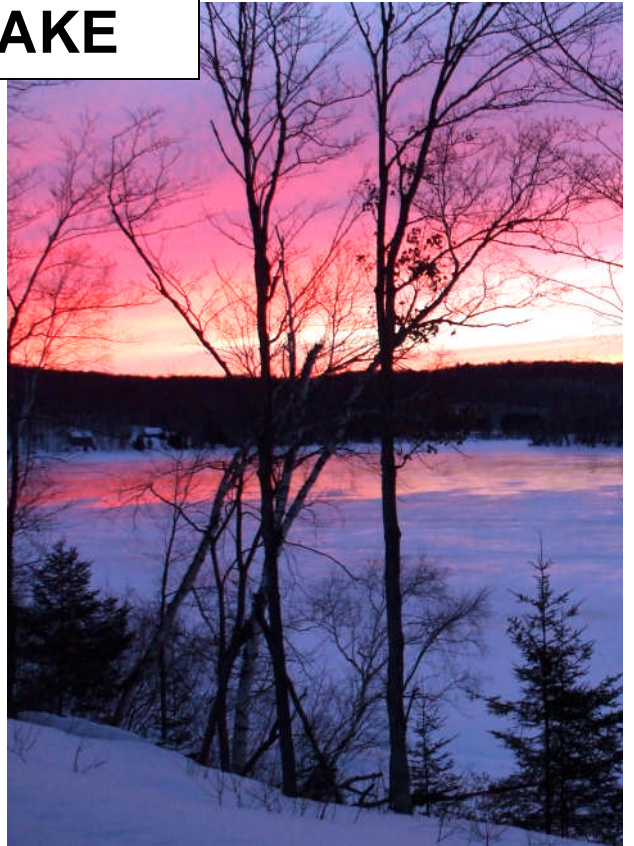




**A LAKE PLAN
for
FOX LAKE**



Stisted Ward – Town of Huntsville – District of Muskoka

A Lake Plan for Fox Lake

Prepared for the Fox Lake Association
with the assistance of Jack van der Meer
2009



“A lake plan is a process through which lake community members identify what is valued about their lake and then develop measures to help preserve these special characteristics.”

from Huntsville Lakes Council: [A Template and Manual - Developing a Lake Plan for Your Lake - April 2004](#)

Note:

In the electronic version of the Fox Lake Plan, pages 8, 22, 28, 32, 46 and 54 appear to be missing.

In the printed version, these are blank back pages of map inserts (pages 7, 21, 27, 31, 45 and 53).

For consistency between the two versions, printed and electronic, the remaining page numbers are the same, so these pages appear to be missing in the electronic version.

Photographs: Cover Page	<i>Blue Flag Iris</i> - Buck River	Ellen Fox
	<i>Great Blue Heron</i> - North End Fox Lake	Ellen Fox
	<i>Rock Island</i> – The middle of the three islands, in the South part of Fox Lake	Ellen Fox
	<i>Sunset</i> - North End Fox Lake	Gabrielle Andersen

Acknowledgements

The Lake Plan for Fox Lake has been prepared under the direction of the Fox Lake Association and the Fox Lake Planning Committee. Since the work started seriously in 2002, and has continued to 2009, there has been a “turnover” of individuals involved, as the Association Executive and Planning Committee members changed year by year. This means that many people played an important role throughout the process. Elaine Jackson deserves special mention, as she has been the constant and steady driving force behind this initiative over the years, through her various roles on the Fox Lake Association Executive, and now as the Chair of the Fox Lake Planning Committee.

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- Town of Huntsville, Planning and Geometrics Department
- Muskoka District Planning Department
- Muskoka Watershed Council
- Ontario Ministry of Natural Resources, Parry Sound District, Bracebridge Area Office
- Ontario Ministry of Environment, Lake Partner Program
- Federal Department of Fisheries and Oceans
- Huntsville Lakes Council

I also acknowledge the support provided by Kathy Hunter of the Fairy Lake Association, and David Johnstone of the Menominee Lake Association, both of whom freely shared information about their respective Lake Plans and their planning processes.

Identification of the things we value, the sharing of information, stewardship of our natural and social environment, and a cooperative association with our various partners were all important factors in the development of our Lake Plan.

These same elements will be key components of an Action Plan to implement the many recommendations of the Lake Plan for Fox Lake.

Jack van der Meer

Fox Lake

December, 2009

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Vision

Fox Lake will be a Community of neighbours who share common values, respect each others' choices, and work together to achieve common goals, in the tradition of a small cottage lake in a rural Muskoka environment.

A Community of neighbours:

- Landowners (whether year-round, seasonal, private or commercial)
- Visitors (family and friends, renters, canoe trippers, anglers, snowmobilers)
- Agencies (the District, the Town, government agencies with an interest)

sharing common values:

- Rural (natural) landscape (treed skyline, natural shoreline, night skies)
- Water Quality
- A healthy natural environment (flora, fauna, the shoreline, water)
- Health and safety

respecting each others' choices:

- Different choices about tenure (year-round residents, seasonal residents, farmers, renters, campers)
- Boating activities (canoeing, kayaking, sail boarding, cruising, water skiing, tubing, PWCs etc.)
- Resource use (nature preservation, conservation, hunting, fishing, tree harvesting)

working together to achieve common goals and objectives:

- Aesthetics (natural beauty of the lake environment; the unbroken skyline; relatively low level of development, with little visible impact along the shoreline and backshore; peace and quiet, dark night skies)
- Water quality
- Water level management
- Safety
- Community

in the tradition of a small cottage lake in a rural Muskoka environment.

1.0 Introduction

Fox Lake is one of Muskoka's many small lakes. Its waters flow from Axe Lake and Round Lake, through Buck Lake to the north, down the Buck River to Fox Lake, and then into Lake Vernon over the Hoodstown Rapids. It was likely used as a travel corridor before European contact in the area, and it was certainly used by explorers, surveyors, and early settlers for access to and through the area.

The lands around Fox Lake saw their first development as homesteads, and a small community (first known as Port Vernon, then Hoodstown) developed between Fox Lake and Lake Vernon. The hills around Fox Lake were not particularly suited to farming, and by the early 1900's, many of the homesteads were abandoned, and Hoodstown was dwindling. Timber became the primary interest in the area, with the Buck-Fox-Vernon corridor being a transportation route for logs for mills and bark for the tanning industry.

There is some early evidence that the beaches at the south end of Fox Lake were used by local people for summer visits, but Fox Lake did not have a significant recreational focus until the 1930's, when land was acquired from the timber industry on the east side of Fox Lake with the intent to establish summer cottages.

Slowly, through the 1930's, 40's and 50's, Fox Lake became a cottage lake, with a number of small summer cottages developing on the east and west sides of the lake. A camp which was established on the south end of the lake in the 1930's is now Camp Winnebago; another children's camp, Romuva, was established at the north end of Fox Lake in the 1960's. The farm at the north end of Fox Lake went fallow, and was eventually developed for shoreline lots in the 1990's.

Like most lakes in southern and central Ontario, cottage recreation has evolved. Seasons started to expand to include spring and fall cottaging, until the present time, when many "cottages" are fully insulated buildings with year-round capability, and winter weekends at the cottage are quite common. Recreational tools (or toys) have evolved too, and the canoes, rowboats and small sailing dinghies, now include a full range from canoes and kayaks to larger outboard and inboard/outboard motorboats, and occasional personal water craft (PWCs) with active water skiing and tubing vying for space with the more sedate non-power uses. There are even float planes using the lake. One year-round resident has a float plane. One cottager on the west side uses a float plane intermittently to access the cottage and Camp Winnebago is occasionally visited by float planes.

Most of the available shoreline on Fox Lake is now developed or under development. The shores of the Buck River and the Hoodstown Rapids are experiencing residential and cottage development. Several

Fox Lake - Location

Fox Lake is one of several small lakes in Muskoka. It lies within the Stisted Ward of the Town of Huntsville, in the Municipal District of Muskoka. See **"Fox Lake – Overview Map"**, page 7, at the end of Section 1.

Primary access to Fox Lake is via the District of Muskoka Road 2 (Ravenscliffe Road) from Huntsville. District of Muskoka Road 45 (Hoodstown Road) skirts the south end of Fox Lake, and the Town of Huntsville's East Fox Lake Road and West Fox Lake Road provide access to the east and west sides of Fox Lake, respectively. North Fox Lake Road (the Town of Huntsville) runs southerly from Muskoka Road 2 at the hamlet of Ilfracombe, to provide access to the north end of Fox Lake, via Rachel's Lane and Yael's Nature Walk.

backshore lots have houses on them or are available for building. Many older cottages are being upgraded into larger buildings, capable of year-round use. Several shoreline and backshore lots are now used for year-round residences.

Change: The potential for conflict is rife in a changing environment: summer cottages or year-round homes or children's camps; canoes or large powerboats or personal watercraft; natural shoreline, or cleared beaches and docks; cleared "urban-style" lots or rustic treed rural lots; traditional canoe routes and portages or private river shore development; water quality, water levels, fish, wildlife, starry night skies; the things we value can be quite different.

The Fox Lake Association has recognized that the potential for conflict exists on our lake, and has determined that a **Lake Plan** is one way of addressing this.

1.1 What Is the Lake Plan?

Purpose

The purpose of the Fox Lake Plan is: to recognize and protect the unique character of our lake; to identify a set of values of importance to the Fox Lake community; to develop specific objectives for long-term protection and maintenance of Fox Lake and its surroundings; and to identify stewardship and land use actions to protect these values.

"A lake plan is a process through which lake community members identify what is valued about their lake and then develop measures to help preserve these special characteristics."
(Huntsville Lakes Council. A Template & Manual: Developing a Lake Plan for *Your Lake*. April 2004.)

The Fox Lake Plan presents some background information about Fox Lake and the area surrounding it. It provides some Municipal context from the Official Plans of the District of Muskoka and the Town of Huntsville. It examines what present lake users value about Fox Lake and their concerns and issues. This background helps to identify the important natural environment, physical elements and social values of Fox Lake and its environs.

The Fox Lake Plan recommends a series of actions that will ensure the long-term sustainability and healthy existence of Fox Lake for future generations. These actions are designed to address the lake's health, beauty, wildlife habitat and recreational opportunities, as well as opportunities for residential and commercial development.

Other recommendations will identify stewardship approaches that the whole lake community can initiate and participate in to protect those values that are important to sustaining the high quality of life on the lake.

The Fox Lake Plan should be a valuable resource and guide for the Fox Lake community and for the Fox Lake Association.

It is intended that the Fox Lake Plan will continue to evolve over time as circumstances change, new issues occur and new information becomes available. The Plan should be reviewed for relevance periodically, and updated if necessary.

Recommendations:

1. ***The Fox Lake Association should use the Fox Lake Plan as a guide when addressing concerns about the management, use, or development within the Fox Lake area.***

2. *The Fox Lake Plan should be reviewed periodically, perhaps every five years, to ensure that it continues to address the needs of the Fox Lake community.*

1.2 The Planning Area

For the purposes of this Lake Plan, the planning area extends from the Buck Lake Dam (also known as the Campbell Dam), along the Buck River southerly to Fox Lake, all of Fox Lake to the Fox Lake Dam (also known as the Hoodstown Dam), extending to the bottom of the Hoodstown Rapids including the land surrounding this waterway, as shown on the **"Fox Lake - Overview Map"**, on page 7 at the end of this section.

1.3 Fox Lake Association

The Fox Lake Cottagers' Association was founded on August 18th, 1946 by Jack Spanner, its first President, to address issues of common interest in this small summer cottage community. Primarily, issues revolved around road and winter maintenance, absentee owner issues, camper behaviour issues with Camp Ogama (later Camp Winnebago), and boating issues as larger powerboats became more common on the lake. At first, only east shoreline residents participated in the organization. Later on, as more cottages were built on the west side of the lake, the Association reached out, and began representing owners around the whole lake.

The Fox Lake Cottagers' Association played a role in monitoring and commenting on development proposals on Fox Lake. In 1970, following the sale of the remainder of the old Mackie farm lands in the northwest corner of Fox Lake to a developer, the Fox Lake Cottagers' Association successfully opposed the development of 120 lots on the basis of environmental, safety and water quality issues on this small, land-locked lake. The Ontario Municipal Board (OMB) denied the development in 1971.

Again in 1981, the Fox Lake Cottagers' Association successfully opposed the development of 250 acres of this land at the north end of Fox Lake (part of Lots 26, 27 and 28, Concessions 11 and 12, Stisted Ward). Opposition was based on water quality and boating safety issues.

However, in 1992, new owners proposed a development of 33 lots on these lands. A subset of the Fox Lake Cottagers' Association members was formed to attempt to modify this development. The group was successful in negotiating a subdivision agreement with the developers and the Town of Huntsville in 1995, reducing development to 19 lots only. A subdivision agreement provided restrictions, registered on title for each lot, designating minimum lot sizes, specific septic requirements, building setbacks from the lake, the percentage of permitted removal of vegetation between the buildings and the waterfront and the preservation of the natural shoreline.

The Association continues to play a role in monitoring and commenting on new development and proposals to amend zoning or land use. By agreement with the Town of Huntsville, the Fox Lake Association receives notice of development proposals, zoning amendment applications and variances.

Another role of the Fox Lake Cottagers' Association was the promotion of a sense of community among the lake's property owners. The first social event sponsored by the Association was the Fox Lake Regatta, first held in 1973. This popular event, held annually on Civic Weekend, has done much to develop a sense of community around the entire lake. More recent social events, sponsored by the Association, include an annual Corn Roast on the Labour Day weekend and a Rib Fest held following the Annual General Meeting in mid-July. All of these social events are attended by large numbers of Fox Lake cottagers and permanent residents and not only provide a lot of fun, but also promote neighbourliness and a chance to meet new people.

In 2000 the **Fox Lake Cottagers' Association** changed its name to the **Fox Lake Association** to better reflect the increasing numbers of its members who were now year-round residents on the lake.

In 2006, to better address issues such as increased development pressures and other needs of its association members, the Fox Lake Association incorporated. Its purpose is as follows:

- To be a forum to allow discussion amongst property owners on Fox Lake in regard to matters of mutual interest (e.g. meetings and surveys regarding important issues, distribution of newsletters and other information of common interest)
- To be a vehicle to allow the property owners to present a common position before government bodies (e.g., to lobby the Town of Huntsville or District of Muskoka on matters of interest or to have representative status at Ontario Municipal Board hearings)
- To promote the development of the Fox Lake Community spirit through sponsorship of regular social events (e.g. Annual Regatta, Rib Fest and Corn Roast)

Incorporation allowed the Association to insure itself and its Board of Directors and Officers against liability and to better accomplish the increasingly complex workload of such an organization with the assistance of a larger board.



An aerial view of Fox Lake, from the northeast. June, 2009.

Flight: Courtesy of Bob Ahrens. Photo by Jack van der Meer

The Buck River enters from the lower left of the picture. The Foxtail is not visible from this angle. Note the three islands.

This picture shows that our lake lies in a large area of forest. At this scale, the impact of development is not obvious.



The Foxtail. June, 2009

Flight: Courtesy of Bob Ahrens. Photo by Jack van der Meer

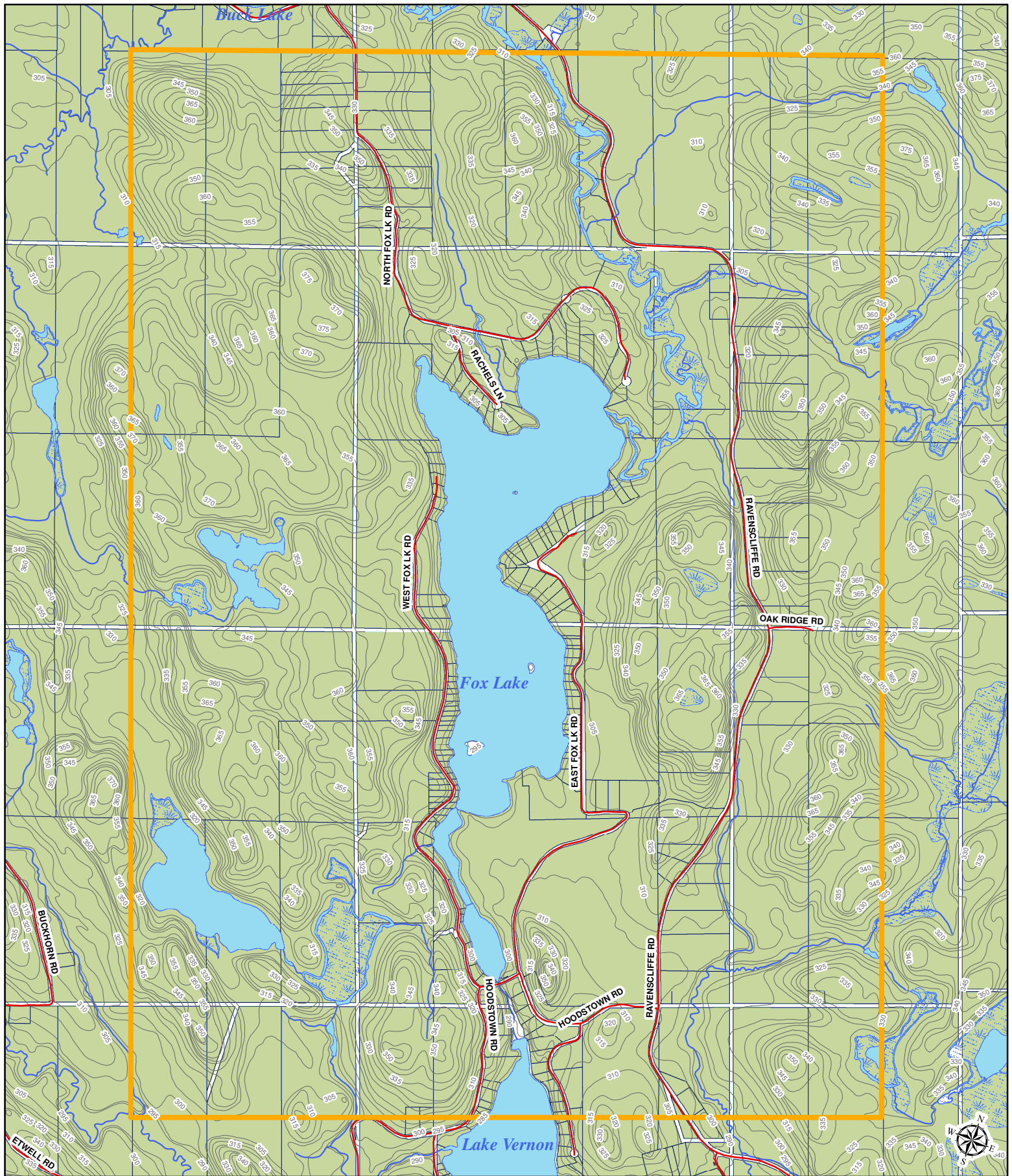
The Bridge and Hoodstown Dam are visible at the very bottom of the photo. West Fox Lake Road and East Fox Lake Road can be seen in the forest, and a bit of clearing can be seen on the Camp Winnebago property.



Fox Lake, from the South.

Flight: Courtesy of Bob Ahrens, Photo by Jack van der Meer.

The plane is just coming over the Foxtail. Camp Winnebago is visible below centre in the photo, and both East and West Fox Lake Roads can be seen. All three islands are visible, but the northern-most is just a dot in the picture.

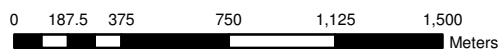


Legend

- Road
- Association Area
- Contour
- Lake
- Tributary
- Property
- Marshland

Information may not necessarily be an exact and/or current reproduction of official documents. In case of discrepancy, official documents are correct. The map is a public resource of general information and is not a plan of survey nor is it suitable for navigation. This road network information has been generated or adapted from Ontario Road Network Database. The Ontario Road Network Database is the property of the Government of Ontario and is used under licence from the Government of Ontario.

FOX LAKE - OVERVIEW MAP Town of Huntsville



UTM Zone 17 NAD 83



2.0 The Process

After receiving a mandate from the 2002 Annual General Meeting of the Fox Lake Association to pursue the preparation of a Lake Plan, a **Fox Lake Plan Committee** was established and began preliminary discussions. The Committee membership (see sidebar) was made up of volunteers with a variety of backgrounds and experiences and included cottagers and year-round residents, both long-term users and newcomers to Fox Lake.

Early discussions reviewed the experiences of other lake associations and their Lake Plan processes and determined the planning needs for Fox Lake. It was decided that, in the initial stages at least, the Fox Lake Plan Committee would proceed without acquiring the professional services of a consultant, partly due to the financial limitations of a small lake association and partly because the Committee make-up included a Planning Consultant with a wide variety of experience in Resource and Environmental Planning. It was felt that the early stages of planning could proceed using existing resources and volunteer efforts of Committee members.

It must be noted that the Fox Lake Plan Committee relied heavily on the experience of other lake associations that were further along in their Lake Planning process. As the process evolved, the Planning Committee drew freely on the direction given by the **“Template & Manual: Developing a Lake Plan for Your Lake”**, prepared by the Huntsville Lakes Council, April 2004. In addition, it recognizes the leadership role that Randy French of French Planning Services Inc. has played in defining the role of Lake Plans in Muskoka, in developing a planning process, and in leading larger lakes through this exercise.

The process to develop a Lake Plan is important in determining the end result. The Fox Lake Plan Committee recognized that the development of a Lake Plan necessarily involves the participation of a lot of different people. It was imperative to the success of the project to identify stakeholders at the outset of the process and to provide ample opportunity to comment and participate. This approach created an awareness of the issues and a long-term ownership of the projects and approaches to be implemented. Stakeholders sought for participation included:

- Those who live on or near Fox Lake and the planning area, either year-round or seasonally;
- Those who recreate on or near Fox Lake (boating, canoe tripping, angling, hunting, nature enjoyment, trail riding, and passive enjoyment of the lake environment);
- Those with a commercial interest in Fox Lake and its surrounding area (developers, camps, marinas, suppliers and outfitters);
- Those who may influence or effect the Fox Lake planning area through their adjacent or nearby activities (developers, farmers, industrial and institutional users, recreation organizations); and,
- Those governments and agencies that have a mandated interest in different aspects associated with Fox Lake, its surroundings or its communities.

LAKE PLAN COMMITTEE 2002/03

Elaine Jackson, Co-chair, year-round resident

Brad Mitchell, Co-Chair, year-round resident

Jack van der Meer, Secretary, year-round resident

Anne Lloyd, **President**, Fox Lake Association, cottager

Tiina Sumner, Vice-President, Fox Lake Association, cottager

Bernie & Gabrielle Andersen, cottagers, (now year-round residents)

Lynda Howe & John Taylor, year-round residents

In order to start the process, the Fox Lake Plan Committee held an initial meeting of major stakeholders (government agencies, commercial interests, developers, owners of adjacent large land-holdings) with the intent of identifying a number of values, interests and potential concerns or issues, as well as identifying opportunities for support and the provision of information.

The First Stakeholders' Meeting

The First Stakeholders' Meeting, in October 2002, was attended by 18 people representing 15 agencies, departments, enterprises, adjacent major landholders and Fox Lake Association members. Participants included municipal politicians, planning and by-law staff, representatives of Federal and Provincial ministries, commercial operators, major landholders and members of the Fox Lake Association and Fox Lake Plan Committee.

Many of the participants had been involved in other lake planning meetings, and many represented agencies with specific planning, resource or environmental mandates. Much of the discussion focused on developing plans for the future with common or shared values, visions and direction, emphasizing communication, cooperation, and developing a lake "profile" of values and expectations. The focus of attention was water levels and quality and environmental concerns, followed by development, security and lifestyle issues.

Participants identified the following as high value processes in developing a Lake Plan:

- the development of common values and direction (for instance, by Lake Planning, Official Plan recognition);
- regular and informative communication with all concerned;
- continued and informed involvement and participation of as many concerned individuals, groups, agencies, and other interests as possible;
- appropriate "rules" and controls such as planning and development regulations, environmental standards, use guidelines;
- monitoring, evaluation, and response to identified concerns;
- cooperation and support between groups, agencies, commercial and industrial interests, and individuals;
- participation in planning and decision making by all concerned.

Most participants were generous in their identification of roles their organizations could and would play, in offering their personal services in the preparation of a Lake Plan, and in the continued day-to-day

Attendance, Oct. 25, 2002 Stakeholders' Meeting

Organization

Representative

Huntsville Council – Mayor's Representative
Huntsville Council – Stisted Twp. Rep
Huntsville Planning Department

Councillor Brian Thompson
Councillor Bill Beatty
Terry Sararas, Manager
Nancy LeBlanc, Assistant
Michael Gooch, By-law Officer

Huntsville Bldg & By-law Dept.

Ontario Ministry of Natural Resources

Christy MacDonald, Senior
Fish and Wildlife Technical
Specialist

Ontario Provincial Police, Huntsville

Staff Sergeant Dale Gordon
Constable Harry Rawluk, CSO
Carolyn Deary

Department of Fisheries and Oceans

DuYuWanna Skidoo Club, Huntsville
Buck Lake Ilfracombe Association
Buck Lake Ilfracombe Lake Plan Comm.
Lake Vernon Environmental Committee

Don Stinson
Eric Davenport
Neil Haist, Chair
Peter McBirnie, Chair

Camp Winnebago, Fox Lake
Camp Romuva, Fox Lake
W. Fox Lake Large Tract Landholders
W. Fox Lake Large Waterfront Owners

Ben Lustig, Owner
Ray Sriubiskis, Administrator
Bob & Linda Ahrens
Ida Haavisto

Fox Lake Plan Committee Members

Elaine Jackson, Secy-Treas,
FLA & Co-Chair, Lake Plan
Committee, Bernie Andersen,
Lynda Howe, Jack van der
Meer

Discussion Leader

**Don Baker, Co-chair
Huntsville Ratepayers
Association**

identification and resolution of issues and concerns associated with Fox Lake, its environs, the life of its community, and the process of Lake Planning.

The Fox Lake Survey, Winter 2002/03

Following the First Stakeholders' meeting, the Planning Committee (with the leadership of Alix Yule) developed a 4-page community survey (see Appendix B). This was distributed to 130 landowners within the planning area and others who had expressed an interest in Fox Lake. The purpose of carrying out a survey of lake users was the collection of information and opinion, not to generate statistically significant data for analysis. Specifically, it sought information about:

- Users/owners: year-round, seasonal; length of time; on shoreline or backshore; etc.;
- Preferred activities;
- Values;
- Interests;
- Issues/Concerns;
- What strategies are appropriate to satisfy values/interests/issues/concerns.

41 responses were received to the survey (a 32% return rate) which was distributed over the winter of 2002/03. Information from this survey will be discussed in the body of this report, particularly in the discussions about values, issues and concerns.

Current Fox Lake Planning Committee

Elaine Jackson	Chair
Jim Watson	Fox Lake Association President
Rob Randall	Fox Lake Association Past Vice President
Gabrielle Andersen	Lake Resident
Gordon Finbow	Lake Resident
Ellen Fox	Lake Resident
David White	Fox Lake Steward
Jack van der Meer	Planning Consultant

The full results of this survey were part of the focus of a second meeting of Fox Lake stakeholders in Spring, 2003.

The Second Stakeholders' Meeting

On May 31, 2003, cottagers and residents of Fox Lake gathered for a second stakeholders meeting at Camp Winnebago on Fox Lake. The focus of this meeting was to provide an overview of the lake planning process, discussing such aspects as the purpose, necessary research, values, issues, opportunities, approvals and implementation that are all part of developing a plan. It was also to update stakeholders about the results of the first stakeholders' meeting and the winter survey. The meeting included discussion of previously identified concerns and issues, with the opportunity for the identification of additional ideas. This meeting resulted in a renewed commitment to the Lake Planning process.

