the operation would not harm the lake water quality, or the potential for residential or recreational development as provided for in the Plan.

For the purposes of the Plan, the municipalities will use the definition of an intensive livestock operation contained in the Code of Practice for the Safe and Economic Handling of Animal Manures, or any successor guidelines or regulations thereto.

#### 3.2.1(iii) Urban (Growth) Area

During the past few years, the Town of Sylvan Lake has experienced very rapid residential and commercial growth. As a growing, vibrant community serving the recreational needs of the lake, future development is expected to be largely concentrated on the southeast part of the lake.

#### Policy Directions

- Large-scale, intensive recreational, commercial and residential developments shall generally be restricted to the Town of Sylvan Lake, unless:
  - (a) such development is otherwise provided for in this Plan, or
  - (b) a plan acceptable to the local municipality and any adjacent municipality has been approved, and
  - (c) the proponent is ready to proceed with a subdivision or development application.
- All newly created lots within the Town must be serviced with municipal sewer and water.

#### 3.2.1(iv) Growth Management

No lake carrying capacity has been determined to define the possible limits for development on the lake. It is, however, the

intention of the municipalities to monitor and assess the cumulative impacts of development to ensure that future growth occurs in an environmentally responsible and sustainable manner.

#### **Policy Directions**

- The municipalities will formalize the means by which the impacts of development are monitored, which may include, among other things, conducting public opinion surveys, tracking the incidence of boating and related complaints, and environmental monitoring.
- Alberta Environment will be asked to undertake environmental monitoring programs, including the monitoring of water quality and water levels. The Department has advised that the monitoring of aquatic growth and/or erosion control may be undertaken on an "as required" basis.
- When considering new development, the municipalities shall take into account the potential for land use conflicts and ways to minimize or eliminate such conflicts.
- The municipalities will carry out their planning responsibilities without infringing on the rights of individuals except to the extent that is necessary for the overall greater public interest.

#### 3.2.2 Environmentally Sensitive Areas

Carefully controlled development will be important in preserving and enhancing fish, wildlife and waterfowl habitats. Map 4 of the Plan shows areas regarded as being environmentally significant. The areas have been largely determined from a review of existing published data sources. No new additional field investigations have been carried out during the course of preparing the Plan. The designations may therefore need to be adjusted following more site-specific analysis at the time that individual development proposals are considered.

The proposed management strategy for the lake recognizes that attitudes and approaches to environmental protection have changed. Improved knowledge of the lake environment and

assessment/mitigation techniques has made the concept of sustainable development a practical reality. Consequently, in many cases, it is no longer necessary to prohibit development in order to protect the environment. Development proposals still, however, need to be rigorously reviewed to ensure that no significant degradation of the environment occurs.

#### **Policy Directions**

- As a general requirement, development on or adjacent to lands that are identified as being environmentally sensitive shall be restricted to uses which are compatible with the environmental conditions, or will be made to do so through measures undertaken to mitigate any resulting negative environmental impact.
- Major multi-lot and other significant development proposals will be subject to an environmental review. Guidelines for conducting such a review are included in Appendix A. All potential impacts and appropriate mitigation measures must be addressed by the developer to the satisfaction of the local municipality.
- Shoreline modifications, including beach development, will
  not be permitted in environmentally sensitive areas, unless
  an environmental review shows that the proposed
  improvements can be carried out in an environmentally
  responsible manner.
- 4. It is proposed that a handbook be produced describing the environmentally sensitive areas around the lake, the importance of these areas and the effects of development on such areas. The handbooks would be distributed to all residents/owners in the Plan area. They would also be made available at the various public boat launches for distribution to the general public.
- Provincial agencies will be encouraged to monitor the state of environmentally sensitive areas around the lake.
- Further inventory and assessment of lake habitats is recommended. Alberta Environment will be requested to take a lead role in coordinating these efforts.

- Signs will be posted at all public and private boat launches requesting boaters to maintain a reasonable distance (i.e., 100 metres or 328 feet) from sensitive shoreline habitats.
- 8. The municipalities intend to work with the Sylvan Lake Advisory Committee to establish criteria for the Sylvan Creek outlet. However, until a decision is made on its use and/or alignment, it is recommended that the outlet area be left in a natural state and kept clear of debris.
- In general, shoreline reserves (or easements) are to be left in their natural state. Reserve areas will be posted and enforced by the municipalities.

