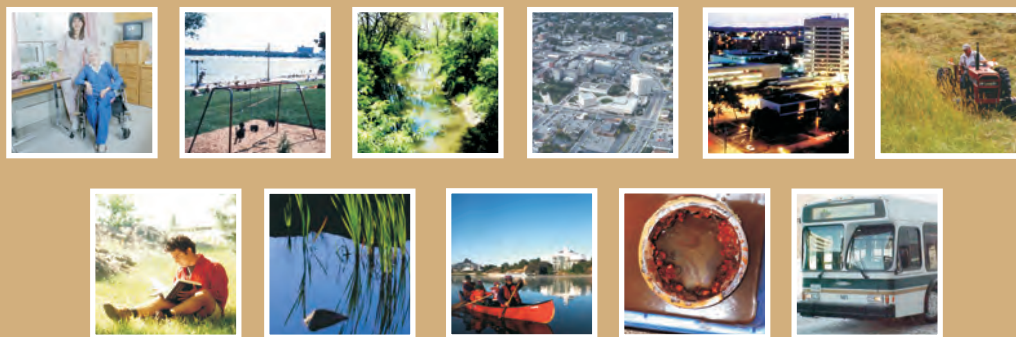




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Waterfront and Rural Background Study

December 2004

*Developing a single, up-to-date
Official Plan that fosters sustainable growth,
economic development and a high quality of life
to attract people and investment.*

*Élaborer un seul Plan officiel à jour qui favorise
la croissance durable, le développement économique
et une qualité de vie élevée afin d'attirer
des gens et des investissements.*



WATERFRONT AND RURAL BACKGROUND STUDY

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EXECUTIVE SUMMARY

The Waterfront and Rural Background Study is one of eight background studies being undertaken as part of the City of Greater Sudbury Official Plan Review. This Background Study is intended to identify issues and discuss policy options to be addressed in the Official Plan Review process.

Executive Summary

The Waterfront and Rural Background Study focuses on issues associated with unserved residential and seasonal residential development outside of the main settlement areas. The main impacts of unserved development are increased demands for and costs of municipal services as well as potential impacts on environmental resources such as groundwater and lakes. Secondary impacts are the loss of rural character and potential conflicts with resource extraction.

From the supply and demand analysis of unserved development, it was determined that the potential supply of shoreline and rural lots is 589 and 767, respectively. These lots currently meet the current zoning standards for the construction of a dwelling.

The study found that the issue of permanent vs. seasonal use of waterfront properties is a complex one. Other jurisdictions have not been successful in limiting the use of dwellings to seasonal use. An option to be considered is that Sudbury should concern itself less with controlling the seasonality of use, and instead ensure that both building and sewage disposal standards are met by all dwellings. Related to this, the conversion policies in existing Official Plans and Secondary Plans should be reviewed to ensure an orderly and regulated conversion process.

Based on a review of current trends and conditions, supplemented by public input, the report recommends a policy response or direction for the new Official Plan for the following issues:

1. Water Quality Issues – including, inspection of septic systems, shoreline remediation and lake carrying capacity.
2. Implementation Issues dealing with the seasonality of use and the long-term stewardship of lakes.

Possible policy responses for the septic system issue include increasing public awareness through education as well as implementing a more active monitoring program. This issue also has particular relevance to the discussion of the potential conversion of seasonal uses to permanent homes. For the shoreline remediation issue, a review of other Canadian Shield municipalities notes the use of required vegetative buffers adjacent to shorelines to enhance water quality. Approaches to lake carrying capacity in the Official Plan should consider, in addition to water quality, a variety of issues that deal with the character of the lake and shoreline environment.

A new approach suggested to the seasonality of use issue is confirmation of a dwelling to building code requirements and the adequacy of the septic system as a condition of permanent use. The suggested policy approach for lake stewardship involves the preparation of Lake Stewardship Plans by lake associations that can be adopted by Council as an amendment to the Official Plan.

This report also reviews the potential for lot creation on the lakes as an economic development initiative and recommends policies dealing with permanent and seasonal uses on the lakes.

1.0 INTRODUCTION

Sudbury has grown from a small settlement created by the discovery of minerals in the area in the 1800's to a City with many communities, each offering different lifestyle choices. The existence of Sudbury is historically directly related to the existence of natural resources in the area. However, natural resources and human habitation are not necessarily symbiotic. This is particularly true for residential development that is scattered and resource dependent (i.e. groundwater supply) and resource impacting through the physical impacts of settlements.

These potential conflicts have been the subject of much discussion and were dealt with by the first Official Plan for the Sudbury Planning Area in 1978. The policies affecting unserviced development in rural and waterfront areas have been added to and further detailed over time as Secondary Plans have been approved. Prior to preparing a new Official Plan for the City of Greater Sudbury, it was determined that it would be important to have an understanding of development trends based on existing policies in order to define which of the policies have been successful and achieved their goals, and which may require revision, given the current context.

The policies of the existing Official Plan affecting unserviced development are based on the following assumptions:

1. In the City of Greater Sudbury, unserviced development increases pressure on environmental resources including groundwater and lakes.

The fragmentation of natural areas, wildlife habitat and agricultural areas are all potential impacts from rural development. Rural development must be constructed on private septic systems. A higher concentration of septic systems in rural and waterfront areas will mean that more phosphates and nitrates will filter into local water bodies and ground water sources potentially affecting groundwater supplies and lake water quality.

2. Rural and waterfront development increases servicing costs at public expense.

Rural and waterfront development typically creates the demand for improved levels of service for garbage pick-up, school bus travel, snow removal and road maintenance. In particular, the need for improved road conditions is necessitated because there is more traffic on the road as a result. The extension of servicing increases costs to the City, particularly when compared to focusing development in existing serviced communities. This issue is the primary reason for the prohibition against permanent dwellings on most of the lakes in the City.

3. Rural and waterfront lot creation can cause potential land-use conflicts between existing and future resource extraction and agricultural activities.

Industrial and agricultural activities are generally not compatible uses with most residential uses. Rural residential development can significantly limit farming as minimum setbacks apply based on the nature of the farming activity and the number of livestock. There are also significant timber operations within the City boundaries as well as potential mining exploration and aggregate operations that can conflict with rural and

waterfront homeowners. Traditionally, the operations of both timber and the mining industry have taken precedence over municipal land use controls in that they are regulated under separate legislation. In some cases, for example in mineral exploration, cottage areas can be subject to mineral exploration activities with no municipal approvals required. In certain jurisdictions the same conditions apply to forestry operations.

The current Official Plan for the Sudbury Planning Area and Secondary Plans recognize these potential conflicts between residential development and natural resource/agricultural land uses. The current Plan states that residential development should occur primarily within the settlement areas with full municipal services. It is a policy of the Plan that residential development should infill existing settlement areas. Some scattered rural residential development is anticipated outside of settlement areas. However, the primary use of lands outside settlement areas should be considered for resource development.

The policies of the Official Plan with respect to rural residential development allow rural, waterfront and resort development. The Plan allows this development to take the form of seasonal and/or waterfront dwellings, rural estate development, hobby farms, agricultural, and permanent rural residential uses.

The Plan acknowledges the potential for land use conflict created by approving residential dwellings in an area that has an abundance of natural resources. Policy 3.15 states that scattered rural residential uses (not waterfront or resort) shall not be permitted in areas "restricted by" the agricultural reserve, mineral reserve or mineral resource extraction areas. Where the development is not prohibited, the new lots are to be a minimum of two hectares in size with a frontage of 90 metres onto a public road with school bus access. New lots must have the soil conditions suitable for sewage disposal and proven water supply.

In the case of seasonal/waterfront development, the Official Plan states:

"A seasonal residential dwelling can be defined as a dwelling used for leisure and recreational uses during different seasons of the year and which is not the sole and primary residence of the owner or occupant. A permanent waterfront dwelling unit is the primary residence of the owner or occupant and is occupied most of the year."(Section 3.16)

Seasonal/waterfront development is subject to the same criteria as approvals of applications for rural residential uses. Seasonal proposals which front on public roads maintained year round are evaluated as permanent residential proposals. Waterfront lot sizes can be smaller at 0.4 hectare with a minimum water frontage of 45 metres, and only seasonal dwellings are allowed in cases where the only access is from the lake with public access points.

Water resources are further governed by broad criteria in the Official Plan in Section 8.28 regarding water resources, and Section 9.12-9.15 regarding sensitive areas. The Secondary Plans have policies more specific to lands within those planning boundaries.

The Official Plan anticipates that the primary land use outside settlement areas will be resource development. Two main resource reserves are set aside in the City of Greater Sudbury, one for mineral and the other for agricultural uses. In the case of new mineral developments, one of the

criteria any approval has to take into account is the impact of the new development on surrounding land uses (Policies 8.7 and 8.12). The concern is that increased rural residential development will affect the potential for resource uses.