Ongoing

Between spring 2003 and summer 2008, the Lake Plan progressed slowly, relying on the collection and analysis of information by various volunteers. While much work was done, it remained unconsolidated, and the Lake Plan process lacked coordination and focus. During this period, the membership of the Planning Committee evolved, with changes in the Association Executive, and some committee members moving from the Lake.

In the summer, 2008, Fox Lake Association directed the Planning Committee to seek, through tender, the use of a Planning Consultant. An agreement was reached with Jack van der Meer to assist in the preparation of the Fox Lake Plan for approval at the Annual General Meeting of the Fox Lake Association in July 2009. This document is the result.

2.1 Issues and Concerns

During the first of the Stakeholders' meetings, discussion concerning values yielded three broad themes of **Environment** (water, shoreline, wildlife, wooded natural setting), **Life Style** (lake character, rural setting, lack of sensitivity of development, security), and **Aesthetics** (scenic rural environment, low level development, night skies).

Environmental issues included water quality, pollution, shoreline habitat and erosion, wildlife and fisheries concerns. **Life Style** issues included concerns about urban style development, cottage conversions, security, and shoreline density. **Aesthetic** issues included concerns about types of use and development.

The **Fox Lake Survey** (Community Questionnaire) was circulated to 130 property owners and others with an interest in the Fox Lake area. Forty-one questionnaires were filled out and returned, which represents a 32% return rate. Forty of the forty-one respondents identified themselves as shoreline owners; 10 of these were permanent residents, 30 were seasonal or part-time residents. In general, the values and issues identified through the survey reflected the results of the first Stakeholders' meeting.

When asked what special characteristics and features they valued most and would want to see preserved or protected for the future, survey respondents focused on:

- Water quality
- Environmental concerns (wildlife and wildlife habitat, natural shoreline vegetation)
- Aesthetics (peace and quiet; scenic aesthetics and natural setting; darkness at night);
- Life style (peace and quiet, perhaps a life style concern as well as one of aesthetics; limited boat traffic; fisheries; community spirit).

When asked what changes respondents had noticed over the past few years there was a strong response to things that influenced the shoreline and its appearance and function.

- Several replies mentioned increased removal or destruction of shoreline vegetation, including clear-cutting of trees, bulldozing of a couple of lots prior to building, and removal of natural plants, bushes and trees. Beaver damage was also mentioned as a contributing factor.
- Several replies focused on increased erosion of shoreline and beaches, including a loss of sand from beach areas, noticeably less dry beach, and undercutting of the shoreline and its vegetation. Perhaps as a related concern, a number of respondents remarked on increased fluctuations in water levels.
- An increase in development (both from the development of new lots and the redevelopment of older cottages) was a concern for about a quarter of the respondents. They specifically mentioned the presence of more cottages and houses, more lawns and docks and commented on the perception of a change to more "urban" and less natural settings.
- A decrease in water quality was also a concern, with replies noting an increase in algae, especially in hot weather, and that there was more gas, oil and litter in the water.

When asked to identify their concerns about Fox Lake and Buck River and the surrounding area, survey results focused on water quality, environment, aesthetics, and life style issues. These include, by priority:

- Over-development (too many cottages, too much stress on the lake, disregard for building by-laws, destruction of natural environment and natural setting);
- Water quality (septic tank leakage and runoff, algae, oil & gas from boats and snowmobiles, pesticides from lawns, cow manure, litter);
- Deforestation and removal of shoreline vegetation and wildlife habitat (clear cutting, clearing to shoreline, clearing in north end and Buck River area);

- Powerboats (too many, too fast, too close to shore, endangering loons, too noisy, don't want jet-skis);
- Excessive light and noise (loud speakers from the camp, audio systems from residences, bright lights at night);
- Water levels and water fluctuation;
- Vehicle speeds on roads in the summer;
- Over use, or improper use of the islands on Fox Lake.

When asked specifically what they perceived as the key issues to be addressed for Fox Lake and its area, survey respondents identified, by priority:

- Control new development;
- Manage water quality;
- Improve water safety;
- Conserve shoreline and wildlife habitat;
- Manage water levels;
- Reduce noise and light pollution;
- Increase community cooperation;
- Reduce littering.

Observation:

From the above, it can be deduced that the Fox Lake community and its various stakeholders want the area to reflect the rural and waterfront characteristics for which people have come to the area since cottaging first began here. They are concerned about the natural environment and want the lake, the shoreline and the surrounding landscape to remain a relatively natural and healthy environment not just for wildlife and fish, but also for the use and enjoyment of the Fox Lake community.

Water quality is also a key concern, and there is emphasis on maintaining or enhancing water quality and mitigating against things that might threaten it. The management of water levels is also recognized as important, although there may not be a consensus on what appropriate levels might be.

A life style is envisioned by the community that includes traditional cottage or water-related activities, accommodates a variety of recreation and life style interests, and is concerned about safety, the intrusion of urban features, such as traffic (on land and water), excessive clearing, noise and light pollution. There is also a sense that common values may be achieved through the development or strengthening of a spirit of community amongst the Fox Lake stakeholders.

2.2 What has been happening?

Since the Lake Planning process started in 2002 and discussions started with lake users and other stakeholders, some of the issues and concerns were identified and the Fox Lake Association has been taking some actions.

- The Association has long been a proponent for responsible development on the lake and has been an active participant in reviewing and commenting on various development plans. It has an agreement with the Huntsville Planning Department, whereby the Association is notified of zoning amendments and variance applications, or other significant proposals around Fox Lake.
- The Association has appointed a “Lake Steward” who monitors and reports on environmental and water quality concerns.
- The Association recognizes that Fox Lake could develop three independent “realities”: the east side, the west side and now, with recent development, the north end. The Fox Lake Regatta has always been a strong force in creating social bonding among lake users. The Association has implemented and supported additional events to help reinforce a sense of community in the Fox Lake area, including an annual “Rib Fest” in mid-summer and a corn roast at summer’s end.
- The Fox Lake newsletter continues to be a source of information for Fox Lake users.

Recommendations:

3. ***The Fox Lake Association should continue its existing efforts to monitor and respond to development activities in the Fox Lake area and to ensure the affected owners are notified of such municipal planning and development activities.***
4. ***The stewardship role should be continued for Fox Lake, with a flow of related information to keep the lake community advised of and involved in the stewardship of our lake and its environs.***
5. ***The Fox Lake Association should continue to be a driving force in the development of a sense of community among the various users of the Fox Lake area. This should include sponsoring events and providing information.***

3.0 A Municipal Perspective

Municipal Official Plans and Zoning Regulations are tools that help govern land use and development. The Muskoka District Official Plan provides guidance for the physical development of Muskoka and general land use direction for its six municipalities. Within the context of the Muskoka District Official Plan, the Huntsville Official Plan is intended to “provide a comprehensive framework to guide future land use and physical development in the Town of Huntsville”. More detail is provided by the Town of Huntsville Zoning By-law 2008-66P which, through a set of standards and permitted uses, regulates how land is used and developed within the Town of Huntsville. A series of Zones are identified and mapped for all areas of the Town and each Zone has its specific standards and permitted uses.

In specific situations, a Municipality may also use Site Plan Control and Consent Agreements to ensure certain construction and design standards are maintained.

3.1 Muskoka District Official Plan

The Muskoka District Official Plan contains policy that is of general application throughout Muskoka, and has interest in the following areas:

- Managing natural areas, lakes and resources in a manner that respects ecological processes and sustainability;
- Broad scale planning for future population change and growth in accordance with the principles of sustainable development;
- Promoting and enhancing activities and development which respect and augment the human, cultural and natural resources of Muskoka; and,
- Supporting and promoting the cultural, historical and recreational resources of Muskoka.

The guiding vision of the District Official Plan is one of a predominately forested landscape that supports diverse and functioning ecosystems including lakes, wetlands, forests, barrens and open fields. Interspersed in the natural setting are small to midsized communities and rural and waterfront development that provide a wide range of economic opportunities and life style options. Policies in the Official Plan are supposed to strike a balance between growth and development and the preservation of the natural Muskoka environment. This vision will be implemented through policies that are based on the following principles:

- The forested landscape of Muskoka will be protected.
- Development will be based on the principle of a carrying capacity to ensure that the quality of the environment is maintained.
- Tourism and recreational opportunities will be enhanced.

It is interesting to note that Muskoka District has a vision for Muskoka that emphasizes the forested landscape, a rural landscape with urban nodes, and the protection and management of our important water resources. The Huntsville Official Plan mirrors that broad vision, and provides more specific policies for rural and waterfront areas. Perhaps not surprising is that the Fox Lake community has identified values and concerns that are in line with these broader directions and policies. Fox Lake and vicinity has long been a relatively low key, natural, rural area that has attracted land-owners and visitors who value the rural and water-related life style.

- Improvement to services that support economic development will be promoted.
- Urban-type development will occur in serviced urban areas.

The District of Muskoka has an interest in the protection of all of the water resources within its jurisdiction and has approved the Muskoka Water Strategy, a comprehensive framework of integrated strategic initiatives to protect Muskoka's water resources. A significant component of that Strategy is Lake System Health. This program has evolved from the review of the Muskoka recreational water quality model. It incorporates the best available science and a variety of implementation techniques designed to minimize the impact of human activities on water resources, protect and enhance the environmental health and quality of life in Muskoka and protect the future of Muskoka as a premier recreational region. The program is to be implemented in concert with the Area Municipalities and other stakeholders.

3.2 The Huntsville Official Plan

The Huntsville Official Plan, approved in 2006, is to "provide a comprehensive framework to guide future land use and physical development in the Town of Huntsville". Included in a list of 10 "purposes", the Huntsville Official Plan states that it is intended to "provide for the conservation and protection of the natural environment, including wetlands, woodlands, Areas of Natural and Scientific Interest (ANSI), fish and wildlife habitat, (and) rivers and streams".

The Huntsville Official Plan describes the character of the Municipality of Huntsville as a "community of communities", namely:

- The urban community focused on the town proper;
- The lake communities (**This would apply to Fox Lake**);
- Smaller settlements such as Port Sydney and Utterson;
- The tourist centres focused on Hidden Valley; and,
- The rural community (**This also applies to Fox Lake and vicinity**).

The Huntsville Official Plan has a number of objectives in the categories of: economic development; environment; employment; tourism; culture and heritage; open space and recreation; housing; municipal infrastructure; resource development; and a universally accessible environment. Within these objectives, the Official Plan enunciates some specific points relevant to Fox Lake and its vicinity. Some are quoted in part, as follows:

Environment.

The natural environment – rocks, trees and water – and the skyline help define the inherent character of Huntsville (and, of course, of the Fox Lake area). The Town is committed to the protection and enhancement of: (one of five) the natural landscape, shorelines, natural panoramas or vistas, clean air and the night sky representing the dominant visual characteristic of lands and lakes outside the identified urban areas.

Stewardship Ethic.

The Huntsville Official Plan endorses a stewardship ethic for shore lands that will include landscape naturalization, improved on-site retention and treatment of pollutants and improved compatibility with the natural environment.

The naturally-treed skylines throughout the community represent an aspect of natural heritage that is immediately evident to residents and visitors. These skylines shall be retained in their natural condition as the basis for view-scapes that compliment the town.

Heritage Waterways.

Important waterways include the Big East River, which is designated as a Heritage Waterway, the Muskoka River and numerous lakes. (The Buck River and Fox Lake are part of the Muskoka River system, and part of a traditional heritage and recreational waterway.) These waterways are a natural and recreational asset to the town. The long-term protection of these waterways and their shoreline is a core feature of this Official Plan).

Historic Portages.

Historic portages are part of the Town's cultural heritage. These need to be identified and conserved.

Open Space and Recreation.

The open space system in Huntsville will include a series of nodes and linkages. Linear corridors/trails will be developed to connect major features in the Town and will enhance the development of the Trans-Canada Trail and the Park-to-Park trail system, and/or other recreational trail systems. Similarly, portages are an integral linkage in linear water based corridors and should be preserved as a point of public access to waterways.

Public Access to Waterways..

Improved public access to waterways is encouraged in appropriate locations.

Agriculture.

The agricultural sector is encouraged to expand in an environmentally sound manner.

Also included in the Huntsville Official Plan are specific **Policy Areas**. These are: Environment; Huntsville Urban Settlement Area; Hidden Valley Settlement Area; Port Sydney Settlement Area; Highway 60 Corridor Policy Area; Waterfront; Commercial Development; Open Space and Environmental Features; Development Constraints – Narrow Waterbodies; Waterfront Special Policy Areas (Peacock Bay Resort); and Lake Plans. Of Particular relevance to Fox Lake and its vicinity are the detailed Environmental Policies, Rural Area Policies, Waterfront Policies and Lake Plans.

Without going into precise detail, the Huntsville's Official Plan Environmental Policies emphasize:

- Preserving the natural environment and appearance, character and aesthetics of the area;
- Maintaining important scenic characteristics, landscape features, and the natural form of water courses;
- Maintaining and improving the quality and quantity of groundwater and surface water and the function of watercourses, aquifers and headwater areas;
- Recognizing the importance of wetlands (swamps, bogs, marshes and fens) and their contribution to fish and wildlife habitat, and to the social and economic benefits related to hunting, fishing, wildlife viewing and appreciation of nature;
- Through adoption of the Muskoka District Lake Health Program, causing no detrimental impact on recreational water quality and supporting the principle of improving water quality through remediation and stewardship activities;
- Maintaining the integrity of fish habitat;
- Maintenance of self-sustaining populations of wildlife, by protecting and managing wildlife habitat;
- Preserving the forested landscape and tree/ridge lines and promoting healthy forests; and,
- Protecting steep slopes from development.

Huntsville's Rural Area Policy Area

Rural Areas are defined as those lands not included in the other land use designations (urban areas, waterfront, etc.). Rural Areas are generally natural forested landscapes with a varied topography of hills and valleys, with areas of cleared land relating to farm operations. Rural Areas provide a location for a variety of resource related uses, conservation activities, environmentally sensitive lands, as well as residential, commercial and industrial uses.

The natural environment is intended to be the dominant landscape feature of the Rural Area, with vegetation maintained on skylines, ridge lines or adjacent to the top of rock cliffs. Official Plan Policies are identified for mineral aggregate resources, forestry, agriculture, open space, and rural residential and rural commercial and industrial development.

Huntsville's Waterfront Policy Area

Waterfront is defined as lands that generally extend inland 150 metres from a waterbody, including all islands and lands which form the bed of any lake or river, and any lands that physically and functionally relate to the shoreline, even though they may extend more than 150 metres from the shoreline. Waterfront policies emphasize:

- Huntsville's lakes and rivers are important public resources providing year-round leisure and recreational opportunities that contribute to the town's economic base through tourism and the "second home" residential sector.
- The focus of development on many lakes will be on redevelopment of existing lots, rather than on new lot development or creation.
- Important Waterfront characteristics are the varied topography and forested landscape, their shorelines with a natural and undeveloped appearance, their views and panoramas, and their significant natural areas and habitats.
- The character of Waterfront will be maintained by retaining the traditional mix of land uses and the overall low density of development, as well as preserving the natural environment, particularly related to water quality, topography and landscape, natural shorelines, and significant natural areas and habitats.
- Open space and conservation uses are encouraged throughout the Waterfront. Permitted open space uses include public parks, portages, and access areas for a variety of outdoor recreation pursuits. Recreational uses will be compatible with adjacent land uses.
- There are development constraints on narrow water bodies (where the distance shore to shore is less than 150 metres).

Lake Plans

As a part of its Waterfront policy, Huntsville's Official Plan identifies the role of Lake Plans in providing more detailed policy direction for specific lakes in the municipality. It recognizes that each lake has its own character, derived from its location, size, physical attributes, access and historical development. It specifies two roles for a Lake Plan:

- First, it provides for a Lake Plan to address different minimum lot standards for new lot creation, to regulate redevelopment activities, to support improved public access to a lake and to recognize special needs for a lake. These land use planning components of a Lake Plan are intended to be implemented through Policies in the Huntsville Official Plan. In the case of the Fox Lake Plan, any variation proposed from the Huntsville Official Plan Policy (such as the application of more stringent

standards for development) would require an amendment to the Huntsville official Plan and its implementing by-laws.

- Second, it recognizes that other features of a Lake Plan would be more likely achieved through local stewardship initiatives, possibly through the efforts of a local ratepayers' organization, such as the Fox Lake Association.

The Huntsville Official Plan also spells out matters that a Lake Plan should address. Presumably, if a Lake Plan does not cover the items mentioned, the plan would be less likely to receive support for policy amendments.

3.3 Huntsville's Zoning By-law

The Town of Huntsville Zoning By-law 2008-66P has a set of standards and permitted uses that regulate how land is used and developed within the Town of Huntsville. A series of Zones are identified and mapped for all areas of the Town, including the Fox Lake vicinity. The map "**Fox Lake – Zoning Map**" page 21, shows the zoning for the Fox Lake planning area, and Section 4.1 **Municipal Zoning**, discusses the zoning detail, as it applies to the Fox Lake area (page

3.4 Other Agencies

Other agencies that have an influence on the use and development of lands and waters in a lake environment include:

- The Federal Government Department of Fisheries and Oceans, regarding fish habitat, navigation, and boating issues
- The Ontario Government, Ministry of Natural Resources, regarding any work around water. The beds of most lakes and rivers in Ontario are under the jurisdiction of the Ministry of Natural Resources, which requires work permits for any activity that involves dredging; filling; creating channels in streams; removing rocks, stumps, logs or aquatic plants; or building or reconstructing dams, docks, boathouses and retaining walls.

Recommendations:

- 6. Sometimes, what happens on the ground does not reflect the professed values of regulating bodies. The convergence of Municipal vision, policy and objectives with the Fox Lake community's values and aspirations suggests that whenever development or use issues arise, the Fox Lake Association should be prepared to emphasize existing municipal or other government policy to ensure our objectives are met.***
- 7. Where the Fox Lake community has identified concerns that transcend those provided for by existing municipal planning and controls, the Fox Lake Association should pursue an amendment to Huntsville's Official Plan or Zoning By-law to incorporate these additional requirements or limitations (for instance, to limit future development options).***

Observation:

The visions, objectives and policies enunciated in the Muskoka and Huntsville Official Plans seem very much in line with the values expressed in the Fox Lake planning process. The concepts of a forested landscape, a variety of functioning ecosystems, emphasis on the natural environment and skylines, a recognition that urban development needs to be restricted to urban environments, a recognition of heritage values and the traditional use of waterways, including traditional portages - all of these strike a chord with the values and concerns identified by the Fox Lake community.

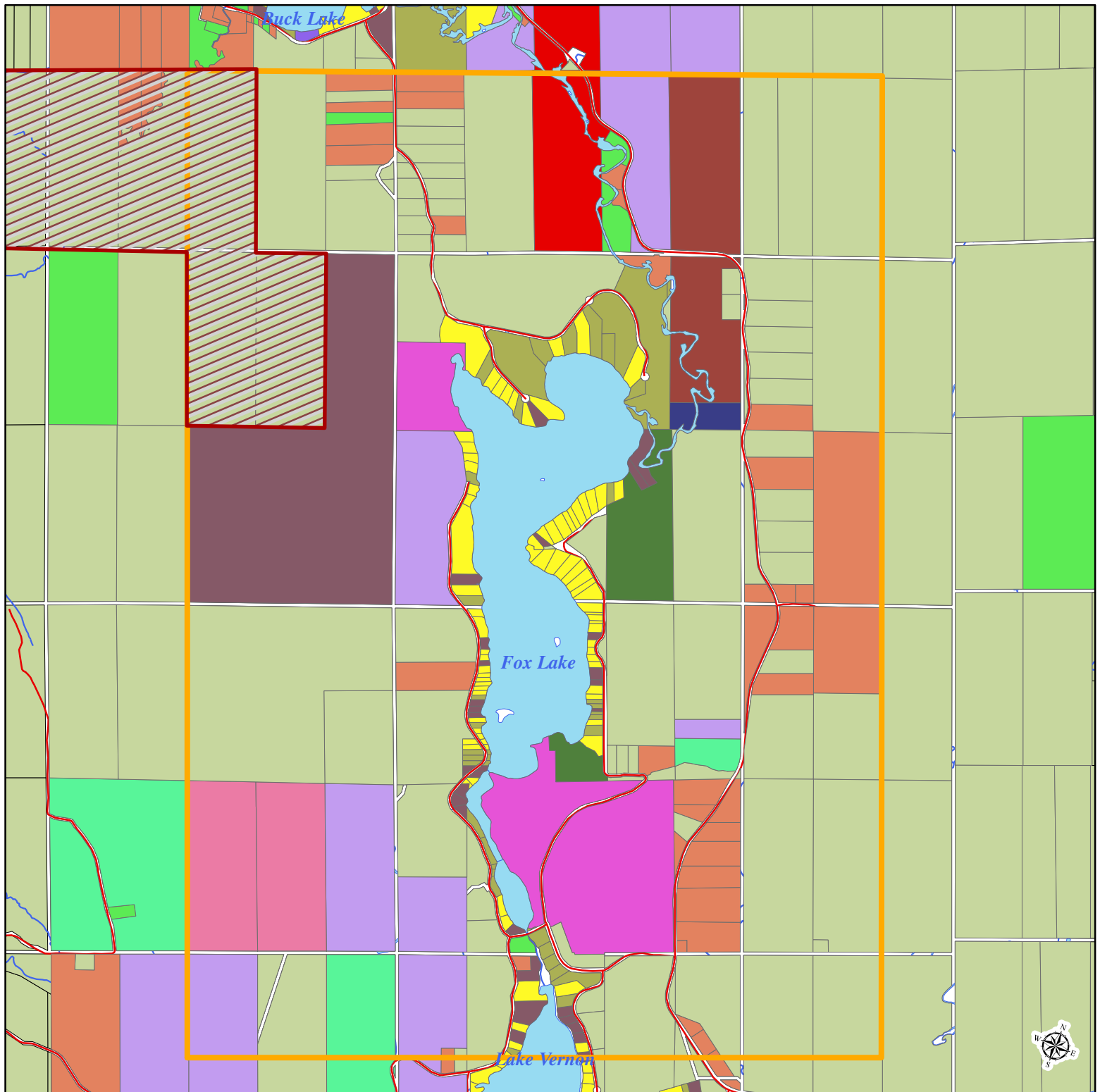
**Farmland along the Buck River**

Flight: Courtesy of Bob Ahrens.

Photo by Jack van der Meer

One of the few non-forested areas in the Fox Lake vicinity, this farmland lies on the east side of the Buck River, downstream from the Buck Lake (Campbell) Dam.

Ravenscliffe Road (Muskoka Road 2) can be clearly seen on the left of the picture. Fox Lake lies just outside the picture, at the lower right.



UTM Zone 17 NAD 83

FOX LAKE MPAC PROPERTY CODE DATA Town of Huntsville

0 235 470 940 1,410 1,880
Meters



April 24, 2009
Geomatics Department

Information may not necessarily be an exact and/or current reproduction of official documents. In case of discrepancy, official documents are correct. The map is a public resource of general information and is not a plan of survey nor is it suitable for navigation. This road network information has been generated or adapted from Ontario Road Network Database. The Ontario Road Network Database is the property of the Government of Ontario and is used under licence from the Government of Ontario.

Legend

- crown_land_stisted
- crown_land_under_mgmt_board_stisted
- Association Area

MPAC_PropCodes_joined

Prop_Code_

- | | |
|--|---|
| Assembly hall, community hall | Managed forest property, vacant land on water |
| Child and community oriented camp/resorts | Marina - defined as a commercial facility for the |
| Church (all denominations with or without manse) | More than one structure used for residential purpose |
| Farm property without any buildings (no structures) | Non-buildable land (walkways, buffer/berm, storm water) |
| Farm with a residence (with or without secondary structures) | Seasonal/recreational dwelling(s) - first tier on |
| Managed forest property, residence not on water | Seasonal/recreational dwelling(s) - not associated |
| Managed forest property, seasonal residence not on water | Seasonal/recreational dwelling(s) - second tier on |
| Managed forest property, seasonal residence on water | Second tier vacant lot |
| Managed forest property, vacant land not on water | Single-family detached (not on water) |
| | Single-family detached on a lake or river |
| | Vacant residential land not on water |
| | Vacant residential/recreational land on water |
| | Water lot (entirely under water) (Structure codes) |

4.0 Land Use

The Municipal Property Assessment Corporation (MPAC) keeps records about the different ways land is used, as it relates to property taxation. This MPAC Data about property use is shown on the map “**Fox Lake - MPAC Property Code Data**”, on page 21. Around Fox Lake itself, MPAC shows around 70 “seasonal” recreational dwellings on water, including two larger properties shown as “managed forest property with a seasonal residence, on water”. Nineteen properties are identified as “single family detached” (year-round) dwellings. MPAC shows about 29 vacant shoreline lots (34 if we include the Hoodstown Rapids). Also shown on water are the two “child and community-oriented” camps.

Along the Buck River, the MPAC Data shows three “single family detached” properties, two seasonal recreational properties, a farm property with a residence and a larger farm property without buildings.

Backlots (not on water): MPAC data shows several single family detached homes along Ravenscliffe Road, one backlot single family detached home each on West Fox Lake Road and one on East Fox Lake Road. (Note: These data are not right up-to-date. There are now three backlot single detached homes – two year-round, and one seasonal – along West Fox Lake Road.) Most of the remaining backlot properties are larger lots and are shown as vacant residential land or managed forest properties.

Land use in the Fox Lake area reflects the normal cottage lake pattern of individual lots at the shoreline, most used seasonally (i.e. as cottages) with a growing number becoming year-round residences. There is a trend to the development of backlots as year-round residences. Recently, one of these has opened a Bed and Breakfast on a West Fox Lake Road backlot, and a building contractor operates from a backlot property on East Fox Lake Road.

There are some properties which MPAC shows as vacant residential land which are being used as recreational properties, pending future development as a residence or cottage, often with long-term usage of “temporary” trailers. This is not a compliant usage according to Huntsville’s Official Plan, and if waste water and sewage disposal is not adequate, this creates a potential water quality issue for Fox Lake.

Fox Lake does not have many shoreline structures which extend into the water, other than docks. There are a half dozen “boathouses” and some utility sheds along the shoreline, most of which lie above the high water level. One aircraft hanger is located at the shoreline on the west side of the lake.

There are three islands on Fox Lake. All are identified as “open space”. All three islands are Crown land. The northern island is very small and receives little or no use. The centre island (sometimes locally called Rock Island) receives a lot of visitation by day users and sometimes overnight campers. Litter, human waste and fires are all concerns with the use of this island. The southernmost island has received little use until recently.

Although there are two municipal road allowances that abut Fox Lake and three municipal “park” lots, one on the Hoodstown Rapids and two adjoining lots on the west side of the Foxtail, there is no formal public access to Fox Lake and no facilities for launching boats. Most property owners make private arrangements

Shoreline Development on Fox Lake (According to MPAC Data)*

Type	Number
Total Shoreline Lots	120
Seasonal Shoreline Dwellings	72
Year-round Shoreline Dwellings	19
Total Vacant Lots	29

* Note: Since this data was compiled, one new seasonal dwelling has been constructed on the north side of Fox Lake, and a new year-round dwelling has been constructed on the west side of the Foxtail. The use of a small number of other properties has changed from year-round to seasonal, and vice versa. The above numbers, therefore, are approximate.

with a neighbour or one of the camps to launch their boat; some have their own small launching areas. This is not seen as an issue by the Fox Lake community. In fact, most users feel that there is currently enough boat traffic on the lake and the lack of public boat access reduces the potential for the accidental introduction of invasive species such as zebra mussels or spiny water fleas.