#### 3.2.3 Shoreline Development

The municipalities recognize that more effort must be made to increase public awareness of the importance of shorelines to lake health.

A booklet titled Caring for Shoreline Properties published by the Alberta Conservation Association describes management practices that can be adopted on lakeshore properties to help protect the shoreline and preserve the water quality of the lake. It also includes ways of restoring damaged shorelines to their natural state.

#### **Policy Directions**

- The municipalities will work with provincial authorities to explore ways to promote the preservation of shorelines in a natural state.
- No shoreline modifications may be made, unless the proper provincial authorizations have been obtained under the Public Lands Act and the Water Act.

For more information, contact the nearest regional office of Alberta Agriculture, Food and Rural Development (Public Lands Division) and Alberta Environment (Water Management Division). Approval may also be required from the local municipality before commencing any shoreline modifications.

 Where areas of damaged shoreline exist, Alberta Agriculture, Food and Rural Development and Alberta Environment will be encouraged to show how property owners can restore natural shoreline conditions.

#### 3.2.4 Water Access

In order to respond to the increasing demand and to avoid overconcentration of water-related activities on particular parts of the lake, new public access will need to be developed. Such development should not, however, occur without careful planning to avoid residential-recreational conflicts, and degradation of shoreline and lake habitats.

#### **Policy Directions**

- High priority will be given to the development of a new public boat launch for lake users.
- To ensure reasonable area exists for public access to the boat launch on Range Road 2-2 (in the Summer Village of Sunbreaker Cove), continued provincial ownership and control of the neighbouring reserve properties, legally described as Lots R-1 and R-5, Block 1 under Subdivision Plan 5213 MC, is supported for public access-related use.
- 3. Petro Park shall be retained as public open space.
- 4. Additional formal public access shall be investigated by the municipalities and located so as to limit potential user group conflicts and negative environmental impacts. The following criteria shall be used in determining suitable locations:
  - availability of land for the provision of associated services and facilities (e.g. parking, garbage collection and sanitary services);
  - access to a public road of a standard capable of supporting the anticipated traffic;
  - impact on adjacent land uses and the environment;

 suitability of shoreline conditions for recreational use (e.g. beaches).

Opportunities will be given to all affected individuals and groups to express their views and concerns.

- In order to develop the necessary public access facilities, the municipalities and/or the provincial government may be required to purchase additional lands for public recreational use.
- Alberta Environment (Natural Resources Service Parks) will be asked to consider public access improvements at Jarvis Bay Provincial Park. The provision of a boat launch and day use facilities are suggested.
- Subject to the protection of environmentally sensitive areas, boat docking facilities, where feasible, will be limited to single access locations in new multi-lot residential and resort developments.

#### 3.2.5 Open Space

It is recognized that, in order to ensure that the lake remains accessible to the public, a network of open spaces should be developed for the different lake users.

#### **Policy Directions**

- Where feasible to do so, new residential developments will be required to provide municipal pathway links between backshore lots and the lakefront.
- 2. The dedication of environmental reserve and/or municipal reserve will be required to improve public access to the lake.
- As general policy, publicly owned shoreline property will not be disposed of to private interests.
- 4. The municipalities may develop a conceptual open space master plan for the Plan area.

The feasibility of developing a public non-motorized trail system around the lake may also be investigated by the municipalities.

#### 3.2.6 Road Access

Highways 11, 11A and 20 serve as the main access routes to Sylvan Lake Plan area. Secondary Highway 781 provides access to the southeast part of the lake from Highways 11 and 11A with the Rainy Creek Road used to access the north side of the lake from Highway 20. A network of local roads (government road allowances or subdivision roads) provides access to development around the lake and to the lake itself.

Further development around the lake will require the upgrading of the existing road infrastructure to safely accommodate the increased traffic.

#### **Policy Directions**

- The municipalities shall work with Alberta Infrastructure in monitoring and assessing the impact of existing and future development on the three provincial highways within the Plan area.
- An assessment of the municipal road system will be undertaken by the municipalities to identify the improvements that are deemed necessary to reasonably and safely handle the increased traffic generated by further development around the lake.
- Developers will be responsible for upgrading or paying for the upgrading of any road(s) that the local municipality has identified as requiring improvement in order to accommodate the increased traffic volumes resulting from new development.