The agricultural reserve policy is aimed at the retention of land with high agricultural capability. Severances are permitted where larger parcels that can continue to support agricultural uses are created for a surplus home on the amalgamation of two farm holdings, and for an owner who has been farming for more than 15 years and wishes to retire on the land. Every parcel held at adoption of the Official Plan in 1978 is allowed one severance for each 10 hectares of holding where the new lot is 0.4 to 0.8 hectares in size with a minimum of 60 metres frontage on a public road (Policies 8.16 - 8.18). The Official Plan schedule showing the Agricultural and Mineral reserve is reproduced on Exhibit 1.

Despite the current policy, there is obviously a significant portion of the population who would prefer a lifestyle based on living in the rural and waterfront areas of the City of Greater Sudbury. As indicated later in this report, approximately 20 percent of all dwellings constructed since 1978 have been in rural and shoreline areas that are not connected to full municipal piped services. In developing policies for the new Official Plan, it will be important to determine whether or not this choice will be limited.

It will also be just as important to decide what types of policy will address the issues created by existing development. Certainly in some of the lake areas in Sudbury, specific environmental concerns with respect to water quality as well as more general lifestyle concerns related to a capacity of a lake to accommodate more than a certain number of cottages will limit further development. Away from the shoreline areas, resource uses (particularly agricultural operations) will continue to limit the development of additional rural residential uses. However, there are still large areas in the City of Greater Sudbury without conflicts with resource uses and without any significant environmental concerns that could offer opportunities to that portion of the population that wish to live in the countryside.

With a potentially declining population base and limited growth prospects, one of the significant issues in the City is likely the ability to pay for a continued appropriate level of municipal services. To the degree that the City's services must be distributed across a wider area, these costs can be higher. Road maintenance, garbage collection, snowploughing and school bussing are all costs that are very sensitive to the distances involved and the degree of dispersal of their catchment areas. An argument can be made however, that where a road already has scattered residential development, all of these services are already provided. Further, infilling of dwellings in these areas may in fact make the provision of some services more efficient.

Traditionally, concerns have also been expressed with respect to the potential pollution of ground water and other environmentally negative consequences of development occurring in areas outside of full municipal services. In the past decade, changes to the standards and technology of private sewage disposal systems, as well as new methods of monitoring and predicting potential negative impacts have shown that development can occur in unserved areas with proper regulatory controls and little or no impacts on our natural environment. In fact, it can be argued that those living in a rural area are often more sensitive to their impacts on

the environment as these are more obvious and given the commitment to living in such an area, the residents can be excellent stewards of the land or lake.

Summary

The policy options for unserviced residential uses should be based on providing choice and economic opportunity while achieving the primary goal of monitoring/enhancing both the natural environment and lifestyle choices. The main impacts of unserviced development are the fragmentation of farmland and conflicts with natural resource uses. Secondary impacts are the loss of rural character, increased service expectation from the City, environmental impacts and the loss of compact urban form that contributes to a sustainable City.

The available options will be more clearly defined in the synthesis of all background studies. The Agricultural Study will more clearly define prime agricultural lands and the Natural Heritage Study will determine significant natural areas. The City is also undertaking a Groundwater Study which should define recharge areas. When these are combined they may assist in defining lands with rural residential and waterfront development area potential and identify more detailed policy options.

2.0 UNSERVICED DEVELOPMENT - SUPPLY AND DEMAND

2.1 Trends In Lot Creation and Building Permit Records

An analysis of lot creation patterns was undertaken to determine the nature and amount of development in unserviced areas. Several different databases were used as sources, including those provided through the approval of applications for private septic services, building permits and lot creation records. For the purposes of the analysis, the term 'second home' means a dwelling used for recreational purposes that is not a primary residence.

The following are the findings of the analysis:

1. According to 2003 assessment data, there are 68,296 residential *dwelling units*, 393 farm dwelling units and 1,533 recreational dwelling units in the City.
2. Between 1992 and 2003, 21.3 percent of all *dwellings* constructed in the Region/City of Greater Sudbury were on private sewage disposal systems.
3. An analysis of lots created through Plan of Subdivision and consent from January 1978 to July 2002 shows that of the total number of lots created, close to 20 percent were created in unserviced areas. Thus, 1,500 lots were created in unserviced areas between 1978 and 2002.
4. Between 1982 and 2002, 244 *building permits* were issued in the City of Greater Sudbury for dwellings constructed to a seasonal standard. Approximately 1,100 second homes were constructed in Sudbury between 1981 and 2001 according to Census and assessment information. This suggests that approximately 850 or 78 percent of all second homes constructed were built to permanent dwelling standards.
5. An analysis of all lots created in 2001 and 2002 indicates that almost 20 percent in both years were created in unserviced rural or waterfront areas rather than on full municipal services.

On the basis of this analysis, it is a reasonable conclusion that 20 percent of the total demand for residential dwelling lots in Sudbury is for dwellings in rural and waterfront areas. This one fifth of total demand has been the recent historical trend and will likely continue to be the level of demand in rural and waterfront areas not on public services.

Summary of Lot Creation January 1978 - July 2002				
	Serviced	Unserviced	Total	% Unserviced
Registered Lots in Subdivision	3759	162	3961	4.1
Lots Created Through Consent	2,085	1,305	3390	38.5
Total	5844	1467	7311	20

A detailed inventory and mapping of unserviced rural and waterfront development was undertaken jointly with City Staff. Exhibit 1 shows the pattern of lot creation over the past twenty-five years. Two patterns are of note. There are rows of rural severances lining many of the rural roads, particularly in the Hanmer and Rayside-Balfour areas. This area is in the heart of the better quality agricultural land, as identified by the current Official Plan (the Agricultural Reserve). The second pattern is the development of new lots adjacent to most of the larger lakes in the area.

The majority of the 400 new lots created in the rural areas of the City over the past twenty-five years have created linear communities of rural-residential dwellings, on a variety of relatively large lot sizes. While these residential areas are not traditionally considered rural or agricultural uses, they tend to represent a lifestyle and housing choice favoured by a portion of the population. The majority of these homes are on paved roads and are currently provided with the full range of municipal services.

The Official Plan establishes a policy framework that allows unserviced permanent and seasonal/waterfront development while generally restricting their location to lands not reserved for agriculture and mining purposes. The pattern of lot creation is contrary to policies intended to protect agricultural lands in the current Official Plan as numerous severances have occurred in the Agricultural Reserve. A review of the data indicates that the majority of these lots were created prior to 1990.

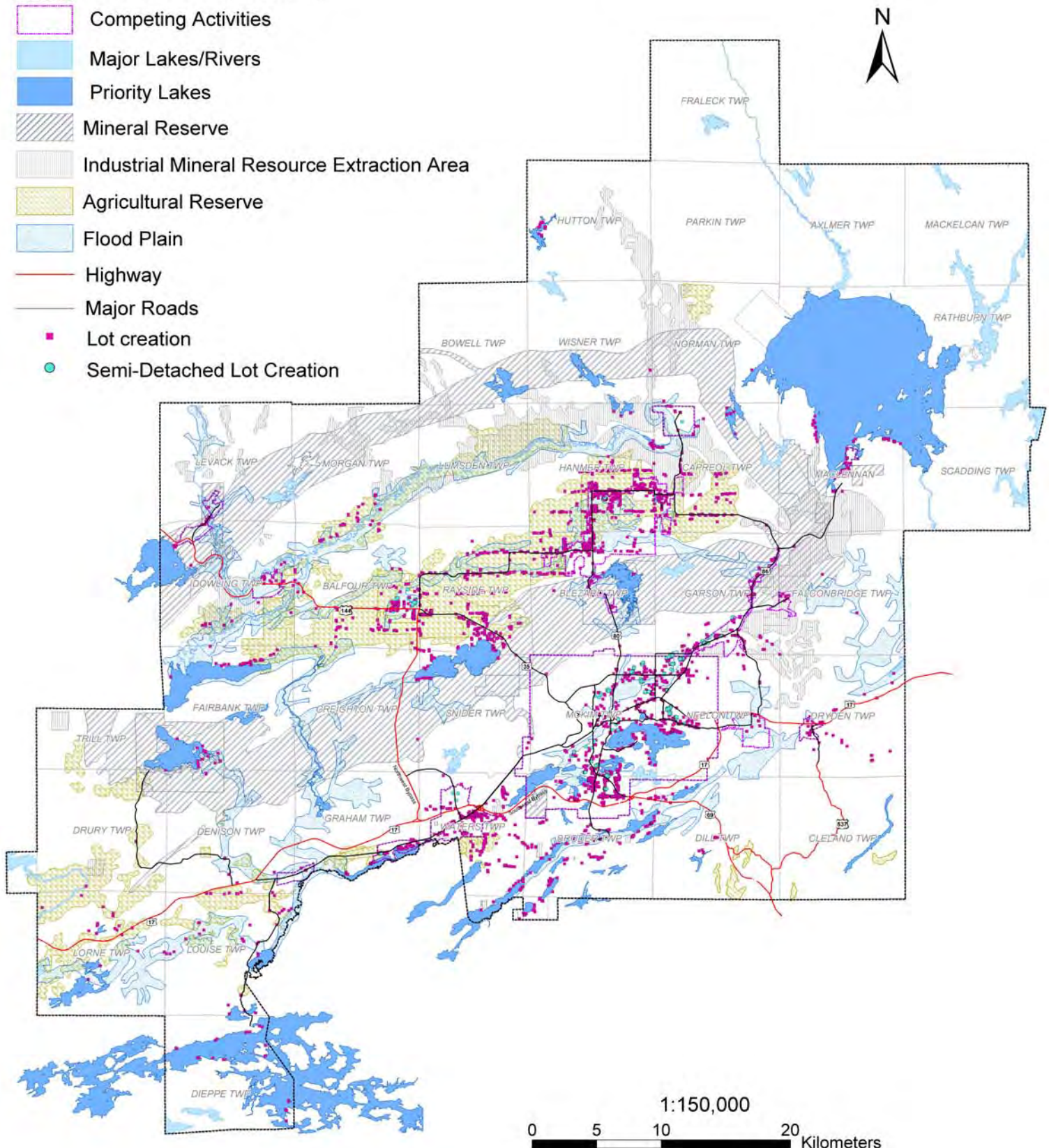
The concern is that allowing further rural residential developments of a non-farm nature increasingly fragments areas with good soil and takes more capable agricultural land out of production. To a lesser extent, some residential uses have been approved in the mineral and industrial mineral reserves. It would appear that the policies in place are generally adequate to protect the natural resource and agricultural areas, but there has been some historical misinterpretation of the policies and a lack of policy application to approvals.