4.1 Municipal Zoning

The Town of Huntsville Zoning By-law 2008-66P applies a set of standards and permitted uses that regulate how land is used and developed within the Town of Huntsville. A series of Zones are identified and mapped for all areas of the Town, including the Fox Lake vicinity. The map “**Fox Lake – Zoning Map**”, shows the municipal zoning for the Fox Lake planning area. This map is located on page 27, at the end of this section.

Most of the shoreline of Fox Lake is zoned as shoreline residential in one of three categories: SR1, SR4 and SR5.

Shoreline Residential 1 (SR1), dark green on the zoning map, applies to most of the waterfront properties on Fox Lake and the Hoodstown Rapids. The minimum lot size for SR1 is 0.4 hectares (1 acre) with 60 metres (200 feet) frontage. They require a 20 metre (66 feet) building setback from the high water mark.

Shoreline Residential 4 (SR4), pale green on the map, is shown for six properties on the Foxtail, one on the west side and one on the east side of Fox Lake, and one on the backlot pond on the west side. These are lots that were accepted as they existed with the passing of the Zoning By-law in 2008. They still require a 20 metre building setback from the shoreline. Some of these SR4 lots (SR4-1547, SR4 1750) have additional exceptions or conditions applied to them.

Shoreline Residential 5 (SR5), light orange on the map, applies to about twenty lots on the north end of Fox Lake. The ten lots on the peninsula, SR5-1029, have an additional setback requirement of 30 metres (100 feet) from any contained watercourse. The ten lots on the north shore SR5-1035 have additional requirements about location of buildings according to a Property Detail Schedule 9-14.

All three of the above SR zones allow for a single detached dwelling, with up to three accessory structures. They allow the property to be used as an artisan’s studio, a bed and breakfast operation, or for a home occupation. For a B&B or home occupation, the lot minimum lot size is 1 hectare (2.5 acres), and no activity related to the home occupation can occur within a 30 metre (100 feet) setback from any watercourse.

Rural Residential (RR), bright green on the map, is shown for lots on the Hoodstown Road, East Fox Lake Road, and along Ravenscliffe Road. This designation allows for single detached dwellings, or a group home (residential), and permitted uses include an artisan’s studio, a bed and breakfast, a day nursery, a hobby farm (1 hectare minimum size), a home industry, a home occupation, a secondary suite and a tourist home. Home industry and home occupation use requires that no related activity occurs within 30 metres of a watercourse, and a tourist home has a lot size minimum of 2 hectares (4.9 acres) with a minimum lot frontage of 60 metres (200 feet).

The Fox Lake shoreline includes two large parcels zoned **CS3, or Institutional Camp**. Principal uses for these Camp properties include institutional tourist establishment and tourist home, and permitted uses include: day nursery, dwelling unit, education institution, home occupation (associated with a single detached dwelling), personal service establishment, place of assembly, private park, restaurant, retail

store (200 square metres maximum), staff quarters and a variety or convenience store (200 square metres maximum).

The large dark blue zone on the map (C-1033) is a **Conservation Zone**, with the only permitted use being a private park with accessory buildings and a private road. The accessory buildings and all structures, including docks, shall have a 457 metre (1500 feet) yard requirement from any watercourse and lot coverage shall not exceed 1%.

The whole of the Buck River is shown as a **Natural Resources Zone (NR)** which includes the flood zone of the river. Permitted uses include flood or erosion control facilities, outdoor recreation, private park, public park and a pre-existing single detached dwelling. Permitted uses may include a boathouse or a dock as an accessory to a permitted principal use on an abutting zone on the same property.

Most of the rest of the planning area is zoned as **Rural One (RU1)**, the General Rural Zone and **Rural Two (RU2)**, the Backlot Rural Zone.

Rural One, white on the map, and Rural Two, grey on the map, both allow a wide variety of principal uses, including:

- Cemetery.
- Equestrian Establishment (existing facilities only for RU2). No farm activity can occur within 30 metres of a watercourse.
- Farm (existing facilities only for RU2). No farm activity can occur within 30 metres of a watercourse.
- Hobby Farm (existing facilities only for RU2). No farm activity can occur within 30 metres of a watercourse. Minimum lot size is 1 hectare, with a frontage of 60 metres.
- Group Home (residential).
- Private Park.
- Single Detached Dwelling.
- Woodland Retreat.

Rural One also allows forestry operations, kennels, and veterinarian clinics as principal uses. As permitted accessory uses, both Rural One and Rural Two Zones allow artisan studios, bed & breakfast^a, day nurseries^a, home occupation, home industry, secondary suites^a, small wind turbines and tourist homes^a. (^a = in a single detached dwelling only). Additionally, Rural One allows boarding house as a permitted accessory use.

Docks and Boat Houses: Under “General Provisions”, the Huntsville Zoning By-law allows boathouses to be constructed, up to “100 square metres (1076.5 square feet)” in area, and extending a maximum of 10 metres (32.8 feet) beyond the high water mark. There are no such boathouses on Fox Lake now, and any such structures would be inconsistent with the nature of the waterfront the lake has traditionally enjoyed.

* This is one of the issues that can be stopped ahead of time through the use of an amendment to the Official Plan and/or Zoning By-law.

Docks are also mentioned in the general provisions of Huntsville’s Zoning By-law. Docks may extend no more than 15 metres (49.2 feet) past the shoreline, with the exception that, if the water depth is less than 0.75 metres (2.5 feet) from the controlled high water level, in which case a dock can extend to the point where the depth is 0.75 metres. Even then, a dock cannot extend more than 30 metres (98.4 feet).

In narrow watercourses, such as the northerly riverine section of the Foxtail, or the Buck River, neither docks nor boathouses can extend more than 6 metres (19.7 feet) beyond the shoreline.

Observation:

Most of the properties in the Fox Lake area comply with the requirements of the Zones as described in Huntsville's recent Zoning By-law. Some of the older lots may not meet the new minimum frontage or size limitations, but, by-and-large, buildings and uses are compatible with the current requirements.

The development of vacant shoreline lots should not be a cause for concern if it falls in line with the appropriate By-law requirements for size, setbacks and types of use.

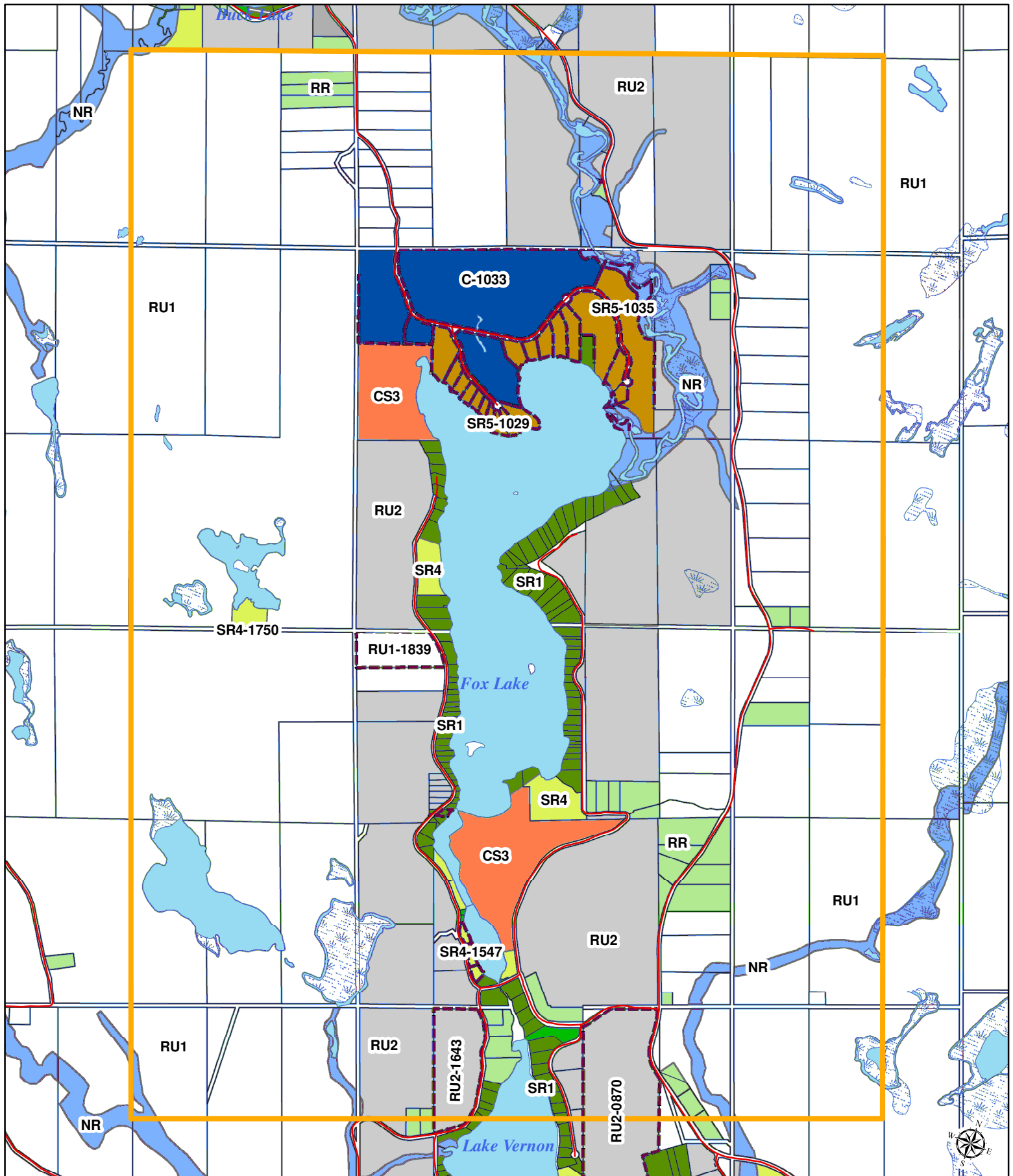
There are three large shoreline properties on Fox Lake:

- an SR4 lot on the west side of Fox Lake which has potential for development of additional lots
- two CS3 Institutional Camp properties, which could accommodate other uses such as retail or convenience stores

The concern with the larger properties is less with their existing zoning and uses than with the potential for rezoning to allow a different set of uses. The Fox Lake community does not want to see significant new patterns of development on Fox Lake. In the event that any of the larger properties become available for rezoning or new development proposals, there should be clear limitations on what is acceptable. Specifically, the community does not want to see any change to multi-residential buildings, cluster developments where a number of properties share a small common shoreline, or industrial or commercial uses that will create significantly more pressure on the lake.

Recommendations:

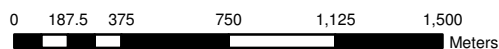
8. *The Fox Lake Association should continue to receive notices of any requests for zoning amendments, variances from the Town of Huntsville and should continue to review such applications and comment to the Town where our values are challenged, or where such changes may impact negatively on the Fox Lake community.*
9. *Specifically, any proposal concerning changing use patterns, zoning, variances, or development proposals concerning the larger shoreline properties on Fox Lake should be circulated, for review and comment, to the Fox Lake Association by the Town of Huntsville.*
10. *Public boat access facilities are not required on Fox Lake and should not be accommodated.*
11. *The Fox Lake Association should pursue appropriate Official Plan and Zoning By-law amendments to restrict the opportunity for boathouses on the Fox Lake shoreline.*



- Legend**
- Road
 - Association Area
 - Marshland
 - Property
 - Lake

Zoning By-Law 2008-66, as amended.
 Information may not necessarily be an exact and/or current reproduction of official documents.
 In case of discrepancy, official documents are correct. The map is a public resource of
 general information and is not a plan of survey nor is it suitable for navigation.
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FOX LAKE - ZONING MAP Town of Huntsville



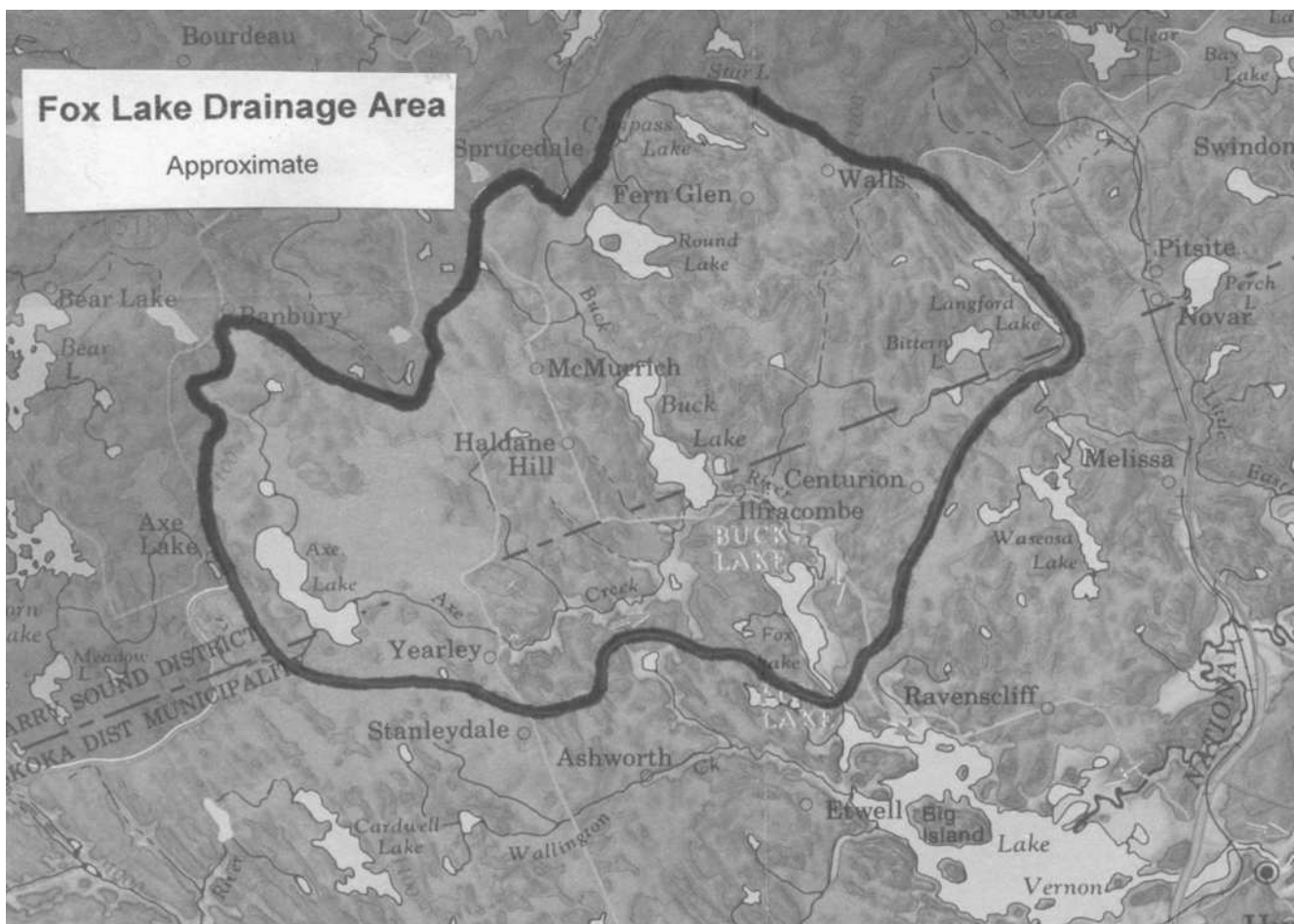
UTM Zone 17 NAD 83



5.0 Fox Lake – an Area Overview

5.1 The Watershed

Fox Lake is part of the western arm of the North Muskoka River Watershed, draining via the Hoodstown Rapids (Buck River) into Lake Vernon and hence through Huntsville, Fairy Lake, Mary Lake, and down the North Branch of the Muskoka River. Drainage from the Lake is controlled at the top of the Hoodstown Rapids by the Fox Lake Dam. This Ministry of Natural Resources (MNR) dam controls a drainage area of 220 km². While there are several small and intermittent streams that drain directly into Fox Lake, the majority of its source water comes via the Buck River to the north. This upstream drainage area is controlled by the MNR Buck Lake Dam, which is located 3.6 km upstream from Fox Lake, and 2.2 km downstream from Buck Lake. This dam controls a drainage area of 205 km² and includes the Buck Lake, Fawn Lake, Round Lake and Axe Lake drainage areas, as well as two small lakes, Bittern & Langford on the east side of the watershed.



Axe Lake and Round Lake are the headwaters of the western arm of this watershed. Axe Lake is regulated by an overflow weir at its outlet on Axe Creek. Round Lake has no control structure. These lakes (particularly Axe Lake) drain significant areas of boggy land. This results in waters that are dark with dissolved organic compounds (tannins and humic matter). These dark waters flow into Buck Lake and then Fox Lake, so that the lake waters have a “tea-like” appearance. Indeed, such dark-water lakes are often referred to as “tea lakes”.

5.2 Physiography, Geology, Topography

The Fox Lake watershed is located on the Canadian Shield with rock formations from the middle and late Precambrian Age. Like most of this part of North America, it has a history of glaciation, with major ice advances and retreats occurring repeatedly from over a million years ago until the most recent retreat of ice about ten thousand years ago. The action of the glaciers, along with other geologic and weathering processes, has shaped the land to the rolling rocky hills that typify our local topography today and largely has defined the location of our waterways.

The retreat of glaciers resulted in a lot of water and much of the surrounding area was below the shoreline (that is, underwater) of post-glacial Lake Algonquin. Fox Lake and vicinity is part of a physiographic unit known as the “Highway 11 Strip”, which features sand, silt and clay deposits that developed as a result of deposits from streams and rivers flowing into this post-glacial lake from highlands to the east.

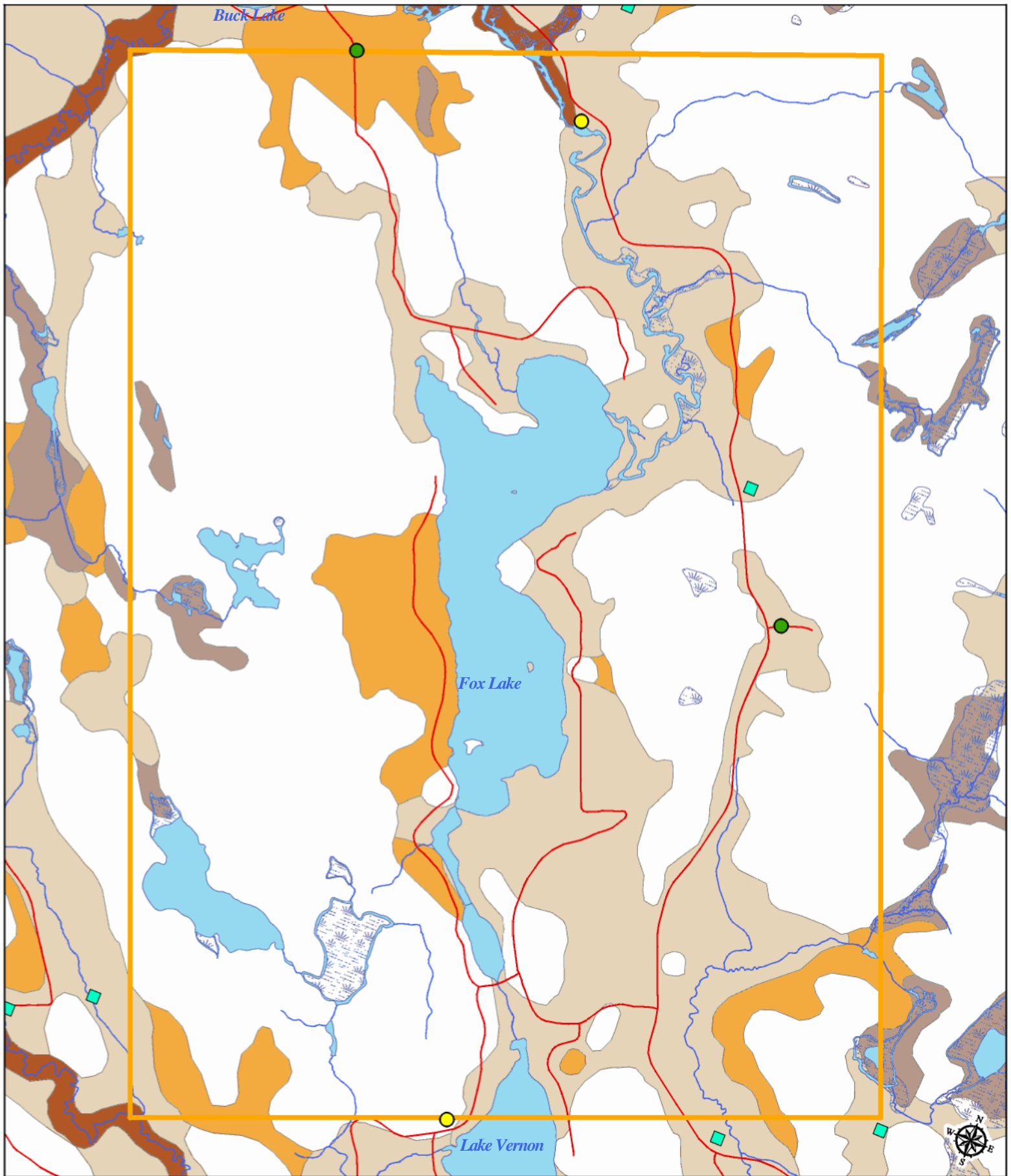
Bed rock outcrops are often apparent on the rounded hills of the Fox Lake area, but bedrock is visible on only a limited number of outcrops on the shore of Fox Lake, the Buck River and at Hoodstown Rapids. Soils on the hilltops and hillsides are often shallow, but there are extensive areas of deeper deposits in the flatter, deeper glacio-lacustrine plain/delta landforms. These are exemplified by the flat, poorly drained areas around Axe Lake, field areas along the Buck River and the sandy areas on the east side of Fox Lake.

In general, the clay deposits are more apparent on the west side of Fox Lake, often showing along the shoreline. Shorelines on the west and north of Fox Lake are more apt to be steeper, often with a clay substrate, and often an organic bottom in the shallow waters. Sand is more characteristic of the east side and south shore of Fox Lake, with much of the east and south shoreline comprising gently sloping sand beaches.

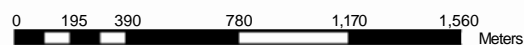
This can be seen on the map “**Geological Features and Genesis – Fox Lake**”, on page 31. The white area represents Precambrian bedrock hills, covered with discontinuous glacial drift generally greater than 1 metre deep, but with occasional bedrock outcrops. The drainage in this area is variable.

The tan area is of glacio-lacustral origin (i.e. deposited by a post-glacial lake). It is mostly sand, which is very permeable, and where the water table is not close to the surface, this area is generally well drained.

The orange areas on the map are identified as “diamicton”, which is a term for non-sorted or poorly sorted sediments that contain a wide variety of particle sizes. Particularly on the west side of Fox Lake, this material, which can be from 1 to 4 metres deep, can be underlain by a bed of clay. The diamicton has medium permeability and drainage in this area is moderate.



GEOLOGY FEATURES & GENESIS FOX LAKE Town of Huntsville



5.3 Climate

The Muskoka area is described as a continental climate, which is moderated by nearby Georgian Bay. The nearest Environment Canada weather station is at Huntsville. According to the *Muskoka River Water Management Plan: Background Information Report (2003)*:

“January is the coldest month with a mean daily minimum temperature of -16°C and July is the warmest month with a mean daily maximum temperature of 24°C. Lakes and streams typically begin freezing in December, and thaw in late March to early April. The average annual precipitation at Huntsville is 1032 mm with 746 mm falling as rain and 286 cm as snow.”

Anyone spending much time around Fox Lake, however, believes that we are on a “streamer” from Georgian Bay, which means we are always a bit cooler in the summer, a little colder in the winter and we get a lot more snow than Huntsville.

In short, Fox Lake has a climate suited to year-round recreation: warm summers conducive to lake-oriented activities; autumns with vibrant colours; winters with ample snow for snowmobiling, cross-country skiing and snowshoeing, and often, enough ice for winter fishing; and typical Muskoka springs, with fresh new growth, spring flowers and, of course, black flies and mosquitoes.

5.4 The Fox Lake Landscape

Physiography, topography and forest cover are all parts of an aesthetic whole that comprises the landscape of Fox Lake. Rolling hills, forested mostly with deciduous trees and patches of conifers frame any view from the lake. Cottages and houses have trees around them. Some are completely hidden and others more open. The shoreline is relatively uninterrupted by major clearings or large structures. In general, this is a forested rural landscape with a feel of nature about it.

The Fox Lake watershed lies within the Georgian Bay Forest District of the Great Lakes-St. Lawrence Forest Region¹. Early surveyors found much of Stisted Township to be covered by hardwood forests, with a scattering of pine, which were of good quality. In 1869, Surveyor Walter Beatty described the forests of Stisted Township thusly: *“Timber. Maple Birch and Beech on the uplands. Tamarac, Spruce and Cedar in the swamps. There are no great tracts of Pine timber but there is a good deal of it scattered throughout the hardwood.”*

Today, after 150 years of logging, settlement, farming and recreation, the forested landscape is again predominantly hardwood forests on the uplands (maple, beech, yellow birch), with scatterings of pine and hemlock, and red oak on many hilltops. Areas of more recent disturbance, such as agriculture, fires, or other clearing, may support stands of white birch and/or poplar.

The forest cover in the Fox Lake area is generally under 100 years old, with many stands significantly younger. This is not a primeval forest, nor is it wilderness. Most of the forests of the area have experienced repeated logging in the past. Many areas have been cleared for homesteading and farming. But forests recover, and the Fox Lake landscape is predominantly one of forested hardwood hills, with patches of birches and poplars along the shoreline, and hemlock covering some hills and side slopes.

The following pages show two aerial photographs, one recent, and one from 1947. The 1947 photo was taken in the summer with leaves on the trees. The recent photo was taken in the spring before the leaves emerged. Nonetheless, it is interesting to note the change in cleared land between 1947 and 2008. The

¹ Reid, R. and Bonnie Bergsma. 1994. Natural Heritage Evaluation of Muskoka. Muskoka Heritage Areas Program.

5.5 Recent Air Photo of Fox Lake Area



5.6 1947 Air Photo of the Fox Lake Area



6.0 History

John A. Laycock, in the book Fifty Years in Huntsville 1934 -1984 states that “The lovely sand beach was uninhabited from the Wifred Tipper cottage at the south end of the lake for nearly half a mile northward. The shoreline was a mass of water lilies with hundreds of frogs dwelling under the lily pads and the bottom alive with clams in the sandy soil. The shoreline was a mass of tangled tea bush, with huge logs, escaped years ago from one of the log drives, partially buried in the sand at intervals along the shore.”

There is a lot of information available about the early days around the Fox Lake area. Most of it is written about someplace else, though, and Fox Lake is often mentioned only in passing, or as incidental information. For those interested, much direct or indirect background on the Fox Lake area can be gleaned from the following sources:

- Tidridge, Nathan ***Beyond Mainland. Exploring history and identity in Cottage Country.*** St*one Soup Publications. 2009. This recent book is mostly about Buck Lake, but includes a lot of information about Buck River and Fox Lake.
- Cookson, Joe ***Early Footsteps in Muskoka.*** Olympic Printing, Sprucedale. 1984. The detail is about Huntsville, but much of the information about settlement is common to the Stisted Township area.
- De la Fosse, Frederick ***English Bloods, New Augmented Edition.*** Edited by Scott D. Shipman. Natural Heritage Books. Toronto. 2004. Early days in Ilfracombe, with fairly direct application to the pioneer experience of Stisted Township and the Fox Lake area.
- Demaine, W. H. ***Stories of Early Muskoka Days.*** Herald-Gazette Press, Bracebridge. 1971.
- Demaine, Marjorie ***Chronicles of Stisted Township.*** Herald-Gazette Press, Bracebridge. 1976. Very relevant information about the settlement and development of Stisted Township, with specific detail about Hoodstown and Fox Lake.
- Coombe, Geraldine ***Muskoka, Past and Present.*** McGraw-Hill Ryerson Limited, Toronto, Montreal, New York, London. 1976. A broader view of Muskoka, with more detail about the southern parts, but with some mention of Stisted Township, Fox Lake, and Hoodstown.