#### 3.2.7 Boating/ Lake Use Conflicts

With the development of additional public access to the lake, the municipalities recognize that boating and other uses on the lake may need to be controlled and regulated to ensure the safe use and enjoyment of the water and to protect the natural environment.

Property owners have also called for more action to be taken to reduce noise pollution on the lake.

#### **Policy Directions**

- The municipalities will work with the RCMP to implement an ongoing education program focused on informing lake residents/users of all aspects of watercraft safety, user proficiency and user rules/regulations. The education program is expected to take the form of newsletters and pamphlets, and should be distributed to lake residents and other lake users.
- 2. A boating restrictions plan may have to be considered for the lake. To implement any restrictions, an application would need to be made to Alberta Environment (Natural Resources Service - Fisheries Management Division) for the appropriate boating designations. Such restrictions might include the following:
  - restricted hours of boating operation;
  - locations restricted for boating;
  - speed limit zones; and
  - other issues as deemed necessary.
- Efforts will be made to improve the marking of the 30 metres (100 feet) water zone adjacent to the shoreline along developed parts of the lake in order to facilitate awareness and enforcement of the 10 km/hr (6 mph) speed limit within these recognized potential user conflict areas.
- 4. Signs should be posted to identify sensitive fish habitats, particularly in the vicinity of:
  - Sylvan Lake Natural Area;
  - Kuusamo Krest:
  - Third Point to the east limits of the Summer Village of Norglenwold;
  - Summer Village of Birchcliff;
  - Summer Village of Jarvis Bay.

- Improved marking of swimming areas will be considered as well as other means of reducing user conflicts. Jurisdictions operating the various beaches around the lake will be asked to review such areas and undertake necessary improvements.
- Each municipality will adopt a by-law restricting the use of municipally-owned land for the launching of boats without proper noise abatement mechanisms and such other by-laws as may be appropriate to eliminate one major source of noise pollution on the lake.

#### 3.2.8 Water Quality/ Sewage Disposal

Reducing the flow of nutrients and chemicals into the water will be important in maintaining and improving the health of the lake.

#### **Policy Directions**

- Livestock should not be allowed direct access to the lake or to inflow creeks draining into the lake. The use of alternate watering sources, such as holding ponds, will be encouraged in order to reduce the amount of nutrients added to the lake and the erosion of the shoreline.
- Livestock use in environmentally sensitive areas will be discouraged.
- The municipalities will approach the appropriate provincial authorities about potential cost-sharing schemes for providing alternate, off-lake watering supplies, as well as the fencing of environmentally sensitive areas.
- 4. Agricultural practices, which minimize the risk of carrying contaminants off the producer's lands, are encouraged. This may be done through the siting of livestock facilities away from watercourses, creating vegetative buffers between livestock facilities and watercourses, and the use of catch basins to collect runoff. Any inappropriate practices will be addressed by Alberta Agriculture, Food and Rural Development under the Soil Conservation Act.

- Manure spreading on lands within the Plan area shall be done in accordance with a manure management plan acceptable to the County and Alberta Agriculture, Food and Rural Development.
- The municipalities will consider undertaking a survey of private sewage disposal systems, including gray water systems.
- Provincial health and safety codes officials will be asked to investigate any sewage systems found to be malfunctioning or substandard with a view to requiring corrective measures as deemed necessary.
- The municipalities, in conjunction with Alberta Municipal Affairs and the Regional Health Authority, will prepare and distribute informational material, outlining options for sewage treatment and disposal, including costs.
- All new development serviced by private sewage disposal systems will be required to comply with the Alberta Private Sewage Systems Standard of Practice 1999, established by the Safety Codes Council.
- 10. Where the local municipality may deem necessary, new development within 300 metres (1,000 feet) of the lake will be required to implement construction management practices which prevent erosion, sedimentation and the flow of nutrients into the lake. In such cases, the owner/developer would be required to submit a construction management plan to the municipality prior to development taking place.
- 11. The municipalities will investigate the feasibility of developing a regional sewage system for an increased level and density of development around the lake.
- 12. It is the intent of the municipalities to work with the appropriate authorities to ensure that all boats, as required under the Canada Shipping Act Regulations, provide for suitable on-board waste disposal facilities and operators use the systems as designed and intended.