The agriculture background study for the new Official Plan is being carried out to better define the agricultural lands. This study will evaluate parcels in terms of the soil capability for agriculture as well as factors beyond the property boundaries that affect the productivity of such lands.

Competing Activities: 1978 - 2003

Legend

-  Greater Sudbury Boundary
-  Competing Activities
-  Major Lakes/Rivers
-  Priority Lakes
-  Mineral Reserve
-  Industrial Mineral Resource Extraction Area
-  Agricultural Reserve
-  Flood Plain
-  Highway
-  Major Roads
-  Lot creation
-  Semi-Detached Lot Creation



The most productive lands can be identified and protected for their long term availability and productivity. Meanwhile, less productive lands that are limited by existing circumstances and that would not further reduce the agricultural activity of surrounding land can be placed within a separate Rural designation. These lands may then be developed in the future for non-agricultural uses. This will assist in limiting land use conflicts between rural residential development and agriculture in the future.

Current Inventory of Vacant Unserved Lots

There are 47 designated priority lakes in the City, given that label because, of the 330 lakes in the new City, these were considered more urban in nature and location and/or more affected by human activity. Input on their selection also was received from Lake Stewardship groups. There are 3,366 dwellings, both permanent and seasonal dwellings on the identified priority lakes as shown in Exhibit 2.

Exhibit 2 lists 45 of the priority lakes and provides a summary of the number of existing dwellings and vacant lots. The priority lakes appear to accommodate 1,200 of the 1,533 seasonal dwellings in the City. An analysis of census and assessment information suggests that there were approximately 1,100 second dwellings constructed between 1981 and 2001. This represents about two thirds - almost 70 percent of the total demand for lots in unserved areas over that time frame.

There are 589 vacant lots which meet the zoning standards, and are in private ownership on the 45 listed priority lakes. Using current zoning standards, these 589 vacant lots could theoretically yield a total development potential of 886 lots, as shown on Exhibit 2.

In the rural areas of the City, assessment data identified 767 vacant lots with rural zoning over two hectares in size. While some of these properties may be constrained by topography or drainage, they all theoretically meet zoning standards for the construction of a dwelling.

2.2 Potential Demand In Unserved Areas

The transportation and servicing analyses being conducted as part of the Official Plan process are reviewing a potential growth scenario based upon a target population of 175,000 persons. The current population of the City of Greater Sudbury is approximately 155,000 persons. The 175,000 population is a possible future and is being used to understand what the potential maximum demand would be during the planning period for a variety of municipal infrastructure needs.

Three forecasts for 2021 were prepared for the City based on demographic analysis of the following scenarios:

1. Out-migration - one in which recent past trends continue with a significant proportion of out-migration occurring.
2. Natural increase - one in which the out-migration and in-migration are balanced and population growth only occurs through natural increase.

City of Greater Sudbury Official Plan Review

Waterfront Development Potential

Summary Chart											
	1	2	3	4	5	6	7	8	9	10	11
Lake Name	Permanent Dwellings	Seasonal Dwellings	Vacant Lots	Development Potential VL (Lots)	Vacant Lots with no Development Potential (Undersized Lots)	Total Build Out RU+RDU+VL	Total Vacant Lots	Development Potential RU (Lots)	Development Potential RDU (Lots)	Total Build Out	Development Potential
CAPREOL											
Ella (Valley) Lakeshore	9	33	15	3	12	57	15	1	2	60	18
Ironside	0	18	8	67	0	85	67	0	1	86	68
ONAPING FALLS											0
Gordon	0	1	0	0	0	1	0	0	0	1	0
Vermilion	62	46	15	20	13	141	33	1	0	142	34
Windy	28	52	5	6	3	89	9	5	0	94	14
NICKEL CENTRE											0
Wanapitei	170	96	42	32	17	315	49	25	13	353	87
RAYSIDE-BALFOUR											0
Whitewater	142	43	89	129	20	334	149	2	1	337	152
VALLEY EAST											0
Frenchman	18	19	2	0	2	39	2	1	3	43	6
Hanmer	12	20	6	2	3	37	5	1	6	44	12
Joe	14	26	1	0	1	41	1	0	1	42	2
McCrea	30	2	6	1	5	38	6	0	0	38	6
Nelson	0	21	0	0	0	21	0	0	0	21	0
Onwatin	53	6	11	46	4	109	50	0	2	111	52
Whitson	13	14	32	51	11	89	62	1	0	90	63
WALDEN											0
Ella (Town)	3	12	3	10	2	27	12	0	3	30	15
Beavers	10	0	11	31	0	41	31	0	0	41	31
Fairbank	57	179	25	24	7	267	31	18	20	305	69
Kelly	0	0	8	53	1	54	54	0	0	54	54
Little Panache	31	34	5	5	0	70	5	23	0	93	28
Long	351	124	57	82	33	590	115	8	1	599	124
Makada	36	29	2	2	0	67	2	1	2	70	5
McCharles	31	13	11	28	4	76	32	0	0	76	32
Panache	25	245	17	19	1	290	20	5	0	295	25
Rat (Kusk)	14	3	5	13	0	30	13	3	0	33	16
Simon	59	1	8	0	8	68	8	1	0	69	9
FORMER CITY OF SUDBURY											0
Bethel	16	0	12	4	10	30	14	0	0	30	14
Chief	0	1	2	8	0	9	8	0	0	9	8
Clearwater	39	13	10	11	8	71	19	3	1	75	23
Crooked	5	9	17	12	15	41	27	0	1	42	28
Crowley	0	0	2	6	0	6	6	0	0	6	6
Hannah	13	2	1	15	0	30	15	0	0	30	15
Lohi	23	9	4	18	1	51	19	3	0	54	22
McFarlane	88	26	15	37	8	159	45	3	0	162	48
Middle	12	5	6	6	2	25	8	0	0	25	8
Minnow	38	0	8	0	8	46	8	0	0	46	8
Nepahwin	242	2	28	2	26	272	28	0	0	272	28
Raft	11	4	4	36	0	51	36	2	0	53	38
Ramsey	304	21	42	2	40	367	42	2	0	369	44
Richard	38	7	9	21	7	73	28	14	0	87	42
Robinson	20	0	7	30	2	52	32	0	0	52	32
Silver	9	8	4	1	3	21	4	1	4	26	9
St. Charles	82	3	10	4	6	95	10	0	0	95	10
T	14	6	4	12	1	33	13	1	0	34	14
Tilton	12	21	6	4	4	41	8	0	0	41	8
SUDBURY EAST											0
Red Deer	22	36	14	33	3	94	36	14	4	112	54
Total	2156	1210	589	886	291	4543	1177	139	65	4747	1381

Chart Key

COLUMN 6 = COLUMN 1 + 2 + 4 + 5

COLUMN 7 = COLUMN 4 + 5

COLUMN 10 = COLUMN 1 + 2 + 4 + 5 + 8 + 9

COLUMN 11 = COLUMN 4 + 5 + 8 + 9

3. In-migration - one in which in-migration exceeds out-migration.

The demand for new housing in the three scenarios is considerably different. In the out-migration scenario, there is a reduction in the number of households and therefore, no additional demand for housing. In the natural increase scenario there is an increase of approximately 4,800 households, and in the in-migration scenario there is an increase of approximately 12,200 households. From the perspective of the impact of these three scenarios on the demand for rural and seasonal housing, there are several implications.