Over the last year, Gabrielle Andersen, a Fox Lake resident, has been compiling a lot of detail about the history of the Fox Lake area. A number of Fox Lakers have contributed to her research. There is still a wealth of untapped, or unrecorded information out there, known to families who have had a long connection to Fox Lake. Some residents have provided this background to Gabrielle, and others with key knowledge are encouraged to contribute to the cause. Gabrielle's history project is ongoing, but to get a thorough picture of cottage development in the Fox Lake area, more information is needed, particularly as it relates to the north and west sides of Fox Lake.

Recommendations:

12. ***Continue to research and write up the history of the Fox Lake area. This background is valuable in helping us maintain a perspective and in developing an understanding of how things got to be the way they now are. It is also interesting to a lot of people.***
13. ***Consider publishing an illustrated history of Fox Lake and the area, perhaps as a tabletop book, perhaps also as a web document.***

The following is a point form sketch of the history of the Fox Lake area,

There is evidence that, after this area was freed from the burden of glaciation, in the period from about 9000 to 5000 years before present times, aboriginal people (known as Archaic people, by archaeologists) hunted, fished, and foraged in the Muskoka area. There is no evidence of large populations, or settlements in the Fox Lake area; rather, our network of small lakes and rivers probably facilitated occasional passage through the area, perhaps on the way between Lake Nipissing, Georgian Bay, and the Severn River in South Muskoka.

- From about 5000 years ago to the time of European contact and exploration Woodland people occupied much of Southern Ontario. In the Muskoka area, they were primarily nomadic hunters and gatherers. Our local lakes and rivers would have been a part of their travel network. Aboriginal peoples still roamed and hunted in Muskoka during the 1800's.
- As late as the 1960's First Nations people were still visiting Fox Lake, making trips from the Doe Lake area southward through the Buck River system to Fox Lake, where they would set up camp and sell handcrafted native goods and fruits and vegetables to local cottagers, before they moved on south to Lake Vernon and Huntsville.
- In 1860, Alexander P. Cockburn traveled from Dorset, through Lake of Bays, Peninsula Lake, Fairy Lake, Lake Vernon, Hoodstown Rapids, Fox Lake and up the Buck River to the Magnetawan River in the north. Other explorers and surveyors used the same water route for early travel. Stisted Township was first surveyed in 1867. In 1868, the Free Grant Land Act was passed, and in 1869, Stisted Township was opened for settlement.
- By 1879, Stisted Township had a population of 1500 and most of the land had been granted as homesteads of 100 or 200 acres. Almost all of the land around Fox Lake was being homesteaded at this time.
- Port Vernon was the northernmost steamship port on Lake Vernon. In 1879 the Port Vernon Post Office was renamed the Hoodstown Post Office. A steam-powered ship, the Northern, provided transportation between Port Vernon and Huntsville.
- In 1880, a plan was registered for Hoodstown for the area between Hoodstown Rapids, the Foxtail (then called Loch Lomond), the big hill (Mount Ararat), and the north end of Lake Vernon. This plan laid out streets and a number of small one-eighth acre lots. (A lot 50 feet – or 15 metres, by 100 feet – or 30 metres, was approximately 1/8 acre). Another plan was registered on the west side of Hoodstown Rapids in 1890, but never developed.
- Hoodstown reached its peak in the early 1880's. It boasted a sawmill, a hotel, three general stores, two churches and a number of homes. The Hoodstown Dam was cut by Muskoka Slide and Boom after 1894 when a fire destroyed the sawmill. Huntsville became the focus for milling. The expected railway was located through Huntsville, rather than the Hoodstown area, and with little to support it, Hoodstown rapidly declined.
- Local land was not really suited to farming, so many homesteads were abandoned. Some were sold to lumber companies. One of these, Muskoka Wood Manufacturing Company, started in 1902.
- A major forest fire in the early 1900's may have caused a decrease in local logging. However, the Buck River was still used for some transportation of logs until 1935, when river driving became a thing of the past as lumber companies built roads to access lumber. Muskoka Wood demolished the Hoodstown Dam in 1936. In 1949 the dam was rebuilt as a concrete and timber structure by the Dept. of Public Works. We do not know, yet, when the dam was replaced after 1894, or whether there was another dam in place between 1936 and 1949. Future historical research may determine this.

Cottaging

- In the 1920's, Wilfred Tipper acquired land from Muskoka Wood on the east side of Fox Lake, built a "summer bush road", and subdivided some of the area into 50 foot lots. This was the beginning of cottaging on Fox Lake.
- In 1935, Jack Spanner acquired 3,300 ft of land on the east side of Fox Lake from W. Tipper. Spanner then owned the property on the north side of the "Point" as far north as the Fraser property, and south of the "Point" as far as the Blanchard property. Tipper retained the property to the south.
- Many lots were created, and cottages built on the east side between the 1930's and 1950's.
- A 100 acre parcel at the north end of east Fox Lake was acquired by the Dobesbergers in 1967, and recently, a few more shoreline lots have been developed on this property.
- In 1934, Mr. and Mrs. Thomas Walmsley of Toronto settled in Hoodstown on the west side of Foxtail. A new permanent home, built by Ida Walmsley Madill, was located on this property in 1974. The home is still at the end of the Foxtail, but the remainder of the property has recently been subdivided for cottage and backlot development.
- The west side of Fox Lake developed more slowly than the east, with the first cottages showing up in the 1940's, and with development progressing slowly through the 1960's and 1970's.
- Probably from the 1920's and up until the 1950's, the north end of Fox Lake was a working farm. It lay fallow until the mid 1970's when it was sold for potential development. The development of the north end is recent.

The Camps

- In 1935, Mr. Frank Latter built a cottage on Hewson St. in Hoodstown (east side) facing Foxtail. He also built other cottages which were rented out. He called his enterprise "Camp Ararat" after Mount Ararat, the big hill on the right as you come into Hoodstown on Hoodstown Road.
- In 1946, Camp Ararat was sold and became Camp Ogama, a boys and girls camp. More buildings were built and the camp was ready for operation in 1947.
- The camp changed ownership in 1957, and again in 1971, when it became Camp Winnebago.
- A Christian summer camp was built on the Mackie farm at the north end of the lake (date unknown at this time). In the 1960's this became Camp Romuva.

Currently, there are approximately 120 shoreline lots on Fox Lake and its two rivers. 20 of these are used year-round as homes, 72 are "cottages" used seasonally, two are youth camps, and 26 are vacant lots.



The Mackie Farm at the north end of Fox Lake, looking south.

Photographer: Murray White.

Courtesy of David White

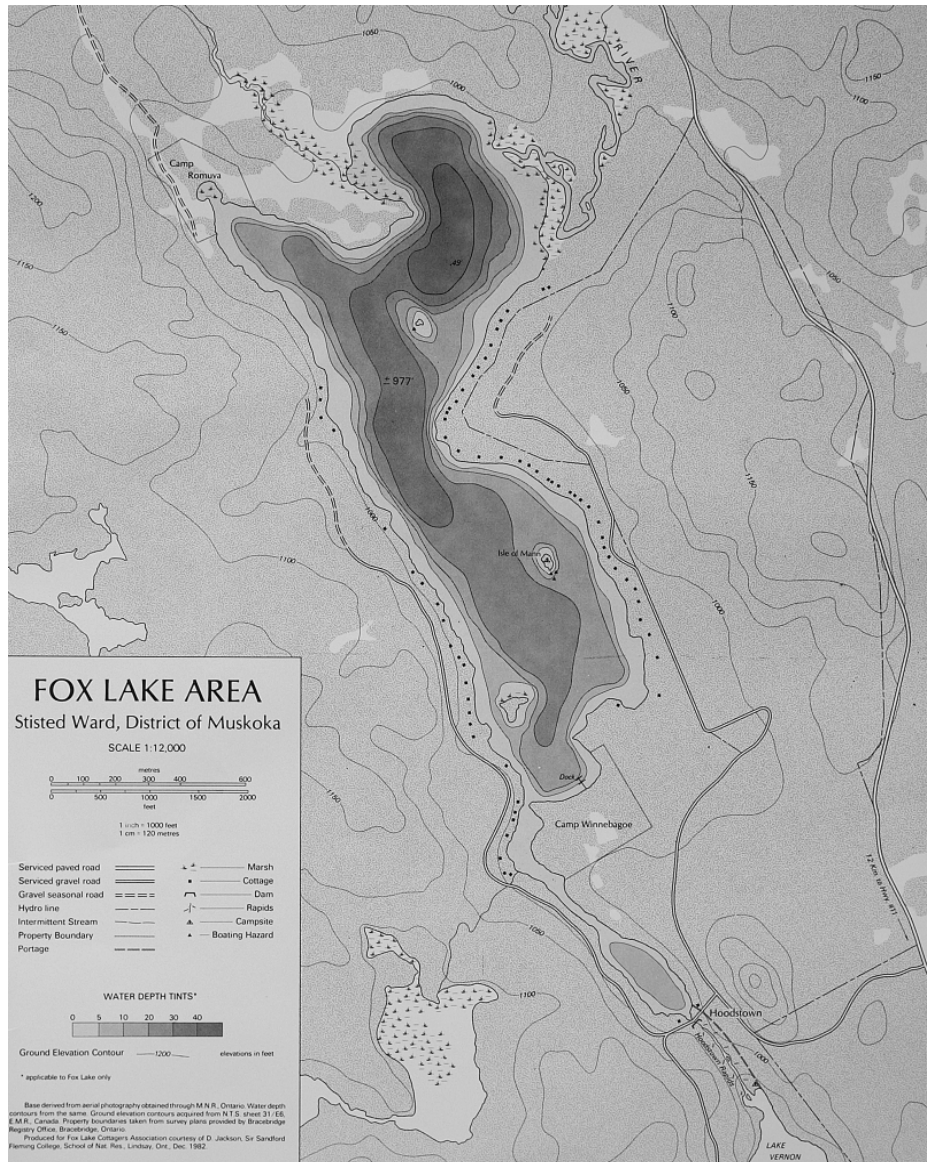
7.0 Fox Lake Characteristics

Fox Lake has a surface area of approximately 140 hectares (1.4 km²), with a maximum depth of 12.2 metres, and a mean depth of 5.7 metres. There are three small Crown Land islands in the Lake. Fox Lake comprises two distinct sections: a large upper basin, where the deeper water is found; and an outlet channel, locally known as the Foxtail, which is riverine and quite shallow for its length.

The contour map for Fox Lake shows the deepest part of the main basin is near its north end where Buck River enters the Lake. Here the depth approaches 15 metres, but most of the lake is less than 9 metres in depth, and portions of it are significantly less than that. Most of the Foxtail is less than 2 metres in depth, with the deeper parts of the Foxtail being around 3 metres.

Fox Lake water depths are enough to allow motorboats to travel without difficulty, although weeds and sunken logs are a hazard through the riverine section of the Foxtail. Water travel ends at the Fox Lake Dam and the Hoodstown Rapids are not at all navigable. Traditionally, a portage route has followed the river and rapids from Lake Vernon to the Fox Lake Dam at the south end of the Foxtail. The Buck River, from the Buck Lake Dam to Fox Lake, is deep enough and wide enough to allow canoes and small powerboats to navigate, though every spring changes the location of debris and log jams and submerged logs and stumps can pose a hazard. Usually, local river travelers clear out the worst of the obstructions each year. Another traditional portage, at the Buck lake Dam, facilitates the movement of canoes and small boats between Fox Lake and Buck Lake.

Although impounded, Fox Lake can be subjected to significant shoreline currents when the Buck River is passing large volumes of water, or when strong winds are funneling north or south through the lake. Changes in shoreline vegetative cover, particularly along some of the sandy shorelines in the larger part of the lake, can result in erosion or trans-location of shore materials. Cribs and permanent dock structures which can impede water flow can also result in erosion-deposition of materials along the shore.



Lake Depths: 1982. Courtesy of Doug Jackson.

7.1 The Dams

The original Buck Lake and Fox Lake dams were most likely constructed in the late 1880's to facilitate the transport of logs to sawmills and, in the case of the Hoodstown Dam, to provide water to power the mills at the Hoodstown Rapids.

Originally constructed of rock and timber, these structures were taken over and rebuilt with concrete by the Ontario Department of Public Works (ODPW). The Buck Lake Dam was reconstructed in 1954 as a concrete dam. The Fox Lake Dam was reconstructed in 1949 and again in 1979. In the early 1970's, the responsibility for the operation and maintenance of the dams was transferred from the ODPW to the Ministry of Natural Resources (MNR)².

The Buck Lake Dam, which supplies the majority of the water to Fox Lake, is approximately three metres high with two adjustable sluiceways (with stop-logs), and additional overflow spillways. It holds back a summer head of 0.92 metres, and is managed by MNR to control Buck Lake water levels for recreational purposes. Immediately below the dam is a long stretch of rapids with bedrock, rubble and gravel bottom.



The concrete and timber dam and bridge at Hoodstown Rapids, 1949 – 1979. Circa 1970. Photo by W Mohun.
(Enhanced by Ellen Fox)

The current Fox Lake Dam was constructed in 1979, replacing one built in 1949, which itself replaced earlier dams, originally constructed for timbering and milling. The Dam is approximately 3 metres high and 15 metres long and maintains a normal summer head of 1.2 metres of water. (This means, if the Dam was not there, the Foxtail water level would be 1.2 metres, or 4 feet, lower; the narrow riverine section would be even narrower, with a more pronounced channel; and the main body of Fox Lake would be at least 1 metre lower.) There are no overflow spillways on the Fox Lake Dam, which is located in a narrow channel with steep sides. This

constriction may limit outflow during high flow events, presenting difficulties in controlling flood events. According to data from the MNR³, in a major flood, water levels could overtop the deck of the Fox Lake Dam.

The Fox Lake dam is now managed by the Ministry of Natural Resources for recreational water levels, and water storage/release as part of the Muskoka watershed system. The management regime includes using the lake as a spring reservoir, while maintaining reasonable stable summer recreational water levels.

² Acres International 2005

³ Acres – ibid – page 6-20

The Ministry's "Rule Curve" includes the following target levels⁴.

Operating Period	Target Level	Operating Zone
Summer Stable Period July 1 to September 1	294.45 metres Above Sea Level Geodetic Survey of Canada	+/- 10 centimetres of Target Level (i.e. 294.35 to 294.55 m ASL)
Fall September 1 to October 15	294.45 metres ASL	+/- 25 centimetres of Target Level (i.e. 294.20 to 294.70 m ASL)
Winter January 1 to late March	Slow drawdown period.	To a low point of 15 cm below Summer range, although drawdown to 25 cm. below Summer range is acceptable. (i.e. drawdown to 294.20 m ASL is normal, to 294.10 m ASL is possible)
Spring Late March to late June	Spring Reservoir period. Targeted to a high of 55 cm. above Summer level. (i.e. to 295.00 m ASL)	Can go higher in years of significant water flow.
Extremes	In 1995, a flood level of 295.57 m ASL was recorded. No extreme low level was cited by MNR source.	Author recalls an "event" in August 1981 when extreme rainfall, accompanied by blockage of the dam by floating debris, raised the lake level to the vicinity of 296 m ASL.

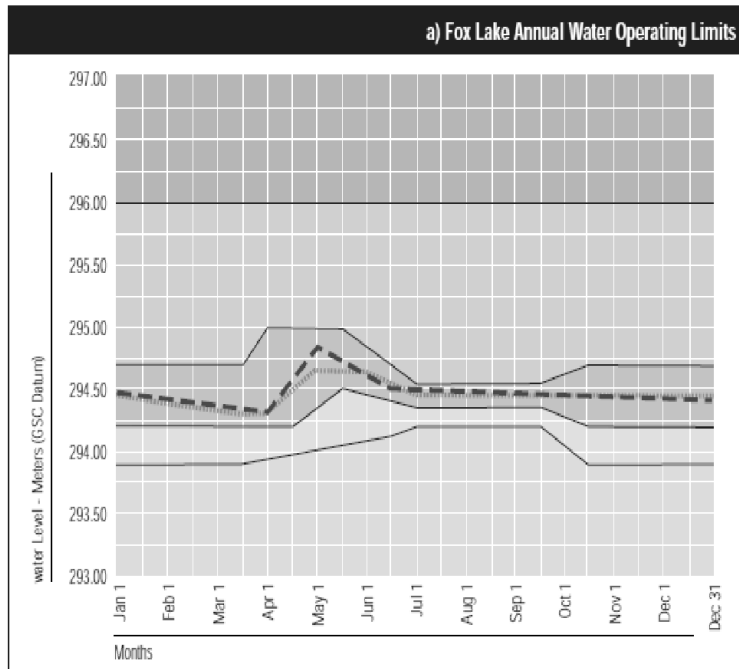


Figure 1: Rule Curve for Fox Lake, from Muskoka River Water Management Plan

According to the Muskoka River Water Management Plan⁵ the MNR operating plan for Fox Lake has the following characteristics:

Target Operating Level Range: 294.3 m to 294.6 m

Normal Operating Zone Range: 294.2 m to 295.0 m

Absolute Range: 293.9 m to 296.0 m

Summer* Range (Typical): 294.35 m to 294.5 m

Winter Drawdown: 294.35 m to 294.3 m

Flood Allowance (lake/river): 295.0 m to 296.0 m/9.9 m³/s

Maximum Daily Flow:** 26.7 m³/s

Minimum Daily Flow*:** 1 m³/s target

⁴ Taylor, Steve. Personal Interview, November 2000.

⁵ Acres International. 2004. Options Report: Muskoka River Water Management Plan. Final Report

Those of the Fox Lake community who have been around the lake for more than a couple of decades recall anecdotally that the summer levels of Fox Lake used to be maintained at a lower level than they are now. People recall wider sand beaches, changes in the amount of shoreline vegetation and identify shoreline erosion as a recent problem.

The Ministry of Natural Resources maintains that it manages the Fox Lake water levels according to the Rule Curve as shown in the Rule Curve, Figure 1 on the previous page. The Lake community generally recognizes that the current water level management program has been similar since the mid 1980's. Prior to then, the summer levels were lower and were reached earlier in the season. Most long-term residents will admit that the levels could vary significantly with the weather, but that is true now as well as then.

Again anecdotally, long-term lake users attribute an increase in shoreline erosion to increased summer water levels and spring levels being maintained higher for a longer period. Add to this an increase in larger powerboats over the last couple of decades, and a tendency for people to use powerboats earlier in the season when water levels are still high, and one can see that shoreline erosion may indeed have increased.

Recommendations about Water Level Management:

- 14. *The Fox Lake Association should develop an historical perspective on the management of water levels on Fox Lake, using photographic evidence collected from lake users, and any other historical records that can be found. This should be compared with the current situation and examined for evidence of increased shoreline erosion or other detrimental effects on the shoreline and its traditional use. This, combined with continuing vigilance and sharing of information with the Ministry of Natural Resources dam water level managers, should be used to confirm or modify an appropriate rule curve for Fox Lake.***
- 15. *The impact of powerboat wakes should be investigated to see if there is a correlation between wakes, loss of shoreline vegetation, erosion, loon nesting, and other natural processes. An education program about power boat use and impacts could be one of the results.***

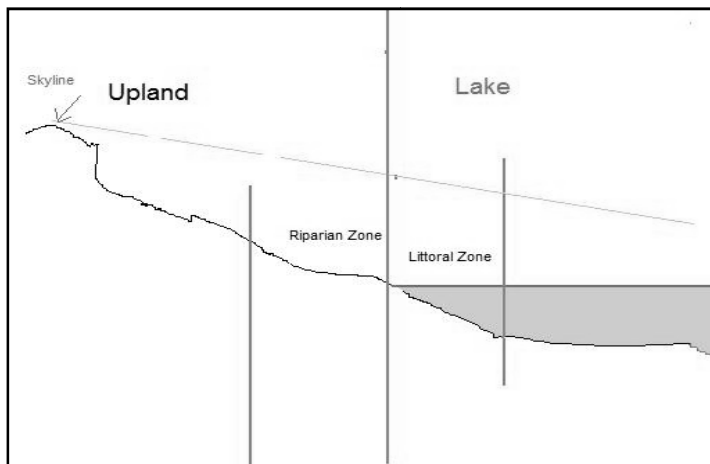
7.2 The Fox Lake Shoreline

The shoreline of Fox Lake, not including Buck River or the Hoodstown Rapids, is approximately 10.7 kilometres in length; and on Fox Lake, it is predominantly in a natural state. This does not mean it is in a pristine untouched condition, but that, to most appearances, it still looks natural, and features trees, shrubs and a variety of water vegetation. The Department of Fisheries and Oceans Canada states that *"natural shores are among the world's most effective, least expensive erosion controls. The mix of plants, shrubs, and trees forms a complex web of roots and foliage that knits the waterfront together, holding the bank in place and fending off the impacts of wind, rain, waves and boat wake."*⁶

In the spring of 2003, the District of Muskoka undertook a Land Use Survey of Fox Lake shoreline. (See the map "**Fox Lake Land Use Survey, June 2003**" inserted as Page 45.) The shoreline survey program was started in the summer of 2002 to collect data on shoreline vegetation, shoreline structures and the first 20 meters of land around a water body. The information gathered is intended to contribute to the growing database on the lakes in Muskoka and will identify long-term trends respecting this important buffer area.

⁶ Ford, Ray. Department of Fisheries and Oceans. The Shore Primer.

If you imagine yourself in a boat, sitting offshore and looking landward, you can envision 3 or 4 different parts to the shoreline. The farthest you can see is the **Skyline**. The view of the Fox Lake skyline is one of unbroken forest, predominantly deciduous trees, with patches of conifers. The **Upland Zone** extends from the skyline down to the area along the lake edge. Around Fox Lake, this area is predominantly forest, with occasional breaks in tree cover where there are cottages, houses, lanes, or other clearings.



The first 10 to 20 metres inland from the water's edge is called the **Backlot** in a study conducted on Fox Lake in 2003 by the District of Muskoka. This is also commonly known as the **Riparian Zone**. As well as providing the erosion control to the shoreline, a natural Riparian Zone acts as a buffer to filter out such things as fertilizers, phosphorus and sediment from running into the lake.

Some advocates of natural shorelines believe that the Riparian Zone belongs to the lake and should be subjected to little or no disturbance. In this context, Fox Lake is in reasonably good shape. As shown in the adjacent table, and on the map on page 45 "**Fox Lake Land Use Survey, June 2003**"⁷ almost 75% of

Backlot Area and Percentage (Riparian Zone)		
Backlot Type	Area square metres	Percent
Coniferous Forest	1,340	1
Deciduous Forest	66,570	32
Mixed Forest	77,110	37
Thinned Forest	20,182	10
Overgrowth	2,276	1
Shrubs	250	0.1
Wetland	12,267	6
Road	606	0.3
Landscaped Lawn	9,084	4
Buffered Lawn	9,956	5
Unbuffered Lawn	11,263	5
Total	210,918	100
Natural	157,547	74.7
Altered	53,370	25.3

the Backlot area (Riparian Zone) on Fox Lake was in a natural condition with forest, shrub or wetland cover, and 25% had been altered to some extent, some of those alterations being minor (thinned forest, buffered lawn), and some more significant (road, landscaped lawn, unbuffered lawn).

The **Littoral Zone** is the area from the water's edge where the sunlight can penetrate to the lake bottom. This near-shore area contains most of the aquatic plants in a lake. Along with the material on the lake bottom, such as rocks, submerged wood and other vegetative debris, the plants in this zone provide a diverse protected habitat and food sources for a variety of invertebrates, amphibians, fish, and wildlife. Aquatic plants in the Littoral Zone are the source of much of the oxygen in the lake. The adjacent table, also from the aforementioned "Fox Lake Land Use Survey", shows that a significant 96% (10.3 kilometres) of the Littoral Zone is still in a natural condition. Of this, almost 2400 metres (22% of the total shoreline) is natural sand beach, 1200 metres (11%) is rock shoreline, and 6800 metres (63%) is wetland, or primarily aquatic vegetation.

⁷ District of Muskoka. 2003. Fox Lake Land Use Survey. A Map.

The “**Fox Lake Land Use Survey, June 2003**” also mapped built (man-made) structures at the water’s edge. Some of these are in the Riparian Zone, some in the Littoral Zone, some cross from one to the other. Since this survey was done, eight more properties have been developed, some older cottages have been redeveloped, and the number of shoreline structures has increased. Most new or replacement docks that have been added are floating or pole docks, which have less impact on the Littoral Zone and its vegetation and fauna. Some of the aquatic vegetation has been reduced simply from the action of docking boats and shoreline disturbance brought about by waterfront activities. A significant shore front addition is an airplane hangar built on the west side of the lake, just north of the Foxtail. The number of beaver lodges mentioned in the table varies year-to-year with the increase or decrease of the beaver population.

Shoreline		
Shoreline Type	Length (metres)	Percent
Beach	2,357	22
Rock	1,216	11
Wetland	6,802	63
Wood Ramp	19	0.2
Stone Shorewall	255	2
Wood Shorewall	92	>1
Total	10,741	100
Natural	10,375	97
Altered	366	3
Structures	138	>1

Shoreline Structures (in June, 2003)	
Type of Structure	Number
Slip Land Boathouse	2
Crib Dock	5
Floating Dock	19
Pole Dock	25
Beaver Lodge	6
Bridge	1
Total	58

Together, the water’s edge, the Riparian Zone on the shore, and the Littoral Zone in the water are very significant to the natural life and health of a lake. They

provide significant fish and wildlife habitat, feeding areas, nurseries, and travel corridors. They protect the shoreline from erosion, the water from runoff, sediments, and the addition of excess nutrients. In their variety of trees, shoreline shrubs and flowers and aquatic vegetation, they provide a naturally aesthetic scenic environment for all to enjoy.



A piece of natural shoreline on the north shore of Fox Lake, with pickerel Weed emerging in the water, High bush Viburnum blooming on the shore, and a variety of herbaceous and shrub vegetation providing all the benefits of wildlife and fish habitat, as well as protection from run-off.

Photograph by Jack van der Meer, June, 2009.