- 13. The municipalities will also seek to ensure that appropriate sewage disposal dumping facilities are provided for those boats required to have and use on-board waste disposal systems.
- 14. Any expansion or renovation to the existing marina in the Town of Sylvan Lake, or the development of any new marina on the lake, will be required to develop and operate approved onshore sewage dumping facilities for the convenient use of all boats which are required to have and use on-board sewage systems according to the Canada Shipping Act and its regulations.

#### 4.0 ADMINISTRATION AND IMPLEMENTATION

### 4.1 AUTHORITY OF PLAN

This Plan has been adopted by Lacombe County, Red Deer County, the Town of Sylvan Lake, and the Summer Villages of Birchcliff, Half Moon Bay, Jarvis Bay, Norglenwold and Sunbreaker Cove to address land use and management issues of mutual interest and concern.

Municipal decisions on future land use changes within the Plan area shall conform to the Plan.

The municipalities will encourage the provincial and federal authorities to have regard for the provisions of the Plan in deciding on the use and development of publicly owned lands, and in the formulation of related federal and provincial policies and programs affecting the Plan area.

### 4.2 STATUTORY PLANS

LAND USE BY-LAWS

The municipalities will be required to amend their Municipal Development Plans, Area Structure Plans, and Land Use By-laws to reflect the directions of the Plan, and to allow for development and servicing standards in the Lake Development Area to be determined following more site-specific analysis and review.

### 4.3 MUNICIPAL CONSULTATION

Intermunicipal cooperation will be very important to ensure that further development around the lake is environmentally sustainable, and considers the various interests and uses within the community.

Consultations will be carried out among the municipalities and with the Sylvan Lake Management Plan Committee to obtain their views during the preparation of other statutory and non-statutory plans or by-laws affecting land use around the lake, or when changes are being considered to such plans or by-laws.

Each municipality will provide the other municipalities an opportunity to comment on any significant residential or

resort/recreational developments proposed in the Lake Development, Residual Watershed and Urban Growth Areas.

The municipalities shall pursue the implementation of fringe area agreements with neighbouring municipalities to promote orderly and compatible developments.

A notice and application respecting the annexation of those lands identified within the Urban Growth Area shown on Map 3 will be supported by Red Deer County and, where relevant, the adjacent Summer Village, upon it being demonstrated that there is a bonafide development proposal and municipal utility services can be provided. A development will be deemed bonafide when a plan acceptable to the respective municipalities has been approved and the proponent is ready to proceed with a subdivision or development application.

#### 4.4 PLAN MONITORING AND REVIEW

The Lake Management Plan Committee, comprised of one elected official from each municipality, will be charged with the responsibility to monitor the performance of the Plan and to advise the municipalities on what changes may be necessary to the Plan from time to time.

It is proposed that the Committee meet at least once a year, or as requested by a member municipality.

The Committee will need to formalize the method by which the cumulative impacts of development on the lake are monitored and assessed. Input and assistance will be requested from other government bodies and agencies. The Committee will also seek the views of the public on how the lake planning is addressing the needs of the community and the public generally. This may be done through newsletters, advertisements, surveys or public meetings.

## 4.5 DISPUTE RESOLUTION

Any intermunicipal dispute that may arise respecting development within the Plan area will be referred to the Committee for consideration. The Committee's role will be strictly advisory.

Where such dispute does arise, written notice must be given by the concerned municipality(ies) to the Chairman of the Committee who shall call a meeting of the Committee to discuss the matter and provide a recommendation to the Councils of the affected municipalities within 30 days after receipt of the notice.

If there is agreement with the Committee's recommendation, the matter may be dealt with accordingly.

Should, however, the affected municipalities not agree on a way to resolve the dispute, the issue may be referred to a mediation process limited to those municipalities which consider themselves to be adversely affected by the matter.

It is agreed that no action shall be taken on the matter in dispute until the issue is resolved or upon the expiry of 60 days after the date of written notice to the chairman of the Committee.