A portion of the broader housing market is met by large lots in a rural or semi-rural setting with the occupants commuting to jobs in one of the centres in the City. Past trends suggest that 20 percent of the total demand for housing would be for lots in unserved areas and two thirds of that demand would be for second homes in waterfront areas. Based on this assumption, the two growth scenarios would generate the following demand for unserved lots:

Potential Demand			
		Shoreline Areas	Rural Areas
		$\frac{2}{3}$ of 20%	$\frac{1}{3}$ of 20%
Natural Increase	Total 20%	640	320
In-Migration	Total 20%	1627	813

Potential Supply	
Vacant Shoreline Lots	Rural Areas Vacant Lots
589	767

The Natural Increase Scenario would result in a demand for 960 dwelling units - 640 seasonal dwellings and 320 unserved rural developments. The In-migration scenario would result in the demand for 1627 additional seasonal dwellings and 813 unserved rural homes (using the two-thirds to one-third proportion). Some of this future demand for permanent dwellings could also be met by the conversion of existing seasonal dwellings. Further details and analysis of lot creation trends and forecasts can be found in the Land Use and Settlement Background Study.

There is a substantial number of vacant lots in the shoreline and rural unserved areas of the City with as-of-right permission to construct a dwelling. In total, there are approximately 589 developable lots on the priority lakes, as well as an additional approximately 700 lots of sufficient size to meet zoning requirements in the rural portions of the City. In the event that the City grows to the highest forecast level, would result in an additional approximately 12,000

households, this would, on the basis of historical trends, result in a demand for an additional 2,500 homes in the rural and waterfront areas as outlined earlier. The existing vacant lot supply would not meet this demand (supply is about 1,400, demand would be for 2,500).

3.0 DISCUSSION - UNSERVICED DEVELOPMENT

3.1 Additional Issues - Rural Areas

Water Quality/Groundwater Protection

Groundwater or source protection issues are an emerging and significant theme municipalities have to address both within their Official Plans and their Zoning By-laws. Currently Section 16 of the Planning Act provides little in the way of guidance for the content of Official Plans concerning groundwater protection. Section 34 of the Act provides very clear authority to local municipalities to address groundwater issues within the Zoning By-law, by restricting private property rights for land or buildings in sensitive ground water recharge areas. The Provincial Policy Statement also addresses protecting sensitive ground water recharge and discharge areas.

The Province of Ontario has issued the White Paper on Watershed-based Source Protection Planning, a commitment to implementing the recommendations of the O'Connor Report (Walkerton Inquiry). The approach suggested by the White Paper would be to set up a Source Protection Planning Committee, assess sensitive areas, assess potential contamination areas and develop a Source Protection Plan that should direct policy within official or watershed plans.

Some ground water issues that should be addressed or accommodated within the Official Plan policies are:

- aquifer vulnerabilities, recharge and discharge areas;
- well head protection areas;
- groundwater influenced by surface water;
- groundwater budgets and base flow protection; and,
- groundwater protection programs.

A study is currently being undertaken by the City to define groundwater areas and issues more completely.

Roads/Servicing

Recently the City adopted a policy dealing with the assumption of private roadways. There are private roadways in the waterfront areas whose owners would like the City to assume them. This issue highlights the connection between rural and shoreline/waterfront issues arising from increasing road related costs in the rural areas due to additional development. While the road assumption policy establishes criteria for assuming private roadways, this issue should be addressed by the new Official Plan in a manner that relates the City's preferred settlement pattern, the costs of road maintenance, and the ownership of roads.

3.2 Issues Summary - Shoreline/Waterfront

Based on a review of current trends and conditions, supplemented by public input, the following issues require a policy response or direction for the new Official Plan:

1. Water Quality Issues
 - Inspection of septic systems
 - Shoreline remediation
 - Lake carrying capacity
2. Implementation Issues
 - Seasonal uses
 - Lake Stewardship

The most important policy objective in waterfront development should be to retain those aspects of the environment that make waterfront living and recreation unique. The single most significant factor in achieving this goal is the maintenance of water quality, hence the focus on water quality issues. Septic system inspection, monitoring of lake water quality, shoreline remediation and preservation, and limitations on permanent use of properties are all topics both raised by the public and investigated as part of the work on this report.

4.0 WATER QUALITY - POLICY APPROACHES AND IMPLEMENTATION

4.1 Inspection of Septic Systems

Given the amount of existing development in the City, the potential impact of septic systems on water quality makes septic system inspection one of the primary unserved development issues in the City. Policies or programs influencing the inspection of septic systems are equally as important as policies governing new development.

It is in the public interest to encourage the upgrading of sewage systems wherever possible. It is recognized that in many areas along the shoreline, especially the older seasonal areas, individual septic systems may no longer be functioning effectively and need to be upgraded or replaced. This is in part due to the age of the existing systems and in part to the use for which the systems were designed.

Many of the septic systems that abut shorelines were designed for seasonal uses some years ago and were not intended to accommodate long term occupancy and urban conveniences such as dishwashers and laundry machines. Failing septic systems impact upon water quality along the shoreline and have implications for greater public health issues. In the City of Greater Sudbury, the Sudbury and District Health Unit is responsible for the inspection of existing/old septic systems. At the present time, the Unit only conducts site visits when they receive a complaint.

There are several existing options available to the municipality to ensure water quality through a program of septic system inspections. These can include one or more of the following initiatives:

- Require the upgrading of older sewage systems prior to the issuance of any building permit;
- Encourage the upgrading of the sewage systems when properties are sold; and,
- Initiate a program of re-inspection in key areas.

Sewage system upgrades at time of building permit

Typically, comments on the suitability of an existing sewage disposal system are required when additional plumbing is being added, or when an addition/deck will be located close to an existing tile field. One option to consider is a policy that any expansion to the habitable living area or any improvement to the plumbing should be conditional upon the sewage system meeting current standards. This requirement could also be included in the Zoning By-law. This would ensure that the requirement became 'applicable law' and was enforced by the Building Department requiring certification from the Health Unit. The rationale for requiring an upgrade (if required) when a dwelling is expanded is that the probability is high that the expanded/improved dwelling will be used on a permanent basis after the improvement.

Encourage Upgrading at Time of Property Sale

Identifying deficient sewage disposal systems and upgrading may take place through property sales as a requirement of a lending institution for insurance purposes. However, this issue is different case-by-case due to the variations in the ability to finance and purchase private property, and the ability of the agencies involved to waive requirements. In short, relying on these transactions to correct sewage deficiencies on their own is not a solution.

Alternatively, prospective purchasers of shoreline properties can be made aware by the City that the Zoning By-law will preclude any expansion to the dwelling unless it can be shown that the sewage system complies with current standards. It is our experience that many purchasers will require confirmation that the sewage system conforms with current standards as a condition of their purchase. In addition, if existing property owners were notified of the City's intent, many may obtain this confirmation before they list their properties for sale. This will assist in ensuring that septic systems are upgraded.

Initiate a Re-Inspection Program in Key Areas

The establishment of a re-inspection program is a long-term ongoing commitment. This initiative has already been identified in the City as one of the Greater Sudbury Lake Improvement Advisory Panel's (GSLIAP) goals. The program can be initiated by prioritizing and inspecting the high risk properties first, or the municipality can begin the program by targeting specific areas of the municipality.

It is only possible to inspect a limited number of systems per year. The Township of the Archipelago completed its first year of a similar program and reported that it achieved its target of 400 properties over a summer. At that rate, it will take approximately 8 to 10 years to

complete the initial round of inspections. The Township of Georgian Bay has set itself a similar target of 300 properties per year. The Township of Lake-of-Bays is a bit more ambitious hoping to inspect 1000 properties per year. Each of these municipalities has a total of approximately 4000 to 6000 properties to inspect. There are approximately 3,000 properties on lakes in Sudbury to inspect. Once all properties have been inspected, the program will be less intensive and become more of a monitoring and maintenance process. The program will need to continue as septic systems continue to age.