Fox Lake Land Use Survey, June 2003



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Structure by Type

- BHL1 (2)
- DC (5)
- DFL (19)
- DP (25)
- NBL (6)
- OSB (1)

Shoreline by Type

- NB (36)
- NR (14)
- NW (50)
- RW (2)
- SWS (8)
- SWW (3)

Backlot by Type

- NFC (1)
- NFD (26)
- NFM (23)
- NFT (16)
- NO (4)
- NS (1)
- NW (5)
- OR (3)
- YL (9)
- YLB (10)
- YLU (9)

Backlot Area and Percentage

Backlot	Type	Area_m2	Percent
NFC	Coniferous Forest	1,340.03	0.64
NFD	Deciduous Forest	66,570.06	31.96
NFM	Mixed Forest	77,119.45	36.56
NFT	Thinned Forest	20,162.73	9.57
NO	Overgrowth	2,276.48	1.08
NS	Shrub	250.13	0.12
NW	Wetland	12,267.63	5.82
OR	Road	606.73	0.29
YL	Landscaped Lawn	9,064.13	4.31
YLB	Buffered Lawn	9,056.75	4.72
YLU	Unbuffered Lawn	11,263.88	5.34
Total		210,918.00	100.00
Natural		157,547.30	74.70
Altered		53,370.70	25.30

Shoreline Length and Percentage

Shoreline	Type	Length_m	Percent
NB	Beach	2,356.92	21.94
NR	Rock	1,216.11	11.32
NW	Wetland	6,802.03	63.33
RW	Wood Ramp	19.41	0.18
SWS	Stone Shorewall	254.88	2.37
SWW	Wood Shorewall	91.67	0.85
Total		10,741.02	100.00
Natural		10,375.06	96.59
Altered		365.96	3.41
Structures		138.00	1.28

Structure Count

Structure	Type	Count
BHL1	1 Slip Land Boathouse	2
DC	Crib Dock	5
DFL	Floating Dock	19
DP	Pole Dock	25
NBL	Beaver Lodge	6
OSB	Bridge	1
Total		58

7.3 More about the Littoral Zone

As mentioned previously, over 63% of the Littoral Zone is defined by the Fox Lake Land Use Survey (2003) as wetland, or primarily aquatic vegetation. In general, there is an area of gently sloping lake bottom extending out from the water's edge, all around the lake. The lake bottom (substrate) in this area is usually sand or clay, overlain by a few centimetres of muck and organic detritus. At some point, the lake bottom drops off quickly and this can be right at the water's edge, or in a few locations, this can be several

metres from shore. The area from the water's edge to the drop-off usually supports an abundance of aquatic vegetation. This includes emergent species near the shore (the leaves come up out of the water), submerged species with floating leaves, usually a little farther out, and totally submerged species, often in deeper water. The species recorded over the years are shown in the adjacent table.

Aquatic Vegetation in Fox Lake			
Common name	Species	Community	When reported
White Water Lily	<i>Nymphaea odorata</i>	Floating -leaf	1921, 1973, 2001
Pickerelweed	<i>Pontederia cordata</i>	Emergent	1973, 2001
Spikerush	<i>Eleocharis</i> species	Emergent	1973, 2001
Eel Grass (aka water celery)	<i>Valisneria americana</i>	Submersed	1973, 2001
Water Horsetail (joint rush)	<i>Equisetum fluviatile</i>	Emergent	1973
Water Milfoil	<i>Myriophyllum</i> species	Submersed	1973
Long-leaf Pondweed	<i>Potamogeton</i> species	Submersed	1973, 2001
Yellow Pond Lily (Spatterdock)	<i>Nuphar variegata</i>	Floating -leaf	1921, 1973, 2001
Watershield	<i>Brasenia scheberi</i>	Floating -leaf	1973
Burreed	<i>Sparganium eurycarpum</i>	Emergent	1973
Pipewort	<i>Eriocaulon aquaticum</i>	Submersed	1921
Bladderwort	<i>Utricularia vulgaris</i>	Submersed	1973
Coontail (Hornwort)	<i>Ceratophyllum demersum</i>	Submersed	1973

Many people see aquatic vegetation as a nuisance, and they often clear away the vegetation in front of their property. Perhaps they do not realize the importance of aquatic habitats for both human and wildlife uses.

The Shoreline Primer states, *"The zone where the water meets the land is the richest natural environment most of us will ever come into contact with, and certainly the most complex piece of the earth we'll have the opportunity to live near and share. Equally important, the waterfront is crucial to your lake's health, acting as the lungs, doormat, cafeteria, and daycare for the lake, as well as a living retaining wall for the shore. When the natural shoreline is altered, often by well-intentioned projects meant to improve waterfront living, that intricate balance between the creatures, plants and earth is toppled. Altering any portion of this region affects the whole, diminishing its ability to support life on the lake."*

Aquatic plants can improve water quality by absorbing phosphorus, nitrogen and other nutrients from the water that could otherwise contribute to the enrichment of the water, and possibly, algal growth. Shoreline vegetation can trap waterfront runoff and inhibit sedimentation of a lake. Stands of waterfront vegetation can buffer the shoreline from waves and boat wakes, thereby reducing shoreline erosion. There is also an aesthetic beauty to the stands of purple pickerelweed flowers, scattered white water lily and yellow spatterdock flowers, and the green carpets of floating leaves.

7.4 Fish Habitat

Under the Federal Fisheries Act¹, fish habitat is defined as those parts of the environment on which fish depend, directly or indirectly, in order to carry out their life processes. These include spawning grounds, nursery grounds, migration (daily or seasonal travel) routes, and feeding areas, all of which are provided for by the shoreline zones of our lake. Destroying, disrupting or altering fish habitats are offences under the Federal Fisheries Act.

The aforementioned Fox Lake Land Use Survey (2003) identifies that 96% of the Fox Lake shoreline (Littoral Zone) is in natural or relatively undisturbed condition, and 63% has abundant aquatic vegetation still intact. This is important fish habitat. Removal of aquatic vegetation or shoreline development that would diminish such habitat is discouraged.

Recommendations about Shoreline and Fish Habitat:

- 16. Maintain the forested skyline view around Fox Lake and the Buck River.***
- 17. Encourage landowners to maintain their shoreline, including both the Riparian and Littoral Zones, in a natural condition, or to rehabilitate portions of the shoreline that have undergone significant modification.***
- 18. Encourage the use of pole or floating docks, which have a lesser effect on aquatic vegetation and fish habitat than crib docks or other filling.***
- 19. Discourage any shoreline structures that cross the shoreline into the Littoral Zone, (such as boat houses, or roofed docks) both because of their impact on aquatic vegetation and fish habitat, and also to maintain the aesthetics of a natural shoreline.***

7.5 Benthic Species

Benthos are the benthic species such as the insects and other aquatic species that live naturally in the lake and streams and form the base of the aquatic food chain. They can include insect larvae such as caddisflies, craneflies, damselflies, dragonflies, mayflies, stoneflies, and other aquatic insects, as well as certain freshwater mollusc, clam, crayfish, leech, worm and snail species. Certain benthic species, which are intolerant or moderately tolerant to pollution, can be an indicator of the health of a lake environment.

Recommendation:

- 20. Establish benthic monitoring. The District of Muskoka and the Lake Partner Program provide assistance with benthic monitoring, as does the Huntsville Lakes Council on request.***

¹ Ontario Ministry of Natural Resources, with Fisheries and Oceans, Canada. Working Around Water. 1993.

7.6 Fish

In 1921, the Ontario Department of Game and Fisheries² investigated Fox Lake, and made some interesting observations. Investigators Pearce and Miller noted the following on the “Lake Card Report Form”:

- *Character of Region: Low sandy hills, wooded with deciduous trees, north end of lake cleared and cultivated.*
- *Bottom: East, sandy 30%, West, mud 55%, Rocky 15%*
- *Vegetation, Marginal: Fairly abundant, mostly deciduous trees.*
- *Vegetation, Submerged: Scarce, some water lilies, Eriocaulon.*
- *Water Colour: Brown.*
- *Water Turbidity: Clear.*
- *Water Transparency: 8 feet with Secchi Disk (2.4 metres).*
- *Fish Present: Perch, catfish, shiners, chub, sunfish (probably pumpkinseed), small suckers.*
- *Extent and Importance of Fishing: Fair sized perch and catfish found here, little fishing done, no game fish.*
- *“We consider this Lake suitable for smallmouth black bass.”*

In 1973, a Ministry of Natural Resource Lake Survey Summary Report observed:

- *A larger variety of aquatic vegetation*
- *Fish: Common white sucker, yellow perch, pumpkinseed, trout perch, common shiner, golden shiner, minnows, black-nosed dace, ciscoe and brown bullhead. Surveyors also list smallmouth bass, but their fish sample (netting) records show that none were caught in their nets. Surveyors noted “There are large numbers of minnows in this lake, but very few sport fish.”*
- *A list of Plantings shows that Fox Lake was stocked in 1939 (6000 yearling speckled trout), 1947 (an unknown number of smallmouth bass), 1948 (1000 fingerling smallmouth bass), 1952 (200 fingerling smallmouth bass), 1953 (400 fingerling smallmouth bass), 1954 (100 adult smallmouth bass), 1956 (300 fingerling smallmouth bass), and 1960 (1000 fingerling smallmouth bass).*



Fishing with the grandkids.

Photograph by Leslie van der Meer

² The Department of Game and Fisheries became part of the Department of Lands and Forests in 1946. Lands and Forests became the Ministry of Natural Resources in 1973.

A 1978 netting record shows a catch of 34 smallmouth bass, 43 white suckers, 27 brown bullheads, and 8 pumpkinseeds.

In 1986, sport fish were collected for sampling by the Ministry of the Environment, as part of the Fish Contaminant Monitoring Program. Samplers caught 2 smallmouth bass, 2 largemouth bass and 10 northern pike by angling, and 6 smallmouth bass, 12 largemouth bass by trap net. In addition, samplers record the presence of brown bullhead, pumpkinseed, yellow perch, and white suckers.

Fish species identified in Fox Lake Surveys, Samples, or Angler Reports		
Common name	Scientific name	When Recorded
Bass, smallmouth	<i>Micropterus dolomieu</i>	1973, 1978, 1986
Bass, largemouth	<i>Micropterus salmoides</i>	1986
Brown bullhead	<i>Ameiurus nebulosus</i>	1921, 1973, 1978, 1986
Black crappie	<i>Pomoxis nigromaculatus</i>	2004
Black-nosed dace	<i>Rhinichthys atratulus</i>	1973
Ciscoe (Lake herring)	<i>Coegonus artedii</i>	1973
Chub	<i>Semotilus atromaculatus</i>	1921,
Common white sucker	<i>Catostomus commersoni</i>	1921, 1973, 1978, 1986
Minnows	<i>unspecified</i>	1973
Northern pike	<i>Esox lucius</i>	1986
Pumpkinseed	<i>Lepomis gibbsius</i>	1973, 1978, 1986
Shiner, common	<i>Notropis cornutus</i>	1921, 1973
Shiner, golden	<i>Notemigonus crysoleucas</i>	1973
Trout perch	<i>Percopsis omiscomaycus</i>	1973
Walleye	<i>Sander vitreus</i>	2000
Yellow perch	<i>Perca flavescens</i>	1921, 1973, 1986

Perhaps before the original dams were built in the 1870's, a different variety of fish species could make their way between Buck, Fox and Vernon Lakes, but the Buck Lake and Fox Lake dams both impede upstream passage of fish. So the 1921 lake survey found no game species, and apparently a decision was made to introduce smallmouth bass. This species was repeatedly introduced in the 1940's, 50's and 60's, and perhaps later, but it took awhile for this fishery to get established. Although Ministry of Natural Resources fish surveys reported few smallmouth in 1973, local fishermen remember smallmouth bass fishing as very good in Fox Lake from the 1950's until the 1980's.

In the early 1980's, northern pike were accidentally released into the Buck/Fox Lake system, and their population exploded, at the

expense of the smallmouth bass and most of the other species of prey fish. After pike became established in Fox Lake, many of the forage fish populations plummeted, the bullfrogs that once blanketed summer evenings with their calls all but disappeared, and breeding ducks and loons became less successful rearing their young.

Between 1998 and 2001, a Buck Lake community-based effort established walleye in Buck Lake, and this species began to show up in Fox Lake very shortly after that. Walleye appear to have become a part of the Fox Lake fish community. The fact that anglers catch walleye representing several different sizes and age classes suggests that they may be reproducing naturally in Fox Lake.

The Lake Plan for Buck and Fawn Lakes lists black crappie from a 2002 fish survey. In 2004, and since, some anglers have caught black crappie in a couple of locations on Fox Lake.

So a lake, that in 1921 had no sport fish species, now has smallmouth bass (introduced on purpose), largemouth bass (probably downstream migrants from Axe Lake, where they were stocked), northern pike (an unauthorized, maybe accidental, upstream release.), walleye (downstream migrants from a Buck Lake release program), and black crappie (probably migrants from an unauthorized upstream release). One is not sure what one might catch when fishing on Fox Lake. Perhaps all of these species will work out some kind of equilibrium.

The lasting impact that the introduction of northern pike had on Fox Lake shows how little we know about the interaction of species in a natural system. Perhaps we should be careful trying to “improve” nature.

Recommendations about Fish:

- 21. Encourage the Ministry of Natural Resources to conduct regular fish surveys on Fox Lake and to monitor the results of accidental and purposeful introductions into our lake system.***
- 22. Educate our people about the negative possibilities of unplanned introductions of species into a natural environment.***
- 23. Ensure that the Fox Lake Association is aware of plans on upstream lakes for the introduction and management of aquatic species.***

7.7 Wetlands

Huntsville's Official Plan identifies wetlands³ as lands that are seasonally or permanently covered by shallow water (or where the water table is at or close to the surface) and "where the presence of abundant water has caused the formation of hydric soils and favours the dominance of either hydrotrophic (water-loving) or water tolerant plants." Wetlands include swamps, marshes, bogs and fens.

The Official Plan also identifies wetlands as an important natural resource that: "maintain and improve water quality; help control flooding; provide habitat for fish and wildlife; provide conditions for a wide variety of vegetation; and contribute to the social and economic benefits related to hunting, fishing, wildlife viewing and appreciation of nature."

There are two obvious wetlands at the north end of Fox Lake, and along portions of the Buck River. There are also some inland wetlands scattered through the planning area, as shown on the map, "**Fox Lake - Official Plan Data**" on page 53..

The Fox Lake Plan recognizes the values attributed to wetlands, and supports their protection from development, drainage, filling, or other alteration.

Recommendation:

- 24. Identify our wetlands as locally significant to our Fox Lake area and work with the Town of Huntsville to ensure that they are not negatively impacted by manipulation or development.***

7.8 Streams

Streams with permanent water flow and intermittent streams are considered to be of value for their contribution to fish and wildlife habitat. They can also play a role in the transfer of nutrients from the surrounding lands to the rivers and lake.

There are a few intermittent streams that flow into Fox Lake in the spring thaw, and sometimes after periods of heavy rain at other times. Their main significance lies in their potential to cause problems with road washouts, and as recently as this spring (2009) both East Fox Lake Road and West Fox Lake Road have experienced flooding and washouts due to excessive flow in intermittent streams and insufficient roadside drainage and culverts to cope with these flows.

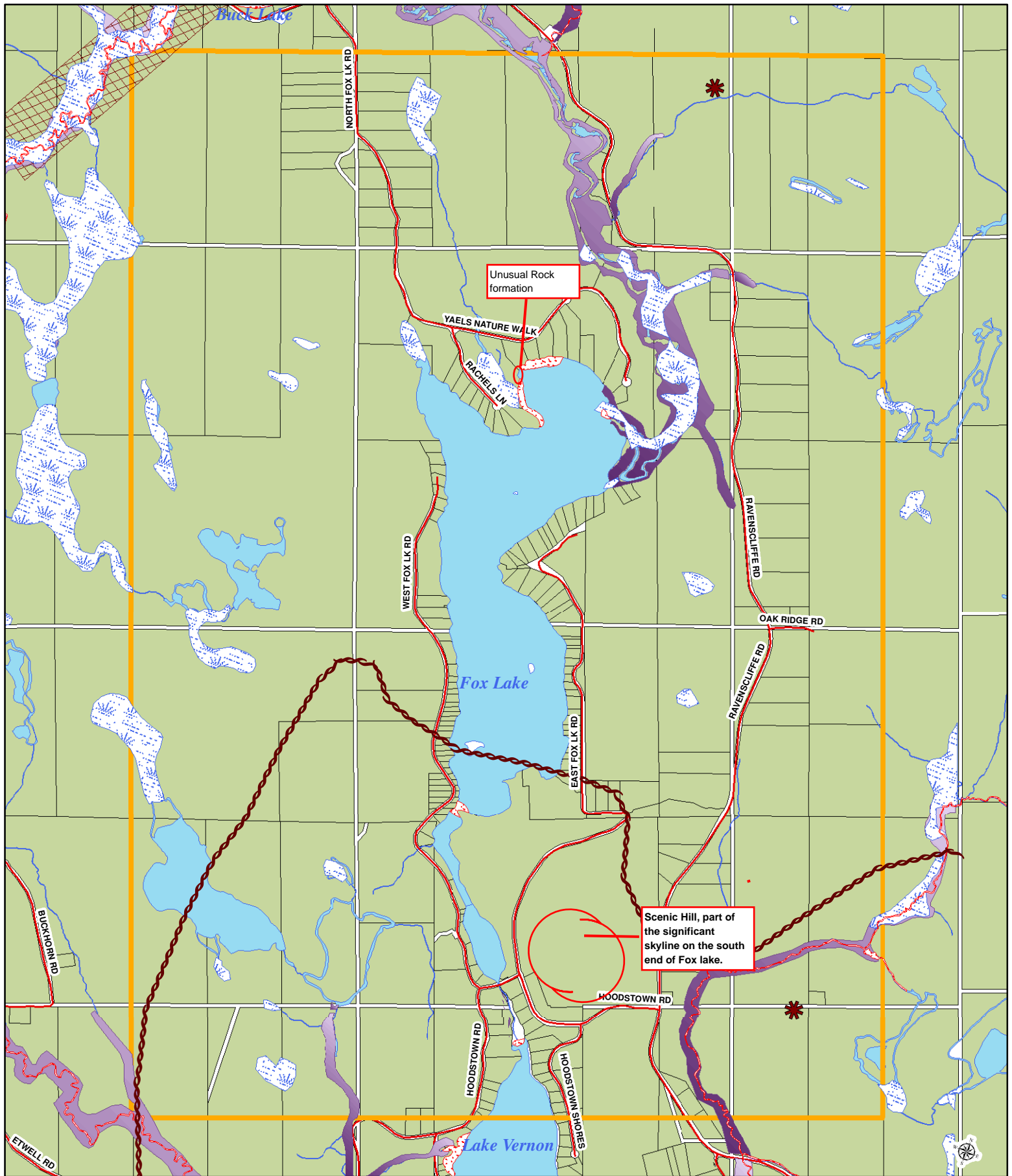
Three permanent streams, as identified on the map "**Fox Lake - Official Plan Data**", flow into the Buck River. Another stream flows into the wetland at the north end of Fox Lake.

The Fox Lake Plan recognizes that alterations to streams through development or forestry or farming practices could have a downstream impact on Buck River and Fox Lake. However, this impact would be mitigated if the zoning restrictions concerning setbacks from watercourses for various activities are followed.

Recommendation:

- 25. Where existing land use does not meet the requirements of the 2008 Huntsville Zoning By-law regarding setback from watercourses, encourage landowners to "retrofit" their land use to comply so as to minimize the potential impact on the watercourse.***

³ Town of Huntsville Official Plan. 2006.



UTM Zone 17 NAD 83



April 24, 2009
Geomatics Department
Information may not necessarily be an exact and/or current reproduction of official documents. In case of discrepancy, official documents are correct. The map is a public resource of general information and is not a plan of survey nor is it suitable for navigation. This road network information has been generated or adapted from Ontario Road Network Database. The Ontario Road Network Database is the property of the Government of Ontario and is used under licence from the Government of Ontario.

FOX LAKE - OFFICIAL PLAN DATA Town of Huntsville

0 195 390 780 1,170 1,560
Meters

Legend

- sigwildlife_stisted
- deer_wintering_Stisted

FISH_HAB_TYPE

TYPE

- 1
- 2
- 3
- stisted_marshlands
- heritage_areas_stisted
- natural_resource_stisted
- Association Area

- Road
- Tributary
- Lake
- Property

7.9 Wildlife

We live or cottage in the country because it is less developed with a more natural landscape. We come to the cottage to enjoy the lake and the bush and to play in nature's environment. We live here, work here, or play here because it is farther away from population pressures and the evidence of commercial, industrial or even residential development.

Our relationship with this rural cottage environment is reinforced by seeing wildlife in its natural habitat: loons, calling hauntingly in the evening; a skein of Canada geese flying overhead in the spring, calling amongst themselves; whitetail deer slipping through the forest; a mink darting along the shoreline in and out of the water's edge; a raft of ducks; birds singing; a startled snowshoe hare darting under cover; even the saucy chipmunks and red squirrels chattering in the yard; or the rare and thrilling sound of wolves howling in the distance.

The Fox Lake area lies within a very large area of forested land with a variety of deciduous and coniferous forest stands, areas of wetlands, lots of shoreline and some scattered clearings, all of which add up to a variety of habitats with ample travel corridors and buffers that support wildlife communities.

No endangered or threatened species habitat has been identified within our Fox Lake planning area. Any site so identified in the future would require protection from development or other activities.

Mammals

Huntsville's Official Plan (see **Fox Lake - Official Plan Data**) recognizes that the south part of our Fox Lake planning area is a Deer Wintering Area, where white-tailed deer tend to accumulate in the winter for the available food and shelter. This has implications for development, as the Town's Official Plan policies require that no negative impacts occur to deer habitat. This may require Site Plan Control or subdivision/consent agreements to mitigate such impact.

Mammals Recorded in the Fox Lake Area

White-tailed Deer	Striped Skunk
Moose	Porcupine
Raccoon	Beaver
Black Bear	Muskrat
Wolf	Snowshoe Hare
Coyote	Eastern Chipmunk
Red Fox	Red Squirrel
Lynx	Grey Squirrel
Weasels	Flying Squirrel
Mink	Groundhog (Woodchuck)
Marten	Various Mice, Voles,
Fisher	Shrews and Moles
River Otter	Bats

Deer are numerous in this area. Deer eat plant material, usually twigs and leaves, but also seem to like garden plants, shrubs and cedar trees. This can become a problem for local properties when deer populations become higher than normal and when deer become habituated to eating around houses and cottages. Deer can also become a traffic hazard when their numbers are high.

The Ministry of Natural Resources monitors deer health, and generally does not recommend the feeding of deer under normal winter conditions. However, it will identify when deer are at risk, and

sometimes makes supplemental food available for volunteers to help out in those extreme situations.

Although it is "nice" to see deer around, 1) unnecessary winter feeding can affect their metabolism, so it does more harm than good to the deer itself and 2) deer become habituated to coming to a winter feeding area and will return in the spring and summer to eat whatever else they can find.

Fox Lake has a natural population of beaver. Beaver build lodges, often in wetland areas or shallower “pond-like” lake areas, but on Fox Lake, usually against a bank or shoreline. These are not normally a problem unless they choose to build them on an area used by the landowner. Beaver dams have not been a problem on Fox Lake, but they could try to dam the narrower section where the main body of Fox Lake becomes the Foxtail.

Beaver make their lodges and their dams from trees. They eat tree bark, shoreline shrubs, and sometimes tubers from water plants. Beaver fell trees randomly. Often beaver only partially cut through a tree which could fall in a later wind storm. Their tree felling can be hazardous to buildings, docks, etcetera and they can also choose trees which the landowner would rather were left standing. Male beaver make scent piles on shore, sometimes on beach edges or on docks.

Beaver populations are naturally controlled by the availability of food and the population of predators. There is ample food available for beaver in the Fox Lake area, but some of it consists of the trees that landowners prefer to keep standing.



A typical shoreline beaver lodge, this one on the east side of Fox Lake.

Photograph by Jack van der Meer, June 2009

Black bear are not uncommon in the Fox Lake area. They are omnivores, always hungry, and always looking for food. They are food opportunists, and will eat plants, roots, insects, carrion and small animals. They have been known to predate young deer and moose. Berry patches and gardens can be visited by bears. Garbage is also food for bears.

Black bear are big, strong animals. If they want to go somewhere, they usually can. If they want to open something, like a log, a stump, a beehive or a garbage bin, they usually can. They are smart enough to learn to revisit a source of food. Bears, therefore, can become a problem in cottage country.

The solutions to “problem” bears include managing bear populations, prevention, or removal.

Population management usually implies monitoring and controlling the bear population and usually means accepting hunting as one of the management tools. Many think bear populations are increasing since bear hunting opportunities have been reduced by the Province of Ontario.

Prevention of nuisance bears puts the onus on the landowner to make sure garbage and recycling materials are kept inaccessible, by storing them inside or in a bear-proof container. It is also prudent to not put garbage out overnight (or longer) for collection the next day.

Sometimes nuisance bears can be removed from the area where they are a problem. The Ministry of Natural Resources or other individuals may provide live-capture traps, so nuisance bears can be caught and taken away. The problem is, where does one take them? Bears can find their way back to their home range from 80 or more kilometres distance. If a young bear is released into another bear's territory, it may not survive the competition. There are very few areas to release a nuisance bear where it won't become a nuisance in the new location. If a nuisance bear becomes destructive to property, or dangerous to personal safety, the only reasonable choice may be to end its life. This is not to be taken lightly, and may require the resources of a local hunter or trapper, with the approval of the Ministry of Natural Resources.

Raccoons are common in the Fox Lake area. They are like small bears only more numerous. They eat anything, are always hungry, and are always looking for food. Raccoons, too, include garbage in their menu. Raccoons are dextrous, and though not as strong as bears they can figure out how to open most containers. Raccoons, therefore, can also become a nuisance in a cottage area. As with bear, the onus is on the human side of the equation to avoid the development of problem behaviour. Proper storage of garbage and recycling, indoor feeding of pets and storage of their food and placing bird feeders out of reach, may curb racoon scavenging behaviour.

While not normally considered part of the wildlife community, domestic cats can become a significant player in the local ecosystem. Domestic cats are incredible hunters. They can do much to keep rodent populations in check, but also eat small birds. When cats go wild (feral), they adapt well to the natural world. They become very efficient predators to the detriment of mice, chipmunks, squirrels and small birds. Cats also can have a serious impact on snowshoe hare and ruffed grouse populations. In the wild, cats can fall prey to larger predators, such as fisher, wolves, and coyotes. This can also happen to domestic cats that are let out to roam at night. The solutions are simple. Do not let domestic cats wander freely, especially at night and never abandon unwanted cats to the wild.

Birds

A wide variety of bird species are found throughout the area, typical of this region of forests and lakes. Of particular interest to Fox Lake are the loons. Until recently, Fox Lake had a pair of nesting loons, with the nest at the north island or in the wetland at the northwest corner of the lake, depending on the year.

Nesting at the water's edge allows for a quick escape route from danger. Unfortunately, it also exposes loon nests to flooding and wave action. Recently, the nesting has stopped and loons are not as evident on the lake. Suspected causes include: an accidental injury to one of the nesting pair; increased predation on young loons by pike; inconsistent lake water levels in the spring; and the effects of wakes from larger boats being operated during the nesting period. Loons are particularly sensitive to development, shoreline disturbances and fluctuating water levels. Powerboats and other activities that cause excessive waves, flooding and noise disturb the nesting loons, loon chicks, and feeding loons. Sensitivity to such disturbances often causes loons to abandon nesting sites and/or the lake completely. Bird Studies Canada¹ identifies loon-friendly lakes as having the following characteristics:

- Well vegetated, natural shorelines;
- Responsible boaters who minimize disturbance to loons;
- Lake users who responsibly manage angling gear (e.g. lead sinkers) and refuse;
- Water level management that minimizes the effects on loon nests.

¹ Bird Studies Canada has been conducting the Canadian lakes Loon Surveys since 1981, monitoring the breeding success of loons on lakes across Canada.

A potential option to encourage successful loon nesting is the provision of floating loon nest platforms, to mitigate against fluctuating water levels and excessive boat wakes.



A typical loon nest on a mat of vegetation.

Photo by Jack van der Meer, June 2009.

This nest is not on Fox Lake.