Where there is still no agreement, the concerned municipality(ies) may be able to begin an appeal process by filing an appeal with the Municipal Government Board in accordance with the provisions of the Municipal Government Act.

#### 4.6 PLAN AMENDMENTS

It will be the responsibility of the municipalities to monitor the effects of further development around the lake. Changes to the Plan may be necessary to deal with such effects and reflect the changing needs and interests of the community and the public generally.

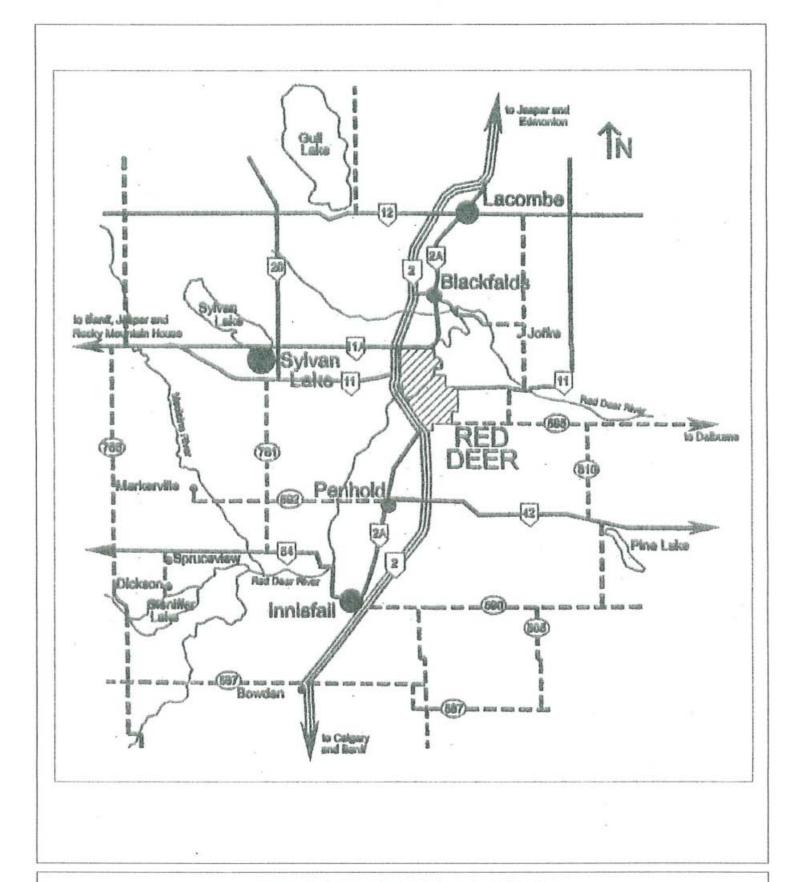
The Committee will consider and make recommendations on any changes deemed necessary to the Plan. In consideration of any amendments, the Committee will ensure that the public is given an opportunity to express their views and concerns before a recommendation is made to the local municipalities.

Advice will also be sought from other government authorities prior to the adoption of any amendments.

Amendments to the Plan may be effected by a resolution passed by each municipality.