Staffing for re-inspection programs vary by municipality. The Township of the Archipelago relied on summer students to run the re-inspection program while the Township of Lake-of-Bays is weighing the merits of retaining a private contractor or having municipal staff be responsible for the program. Staff in Lake-of-Bays reported that in order to run the program "In-house", the municipality would be solely responsible for this program.

If after inspecting a property, the inspector identifies a deficiency in the existing septic system that has an impact on public health it must be acted on. There are issues of liability to the municipality if the municipality is aware of a problem and permits it to continue. This is especially true given that faulty septic systems can have implications on overall public health.

The municipalities reported using a "soft compliance" approach to enforcement. This involved sending a letter to the property owner advising the owner of the defect along with what is required to fix the defect. A defect could be a minor repair, a lack of information, or a fairly significant repair. In the case where the municipality is lacking information, or was unable to properly inspect the septic system because of an accessibility issue, the property owner must contact the Chief Building Official and provide that information to the municipality. The Township of the Archipelago reported that of the 400 properties inspected, 60 percent required letters to advise of defects in the existing systems. Most of the reported defects were relatively minor or reflected a lack of information.

Staff at the Township of the Archipelago reported that the re-inspection program cost an approximate total of \$17,000 in 1999 for the inspection of 400 properties. This is an average inspection cost of \$42.50 per property. The municipality was able to recover \$10,000 in permit fees. The Township of Lake-of-Bays reported that it was hopeful that it could establish a re-inspection program at a cost of \$22.00 to \$35.00 per property depending on whether the municipality retains a private contractor or is able to use municipal staff to direct the program. These figures for Lake-of-Bays do not reflect the initial start up costs for the program such as the purchase of a new staff vehicle.

Municipalities establishing a re-inspection program have stressed the importance of communication with the public. In almost all cases, staff reported that Council had strong public support from rate payer groups to address failing septic systems in the municipality. Municipalities prepared newsletters for property owners advising of the re-inspection program and encouraged voluntary participation in the program. However, it should be noted that the City is able to inspect a property without the property owner's consent.

Update the GIS Systems

The City of Greater Sudbury has files on past septic system approvals dating back to 1992. This provides the municipality with the opportunity, through the use of a Geographic Information System to create a comprehensive database. The result could be a database with complete records for each property including the characteristics of the property (ie lot size, zoning etc.) and the type and age of the existing septic system. Other municipalities that have instituted this approach report that while the end result is very effective, it does take considerable work to translate the files into one consistent format. The establishment of the database is significant because it allows the municipality to identify potential 'hot spots' that should be monitored and allows the municipality to see any links between septic systems and water quality for more active response.

Financing upgraded septic systems

Due to the expense of upgrading or installing septic systems, the City of Greater Sudbury may recognize that any program could create a financial burden for its citizens. One mechanism to reduce costs would be to apply a Community Improvement Plan to waterfront and rural areas and allow the owners to borrow to allow the upgrade of the sewage system while paying back the total or a portion of the cost over a number of years.

4.2 Shoreline Remediation/Preservation/Enhancement

A Natural Buffer is Critical for Water Quality

A relatively recent and successful series of policy initiatives in Canadian Shield municipalities aimed at minimizing the impact of development on lake water quality has involved a variety of regulations related to the maintenance of a natural zone in the first 15 metres of land adjacent to lakes. Much research has been carried out over the past two decades regarding the ability of soils in the shield to filter phosphorous. Most of these studies have determined that it is the first 20 to 30 metres of land adjacent to lakes that provide an essential natural buffer that mitigates the impacts of development on water quality, provides habitat for wildlife and birds, retains shade on the water therefore minimizing impacts of tree removal on water temperature, filters surficial water runoff as it enters the lake and, also as a consequence, offers a buffer minimizing the impacts of development from a visual perspective.

The Township of Lake of Bays has been granted permission to institute a development permit system by the Province of Ontario as one of five test cases. The Township has drafted a development permit By-law regulating the removal of vegetation, changes to grade and changes to the surface of the land in the first 15 metres of land surrounding Lake of Bays. While these policies at this time are not available to the City of Greater Sudbury, there are policies in the planning documents with zoning regulations that can ensure any future development, and in fact even existing development, would retain the first 15 to 20 metres of shoreline in a naturalized buffer adjacent to the Lakes in the City through site plan control.

Some of the more specific regulations that could be implemented with respect to the naturalized buffer would involve establishing a maximum "activity area" in relation to the frontage of the lot. It would be within this activity area that any man-made structures including docks, boathouses

and other smaller structures could be located and the width of this activity area would be specified in terms of the percentage of the lot width.

For example, the maximum activity area could be 25 percent of the lot width. Thus, on a 70 metre lot, only one quarter of that distance, or 17.5 metres could be an area with a boathouse and/or dock. The regulations would specify how the width was calculated and how the area of the activity area would be determined. Generally speaking, these regulations are consistent with the forms of development that occur on cottage lots of 65 metres of width or greater. In cottage areas with lot frontages of 50 metres or less, there are some situations in which boathouses and docks can currently exceed the maximum activity area requirements. However, these can be "grandfathered" into the By-law with the requirement that they not be made any larger. This system has to date received acceptance among cottage owners in the Muskoka areas where it has been implemented with relatively few problems.

Exhibits 3, 4 and 5 describe the "Activity Zone" concept.

4.3 Lake Carrying Capacity

Past Approaches for Determining Lake Capacity

Shoreline and waterfront policies in Ontario are perhaps the most advanced of any jurisdiction in North America. This is in part because of the historic demand for second homes on lakes on the Precambrian shield, but also very much due to the involvement of the Provincial Government beginning in the early 1970's with a program called Lakealert. This study provided two approaches to determine the lake carrying capacity - the shoreline capability calculation and the theoretical boat density calculation. Neither of these approaches is in common use today.

Also in the early 1970's, Dr. P. Dillon published the first scientific approach to determining the carrying capacity of lakes. The "Dillon Model" dealt with the issue of water quality or lake trophic quality through a series of equations that quantified how phosphorous concentrations in a lake could be determined. Once the supply of phosphorous was estimated, concentrations of phosphorous and chlorophyll as well as Secchi Disc transparencies could be predicted. These predicted amounts were then compared against measured values to determine how accurate the model was and recalibration was then conducted if necessary. The assumption was that by setting a water quality objective for either phosphorous or chlorophyll, the capacity of the lake could be determined in terms of the supply of additional man-made phosphorous affecting the lake prior to exceeding the objective. In turn, this supply was expressed in the number of shoreline lots, both permanent and seasonal, or any other type of development that would produce phosphorous impact on the lake. This approach, which did not distinguish between warm water and cold water lake trout lakes, was refined in 1986 through the Lakeshore Capacity Study. This approach is now used and recognised by the Ministry of Environment, other resource managers and many municipalities. The Dillon Model is currently used by the Ministry of the Environment in the City of Greater Sudbury.

Municipalities Have Been Relying on the MOE to Determine Capacity

Most municipalities have not shown lake specific capacities in their planning documents due to the cost. An exception is the District Municipality of Muskoka where capacities for all lakes

were determined. In most municipalities capacity limits can be identified based on a standard surface area per dwelling requirement, sometimes with a requirement that for lakes approaching capacity, additional work related to water quality is recommended. Other municipalities have simply reproduced lists provided by the Province of at capacity lakes with the requirement that no additional development can occur. Generally, in the absence of municipally-generated lake capacity information, the Province has encouraged or required municipalities to include the Provincial approach to development on lake trout lakes in their Official Plans.

Section 8.28 of the City's Official Plan prohibits new waterfront development in areas with environmental constraints/sensitivity unless studies are conducted to prove that the development will not impact the environment of the lakes. These environmental constraints include lake trout lakes under 500 acres and fish spawning areas. In the City of Greater Sudbury, environmental sensitivity policy is found in Section 9.12, 9.13 and 9.15 of the Official Plan. The Lake Trout Lakes identified by this policy are Capreol, Little Panache, Ironside, Morgan, Waddell and Kumska, two of which are considered Priority Lakes in the City. Development on these lakes must be consistent with the criteria in the Ministry of Natural Resources Sensitive Areas Report. Additional lake trout lakes are Fairbanks, Kukagami, Panache, Wanapitei, Windy, Nelson and Fraleck.

The City has traditionally relied on the Ministry of Environment to establish water quality monitoring and set up pollution abatement and controls (Section 8.30). All proponents of shoreline development must demonstrate that a proposal shall not "adversely affect" the environment. In many cases, the main criteria of environmental impact is the phosphorous count in lakes as an indicator of the introduction of additional nutrients into the aquatic environment and potential for harm. Currently the Ministry has prohibited new development on MacFarlane and Whitewater Lakes due to their sensitivity. Additional lakes are noted for 'caution' on further development, including, but not limited to: Fairbanks, Fraleck, Little Panache, Long Lake, Perch, Red Deer, Simon and Ramsey. Most of these do have additional lot potential on the shore.