Some of the Bird Species Seen Around Fox Lake

Common Loon	Ruby-crowned Kinglet	Eastern Phoebe
Great Blue Heron	Eastern Bluebird	Eastern Kingbird
Canada Goose	Veery	Red-eyed Vireo
Wood Duck	Hermit Thrush	Blue Jay
American Black Duck	Wood Thrush	American Crow
Mallard	American Robin	Common Raven
Blue-winged Teal	Ruffed Grouse	Brown Thrasher
Ring-necked Duck	Spotted Sandpiper	European Starling
Lesser Scaup	American Woodcock	Cedar Waxwing
Bufflehead	Ring-billed Gull	Various Warblers
Common Goldeneye	Herring Gull	Ovenbird
Hooded Merganser	Rock Dove (pigeon)	Common Yellowthroat
Common Merganser	Mourning Dove	Scarlet Tanager
Broad-winged Hawk	Ruffed Grouse	Various Sparrows
Osprey	Barred Owl	Dark-eyed Junco
Turkey Vulture	Northern Saw-whet Owl	Rose-breasted Grosbeak
Bald Eagle	Ruby-throated Hummingbird	Red-winged Blackbird
Tree Swallow	Belted Kingfisher	Common Grackle
Black-capped Chickadee	Yellow-bellied Sapsucker	Brown-headed Cowbird
Red-breasted Nuthatch	Downy Woodpecker	Northern Oriole
White-breasted Nuthatch	Hairy Woodpecker	Purple Finch
Brown Creeper	Northern Flicker	Common and Hoary Redpole
House Wren	Pileated Woodpecker	Red Crossbill
Winter Wren	Olive-sided Flycatcher	American Goldfinch
Golden-crowned Kinglet	Eastern Wood-Pewee	Evening Grosbeak

The above list is not complete but is a representation of what has been seen around Fox Lake in the last few years.

A variety of ducks nest around Fox Lake, and they can become habituated to being fed from people's docks in the summer. Canada geese have started nesting on Fox Lake in the last three years, and they too can become semi-tame if encouraged.

The Canada goose is a Canadian icon. It is lovely to hear them and see their flying flocks in the spring and fall. A raft of geese swimming on the lake is a beautiful natural sight. However, geese are grazers, usually preferring short grass. They eat on shore, and often rest on docks. Another unfortunate feature of geese is that they excrete a lot of feces. Goose (and duck) droppings are unpleasant on lawns and docks, places where people may want to sit or walk. They also contribute to the enrichment of water, and the deterioration of water quality in the lake. In acceptable environments, where food and nesting sites are available, the goose population can quickly grow out of control.

The only legal control for geese numbers is fall hunting. One may not interfere with the nests, or harm individual birds at other times.

Reptiles and Amphibians

Reptiles are represented in the Fox Lake area by a small number of snake and turtle species. Amphibians are present as frogs and toads and some salamanders. Until the mid 1980's Fox Lake was resonant with the sound of bullfrogs, which had a strong healthy population on the lake. When northern pike were introduced to Fox Lake, bullfrogs all but disappeared. Many people observe that other frog species also seem to have declined on Fox Lake, but this has not been confirmed through samples or surveys.

Many people believe that Reptile and Amphibian species have been declining over the past several years because of habitat loss from development and encroachment, which reduces local biodiversity. Monitoring of these species is an important action to consider.

Recommendations about Wildlife:

- 26. *Educate the Fox Lake community about the potential negative impacts of winter feeding of deer including: the effect on their metabolism; the potential for unnatural population growth; the impact to local plant growth, both wild and cultivated; and the potential traffic hazard of deer near roads.***
- 27. *Continue the monitoring of loons on Fox Lake through participation in the Canadian Lakes Loon Survey of Bird Studies Canada, and take initiatives to keep Fox Lake a loon-friendly lake. This would include user education about disturbing potential loon nesting areas, responsible boating, managing the water level regime during the loon nesting period and exploring the potential for floating nesting platforms.***
- 28. *Emphasize the protection of Fox Lake's wetlands and other potential loon nesting areas from development or other alteration.***
- 29. *Monitor the increase in goose populations on Fox Lake and investigate methods to manage their population and potential negative impact on the lake environment.***
- 30. *Encourage landowners to have less lawn and short grass at the lakefront. Shrubs along the shoreline often discourage geese from coming ashore to graze.***

31. *Feeding ducks and geese near swimming areas should be discouraged, perhaps through an ongoing education initiative.*
32. *Maintain control of the beaver population by encouraging local trappers to keep the beaver population in check through their normal trapping activities.*
33. *Investigate the possibility of a Fox Lake Association initiative for nuisance beaver control. Alternatively, encourage landowners to use a local trapper to remove specific nuisance animals that are “targeting” specific areas.*
34. *Encourage landowners to protect individual trees; for instance by loosely wrapping chicken wire or hardware cloth around the trunk.*
35. *Use education to advise the Fox Lake community on how to avoid conflict with bears and racoons.*
36. *Continue to monitor the variety and numbers of frogs, as well as other amphibians and reptiles. Consider the re-establishment of a healthy bullfrog population on Fox Lake.*
37. *Encourage the monitoring of wildlife populations and activities and make this information available to the Fox Lake community and the greater community of those interested in nature.*
38. *Promote vigilance in the protection of wildlife habitat, including wetlands and the shoreline Riparian and Littoral Zones.*
39. *Discourage “free-range” pets, especially cats.*

7.10 Vegetation

The area forests were discussed under “The Fox Lake Landscape” on page 33. Forest herbs include white and red trilliums (*Trillium grandifolium* and *erectum*), trout lily (aka dog-toothed violet), spring beauty (*Claytonia caroliniana*), yellow clintonia (*Clintonia borealis*), goldthread (*Coptis groenlandica* and occasional patches of wild leeks (*Allium tricoccum*), along with common club moss and fern species. These species are all typical of the upland forests of the Muskoka area and there are no evidences of rare, vulnerable or endangered species in the area.

Aquatic vegetation, too, is typical of the Muskoka area lakes, and is described in more detail in Section 7.2 (Fox Lake Shoreline)

7.11 Invasive Species

Invasive species are organisms “from away” that have been introduced into non-native habitats. The introduction of invasive species can have a disruptive impact on native habitats. Fox Lake’s experience with the introduction of Northern Pike is an example of a new species significantly altering the established balance in a natural system. Because they may not have natural predators, diseases or other population controls, invasive species can explode and out-compete native species for food and habitat.

A number of invasive species have been identified and are now established in many inland lakes and wetlands of Central Ontario. These include Purple Loosestrife, Zebra Mussels, Rusty Cray Fish, Spiny Water Flea, Round Goby, Eurasian Water-milfoil, European Frogbit, Fanwort, Curly Pondweed and Flowering Rush. As mentioned before under “Mammals”, domestic pets, especially cats, can be “invasive” to the natural ecosystem.

Residents, cottagers, and visitors to Fox Lake can guard against the accidental introduction of invasive species to our area by being careful about transport and planting of non-native species. They should especially ensure that boats that are used in different water bodies are thoroughly cleaned before entering Fox Lake or Buck River. Interested individuals can also assist efforts to raise awareness of invading species, prevent their spread and track their distribution by participating in various innovative projects, including the Ontario Federation of Anglers and Hunters invasive species monitoring program. The Invading Species Hotline offers a toll-free number (1-800-563-7711) for reporting sightings and obtaining free information on invading species.

Recommendations about Invasive Species:

- 40. Participate in the Ontario Federation of Anglers and Hunters’ Invasive Species Monitoring Program. Establish a local “Invading Species Watch”: a volunteer-based monitoring program to detect zebra mussels, spiny water flea, purple loosestrife and other invasive species.***
- 41. Educate lake users about the potential for invasion of exotic species, their harmful effect on the lakes and the procedures to ensure protection of the lake ecosystem. Educate boaters and anglers to take precautions to prevent the transport of exotic species from one lake, river or stream to another. Erect signs (available from OFAH) advising boaters on how to prevent invasive species entering the lake from their boats and fishing gear at commonly used boat launching sites or on East, West and North Fox Lake Roads.***

7.12 Other features

Looking south down Fox Lake, a prominent hill stands out behind Camp Winnebago. Sometimes called Mount Ararat, this hill is topped by deciduous trees (mostly maple and oak) and a distinct patch of conifers (primarily hemlock). This is a distinctive and notable part of the Fox Lake skyline, which gives the appearance of unbroken forest. This is shown on the map “**Fox Lake - Official Plan Data**” on page 53. A Photograph showing this feature is found on the facing page, page 63.

Other hills around Fox Lake are as high as, or even higher than the hill on the south end of Fox Lake. They are part of the skyline, as viewed from lake level, and contribute to the rural, natural feel of the lake environment, a characteristic of the Fox lake area that is valued by most of the Fox Lake community. The protection of the forested landscape, treed skylines are also mentioned as important in the Official Plans of the District of Muskoka and the Town of Huntsville.

Another significant landscape feature is a jumble of rocks, located along the shore in the northwest corner of Fox Lake. This feature is also shown on the map “**Fox Lake - Official Plan Data**” on page 53, with a photograph on the facing page, page 63.

The origin of this rock pile is, so far, undetermined. It has been there as long as anyone can remember. The rocks are too large to have been assembled by pioneer machines. It is obviously not a result of mining or blasting. Perhaps it is a relic of a thawing glacier several thousand years ago.

Regardless of how it got there, this natural feature is known by all who boat on Fox Lake, and is a reference point in many discussions. This natural rock structure is significant to the Fox lake community, and although it is on private land, most feel that it deserves to be protected from development, modification or destruction that would change its character as a natural landmark.

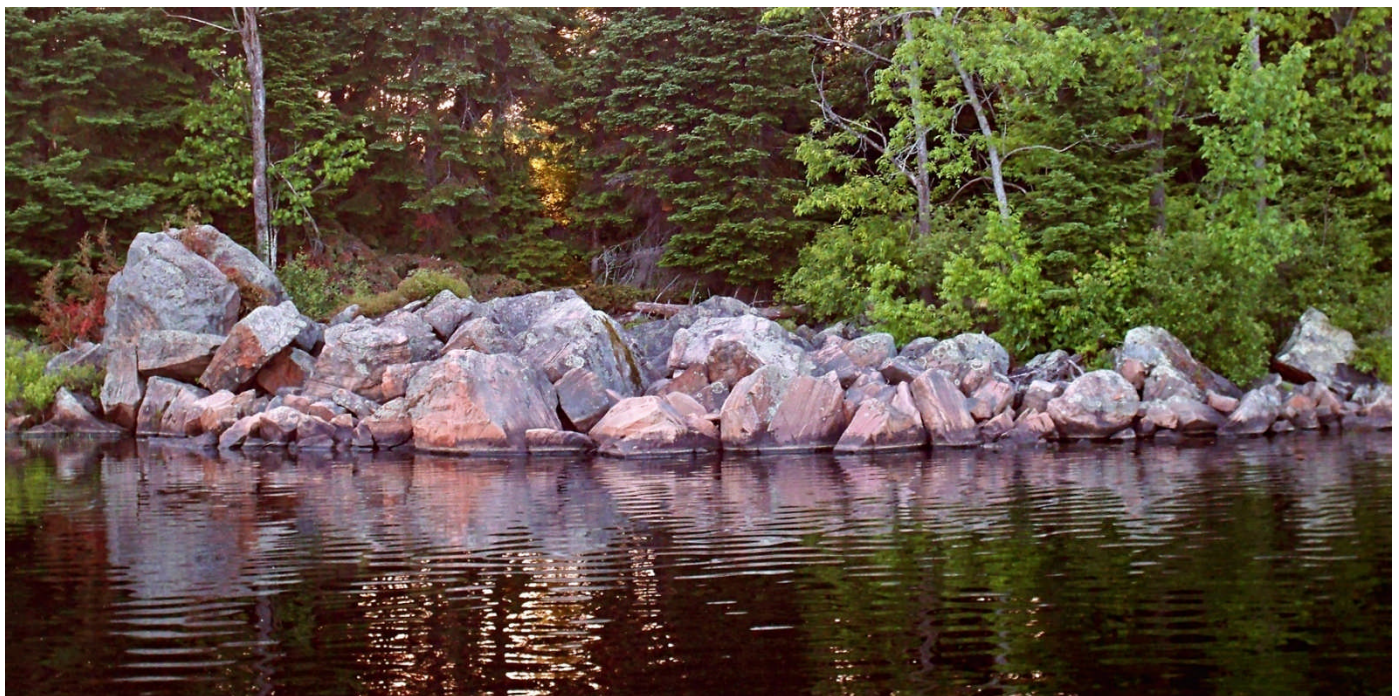
Recommendations about the Landscape:

- 42. The rustic forested landscape is an integral part of the character of Fox Lake. Care must be taken to maintain this character. This includes special attention to the dominant hill feature at the south end of the lake. Future development or forest manipulation should maintain the forested appearance of this important skyline feature.***
- 43. The unexplained rock pile at the northwest end of the lake is on private land, but it is a significant landmark to most lake users. Future development should avoid changing this feature.***



“Mount Ararat” the hill behind Camp Winnebago

Photo by Jack van der Meer, June 2009



The unexplained rock pile at the north end of Fox Lake

Photo by Jack van der Meer, June 2009

8.0 Water Quality

Often, the first thing people notice about Fox Lake's water is its colour. Fox Lake is a "Tea Lake". The major source of its waters is from the Buck River which drains significant areas of upstream swamps and bogs. The water contains dissolved organic compounds from these wetlands, making it a clear brown, like weak tea. Dissolved organic compounds reduce its clarity, but this is not an indication of reduced water quality.²

Muskoka has monitored recreational water quality in lakes and bays throughout Muskoka for over 25 years. The recreational water quality monitoring program is a field-based program that monitors approximately 192 sample locations across Muskoka on a rotating basis, depending upon development pressures and the specific characteristics of the lake. The purpose of the program is to establish a long-term record of key water quality parameters so that trends in water quality can be identified.

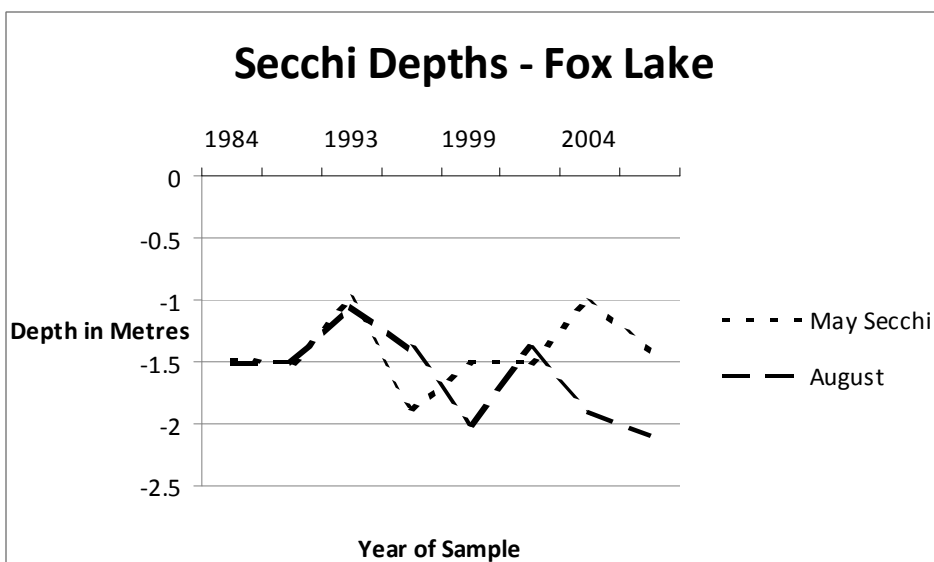
The sampling program measures:

- Secchi depth (a measure of water clarity)
- Phosphorus concentrations (a measure of nutrient enrichment)
- Dissolved oxygen and temperature
- A number of chemical parameters are also tested, including pH, conductivity, dissolved organic carbon, alkalinity, nitrates, sulphuric acid, iron, and chlorine.

Secchi Depth

Water clarity is determined by suspending a Secchi disk into the water until it disappears from view; the deeper the reading, the better the clarity. The Secchi disk is an 8-inch (20 centimetre) diameter, black and white disk attached to a dowel rod, PVC pipe, rope or chain. Inch or centimetre intervals are marked on the rod, pipe, rope or chain with permanent ink, paint or clamps. This very simple sampling technique gives a good reading of water clarity. Water clarity is decreased by the natural colour in Fox Lake, but it can also

be influenced by nutrient enrichment, which can result in increased levels of suspended sediments and algal growth.



In general, where a lake is not coloured by dissolved organic compounds, the higher the Secchi depth reading, the clearer the lake and the less nutrient it contains. As a guide, lakes with Secchi disk readings of over 5 metres are considered unenriched or oligotrophic. Readings between 3 and 5 metres indicate waters that are

moderately enriched, or mesotrophic. Lakes with Secchi readings of less than 3 metres are considered enriched, or eutrophic.

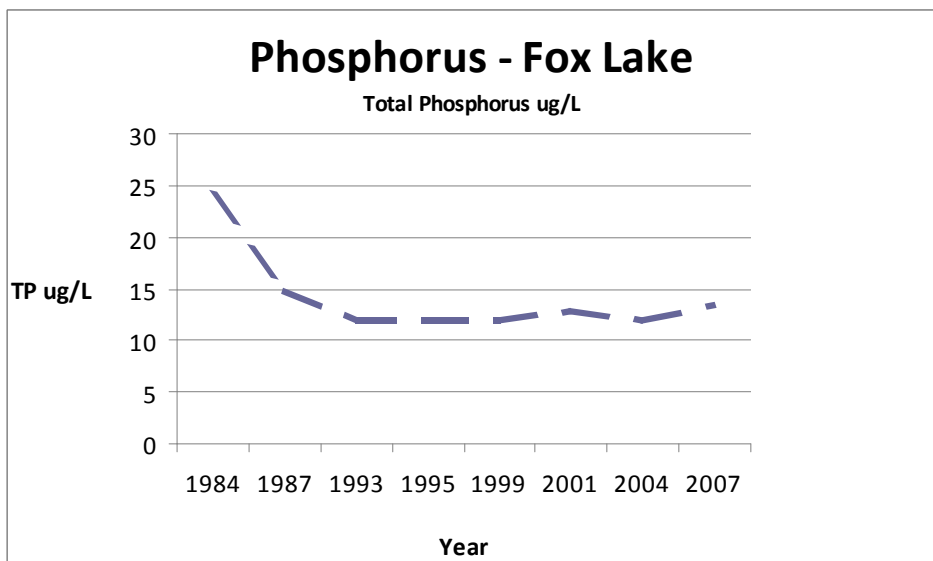
² Muskoka Water Web. February 2009. www.muskokawateweb.ca/1/1.1/PDF/LakeDataSheetInfo.pdf

A Department of Game and Fisheries sample on July 3, 1921 showed that the water colour was brown, the water was clear, and its “transparency” was 8 feet (2.4 metres). A July 9, 1973 lake survey by the Ministry of Natural Resources showed a Secchi disk reading of 4 feet (1.2 metres) in “wavy” yellow-brown water. Data on the Muskoka Water Web shows a series of Secchi disk readings ranging between 1.5 metres and 2.5 metres between 1984 and 2007, with a long-term average of 1.7 metres. On the evidence of Secchi disk readings alone, Fox Lake would be considered to be eutrophic.

Phosphorus

Phosphorus is the nutrient that controls algal growth in many of Ontario's lakes and is perhaps the single most significant impact on water quality in most recreational lakes and rivers. In general, more phosphorus means more algal growth. High levels of phosphorus can lead to algal blooms that detract from recreational water quality. Phosphorus can enter a lake naturally through precipitation and natural drainage from the watershed. Man-made sources of phosphorus include increases in overland flow because of disruption in the natural vegetation (leading to erosion) in and beyond the Riparian Zone, use of fertilizers, manure from livestock, increased storm water run-off from impervious surfaces and effluent from septic systems and sewage treatment plants. According to a 1981 letter from the Ministry of the Environment³, almost all of the phosphorus input to Fox Lake originates in the drainage basin (i.e. from upstream) and very little can be attributed to input from other sources, such as leaching from tile fields. Nonetheless, the Fox Lake Association would like to encourage folks to continue to use as little phosphate as possible in their cleaning products to ensure the minimum addition of phosphorus from adjacent properties.

Regular testing can identify changes in the nutrient status and/or the water clarity of the lake due to the impacts of shoreline development, climate change and other possible stresses.



A sensitivity rating is given to each lake in Muskoka based on the lake's responsiveness to phosphorus inputs and the mobility of phosphorus within the lake's watershed (based on the recreational water quality model as detailed in the report prepared by Gartner Lee Limited in 2005 entitled *Recreational Water Quality Management in Muskoka*). A lake can have either a low, moderate or high sensitivity to phosphorus. Lakes of moderate sensitivity have

some ability to receive phosphorus without a significant decrease in water quality. Fox Lake is identified as a lake of moderate sensitivity to phosphorus.

Lakes with phosphorus concentrations below 10 micrograms per litre ($\mu\text{g/L}$) are considered oligotrophic or unenriched. Those with a phosphorus concentration falling between 11 and 20 $\mu\text{g/L}$ are termed mesotrophic or moderately enriched, while lakes with a phosphorus concentration exceeding 20 $\mu\text{g/L}$ are

³ Ontario Ministry of the Environment. March 13, 1981. J. Beaver, Technical Support Section, MOE to W.A. Mohun.

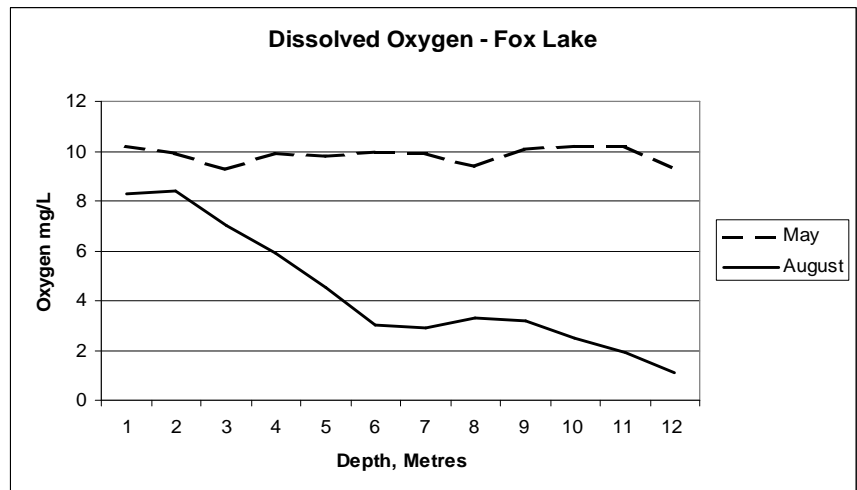
called eutrophic and are considered enriched. The long-term average for Fox Lake is 12.2 µg/L, meaning, that from the perspective of phosphorus concentrations, Fox Lake would be considered mesotrophic, or moderately enriched.

However, information from the Lake Partner Program of the Ministry of the Environment⁴ identifies Fox Lake as a **dystrophic** lake, meaning coloured or tea stained. The total phosphorus concentrations at around 10-15 µg/L would make it, normally, a mesotrophic lake, with occasional algal blooms expected, however, since dystrophic lakes are not on this normal scale⁵ and because the phosphorus is tied up with the Dissolved Organic Carbon, the nutrients are mostly unavailable for algal production. Thus there is less danger of algal blooms on Fox Lake.

Dissolved oxygen and temperature

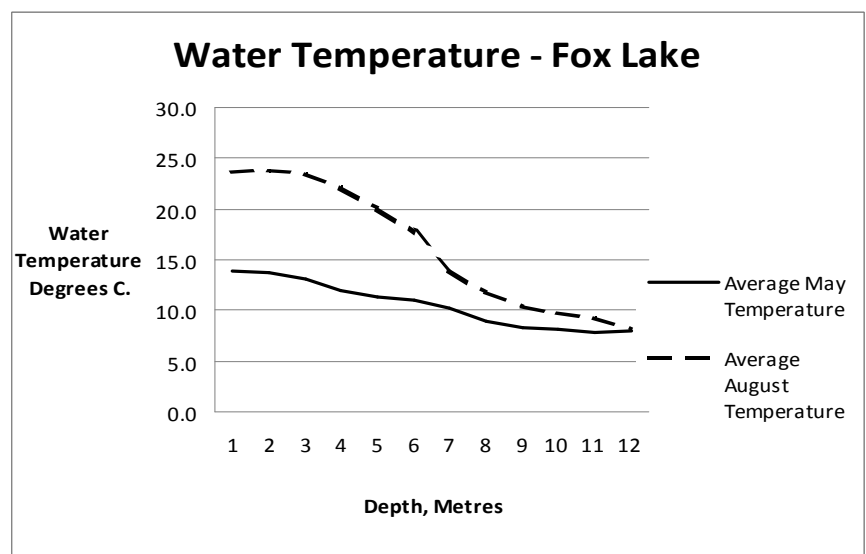
Oxygen gets into the water by diffusion from the surrounding air and as product of photosynthesis. Dissolved oxygen is a measure of the concentration of oxygen dissolved in water. Adequate concentrations of dissolved oxygen are necessary for the survival of fish and other aquatic organisms.

Dissolved oxygen concentration is an indicator of a lake's ability to support aquatic life. Dissolved oxygen levels above five milligrams per litre (mg/L) are considered optimal for most aquatic organisms. Most fish cannot survive if levels fall below 3 mg/L.



Temperature affects many aspects of a lake, including:

- The solubility of oxygen in water;
- The rate of photosynthesis by algae and higher plants;
- The metabolic rates of aquatic organisms;
- The sensitivity of organisms to toxic wastes, parasites and diseases;
- Life cycle rates of aquatic insects;
- Whether cold water species or warm water species are present.



Considerable increases in water temperature may increase large plant growth, thereby contributing to eutrophication.

⁴ Personal Communication, David White, Fox Lake Steward, with Bev Clark, Coordinator, Lake Partner Program, MoE, Dorset. 2008

⁵ Wetzel, R.G., 2001. Limnology: Lake and River Ecosystems. Third Edition. New York: Academic Press. Pg 812-814.

Data for Fox Lake⁶ show spring water temperatures range from 15°C on the top to a cooler 6°C near the bottom, with the temperature declining quickly below the 2 metre level. Summer temperatures show a more exaggerated shift from surface temperatures in the low 20's at the surface to about 8°C near the bottom, with the temperature declining quickly below 3 metres.

Dissolved oxygen is fairly consistent, surface to bottom, with a spring 2007 reading around 12 mg/L, reflecting the higher spring water volumes moving through the lake. Summer dissolved oxygen levels are reasonably high at the surface (about 8 mg/L), but they drop quickly where the temperature drops off (the thermocline) between three and six metres, to a low of near 2 mg/L at the bottom.

Temperature regimes and dissolved oxygen levels for Fox Lake indicate that it would not be capable of supporting cold water fish species (like lake trout or brook trout), but it is sufficient to support a variety of aquatic life, including warm water fish species.

pH

pH is a measure of the acid concentration in a water sample. A pH of 7 is neutral. Values above 7 are basic and values below 7 are acidic. Lakes in Muskoka tend to be slightly acidic.

Recent Fox Lake readings show a pH of 5.76 in May 2004, and 5.46 in May 2007.

Clean rain has a pH of 5.6.

Mercury

According to the Ministry of the Environment⁷ mercury is a naturally occurring metal which is found in very low levels in air, water, rocks, soil and plant and animal matter. Mercury is attracted to particles in the water which coagulate as sediments at the bottom of the lake. The mercury is converted by microorganisms to methylmercury. Methylmercury is rapidly absorbed by fish either from water passing directly over gills or from ingestion with diet. Since fish eliminate mercury at a very slow rate, concentrations of this substance gradually accumulate in their bodies.