## 4.7 REPEAL OF PLAN

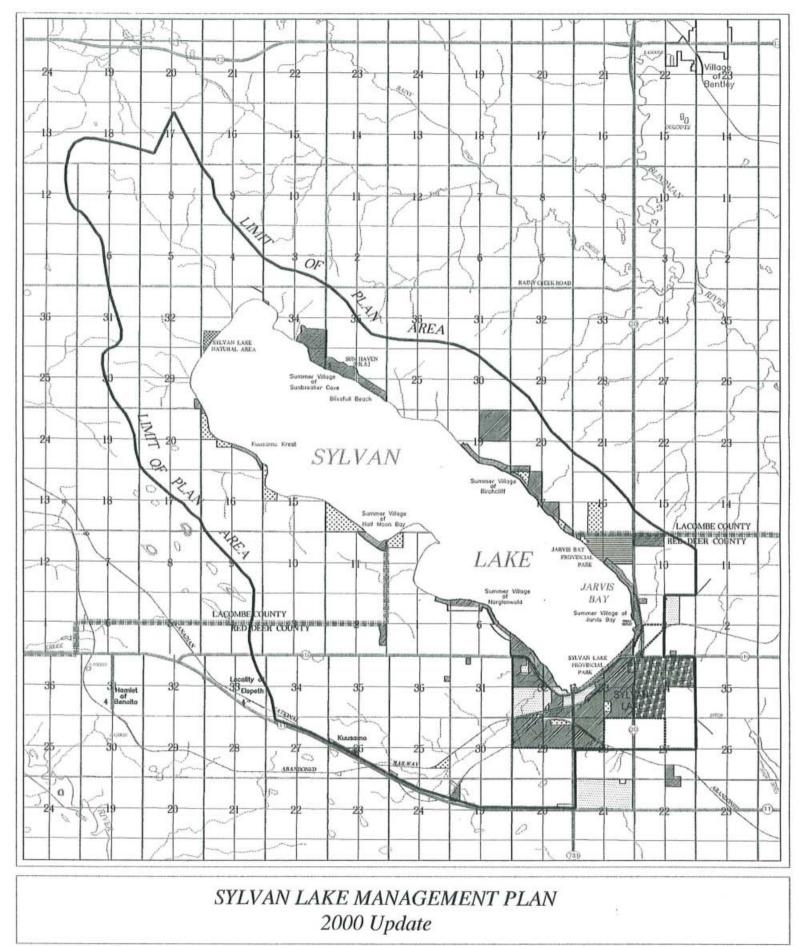
If a situation arises where one or more of the municipalities wishes to withdraw from the Plan, not less than 90 days notice must be given in writing to the other municipalities before any resolution is passed by a municipality to withdraw from the Plan.

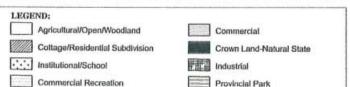


### SYLVAN LAKE MANAGEMENT PLAN 2000 UPDATE

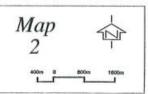
REGIONAL SETTING

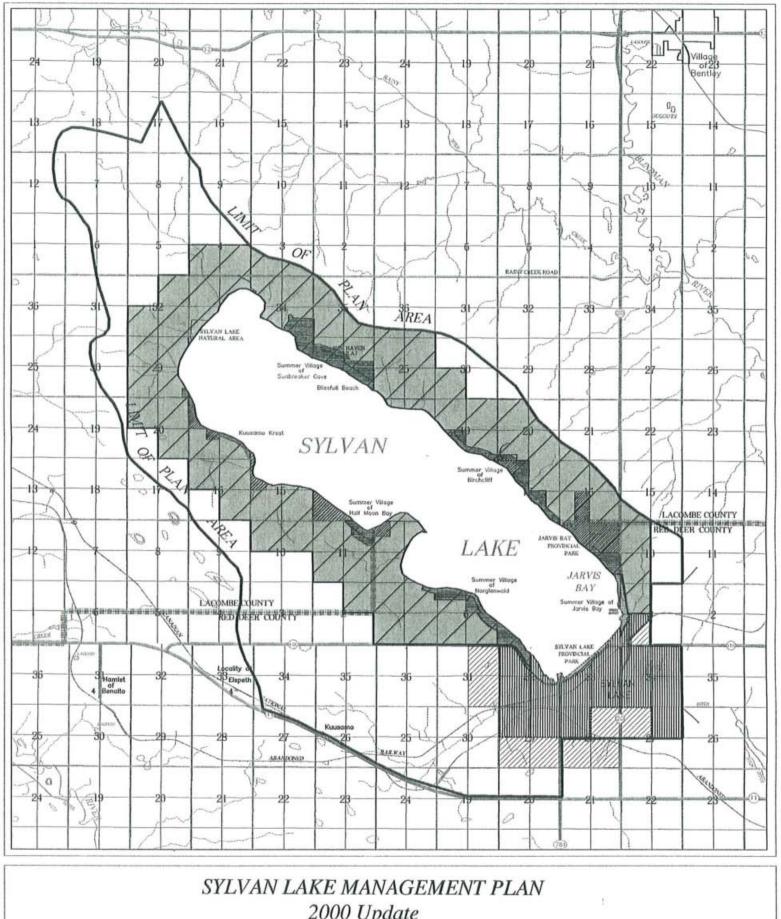






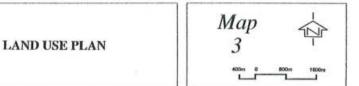
PLAN AREA (EXISTING LAND USE)