However, there is another potential policy approach to this issue that is not dependent on water quality data, an approach that can be taken to remove the sole reliance of lake capacity policy on data.

A Planning Option for Lake Capacity

New approaches to lake capacity are being taken. It is noted by Dr. Neil Hutchinson of Gartner Lee Limited that lakes/soils on the Canadian Shield are very acidic and that phosphorous is not particularly mobile from septic systems to lake water, thus phosphorous counts should not be the only basis for planning controls. Sewage treatment technology is also being improved which may decrease phosphorous transfer even more. Due to this potential inaccuracy of phosphorous sampling, an Ontario Municipal Board policy defence for lake capacity based on this type of sampling is not generally supported if attempting to prohibit new development. The exception has been for Lake Trout Lakes where development restrictions based on water quality sampling has generally been upheld.

A more defensible approach to lake capacity can be considered as basic planning controls. The basic planning control recognizes the individual reasons for purchasing lakefront development, such as enjoyment of a natural amenity without crowding and the undeveloped character of

lakes. This approach establishes controls to retain a vegetated buffer around the lake with development setbacks. It may require large waterfront lots with minimum frontages of 200 feet for example, and larger lot sizes for inlets or islands (400 to 600 feet).

This approach also involves active programs to upgrade sewage systems around the lakeshore and sampling of the lake water quality as a support to the basic planning controls. It also encourages shoreline naturalization where possible and avoids 'urbanizing' lakes. Planning controls through site plan approval and zoning regulations can also address this issue.

4.4 Seasonal and Permanent Waterfront Uses

The "Season" for Seasonal Uses is Growing Longer

As the demographics of the population and the nature of employment change in Ontario and Sudbury, seasonal residential uses in shoreline areas are increasingly being occupied for longer periods of the year. This results in changes to the nature and intensity of the uses along the shoreline. As the longer term occupancy of dwellings occurs, there are greater impacts on the ability of the older septic systems in the area to handle effluent. This also has implications on the demand for municipal services. It is the policy framework in the Official Plan and Zoning By-law that regulates the nature of the occupancy.

There are typically two issues of importance in considering the appropriateness of seasonal versus permanent residential uses:

- potential environmental impacts; and
- requirements for municipal services.

Both of these issues have been addressed by a number of municipalities with extensive shoreline development in recent years. Environmental impacts potentially occur due to the inadequacy of private sewage disposal systems to accommodate permanent usage. Demand for additional municipal services occurs typically when permanent residents paying full municipal taxes raise concerns about the lack of services, most often road maintenance.

Seasonal Zoning is Being Replaced

Shoreline properties in the City of Greater Sudbury are designated for seasonal and/or permanent residential use in the Official Plan for the Sudbury Planning Area and similarly zoned. In most shoreline areas only seasonal use of a dwelling is permitted. Conversion to permanent use is permitted subject to certain criteria, and requires a rezoning.

This approach to regulating residential conversion was common in Ontario several years ago. However, over the past decade, most municipalities with extensive shorelines have now moved away from controlling the nature of occupancy through zoning. Many municipalities in the Districts of Muskoka and Parry Sound have replaced 'Seasonal Residential zones' with 'Waterfront Zones' or simply 'Residential Zones' that permit detached dwellings and accessory uses. These waterfront zones do not distinguish between seasonal or permanent occupation and typically require that new lots are larger and have more frontage. The table below provides a sample of the shoreline requirements in other municipalities.

Municipality	Permitted Uses	Minimum Lot Area	Minimum Frontage
Georgian Bay (Twp)	Detached dwelling	0.4 to 1.4 ha depending on zone	60 to 210 metres depending on zone
Archipelago (Twp)	Detached dwelling	.8 to 4 ha	100 metres
Muskoka Lakes (Twp)	Detached dwelling	.4 to 2 ha	60 metres
North Bay	Detached dwelling	.4 ha	61 metres
Lake of Bays	Detached dwelling	.4 ha	60 metres
City of Greater Sudbury*	Seasonal dwelling	.4 ha (1 acre)	45 metres

* With the exception of Fairbanks Lake

Some municipalities have been moving away from 'Seasonal Residential' designations and zones because:

- *Many 'cottages' are now used more frequently and many, if not all, of the new 'cottages' being built are being designed for use as a permanent dwelling.* The character of shoreline areas has changed dramatically in the past 10 to 15 years as a result of higher demand for year round occupancy. This is in part due to changes in the lifestyle of retirees and in part to an increased effort by municipalities in traditionally recreational areas to attract four season tourism. Policy frameworks written to regulate seasonal residential dwellings were not crafted to address the changing nature of this use and as a result, are no longer an effective means to managing shoreline residential uses.
- *Policies regulating seasonal dwellings are difficult or impossible to enforce.* In order to apply regulations to a seasonal use, the municipality must be able to identify what constitutes a seasonal use. The Planning Act provides the municipality with the authority to regulate the type of use but not the occupancy of that use. As a result, the existing policies for seasonal residential uses are impossible to enforce. In many municipalities, shoreline residential uses are now being held to a higher standard that anticipates potential year round or permanent occupancy in order to ensure that issues of public health and the establishment of effective services can be planned for.

Many "Seasonal" Dwellings are Used Year Round Without Conversion

At the present time in Sudbury, applications for conversion can be triggered when a property is sold or when a property owner wishes to reside in the dwelling on a full-time basis. In the past decade staff were aware of only one application to convert seasonal to permanent residential use. In other jurisdictions, property owners obtain the zoning to ensure that they can live in their dwelling in the future, when they choose to retire. In other jurisdictions, approval of the adequacy of the sewage system is required. Since the process involves rezoning, a formal public meeting under the Planning Act has to be held. It is commonly understood that on many lakes, including those in Sudbury, many "seasonal dwellings" are used on a permanent or semi-permanent basis without the rezoning approval.

The conversion process works when property owners voluntarily decide to submit an application. However, the process is currently based on the concept that it is 'illegal' to occupy a residence on a 'full-time' basis. Enforcing a by-law on the basis of occupancy is difficult, since the definition of seasonal is very subjective. For this reason, seasonal zoning restrictions are seldom enforced.

A New Approach to Conversion is Being Implemented

A successful approach to the regulation of conversion of seasonal to permanent dwellings is currently in effect in Tay Township and several other jurisdictions. In Tay, it was determined that the only criteria for conversion to permanent use would be the conformity of the dwelling to building code requirements and the adequacy of the septic system. All areas in the municipality with a seasonal zoning restriction were rezoned to permit permanent uses with an "H" symbol (holding). The criteria for the removal of the holding was confirmation by the chief building official of the building standards and of the adequacy of the septic system. In this way, should an owner wish to sell the dwelling for permanent use, a formal rezoning application was not needed but rather only the removal of the holding zone.

This has proven to be extremely successful in Tay Township and the majority of property owners who have transacted their property over that time have in fact obtained these approvals. The costs are relatively low and in the case of Tay Township, a period of one year was allowed when an individual could obtain the permission for permanent use without any application fee paid to the Municipality.

Other Considerations for the City of Greater Sudbury

Other considerations for the issue of seasonal and permanent use in the City of Greater Sudbury include:

- demands by residents for municipal services
- the character of the lake including density, vegetative cover and setbacks; and,
- proximity of resource activity.

As approximately two percent of the population of the City currently owns a seasonal dwelling and the trend is increasing, policy discussions should address these factors as well. Current issues over the upgrading of private roads highlight the need for a clear policy direction.

4.5 Role of Lake Plans

Lake planning is a community-based approach for lake management as an alternative to or in support of the purely scientific approach of sampling and water quality described earlier in this report. In his thesis *"Science, Community Empowerment and Planning: The Environment of a Resort Community"*, Michael Logan describes lake planning:

"Lake planning encourages residents around a particular lake to envision the future of their lake community (including quality of the water), and then work with local governments to implement their ideas using by-laws and secondary plan."
(p. 1)

Lake planning involves the lake community in determining the vision for the lake and gives them the tools, the data and the professional guidance, to apply to the development policy of the lake. It essentially engages the people who affect the lake the most and builds awareness, consensus, and commitment to water quality.

The following are two typical policy approaches to the preparation of more detailed lake plans, both of which could be used within the Community Improvement program. The first, Lake Plans, are done independently of the Official Plan and can be adopted by Council as an amendment and tool to be used by the municipality. The second follows the lead of the Official Plan and is primarily a tool for the local lake community and stakeholders. Depending on the nature and intent of the Lake Plan, Community Improvement Plans can be used as an implementation mechanism.