- The Guide to Eating Ontario Sport Fish identifies mercury advisories on three fish species for Fox Lake. For Northern Pike, the general population is advised to eat no more than 4 meals per month of fish between 45 and 50 centimetres (18 – 20 inches) total length, or no more than 2 meals of fish over 50 centimetres (20 inches). There is no advisory for northern Pike less than 45 cm, (18") long.
- For Smallmouth Bass, the advisory suggests no more

Fox Lake Water Chemistry	1988
pH	6.17
Alkalinity (mg/L)	3.92
Conductivity (microsiemens)	27.20
Calcium (mg/L)	2.60
Magnesium (mg/L)	0.58
Sodium (mg/L)	0.88
Potassium (mg/L)	0.49
Sulphate (mg/L)	5.75
Chloride (mg/L)	0.50
Aluminum (mg/L)	0.114
Manganese (mg/L)	0.033
Iron (mg/L)	0.250
Phosphorus (mg/L)	0.016

⁶ District of Muskoka. 2007. Lake Data Sheet.

⁷ Ontario Ministry of the Environment. 2009/2010.

Fox Lake.

Guide to Eating Ontario Sport Fish.

than 4 meals per month of fish between 25 to 30 centimetres (10 – 12 inches), no more than 2 meals per month of fish between 30 to 35 centimetres (12 – 14 inches) and no consumption of fish larger than 35 centimetres (14 inches).

- For Largemouth Bass, the limits are no more than 4 meals per month of fish between 25 to 35 centimetres (10 – 14 inches), no more than 2 meals per month of fish between 35 to 40 centimetres (14 – 16 inches) and no consumption of fish larger than 40 centimetres (16 inches).
- The Guide advises women of child bearing age and children under 15 years old to eat no fish of these species in these size categories.
- There is no data available yet about the consumption of walleye (pickerel) or crappies.

Where the mercury in Fox Lake comes from is a bit of a puzzle. In 1987, the Ministry of the Environment conducted a study of cores from the bottom sediment in Fox Lake, to help explain the “anomalously high concentrations of mercury in the fish”. The core samples showed a maximum concentration of mercury in the sediment of 0.14 mg/kg dry weight, which is “quite low”. This level of mercury enrichment does not explain the high mercury levels in the fish.

In a letter discussing this analysis, the Ministry of the Environment stated:

*“We now feel we have eliminated industrial and geological sources of mercury in the Buck-Fox-Vernon system. The remaining possibilities to explain the high levels of mercury in the fish in these lakes are unusual microbiological activity, unusual food chain structure which enhances mercury accumulation, and some anomaly in the water chemistry which we do not understand.”*⁸

This same letter concluded:

“The water quality of Fox Lake is pretty good. It is a dilute, coloured lake with fairly typical water chemistry for this area. All of the values indicate that the lake is not under acidification stress to the extent that biological damage would be occurring.”

And in another discussion with the Ministry of Environment Lake Partner Program⁹ it was noted that “tea stained lakes (dystrophic lakes) tend to have high mercury in fish”.

Potential for Development

Water Quality Capacity

One tool that planners have used for the last several decades to address water quality is to assign to a lake a development capacity based on nutrient loading from septic systems. The idea is that any development with a septic system will generate phosphorus, which can stress the lake environment. As the nutrient load slowly increases with each additional bit of development, it can reach a level that will make the lake environmentally unhealthy and result in nuisance algal blooms.

⁸ Ontario Ministry of the Environment. January 14, 1988. B. Neary, Lake Management Studies Unit to Mrs. E. Jackson

⁹ Personal Communication, David White, Fox Lake Steward, with Bev Clark, Coordinator, Lake Partner Program, MoE, Dorset. 2008

Water Quality Capacity:

The District of Muskoka has a recreational water quality program whose purpose is to establish development policy that reflects the sustainable limits of area water bodies. Lake development is managed to prevent detrimental changes in water quality. A district-wide study was undertaken of recreational water quality. The intent of the study was to establish phosphorus-based water quality objectives for each lake and to translate these into “development capacities” or “limits to growth”. The result of this study was the 2005 publication titled, “Recreational Water Quality Management in Muskoka”, by Gartner Lee Limited, consultants.¹⁰

Recreational water quality is primarily interpreted as water clarity. Water clarity in Muskoka is largely determined by two factors. The first factor is dissolved organic carbon (DOC) which colours water orange-brown. The concentration of DOC is largely determined by the amount of wetland in the catchment of the lake. The second factor is the level of chlorophyll “a” contained in water-borne algae. The algal nutrient in shortest supply in Muskoka lakes is phosphorus. Therefore, an increase in phosphorus can cause a direct increase in algal growth, leading to a decrease in water clarity. Phosphorus is naturally deposited in lakes from the atmosphere and in runoff from soils and wetlands. Human sources include effluent from septic systems, runoff from agricultural and cleared areas, as well as hardened urbanized surfaces.

The pre-development “background” phosphorus level had to be estimated to create a baseline for specific lake management. The *background* is considered the natural condition in the lake before human activities modified the water quality. Many factors were taken into account in developing this background. Once the background was determined, the “threshold” was calculated as *background plus fifty percent*. The threshold phosphorus level acts as a trigger to indicate the point at which water quality may be threatened by additional human activity. Consistent phosphorus levels over the threshold, maintained over a period of time, should trigger management activities or contingency plans to reduce the possibility of further water quality degradation. Management activities could include development controls.

The report determined that Fox Lake has a background phosphorus level of 13.27 µg/L, resulting in a threshold of 19.90 µg/L. The 2007 Lake Data Sheet shows that Fox Lake was at about 25.0 µg/L in 1985; considerably above the threshold. However, the phosphorus level declined rapidly thereafter. For the last nineteen years phosphorus levels have been consistently below or just approaching the established background level of 13.27 µg/L.

Recommendations about Water Quality:

44. ***Continue to participate in the Muskoka District’s recreational water quality monitoring program, including measuring of Secchi depth, phosphorus levels, water temperature and dissolved oxygen and pH. Include testing for benthic invertebrates as part of the lake monitoring program.***
45. ***Encourage the Ministry of Environment to continue to investigate the cause for the higher than normal mercury levels in our fish, including the continuing measurement and reporting of mercury levels in our fish and supporting research on mitigating measures.***

¹⁰ *Recreational Water Quality Management in Muskoka*; prepared for the Department of Economic Development, District Municipality of Muskoka by Gartner Lee Limited; June 2005; page 63

- 46. *Through education and information, encourage the Fox Lake community to maintain the shoreline zones of Fox Lake and the Buck River in a natural state, to reduce the opportunity for the addition of nutrients and pollutants through runoff.***
- 47. *Inform the Fox Lake community about proper care and maintenance of septic systems and advise of other forms of pollution and contamination that could affect the water quality of Fox Lake, such as use of garden fertilizers and pesticides and farm runoff.***

9.0 Other Concerns

9.1 Boating

This is a lake community. Since the earliest days of cottaging on Fox Lake, people have used canoes, rowboats, sailboats and motorboats. As early as the 1940's, there was concern expressed about an increase in the size of outboard motors and how this was affecting other users and the "serenity of the lake". Those who have used the lake for several years will have noted that this process is ongoing. Each class of watercraft has gone through technical evolution. Now there are fancy canoes, high tech kayaks, sailboards and sailboats and a wide variety of powerboats from quiet electric launches, small fishing boats and pontoon boats to larger outboard, inboard/outboard and inboard-powered motor boats for cruising along, towing water toys, water skiing and wakeboarding. Recently, Personal Water Craft (PWCs) have made a permanent appearance on Fox Lake. Opposing opinions between user groups are inevitable.

Regardless of one's point of view, the increased size, speed, numbers, traffic volume and variety of boating types leads to competition for space, a potential for noise, pollution, safety concerns and a possibility of wake damage to some vulnerable shorelines, docks and boats tied to those docks.

The new boat operator licensing process educates boat operators about safe handling of watercraft. Boaters should know about the requirements for using slow speeds within 30 metres (98.4 feet) of the shoreline and in narrow channels, and how to meet or pass other watercraft. They should also be aware of other users that may have less speed or manoeuvrability, or who may be uncomfortable dealing with large wakes.

Where shoreline development has cleared the vegetation, where water levels fluctuate significantly, and/or where boat traffic is heavy, erosion can occur. Wake impacts can be significant in terms of erosion of shorelines, damage to wetlands and injury to wildlife, as with swamping loon nests at water level. Most large boats, operated at a normal speed, create a small wake. However, operating large motorboats "off-plane" can create large wakes. Wakeboard boats are specially designed to create large wakes. On a small lake such as Fox Lake, excessive wake can be a problem for other users, for the shoreline and for wildlife. Creating large wakes should be discouraged here.

The Environment Canada Environmental Technology Centre reports that older technology two-stroke engines can produce twelve times as much toluene, xylene, ethyl benzene and benzene and can release five times as much oil and grease as does a four-stroke outboard. As well, they produce 50% more carbon monoxide and fifteen times more unburned hydrocarbons than the four-stroke engine. With new technology, two-stroke engines are significantly improved over their ancestors. As lake users update their boats or motors, the pollution concerns about old two-stroke engines should decrease.

The floating of rafts, mooring buoys, and floating of shoreline buoys to “protect one’s piece of the shoreline” can create their own boating issues. Any structure anchored in navigable water needs the approval of the Federal Department of Fisheries and Oceans. If they are located too far into the lake, rafts and buoys can be a safety hazard. In particular, “territorial” buoys, usually made from old plastic bottles, are aesthetically offensive, can cause issues with anglers who are trolling and can be a water hazard for boaters. On Fox Lake, one’s property ends with the lakeshore. The lake surface belongs to all.

Recommendations:

- 48. The Fox Lake Association should create a code of ethics, etiquette, and boating safety for Fox Lake and share it with the Fox Lake community and visitors.***
- 49. Fox Lake’s sensitive shorelines, wetlands, loon nesting sites and so forth should be identified and this information should be part of an information/education program for the area.***
- 50. “No Wake” signage should be posted at the entrance to Buck River and the riverine section of the Foxtail. “Wake Sensitive Area” signage should be posted near the two wetlands at the north end of Fox Lake.***
- 51. Creating large wakes and the use of wakeboard boats should be discouraged, through education and information to the Fox Lake community, and through cooperative agreement with the camps and other boaters.***
- 52. The floating of shoreline buoys to “protect” one’s part of the lake should be discouraged. Docks, rafts and mooring buoys should be located no further offshore than required to provide adequate dockage depths and safe anchorage or swimming depth.***
- 53. Information should be shared with boaters about the advantages of newer engines for watercraft, in order to reduce the potential for pollution from older out-of-date two-cycle outboards.***

9.2 Night Skies

The ability to view the night sky has been identified as an important value to members of the Fox Lake community. Unfortunately, increased or “upgraded” development in cottage country often brings suburban tendencies. Excessive artificial lighting interferes with the ability to star gaze which is an enjoyable part of living on the lake. The popularity of landscape lighting, string, spot and garden lighting adds to an increased light level around the lake, as does the use of “security lights”, spot lights, pole lights and other outdoor area lighting.

Local lighting is only a part of the concern. The southeast quadrant of the Fox Lake night sky, that area around the Huntsville urban core, has significantly deteriorated for night sky viewing. Normal urban lighting contributes to this. Recent major developments, such as the development at the intersection of the Highways 11 and 60 corner have had immediately noticeable effects on the night sky above Huntsville. Technology exists to provide safety and security while still protecting the night sky. Education programs should provide information about the most effective technologies that can achieve both objectives.

Recommendations:

- 54. Work with the municipalities to reduce light levels in new developments and to encourage retrofitting or redesigning of existing sources of excessive light.***
- 55. Discuss the concept of reducing or eliminating the night lighting of signs and parking lots with some of the larger commercial developments, except for the minimum required for security and safety.***
- 56. Develop standards and educate lake residents about the impacts of light pollution on the lake, and the available solutions.***

9.3 Noise

Peaceful enjoyment of the lake living environment was also identified as a potential issue by the Fox Lake community. Loud music, especially in the evening or at night, party noise, the steady whine of Personal Watercraft (PWCs), excessively loud boat motors, all have a tendency to annoy those who expect a quieter cottage environment. Noise travels over the water, and activities, that in an urban or forest environment would cause little concern, can seem exaggerated when they occur on or beside a lake.

Recommendation:

- 57. Through education and information, create an awareness of the effects of excessive noise on the enjoyment by others of our lake environment.***

9.4 Portages

Fox Lake is a part of a prehistoric, historic, traditional and current water travel corridor. It was used by aboriginal peoples, by explorers, surveyors, settlers and canoeists and is currently used by children's camps and individuals as part of a canoe route. This travel corridor/canoe route involves a portage around the Hoodstown Rapids and Hoodstown Dam and one around the Buck Lake Dam (Campbell Dam) and rapids.

These portages have been in use forever and are still used.

Yet, in spite of the mandate the Ministry of Natural Resources has in protecting traditional portages (under The Public Lands Act) and the policies of Huntsville's Official Plan that support traditional water travel corridors and portages, no protection was given to the portage around Hoodstown Rapids when a subdivision proposal was approved in the 1980's.

It is important that a legal, safe, identifiable portage route be reconfirmed around Hoodstown Rapids and that the portage around the Buck Lake Dam and rapids be protected for the future.

Recommendation:

- 58. Through cooperation with the Town of Huntsville and the Ministry of Natural Resources, portages around the Hoodstown Rapids and the Buck Lake Dam and rapids need to be acknowledged and protected.***

10.0 Summary of Recommendations

The recommendations from the body of the foregoing report are listed below. They can be grouped into four broad categories as follows:

- Those requiring municipal action or cooperation; (Municipal)
- Those requiring cooperation with or reliance on other agencies or organizations; (MNR et al)
- Those requiring additional or ongoing studies or monitoring: (Studies) and,
- Those involving information or education actions for the Fox Lake community. (Info/Ed'n)

The categories that apply to each recommendation are noted at the end of each one. Some recommendations fit more than one category.

1. The Fox Lake Association should use the Fox Lake Plan as a guide when addressing concerns about the management, use, or development within the Fox Lake area.
2. The Fox Lake Plan should be reviewed periodically, perhaps every five years, to ensure that it continues to address the needs of the Fox Lake community.
3. The Fox Lake Association should continue its existing efforts to monitor and respond to development activities in the Fox Lake area and to ensure the affected owners are notified of such municipal planning and development activities. (Municipal)
4. The stewardship role should be continued for Fox Lake, with a flow of related information to keep the lake community advised of and involved in the stewardship of our lake and its environs. (Studies, MNR et al, Info/Ed'n)
5. The Fox Lake Association should continue to be a driving force in the development of a sense of community among the various users of the Fox Lake area. This should include sponsoring events and providing information. (Info/Ed'n)
6. Sometimes, what happens on the ground does not reflect the professed values of regulating bodies. The convergence of Municipal vision, policy and objectives with the Fox Lake community's values and aspirations suggests that whenever development or use issues arise, the Fox Lake Association should be prepared to emphasize existing municipal or other government policy to ensure our objectives are met. (Municipal, MNR et al)
7. Where the Fox Lake community has identified concerns that transcend those provided for by existing municipal planning and controls, the Fox Lake Association should pursue an amendment to Huntsville's Official Plan or Zoning By-law to incorporate these additional requirements or limitations (for instance, to limit future development options). (Municipal)
8. The Fox Lake Association should continue to receive notices of any requests for zoning amendments, variances from the Town of Huntsville and should continue to review such applications and comment to the Town where our values are challenged, or where such changes may impact negatively on the Fox Lake community. (Municipal)

9. Specifically, any proposal concerning changing use patterns, zoning, variances, or development proposals concerning the larger shoreline properties on Fox Lake should be circulated, for review and comment, to the Fox Lake Association by the Town of Huntsville. (Municipal)
10. Public boat access facilities are not required on Fox Lake and should not be accommodated. (Municipal)
11. The Fox Lake Association should pursue appropriate Official Plan and Zoning By-law amendments to restrict the opportunity for boathouses on the Fox Lake shoreline. (Municipal)
12. Continue to research and write up the history of the Fox Lake area. This background is valuable in helping us maintain a perspective and in developing an understanding of how things got to be the way they now are. It is also interesting to a lot of people. (Studies, Info/Ed'n)
13. Consider publishing an illustrated history of Fox Lake and the area, perhaps as a tabletop book, perhaps also as a web document. (Info/Ed'n)
14. The Fox Lake Association should develop an historical perspective on the management of water levels on Fox Lake, using photographic evidence collected from lake users, and any other historical records that can be found. This should be compared with the current situation and examined for evidence of increased shoreline erosion or other detrimental effects on the shoreline and its traditional use. This, combined with continuing vigilance and sharing of information with the Ministry of Natural Resources dam water level managers, should be used to confirm or modify an appropriate rule curve for Fox Lake. (MNR et al, Studies, Info/Ed'n)
15. The impact of powerboat wakes should be investigated to see if there is a correlation between wakes, loss of shoreline vegetation, erosion, loon nesting, and other natural processes. An education program about power boat use and impacts could be one of the results. (MNR et al, Studies, Info/Ed'n)
16. Maintain the forested skyline view around Fox Lake and the Buck River. (Municipal)
17. Encourage landowners to maintain their shoreline, including both the Riparian and Littoral Zones, in a natural condition, or to rehabilitate portions of the shoreline that have undergone significant modification. (Info/Ed'n)
18. Encourage the use of pole or floating docks, which have a lesser effect on aquatic vegetation and fish habitat than crib docks or other filling. (Info/Ed'n)
19. Discourage any shoreline structures that cross the shoreline into the Littoral Zone, (such as boat houses, or roofed docks) both because of their impact on aquatic vegetation and fish habitat, and also to maintain the aesthetics of a natural shoreline. (Municipal, MNR et al, Info/Ed'n)
20. Establish benthic monitoring. The District of Muskoka and the Lake Partner Program provide assistance with benthic monitoring as does the Huntsville Lakes Council on request. (MNR et al, Studies)
21. Encourage the Ministry of Natural Resources to conduct regular fish surveys on Fox Lake and to monitor the results of accidental and purposeful introductions into our lake system. (MNR et al, Studies)

22. Educate our people about the negative possibilities of unplanned introductions of species into a natural environment. (Info/Ed'n)
23. Ensure that the Fox Lake Association is aware of plans on upstream lakes for the introduction and management of aquatic species. (MNR et al)
24. Identify our wetlands as locally significant to our Fox Lake area and work with the Town of Huntsville to ensure that they are not negatively impacted by manipulation or development. (Municipal, MNR et al)
25. Where existing land use does not meet the requirements of the 2008 Huntsville Zoning By-law regarding setback from watercourses, encourage landowners to "retrofit" their land use to comply so as to minimize the potential impact on the watercourse. (Info/Ed'n)
26. Educate the Fox Lake community about the potential negative impacts of winter feeding of deer including: the effect on their metabolism; the potential for unnatural population growth; the impact to local plant growth, both wild and cultivated; and the potential traffic hazard of deer near roads. (MNR et al, Info/Ed'n)
27. Continue the monitoring of loons on Fox Lake through participation in the Canadian Lakes Loon Survey of Bird Studies Canada and take initiatives to keep Fox Lake a loon-friendly lake. This would include user education about disturbing potential loon nesting areas, responsible boating, managing the water level regime during the loon nesting period and exploring the potential for floating nesting platforms. (MNR et al, Studies, Info/Ed'n)
28. Emphasize the protection of Fox Lake's wetlands and other potential loon nesting areas from development or other alteration. (Municipal, Info/Ed'n)
29. Monitor the increase in goose populations on Fox Lake and investigate methods to manage their population and potential negative impact on the lake environment. (MNR et al, Studies)
30. Encourage landowners to have less lawn and short grass at the lakefront. Shrubs along the shoreline often discourage geese from coming ashore to graze. (Info/Ed'n)
31. Feeding ducks and geese near swimming areas should be discouraged, perhaps through an ongoing education initiative. (Info/Ed'n)
32. Maintain control of the beaver population by encouraging local trappers to keep the beaver population in check through their normal trapping activities. (MNR et al, Info/Ed'n)
33. Investigate the possibility of a Fox Lake Association initiative for nuisance beaver control. Alternatively, encourage landowners to use a local trapper to remove specific nuisance animals that are "targeting" specific areas. (MNR et al, Info/Ed'n)
34. Encourage landowners to protect individual trees; for instance by loosely wrapping chicken wire or hardware cloth around the trunk. (Info/Ed'n)
35. Use education to advise the Fox Lake community on how to avoid conflict with bears and racoons. (Info/Ed'n)

36. Continue to monitor the variety and numbers of frogs, as well as other amphibians and reptiles. Consider the re-establishment of a healthy bullfrog population on Fox Lake. (Info/Ed'n, MNR et al)
37. Encourage the monitoring of wildlife populations and activities and make this information available to the Fox Lake community and the greater community of those interested in nature. (Studies, Info/Ed'n)
38. Promote vigilance in the protection of wildlife habitat, including wetlands and the shoreline Riparian and Littoral Zones. (MNR et al, Info/Ed'n)
39. Discourage "free-range" pets, especially cats. (Info/Ed'n)
40. Participate in the Ontario Federation of Anglers and Hunters' Invasive Species Monitoring Program. Establish a local "Invading Species Watch": a volunteer-based monitoring program to detect zebra mussels, spiny water flea, purple loosestrife and other invasive species. (MNR et al, Studies, Info/Ed'n)
41. Educate lake users about the potential for invasion of exotic species, their harmful effect on the lakes and the procedures to ensure protection of the lake ecosystem. Educate boaters and anglers to take precautions to prevent the transport of exotic species from one lake, river or stream to another. Erect signs (available from OFAH) advising boaters on how to prevent invasive species entering the lake from their boats and fishing gear at commonly used boat launching sites or on East, West and North Fox Lake Roads. (Info/Ed'n)
42. The rustic forested landscape is an integral part of the character of Fox Lake. Care must be taken to maintain this character. This includes special attention to the dominant hill feature at the south end of the lake. Future development or forest manipulation should maintain the forested appearance of this important skyline feature. (Municipal)
43. The unexplained rock pile at the end of northwest end of the lake is on private land, but it is a significant landmark to most lake users. Future development should avoid changing this feature. (Municipal, Info/Ed'n)
44. Continue to participate in the Muskoka District's recreational water quality monitoring program, including measuring of Secchi depth, phosphorus levels, water temperature and dissolved oxygen and pH. Include testing for benthic invertebrates as part of the lake monitoring program. (MNR et al, Studies)
45. Encourage the Ministry of Environment to continue to investigate the cause for the higher than normal mercury levels in our fish, including the continuing measurement and reporting of mercury levels in our fish and supporting research on mitigating measures. (MNR et al)
46. Through education and information, encourage the Fox Lake community to maintain the shoreline zones of Fox Lake and the Buck River in a natural state, to reduce the opportunity for the addition of nutrients and pollutants through runoff. (Info/Ed'n)
47. Inform the Fox Lake community about proper care and maintenance of septic systems and advise of other forms of pollution and contamination that could affect the water quality of Fox Lake, such as use of garden fertilizers and pesticides and farm runoff. (Info/Ed'n, MoE et al)

48. The Fox Lake Association should create a code of ethics, etiquette, and boating safety for Fox Lake and share it with the Fox Lake community and visitors. (Info/Ed'n)
49. Fox Lake's sensitive shorelines, wetlands, loon nesting sites and so forth should be identified and this information should be part of an information/education program for the area. (MNR et al, Info/Ed'n)
50. "No Wake" signage should be posted at the entrance to Buck River, the riverine section of the Foxtail. "Wake Sensitive Area" signage should be posted near the two wetlands at the north end of Fox Lake. (Info/Ed'n, MNR et al)
51. Creating large wakes and the use of wakeboard boats should be discouraged, through education and information to the Fox Lake community, and through cooperative agreement with the camps and other boaters. (Info/Ed'n, MNR et al)
52. The floating of shoreline buoys to "protect" one's part of the lake should be discouraged. Docks, rafts and mooring buoys should be located no further offshore than required to provide adequate dockage depths and safe anchorage or swimming depth. (Info/Ed'n)
53. Information should be shared with boaters about the advantages of newer engines for watercraft, in order to reduce the potential for pollution from older out-of-date two-stroke outboards. (Info/Ed'n)
54. Work with the municipalities to reduce light levels in new developments and to encourage retrofitting or redesigning of existing sources of excessive light. (Municipal)
55. Discuss the concept of reducing or eliminating the night lighting of signs and parking lots with some of the larger commercial developments, except for the minimum required for security and safety. (Municipal, Info/Ed'n)
56. Develop standards and educate the Fox Lake community about the impacts of light pollution on the lake, and the available solutions. (Info/Ed'n, Municipal)
57. Through education and information, create an awareness of the effects of excessive noise on the enjoyment by others of our lake environment. (Info/Ed'n, Municipal)
58. Through cooperation with the Town of Huntsville and the Ministry of Natural Resources, portages around the Hoodstown Rapids and the Buck Lake Dam and rapids need to be acknowledged and protected. (Municipal, MNR et al)

11.0 Action Plan

The Fox Lake Association is an organization made up of volunteers, and the members of the Fox Lake community represent a wide range of interests. Anything we achieve is through the volunteer efforts of Association directors, officers, involved people with special interests, knowledge or skills, and a variety of individuals who pitch in on specific tasks, problems or issues. One cannot expect that we can address all of the Lake Plan recommendations with our full and immediate attention and unlimited human and financial resources.

The foregoing parts of the document are, basically, background information. What we do with that information will determine the actual usefulness of the Lake Plan for Fox Lake. This is the **Action Plan**, which gives direction to the Fox Lake Association and the Fox Lake community for the immediate future, and facilitates the achievement of common objectives.

As mentioned at the beginning of the previous section, **10.0 Summary of Recommendations**, there are different types of recommendations, requiring different types of action. While the Fox Lake community can achieve a number of objectives with local effort and initiative (collecting and sharing information, monitoring, stewardship), it also relies heavily on the Municipality (both the District of Muskoka and the Town of Huntsville) and other agencies (Federal and Provincial departments/ministries) for the policies, regulations and actions that help us meet our needs.

All of the recommendations that have resulted from this Lake Plan are important to the Fox Lake community, but there is a sense of urgency to some of them. Failing to act, or delaying attention to some recommendations could result in decisions and actions by others that are not in the best interests of the Fox lake Community and its values.

The following lists a number of actions that can be undertaken to satisfy the recommendations of the lake Plan, and achieve the objectives of the Fox Lake Association and community. All are important, but some merit additional attention. A sense of precedence is assigned to each action using the following levels of priority.

- **Top Priority** This item requires immediate attention to achieve our objectives. Without accomplishing this, others, such as developers, municipalities or other government agencies may take action that will jeopardize the values of the Fox Lake community.
- **High Priority** This action requires quick, and most likely, ongoing attention. It is required to meet our objectives, or to contribute to another Top Priority or High Priority action.
- **Important** This action will contribute to achieving the recommendations of the Lake Plan, and will help us to maintain or enhance the natural or social environment of the Fox Lake community.

A sense of timing is also assigned to each item, to help the Association Executive determine what kind of resources are required to address the various actions. Timing will address the immediacy and duration of the tasks required to address the action items.

Zoning and Development

Action 1

Negotiate with the municipalities to have the appropriate sections of the Lake Plan for Fox Lake incorporated as amendments to the Huntsville Official Plan or in the Huntsville Zoning By-law. In particular, address limitations on construction of boathouses and developments that would include cluster development or multi-unit residential buildings. Incorporate protection of the forested skyline, areas subject to inundation, the rock pile at the north end and the small wetlands on Fox Lake.