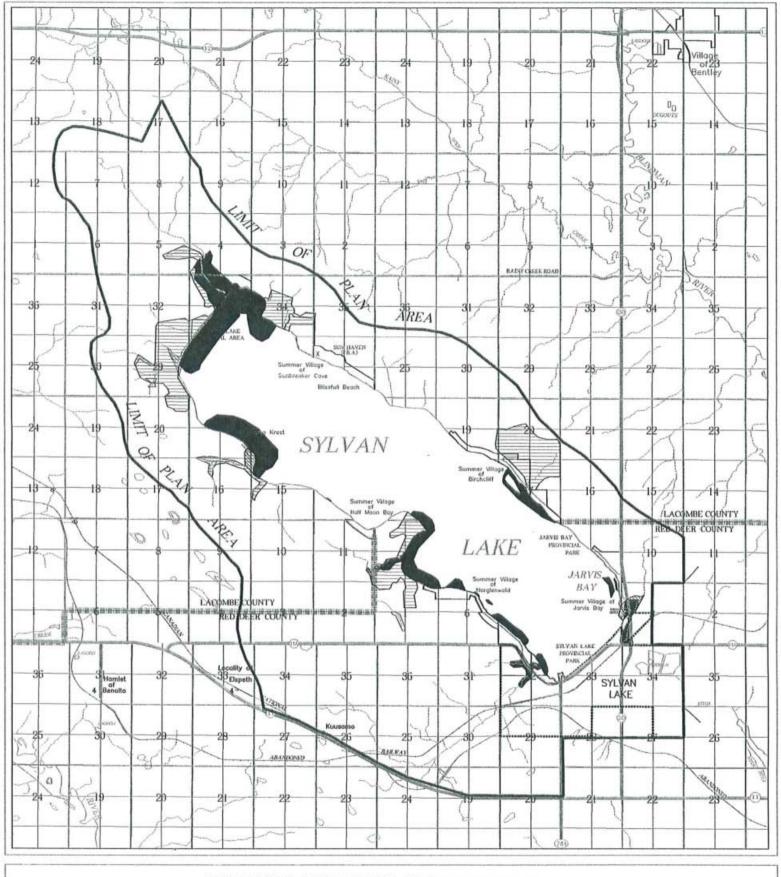




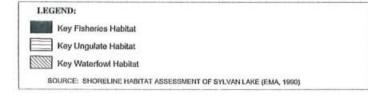
# 2000 Update

LEGEND:	
Urban District	Residual Watershed Area (remainder of Plan Area)
Urban Growth Area	(remainder of Plan Area)
Lake Development Area	