Lake Plans/Policy Framework

1. Specific lake plans may be prepared for individual lakes in order to identify, reflect and respond to the character and physical capabilities of an individual water body and shoreline community.
2. Specific lake plans may be implemented as amendments to the Official Plan.
3. It is the intent that lake plans will identify the limits to development on that particular lake based on various factors including recreational carrying capacity. Recreational carrying capacity refers to the point at which the shoreline facilities, and the recreational activities which they generate, are in balance with the ability of the water body to withstand the impact.
4. The following should be identified and addressed in a specific lake plan:
 - location in relation to the watershed;
 - drainage basin and related watercourses;
 - size and shape of the lake;
 - distinct areas or neighbourhoods on larger lakes;
 - number and location of islands and narrow water bodies;
 - topography, landscape, shoreline features and hazards;
 - shoreline constraints and influences;
 - natural heritage and habitat;
 - allocation of water quality capacity;
 - cultural heritage, built heritage, and historic development;
 - existing land uses;
 - access;
 - open space, recreation areas and trails;
 - natural areas and landscape features to be preserved;
 - definition of character to be preserved; and
 - specific policies and standards for development.

Lake Stewardship Plans and Strategies/Policy Framework

1. The Official Plan represents in part, Council's policy for properly managing land use and development in the shoreline areas. However, Council can encourage the preparation of Lake Stewardship Plans and Strategies to articulate lake specific principles and goals outlined in the Official Plan.
2. Council supports the preparation of Lake Stewardship Plans and Strategies that assess issues important to lake communities. Such strategies could establish monitoring programs and/or remediation programs to be primarily implemented by local residents and stakeholders such as the City, the Conservation Authority and the Province.
3. The Vision, Principles and policy framework of the Official Plan demonstrate the City's commitment to managing its lakes and therefore it would be a policy of the Official Plan that Lake Stewardship Plans or Strategies serve as a tool to establish/improve good land stewardship practices amongst those who live in lake communities.
4. Council would consider amendments to the Official Plan or zoning by-law where Lake Stewardship Plans or Strategies reveal new planning issues not already addressed. Where all or part of a Lake Stewardship Plan or Strategy is proposed to be incorporated by an amendment to the Official Plan and/or the zoning by-law, it must be consistent with the Vision and Principles of the City of Greater Sudbury Official Plan as well as the Objectives for the Shoreline designation.

An example of policies in an existing Lake Plan in the City has been included in this document (Excerpts, City of Greater Sudbury's Fairbanks Lake Secondary Plan, Appendix B).

5.0 SEASONAL DWELLINGS TO FACILITATE ECONOMIC DEVELOPMENT

In 1977 approximately six percent of households in Ontario owned a cottage or seasonal dwelling. That number climbed slowly to seven percent by 1999. In the last three years the number has risen another percentage point to eight percent of all households. An aging population, low interest rates, volatile stock market and increased United States demand are all reasons why cottage ownership will increase in the future. With relatively few lake development opportunities in the Muskoka and Haliburton areas to the south, there are potential new markets for second homes in the Parry Sound and Sudbury area.

Both the Canadian and the American markets could have some of the demand for second homes met in waterfront areas in the City of Greater Sudbury. At the present time the state of Michigan is the fourth largest supplier of second homes in the United States. Florida ranks first with close to 500,000 second homes with California, Michigan and New York all close to the 250,000 mark.

Demographic and social factors suggest that the demand for second homes across North America will be very strong over the next several decades as more than \$288 billion per year in the United States and close to \$15 billion per year in Canada is expected to be transferred between generations. Previous studies have shown that a significant proportion of inherited wealth is usually invested in real estate. Assuming 25 percent is invested in real estate, in Canada alone, \$3.6 billion per year will be invested in real estate of one form or another.

The total number of cottages constructed in the Haliburton, Muskoka, Parry Sound and Sudbury district over the past 20 years has been approximately 12,000 units. These have been primarily in the Parry Sound District, 8,400 units alone, while the District of Muskoka at 1,600 units and Haliburton at 800 units, have relatively few development opportunities remaining. Over the same period of time, the Region of Sudbury had 1,100 second homes constructed.

The "baby boom" population is reaching middle age (45-65) which has traditionally been the years when most people purchase cottages. One method of estimating future demand for second homes in the Ontario market is to analyse the average age at which the purchase of a second home occurs, relate that to the past proportion of people of that age who purchased a second home, and then use that ratio to forecast into the future. Over the next 20 years 3.5 million people in Ontario are expected to turn 45, which is 23 percent more than turned that age over the last 20 years. Using the 23 percent as an indicator, the demand in Sudbury would be for 1,350 new second homes (23 percent higher).

In summary, two methods of estimating demand for second homes result in the following:

- As a percentage of growth in the City - 0 to 960 lots (based on in-migration population scenario, see page 8); and,
- As a reflection of demographic change, a 23 percent increase - 1,350 lots.

At the present time, of the approximately 1,200 properties assessed as second homes on the 47 priority lakes, 83 percent are owned by residents of the City. Thus, 17 percent of these dwellings are owned by individuals in other parts of Northern Ontario (three percent), Southern Ontario (10 percent), the United States (three percent) and other parts of Canada (one percent).

Assuming a doubling of demand from markets outside Sudbury, there would be the market for approximately 200 additional second home properties from residents outside Sudbury over the next twenty years, or ten per year. Assessment would grow for the City and, when the multiplier effect is applied, the seasonal population could result in economic growth for the City of Greater Sudbury.

APPENDICES

APPENDIX A: PUBLIC INPUT

Public Input

Public Open House sessions were held in Hamner, Azilda and Sudbury between March 29 and 31st. These Open House sessions provided information about the Waterfront and Rural, Agricultural, Stormwater and Natural Heritage Studies. They provided an opportunity for the public to attend, learn and discuss the issues with Study representatives, take information home and also to give input through discussion or submission of an issue-scoping exit survey. The City also distributed questionnaires to the Lake Stewardship Groups who were asked to respond to questions on what the most important issues were for their lake and land. The questionnaire summaries are attached in Appendix B.

The survey responses were received primarily from lakefront groups due to the direct circulation of the questionnaire to these stakeholders.

There were 177 questionnaires returned to the City. Two of these were from the Open House sessions, though some of the e-mailed responses may have resulted from the discussions with representatives at the Open Houses. One survey did not identify a lake and one survey was directly related to non-lake associated rural development.

With over 31 Lake Stewardship Groups identified by the City, approximately two thirds were represented in the survey responses. These lakes are as follows:

- Little Lake Panache (27)
- Valley East - Joe, Hanmer, Frenchman, Dixon Lakes (26)
- Windy Lake (24)
- Nepahwin (15)
- Vermillion (15)
- Fairbanks (15)
- Ella (8)
- Makada (7)
- Whitewater (6)
- Big Beaver (5)
- (Big) Lake Panache (4)
- Minnow Lake (4)
- Little Beaver (3)
- Vermillion River/Lake Wabugishik/Kusk Lake (5)
- Simon (1)
- Jake (1)
- McFarlane/Richard (1)
- Nelson (1)
- No lake identified (4)

Though the issues are broken down into most frequently mentioned issues by lake, common themes emerged from all the questionnaires. These are:

- Inspection of septic systems is a common concern/desire;
- Concern with the amounts of development allowed on the lakes and the protection of the natural environment;
- Pollution from point and non-point sources and water quality; and,
- More control over recreational use (summer and winter) of the lakes.

Additional comments from the Open Houses related to the issues noted in the survey summaries but also reflected opinions that conversions are a significant issue and that there is increasing concern about mining impacts on lakes.

It should be noted that a variety of issues were identified by the lake groups, as well as some lake-specific suggestions for mitigation of impacts, however the following is a summary of the most frequently stated concerns by lake:

Little Lake Penache

The main issues for the local stewardship group was the inspection of septic systems, followed by the protection of the natural environment, limiting development and regulating motorboats/personal watercraft.

Valley East - Joe, Hamner, Frenchman and Dixon Lakes

Joe Lake was the topic of the majority of the questionnaires. The main issue for this lake is the effect of mining/exploration, which is in close proximity to the lake, on water quality, the natural environment and health. Further main issues were the inspection of septic systems and limiting the amount of development.

Windy Lake

The main issue for the Windy Lake group was the control of winter users on the lake. This includes limiting vehicle access in the winter and the pollution of the lake from irresponsible ice hut users and lack of portable toilets for human waste. Other priority issues were limiting development, the inspection of septic systems, the preservation of the natural environment and the impact and operational practices of Wallbridge Mining (located on the lake).

Lake Nepahwin

The primary issue for the survey respondents was the control or ban of motor boats on the lake. Other issues were the inspection of septic systems and the preservation of the natural environment and the control of run-off around the lake.