Approach Consult with the Town Planning Department and enlist its support. Follow up with a qualified municipal planner who has experience working with the Town. Apply for Official Plan and By-law amendments recognizing the Lake Plan for Fox Lake.

Top Priority **This action requires immediate attention. Target duration is one year to completion.**

Time Table Choose and authorize an action team immediately. Begin consultation and negotiation as soon as that team is established. Apply for the appropriate amendments within six months.

Action 2

Reconfirm a working relationship with the Town of Huntsville to ensure that the Fox Lake Association is given appropriate notice and opportunity to respond, on behalf of the Fox Lake community and its members, to any zoning amendments or variance applications, new development proposals, or significant redevelopment proposals.

Approach A formal letter from the Fox Lake Association to the Town of Huntsville with follow up contact with the Planning and Building/By-law departments.

Top Priority **This action item requires immediate attention. It should be achieved within a couple of months.**

Time Table Assign the preparation of a formal letter immediately. Deliver to the Town of Huntsville, with and expectation of confirmation from the Town within two months.

Action 3

Develop a good understanding of the policies and regulations of Huntsville's Official Plan and Zoning By-laws in order to monitor on-the-ground activities, ensuring that what actually occurs is consistent with municipal policies and by-laws and with the requirements of the Fox Lake Community.

Approach Establish a "Development/Policy" working group or individual who can advise the Association in this regard. Prepare a policy and by-law summary which highlights the details of the Muskoka Official Plan, the Huntsville Official Plan and the Huntsville Zoning By-law for easy reference by the Fox Lake Association and the Fox Lake community.

High Priority **This action item requires immediate attention. It will be a valuable reference for the Association in evaluating development activities and proposals around Fox Lake.**

Time Table Assign an individual to prepare this summary, with review by the Fox Lake Planning Committee. Work should begin right away, with completion anticipated within three months.

Action 4

Confirm with the Ministry of Natural Resources, which has responsibility for the Crown land lake bed (the land under water), that the Fox Lake community requires that no boat houses or similar construction be permitted to extend beyond the shoreline of Fox Lake and that the Ministry of Natural Resources (MNR) should ensure that no land use permits, leases, or other occupation authorities are granted to allow such facilities. MNR support will be required when the Association initiates an amendment to the Huntsville Zoning Bylaw.

High Priority **This action item requires immediate attention.**

Time Table Prepare and send a formal letter, within the next two months, with the target of achieving an agreement with the MNR within six months.

Maintain/Improve Water Quality

Action 5

Continue to participate in the Muskoka District's recreational water quality monitoring program to monitor water quality factors, including water clarity, nutrient enrichment, dissolved oxygen and temperature and a number of chemical parameters.

Approach Use our Lake Steward position as the primary contact with the lake monitoring program and establish an annual Water Quality report to the Fox Lake Association.

Important

Time Table Ongoing, and continuous.

Action 6

Add benthic monitoring with the assistance of the District of Muskoka, the Lake Partner Program and the Huntsville Lakes Council. Include the results and analysis as part of the aforementioned annual Water Quality report.

Approach Include this as part of the Lake Steward activities.

Important

Time Table Put in place this year.

Action 7

Communicate the factors that can contribute to deteriorating water quality in Fox Lake, such as dysfunctional septic systems, excessive storm water runoff from clearing vegetation and agricultural runoff and advocate remedial activities.

Approach Create a report on water quality issues and ways of avoiding or correcting them. Communicate this through newsletters, on a Fox Lake web site, or possibly through lake user workshops. If specific problem areas are identified and confirmed, negotiate mediation with the appropriate landowners, or through the municipal or provincial agencies with the mandate for that issue.

Important

Time Table Ongoing. There should be some information in place for summer 2010.

Manage Water Levels

Action 8

Develop the most appropriate regime for water level management on Fox Lake, and negotiate required changes in approach with the Ministry of Natural Resources.

Approach Continue to monitor, record, and report Fox Lake water levels on a regular and ongoing basis. Consult with the Fox Lake community, through a report and questionnaire to develop a consensus on what water level "Rule Curve" would best suit our needs, taking into account potential for shoreline erosion from high water levels and the effects of boat wakes, historic summer water levels, effect on fisheries and wildlife, et cetera.

Discuss the results with the Ministry of Natural Resources and the District of Muskoka and negotiate the appropriate changes in the Rule Curve.

Important

Time Table Monitoring of levels – ongoing.

Consultation and consensus building – Starting right away, and continuing.

Discussion/negotiation – as required.

Action 9

Investigate the impact of powerboat wakes to determine if there is a correlation between wakes, loss of shoreline vegetation, erosion, loon nesting and other natural processes. An education program about power boat use and impacts could be one of the results.

Approach Do literature and web research to determine if such studies have been done. Consult with the Ministry of Natural Resources and the Ministry of the Environment on this matter.

If the results justify, share the information with the Fox Lake community and solicit appropriate modification of boating behaviour during high water periods, or periods when wildlife or vegetation are vulnerable.

Important

Time Table Research – starting as soon as it can be initiated. Additional action depends on results of research.

Improve Water Safety and Conflict

Action 10

Post “wake sensitive area” signage at wetlands and other potential loon nesting sites and “no wake signage” at narrow channels such as the entrance to the Buck River, the riverine section of the Foxtail and other safety or “wake risk” areas.

Approach

Important

Time Table Initiate this spring.

Action 11

Develop a “boating” program that recognizes the variety of different types of recreational water usage on Fox Lake, the potential for conflict between different types of equipment and use, the potential impact of wake on shorelines, sensitive areas and wildlife and the regulatory requirements regarding speed, proximity to shorelines, narrow channels and boating traffic rules.

Approach Carry out a boating survey for Fox Lake, including information about the types of watercraft owned and used, preferences for boating activities, trends and concerns and issues.

Analyse and report on the boating survey, determining if there are significant issues that can be addressed. Share the results through newsletters or on the Fox Lake web site.

Important

Time Table The sooner this happens, the sooner the Association can address some of the potentials for conflict on Fox Lake. It will require the development of a survey, and a significant length of time for people to participate. A time frame of over a year can be anticipated.

Conserve Shoreline and Fish and Wildlife Habitat

Action 12

Protect areas of aquatic vegetation which are important to the health of a variety of fish and wildlife.

Approach Share information about the value of the littoral zone and the aquatic vegetation that is in it. Develop a Fox Lake aquatic vegetation primer that identifies and maps key shoreline habitat areas. Request the Federal Department of Fisheries and Oceans to do a comprehensive evaluation of the Fox Lake shoreline, before the aquatic vegetation is removed to provide “clean” beaches, or through redevelopment of shoreline properties, rather than only reviewing major development proposals.

Alternatively, engage an aquatic (fisheries) biologist to evaluate the Fox Lake shoreline to identify significant fish habitat.

Ensure that information about significant fish or wildlife habitat is given to the District of Muskoka and the Town of Huntsville to be added to their planning database.

High Priority The condition of the shoreline is important to the health of Fox lake, its fish and wildlife, and reflects the values of the Fox Lake community. This requires immediate and ongoing attention.

Time Table Collecting and sharing information and the preparation of a primer require a project approach, probably with a team to be set up by the Association. Shoreline evaluation by the Federal Department of Fisheries and Oceans or another expert source is important as information for negotiating with government agencies and the Municipalities regarding future actions on Fox Lake. This action should be undertaken as a priority project as soon as can be arranged.

Action 13

Encourage re-naturalization of modified shorelines, and the maintenance of natural shorelines where they have not yet been modified.

Approach Obtain and distribute information about the value of natural shorelines, the process of naturalization and shoreline re-vegetation.

Identify locations of natural stock for re-vegetation of modified shorelines, if necessary encouraging local nurseries to be a source for this material.

Consider a lake workshop, doing some actual re-vegetation of a modified area, and inviting observation and participation of the Fox Lake community.

Examine the possibility of a “home grown” source of natural material by encouraging a local gardener to develop nursery stock.

Important

Time Line Gathering and distributing information is a continuous process. Sourcing stock can be done as soon as someone is found to do it. A naturalization workshop, and the local development of native stock is a specialized project that will depend on the Association finding a project person to undertake it.

Action 14

Reduce the potential for the introduction of invasive species to the Fox Lake environment.

Approach Gather and distribute information about exotic or invasive species to the Fox Lake community to educate lake users about the potential for invasion of exotic species, their harmful effect on the lakes, and the procedures to ensure protection of the lake ecosystem. Focus on boaters and anglers to take precautions to prevent the transport of exotic species from one lake, river or stream to another.

Participate in the Ontario Federation of Anglers and Hunters invasive species monitoring program. Establish a local “Invading Species Watch”: a volunteer-based monitoring program to detect zebra mussels, spiny water flea, purple loosestrife and other invasive species.

Encourage the Ministry of Natural Resources to monitor the health of the Fox Lake fishery and to limit upstream activities (such as legal or illegal introduction of new species) to ensure that no new species threaten the lake fishery.

Important

Time Table Information and education – ongoing. Monitoring the health of the fishery – ongoing. Initiate OFAH monitoring program – as soon as possible. Establish “Invasive Species Watch” – ongoing, and as part of the Lake Steward activities.

Knowing Our Natural Environment

Action 15

Increase our knowledge of the natural communities of the Fox Lake area to use as important information relative to conserving our wildlife habitat and protecting significant species, but also to satisfy a common interest about our natural neighbours.

Approach Establish a “naturalist network” of Fox Lake people and others in the wider community, who would be willing to document, record and report on the birds, mammals, reptiles and amphibians, and invertebrates of this area.

Share this type of information widely through newsletters and the Fox Lake web page.

In particular, continue monitoring loon activities on Fox Lake, frog and other amphibian populations

Important

Time Table Establish a naturalist network – This could be undertaken as soon as interested participants are identified. Sharing information should be an ongoing process, perhaps taking advantage of the newsletter process.

Documenting Our History

Action 16

Research, write and share the history of the Fox Lake area. Gabrielle Andersen is gathering such information. Many others have contributed. This process should be reconfirmed.

Approach This should be set up by the Association as a four part project.

- 1) Continue gathering information from members of the Fox Lake community to ensure that valuable history of the early cottaging development is not lost.
- 2) Document additional detail about the surveying, homesteading and settlement of the Fox Lake area, perhaps enlisting the aid of a university history department or a trained historical researcher.
- 3) Seek definitive information about the prehistoric period and the use of the area by aboriginal peoples, for example, from William Allen, a recognized amateur archaeologist who has knowledge of the Muskoka, Parry Sound Districts.
- 4) Compile the gathered information into a History of Fox Lake and its Area for publication.

Important

Time Table This is not a short term project. It may take a several months to gather such information, and to involve others in the process. A target of one year is reasonable for the “gathering” process, followed by another year for the document preparation and publishing.

Protecting Our Night Skies

Action 17

Develop standards and educate the Fox Lake community about the impacts of light pollution on the lake and the available solutions.

Approach Gather available information about night skies, available technology and potential solutions to light pollution of night skies.

Create an information bulletin or document about night skies for distribution to the Fox Lake community by Fox Lake by newsletter or on the Fox Lake web site.

Important

Time Table Gathering of information can begin as soon as someone is found to undertake this task. Preparing a document should follow as soon as possible after that, with distribution of this information starting as soon as it is available, and on an ongoing basis.

Action 18

Lobby the Town of Huntsville, to make it aware of our concern for the maintenance of dark night skies and the effect of municipal lighting decisions on skies far from the urban centre. Seek a renewed commitment from the town to embrace the principle of night sky friendly development in its planning and development decisions.

Approach Include the principle of “dark night skies” in our discussions with the Town of Huntsville, and seek reassurance that night sky friendly development is still one of the Town’s priorities.

Important

Time Table Ongoing.

Excessive Noise

Action 19

Create an awareness of the effects of excessive noise on the enjoyment by others of our lake environment.

Approach Through the sharing of information.

Important

Time Table As part of the Association's ongoing communications efforts.

Protecting Portages

Action 20

Take action to restore a safe portage around the Hoodstown Rapids and protect the portage around the Buck Lake Dam and rapids.

Approach Document the history of water travel and portage use around Fox Lake. Lobby the Town of Huntsville and the Ministry of Natural Resources to support this initiative, emphasizing their commitment to the concept of traditional waterways and the protection and maintenance of traditional portages.

Important

Time Table This research and documentation should begin right away. Lobbying the Town of Huntsville and the Ministry of Natural Resources can begin as soon as there is enough information and documentation available to make a sound case.

Building a Community

Action 21

Develop and maintain a sense of community among the various users of the Fox Lake area.

Approach Continue traditional events such as the annual Fox Lake Regatta, Rib Fest and corn roast for the lake community, perhaps through a social committee of the Association.

Continue the tradition of sharing information through newsletters and a Fox Lake web page. This may require the assistance of a web site manager.

Establish a series of annual reports concerning matters of interest to the Fox Lake community, including: "Changes" about the development of Fox Lake properties; "Water Quality" keeping people informed about the health of Fox Lake water; "Our Nature" documenting and sharing information about our natural world; and other subjects of interest.

Important

Time Table Some of this is ongoing. The production of annual reports can be phased in as the relevant information develops.

Building Strength

Action 22

Build on the membership of the Fox Lake Association with the target of maintaining an enrolment of a large majority of the Fox Lake community.

Approach Develop an enrolment campaign based on making the Association truly representative of the needs of the Fox Lake community and its members.

Important

Time Line Start a campaign soon, with timing set to culminate with the Annual General Meeting this summer. Membership initiatives should be ongoing.

Appendix A FOX LAKE PLAN - COMMUNITY QUESTIONNAIRE

The Fox Lake Plan Committee is undertaking a survey to gather information that will assist in the preparation of a lake plan for Fox Lake. (*Information about the lake planning process and the lake plan committee is included on a separate piece of paper in this package of information*).

Please take a few minutes to respond to the following questions and return the completed form by **March 31, 2003** as directed on page 4. The results of the survey will be consolidated for discussion at a stakeholders meeting to be held in the late spring. Thank you for taking the time to identify the things about Fox Lake and its surrounding area that are important to you.

Part 1 – Please tell us about yourself:

1. Are you a resident of the Fox Lake and Buck River area?
(*For the purpose of this survey, the "Fox Lake and Buck River area" is defined as properties with shoreline on the Buck River or Fox Lake between the Buck River Dam and the Hoodstown Dam as well as properties on the Fox Lake Roads*)

Yes ☐ No ☐
If yes - Permanent resident ☐ Seasonal/part-time resident ☐
 Shoreline property ☐ Non-shoreline property ☐
2. Do you have commercial or business interests in the Fox Lake and Buck River area?
If yes - Farming/agricultural ☐ Private camp ☐
 Cottage/cabin rental ☐ Property development ☐
 Hunting/trapping ☐ Other _____
3. How many days per season (approximately) is your residence used?
Summer _____ Fall _____ Winter _____ Spring _____
(*maximum number of days per season = 91*)
Year round _____ (in the case of permanent residents)
4. Who are the primary users of the property and its facilities?
Family and friends only ☐ Renters (unknown) ☐ Others _____
5. Are you considering changing your usage pattern within the next 5 years?
No ☐ Will increase use ☐ Will decrease use ☐
Will change from seasonal/part-time resident to full-time resident ☐
Will change from full-time resident to seasonal/part-time resident ☐
6. Are you planning major changes to your buildings, property or waterfront in the next 5 years, or are you planning a change of ownership?
Yes ☐ No ☐ Not sure ☐
If yes, please briefly describe the planned changes:

7. What is the main reason(s) that you live in, or visit, the Fox Lake and Buck River area?
rural / natural setting ☐ outdoor recreation ☐
family / heritage ☐ peace and quiet / rest ☐
socializing ☐ other _____

8. What activities do you, and those that often stay at your residence, frequently participate in?

- | | | | |
|-----------------|--|---|--------------------------|
| Arts and crafts | <input type="checkbox"/> Ice Skating | <input type="checkbox"/> Snow skiing | <input type="checkbox"/> |
| ATV/off-roading | <input type="checkbox"/> Jet skiing | <input type="checkbox"/> Socializing | <input type="checkbox"/> |
| Bird watching | <input type="checkbox"/> Kayaking | <input type="checkbox"/> Star gazing | <input type="checkbox"/> |
| Canoeing | <input type="checkbox"/> Photography | <input type="checkbox"/> Swimming | <input type="checkbox"/> |
| Cycling | <input type="checkbox"/> Power boating | <input type="checkbox"/> Walking | <input type="checkbox"/> |
| Fishing | <input type="checkbox"/> Reading/writing | <input type="checkbox"/> Water skiing/ tubing | <input type="checkbox"/> |
| Hiking | <input type="checkbox"/> Sailing/Windsurfing | <input type="checkbox"/> Wildlife viewing | <input type="checkbox"/> |
| Hunting | <input type="checkbox"/> Snowmobiling | <input type="checkbox"/> Other (specify) | <input type="checkbox"/> |
| Ice Fishing | <input type="checkbox"/> Snowshoeing | <input type="checkbox"/> Other (specify) | <input type="checkbox"/> |

9. Do you rely on lake water as your main water source?

Yes ☐ No ☐

If yes, do you treat lake water for drinking? Yes ☐ No ☐

10. During the summer of 2002, how did you find the average lake and river water levels?

much too low ☐ somewhat low ☐ about right ☐ somewhat high ☐ much too high ☐

Describe – using a familiar landmark around the lake – the “ideal” summer water level from your point of view.

Part 2 – Your concerns and comments:

At the October 25 Stakeholders' Workshop, representatives from government, commercial operators, neighbouring lakes and the Fox Lake Association identified their *values, issues, concerns* and *suggestions* about Fox Lake. The discussion focused on such things as:

- | | | | | |
|-------------------|-------------------|-------------------------|--------------------------|------------|
| ◆water quality | ◆wildlife habitat | ◆shoreline preservation | ◆water levels | ◆erosion |
| ◆new development | ◆communication | ◆noise | ◆security | ◆fisheries |
| ◆recreation | ◆boat use/safety | ◆scenic aesthetics | ◆legislation enforcement | |
| ◆public education | ◆road maintenance | ◆waste/garbage | ◆community cooperation | |

Prior to developing a Fox Lake Plan we need to identify the values, issues, and concerns of everyone within the lake community. Please provide input on the things that **you** think are important. If the spaces below are insufficient, please feel free to use an additional piece of paper.

11. What are the special characteristics and features of Fox Lake and its surrounding area that you appreciate or value the most and want to see preserved or protected for the future?

12. What changes in the shoreline of the Fox Lake and Buck River area have you noticed over the past few years?

13. What concerns do you have about Fox Lake and Buck River and their surrounding areas?

14. What key issues should (or should not) be addressed within our lake plan?

15. What suggestions do you have for how issues can be addressed or problems fixed? What short-term and long-term strategies do you recommend?

16. Please provide any additional comments you may have about the Fox Lake Plan.

Part 3 – What Next?

17. The Lake Plan Committee is planning a meeting to present the consolidated responses to the survey and to get more input from local residents and property owners about the Fox Lake Plan. Please indicate your availability and interest in attending such a meeting.

- I would prefer to attend on Sunday May 18th from 2:00 to 4:00 p.m. ☐
- I would prefer to attend on Saturday May 31st from 10:30 a.m. to 12:30 p.m. ☐
- Would like to attend but am not available on either date ☐
- I do not wish to attend ☐
- I would like to receive the survey results by mail or e-mail regardless of attendance ☐

18. This survey has been mailed to you at your permanent address as provided by the Fox Lake Association or the Town of Huntsville role number file. If you would like to be contacted at a different address, or by e-mail, please let us know.

How would you like the Lake Plan Committee to communicate with you in the future?

If you wish to maintain the anonymity of this survey, please note your preferred mailing and/or e-mail address on the form on the back of the Winter Newsletter and mail to us in a separate envelope.

Thank you very much for completing the questionnaire!

Please return **by March 31, 2003** by post to: Fox Lake Association c/o Elaine Jackson
602 East Fox Lake Road, RR# 1 Huntsville, ON, PIH 2J2

Or drop it off in the mailbox or at the door
at one of these residences:

Elaine Jackson, 602 East Fox Lake Road
Lynda Howe & John Taylor, 180 Rachel Lane
Jack van der Meer, 479 West Fox Lake Road

If you know of anyone we have omitted in this mailing, please contact Elaine Jackson. She will send a package to them.

Appendix B Contact List

EMERGENCY NUMBERS

Police – Fire – Ambulance	Call 911
Bear Problems Hotline	1-866-514-2327
District of Muskoka - Declared Emergency or Disaster	1-800-240-1523
Environmental Spills or Emergencies (MOE)	1-800-268-6060
Pollution Hotline (MOE)	1-866-663-8477
(oil spills, blue/green algae, water, waste, air issues)	1-800-268-6060
Huntsville District Memorial Hospital	1-705-789-2311
Hydro One (power outages/emergency service)	1-800-434-1235
Ontario Telehealth Hotline – 24/7	1-866-797-0000
Poison Information Centre	1-800-268-9017
Roads Emergency Line – Town of Huntsville	1-705-789-5553
Roads Emergency Line – District of Muskoka	1-705-645-6764 or 1-800-281-3483

HELPFUL ORGANIZATIONS

Environment Committee, Huntsville Councillor Mary Jane Fletcher	mjfletcher7@sympatico.ca 705-788-3646	town issues re environment
Federation of Ontario Cottagers Association (FOCA) 201 – 159 King Street Peterborough, ON K9J 2R8	www.foca.on.ca info@foca.on.ca 705-749-3622	advocacy for members and stewardship
Huntsville/Lake of Bays Lakes Council (HLoBLC)	www.huntsvillelakescouncil.org	advocacy and stewardship
Local Environment Advisory Forum (LEAF) – Huntsville area	leaf.huntsville@hotmail.com	environmental advocacy
Muskoka Heritage Foundation & Watershed Council 9 Taylor Road, Box 482 Bracebridge, ON P1L 1T8	www.muskokaheritage.org info@muskokaheritage.org 705-645-7393	preservation conservation of Muskoka
Muskoka Water Web – Info on many topics such as: <ul style="list-style-type: none"> • Lake Data • How to Protect your water • Who Protects your Water • Who does What 	www.muskokawaterweb.ca Watershed Health Lake System Health Recreation Water Smart Living	great source of information for environmentally related programs Waterfront
Owners After Fair Taxation (WRAFT)	wraft@bellnet.ca	taxation equity – waterfront owners

CONTACT LIST RE VARIOUS ISSUES

ISSUE

Town of Huntsville (ToH) 37 Main Street East Huntsville, ON P1H 1A1	www.huntsville.ca 705-789-1751 Toll free 1-888-696-4255	for local issues and services: see below
Members of Council Claude Doughty, Mayor Dianne Conwath, Deputy Clerk (phone contact for Mayor and his Assistant) Bill Beatty, Councillor, Stisted Ward Chris Zanetti, Councillor, Stisted Ward	council@huntsville.ca mayor@huntsville.ca administration@huntsville.ca dianne.conwath@huntsville.ca 705-789-1751, Ext. 2240 billb@vianet.ca 705-385-3379 cbzanetti@sympatico.ca 705-783-6222	issues for entire council issues for entire council local council rep's re town issues
Development Services Michael Gooch, Acting Director Jacquie Tschekalin, Development Coordinator	developmentservices@huntsville.ca mike.gooch@huntsville.ca 705-789-1751, Ext. 2232 jacquie.tschekalin@huntsville.ca 705-789-1751, Ext. 2353	zoning, by-law, planning and septic systems site plan and development
Corporate Services Colleen Mitchell, Tax Collector	corporateservices@huntsville.ca colleen.mitchell@huntsville.ca 705-789-1751, Ext. 2245	tax payments
Public Works Bev Martin, Administrative Assistant	publicworks@huntsville.ca bev.martin@huntsville.ca 705-789-5684, Ext. 3821	roadwork, signs & maintenance issues
Huntsville Animal Shelter	705-789-9709	missing pets
Huntsville Animal Control	705-789-1751, Ext. 2355	stray pets
Huntsville Public Library (HPL) 7 Minerva Street, Huntsville	www.huntsvillelibrary.net 705-789-5232	local history & lake plan info
District Municipality of Muskoka (DoM) 70 Pine Street, Bracebridge, ON P1L 1N3	www.muskoka.on.ca 705-645-2231 Toll free 1-800-461-4210	district issues and services
Garbage Information Toll free 1-800-281-3483 Stisted Landfill Muskoka Container Services (MCS) Madill Yard Works Yard 169 Madill Church Rd. Burning Information	705-789-3071 705-645-4453 705-789-5684 Toll free 1-877-847-1577	garbage issues hours and rules bluebox/garbage hazardous and electronic waste outside fires
<i>Please also see District of Muskoka web site & annual waste info calendar for specific information.</i>		
Intyre Electronic Recycling (24/7 free) 7 East Airport Rd., Huntsville	intyrerecycling@sympatico.ca 705-789-8142	local electronic recycling (free)

Ontario Provincial Police (OPP)

Constable Lynda Cranney
298 Ravenscliffe Rd., Huntsville
Ontario Ministry of Environment (MOE)
Public Information Centre
Dorset Environmental Science Centre
1026 Bellwood Acres Rd., Dorset

705-789-5551
lynda.cranney@ontario.ca
www.ene.gov.on.ca
Toll free 1-800-565-4923
705-766-1294
Toll free 1-800-4700-8322

local community
services officer

Lake Partner Program

Ontario Ministry of Health (MOH)
Local Health Unit, Huntsville
Ontario Ministry of Natural Resources
(MNR) General Inquiries
Tips Line (anonymous)
Parry Sound District Office
Andy Heerschap, Manager
7 Bay Street
Parry Sound, Ontario P2A 1S4

lakepartner@ontario.ca
Toll free 1-800-470-8322
www.health.gov.on.ca
705-789-8813 or 705-684-9090
www.mnr.gov.on.ca
Toll free 1-800-667-1940
Toll free 1-877-847-7667

phosphorus and
water quality monitoring

well water testing
management of
natural resources
resource abuse

705-746-4201
use call menu to access
desired department

overall area
management

Bracebridge Area Office

Trevor Griffin
Area Manager
1350 High Falls Rd., R.R.#2
Bracebridge, ON P1L 1W9
Dept. of Fisheries and Oceans (DFO)
28 Waubeek St.
Parry Sound, ON P2A 1B9
Fox Lake Association (FLA)
Jim Watson,
President
550 East Fox Lake Rd
Robin Yule,
Vice-President
480 East Fox Lake Rd

705-645-8747
use call menu to access
desired department
www.dfo-mpo.gc.ca
705-746-2196

www.foxlakeassociation.org
riderjim@rogers.com or
416-255-1481 (home)
705-789-3016 (cottage)
robinfoxpause@yahoo.ca
519-396-8184 (home)
519-386-3636 (cell/cottage)

fish and wildlife,
water levels,
shoreland works,
and crown lands
any impacts on
fish habitat

for all Fox Lake issues
and all issues
with both Camps
except for emergencies

alternate contact
for President

Jim McMahon,
Treasurer
277 Belsize Drive
Toronto, ON M4S 1M5

j.mcmahon@sympatico.ca
416-487-8023 (home)
600 East Fox Lake Rd.
705-788-9720 (cottage)

payment of
association dues

Camp Winnebago
Ben Lustig, Owner
Camp Romuva
Ray Sriubiskis, Camp Contact

705-789-5892
ray@sportshows.ca
ray.sriubiskis@rogers.com
705-737-9101 (home)

immediate
emergencies only
property damage, or
vandalism, etc.