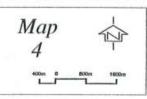


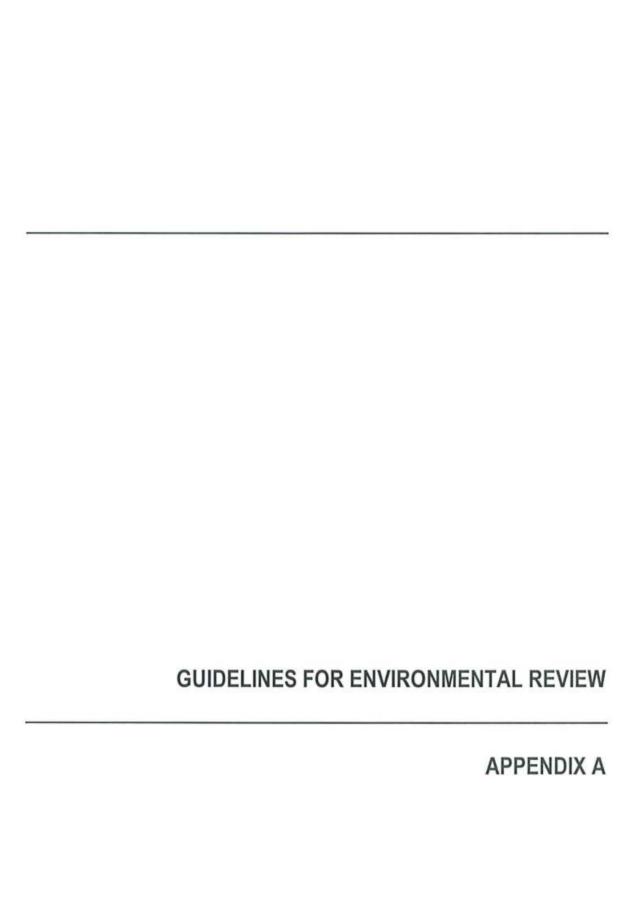


### SYLVAN LAKE MANAGEMENT PLAN 2000 Update



ENVIRONMENTALLY SENSITIVE AREAS



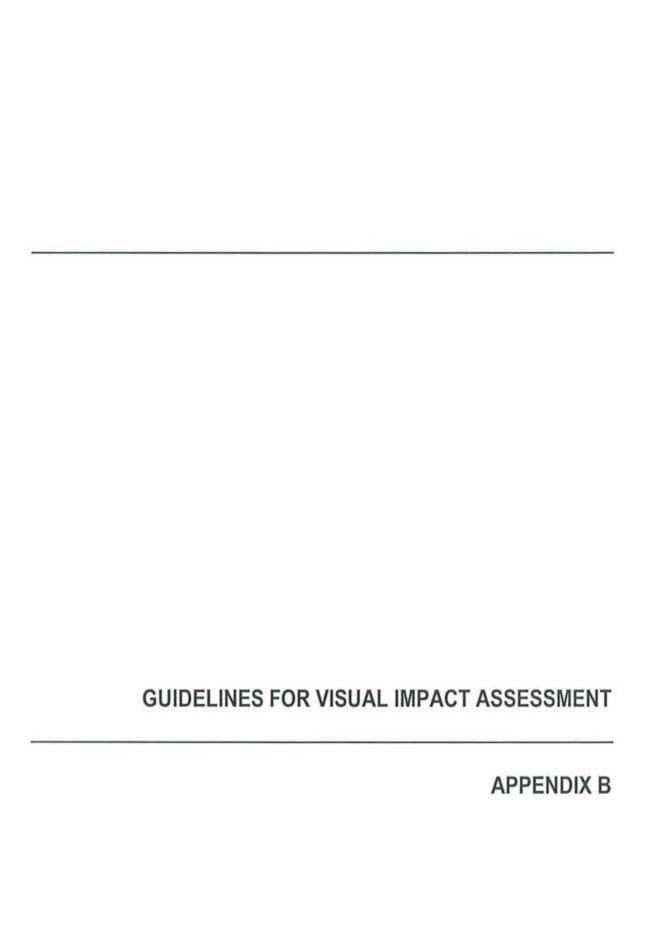


# GUIDELINES FOR ENVIROMENTAL REVIEW

Where an environmental review is required by this Plan, the assessment shall be undertaken by a qualified professional(s) and must address the following to the satisfaction of the local municipality:

- a description of the environmental sensitivity of the lands proposed for development and the surrounding area;
- the nature and significance of the impact(s) associated with the proposed development during construction and once completed, the residential/recreational activities that will result; and
- an environment protection plan to:
  - alleviate any adverse impacts;
  - monitor the performance of the environmental measures; and
  - identify any residual impacts and their significance in any or all of the following areas:

fish and wildlife vegetation soils and terrain water quantity and quality shoreline



### GUIDELINES FOR VISUAL IMPACT ASSESSMENT

A visual impact assessment shall be undertaken by a qualified professional(s) and must provide sufficient information to show the likely effects of the proposed development and the extent to which any undesirable effects may be mitigated by the project design.

As general requirements, the assessment shall address to the satisfaction of the local municipality:

- how the natural features of the site will be preserved so as to contribute to the visual quality of the development.
- the manner in which the density and form of the proposed development will be considered in terms of its visibility from important viewpoints on and off the lake.

In areas where development is not visible from important viewpoints, higher densities might be considered more appropriate than in areas of high visibility

Except where necessary to sustain the forest resource or reduce the fire hazard, the clearing of vegetation is to be minimized in order to maintain the continuity of tree cover and screen the proposed development from view.