Vermilion Lake

Controlling winter use of the lake was the main issue for the Vermilion Lake landowners. Inspection of septic systems, protecting the natural environment, controlling boating and limiting the amount of development, and weed control were also mentioned at least five times each.

Fairbanks Lake

The inspection of septic systems and sauna wastewater streams was the main issue for this group. Also a primary issue was the conversion of inappropriate buildings to living quarters (such as boathouses to residence or sauna). Another important item was the desire to keep the Fairbanks Lake Secondary Plan through this process, and the protection of the natural environment.

Ella Lake

The main issue was the backing of the Vermillion River into Ella Lake and the increased pollution (sewage related) and algae resulting from the spring flooding.

Black Lake (Makada)

Water quality and pollution are issues, in addition to the inspection of septic systems, saunas and outhouses. The desire to maintain the quality of the natural environment was also expressed.

Whitewater Lake

The main issue for this group is the effect of fertilizers/pesticides and other chemicals on the lake and water quality. There was also mention that inspection of septic systems and the City lift station pump failures (sewage spills) were also of primary importance.

Big Beaver Lake

Winter use pollution, algae and other types of pollution are important.

(Big) Lake Panache

The City should provide water testing, sewage pump-out and other services for lake residents. Additional issues include banning further development, policing recreational users and prohibiting the enlargement of Provincial Parks in the City.

St. Charles Lake

The main issues is limiting of development and the feeling that there is enough or that conversion needs to be controlled. There are also water quality issues and the feeling that boats need to be regulated on the water due to its small/shallow nature.

Minnow Lake

The main issues are boating controls, natural environment, and non-point source pollution from the variety of surrounding land uses.

Little Beaver Lake

Inspection of septic systems, winter use pollution, algae and decreasing lake size were all noted as issues.

Lake Wabagishik/Vermillion River/Kusk Lake

The main issue was pollution from sewage, run-off of pesticides/fertilizers and resulting water quality issues.

Simon Lake

The lake is improving with the new treatment plant but the City should stop salting/sanding the roads as it is ending up in the lake.

Jake Lake

A beaver dam is blocking water and flooding may result if it breaks.

MacFarlane/Richard Lake

Inspection of septic systems, limit development and the noise from boats.

Nelson Lake

Water quality and preservation of habitat.

General

Control pollution, upgrade existing septic systems, monitor water quality and provide information to residents.

Rural Residential

The Ministry of Environment should more strictly control agricultural chemical application. Severances to build housing should not be allowed because only big farms are profitable and the nature of the rural community is lost. Roadways in rural areas are an issue because farmers cannot survive without a second job and must drive to and from work.

APPENDIX B: EXCERPTS: FAIRBANKS LAKE SECONDARY PLAN

LAND USE POLICIES

"Shoreline Protection

- 2.2 Council supports the Ministry of Natural Resources in designating Fairbank Lake as a lake-trout lake for lake management purposes and will cooperate with the Ministry of the Environment and the Ministry of Natural Resources in protecting its water quality and aquatic habitat by consulting these Ministries in reviewing development proposals. Specifically:
- a. The wet beach and littoral zone vegetation shall be protected from modifications and disturbances. All changes made to beaches and shores are subject to the approval of the Ministry of Natural Resources;
 - b. During site preparation and construction, disturbances to backshore vegetation and soil shall be kept to a minimum. Erosion control measures shall be implemented by the owner to prevent silt and debris from entering the lake;
 - c. As fish spawning grounds have not yet been individually identified, additional development restrictions may be imposed for their protection in the severance or subdivision approval process on a case-by-case basis. Once fish spawning areas are identified by the Ministry of Natural Resources, such information will be incorporated into this Plan and indicated on Map A as Sensitive Areas by amendment to this Plan.

Seasonal Development District

- 2.3 A Seasonal Development District is designated along the shorelines of Fairbank Lake, as indicated on Map A. The existing lots and parcels within this District are mostly occupied by seasonal dwellings. Some vacant lots and parcels still remain. The following policies shall apply to this area:
- a. Seasonal dwellings shall be permitted on existing registered waterfront lots or parcels legally created and held under separate ownership at the time of adoption of this Plan by Council, provided that:
 - i) the waterfront lot or parcel also fronts on a public road which is maintained seasonally or has public water access;
 - ii) approval is obtained from the Sudbury and District Health Unit for the location and operation of a private sewage disposal system pursuant to regulations of the Environmental Protection Act prior to the issuance of a building permit. For the preservation of lake water quality, all new or replacement field beds shall have a minimum setback of 30 metres from the highwater mark;
 - iii) all new main or accessory buildings, with the exception of boathouses and docks, shall have a minimum setback of 25 metres from the highwater mark;
 - iv) municipal services need not be extended beyond what is currently provided;

- b. *New lots for seasonal dwellings may be created either by consent or plan of subdivision from existing parcels of land abutting the lake but having access only by a seasonally maintained public road or by public docking facilities, provided that:*
- i) *notwithstanding Section 3.17 of the official Plan, the lot created and the lot remaining must have a lot size of not less than 0.8 hectare and a minimum water frontage of 80 metres;*
 - iii) *an adequate supply of potable water is proven to the satisfaction of the Regional Engineer prior to the issuance of a final certificate by the Committee of Adjustment or final approval of a plan of subdivision;*
 - iii) *approval is obtained from the Sudbury and District Health Unit for the operation and location of a private sewage disposal system pursuant to regulations of the Environmental Protection Act prior to the issuance of a final certificate by the Committee of Adjustment or final approval of a plan of subdivision;*
 - iv) *all setback requirements stipulated under clauses ii) and iii) of subsection a. can be satisfied;*
 - v) *it is not constrained by environmental hazards such as steep slopes, swamps, or a designated flood plain;*
 - vi) *the new lot would not have a negative impact on any identified fish spawning ground;*
 - vii) *a No Demand for Services Agreement is registered against the title where access is obtained from a seasonally maintained road;*
- c. i) *Notwithstanding subsection b., parts of Parcel 8243, 8244 and 8973, Lots 1-3, Concession I, Township of Trill, and parts of Parcel 8240 in Lot 2, Concession VI, Township of Drury, may be subdivided to recognize the existing seasonal dwellings ' that cannot meet the lot size and frontage requirements of this Plan, provided that all other conditions regarding seasonal development can be met;*
- ii) *notwithstanding the requirements of clause i) of subsection b., four (4) new lots may be created on parcel 26859 "A", Lot 3, Concession I, Township of Trill, provided that all other conditions regarding seasonal development can be met; (1985 OMB)*
- d. *Notwithstanding the provisions of subsection b., no further severances or subdivisions shall be permitted on the islands of Fairbank Lake;*

Conversion

- e. *Subject to rezoning, conversions of existing seasonal dwellings into permanent dwellings are permitted, provided that:*
- i) *the lot fronts on a public road which is maintained year-round;*
 - ii) *the existing lot has a minimum size of 0.8 ha and water frontage of 80 metres, and meets all other requirements of the Zoning By-law for permanent residential use;*
 - iii) *the lot is suitable for private water and sewer systems for permanent use as approved by the Sudbury and District Health Unit;*

- iv) *Building Code Standards for permanent dwellings are met;*
- v) *the lot does not lie within a designated flood plain;*
- vi) *Ministry of the Environment is satisfied that the conversion would not have long-term effects on the existing trophic level of Fairbank Lake;*

Existing Resort Commercial

- 2.4 a. *The existing resort commercial establishment .located on Parcel 8095, Lot 10, Concession I, Township of Fairbank and on Parcel 7288, Lot 10, Concession VT, Township of Denison, shall be recognized as an existing Resort Commercial use and will be zoned to permit such a use in the Zoning By-law. It shall permit the existing seasonal recreational campground of 100 campsites on Parcel 7288 and the existing 10 housekeeping cottages, confectionary store, snack bar, marina, and one dwelling for the owner/operator on Parcel 8095. The foregoing shall not exclude additional uses normally accessory or ancillary to commercial operations of a similar nature, including an administration office and maintenance buildings, and recreational facilities for the use of campers and cottagers. The creation of additional campsites and expansion of the operation, however, shall not be permitted except by an amendment to the Zoning By-law. In considering such an application, Council shall evaluate, among other factors, the impact of additional campsites on the water quality of Skill Lake, the impact of additional boats and campers on both Fairbank Lake and Skill Lake, and the impact on fisheries habitat on both of these lakes;*
- b. *The existing resort commercial establishment located on Parcel 9738, Lot 12, Concession VI, Township of Denison, shall be recognized as an existing Resort Commercial use and will be zoned to permit such a use in the Zoning By-law. It shall be limited to its existing capacity of 5 cottages, boat and motor rental, related gas and oil sales."*