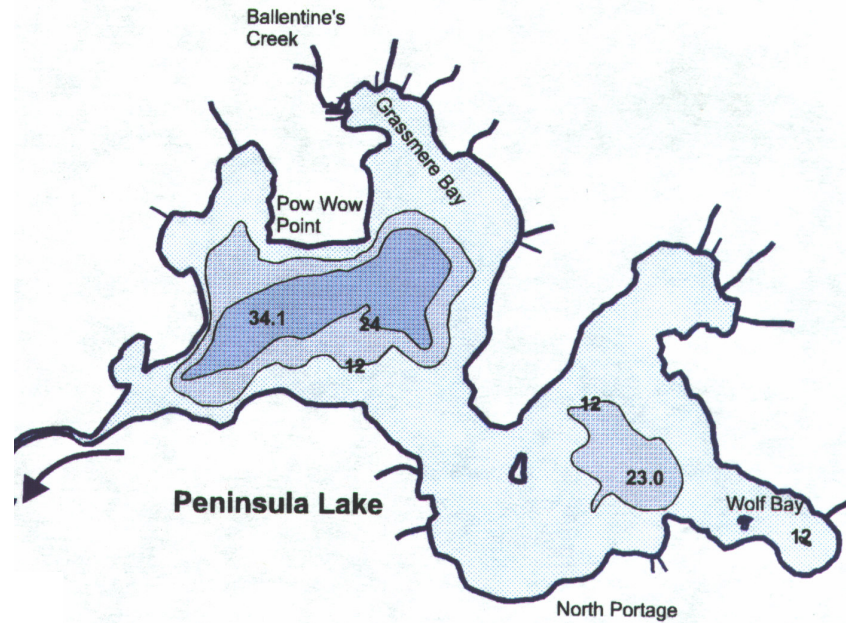
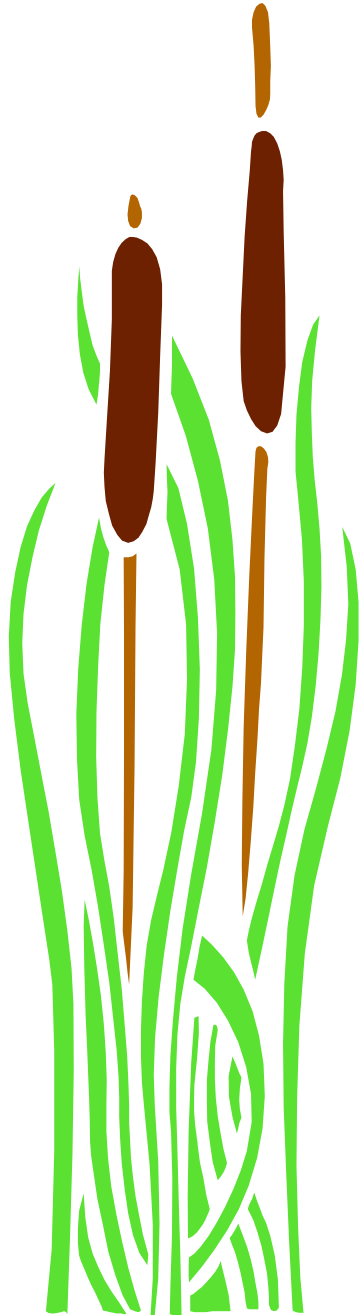


# PENINSULA LAKE PLAN

... the future is on our lake !



**Prepared by**

**French Planning Services Inc**

**Bracebridge, Ontario**

**July 2001**

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# ***Preface***

*The Peninsula Lake community wants to preserve and enhance the future of their lake and watershed. Over the past 100 years there have been many changes on Peninsula Lake. People have been attracted to this area by its recreational opportunities, natural environment and social values. Once a pristine environment, untouched by human intervention, the lake is now ringed with residential and commercial development, and the very reason why people want to be on the lake could be in jeopardy.*

*The Lake Stakeholders strongly believe that the health of their lake is vested in those who use and have an interest in it's future. With this in mind, they have initiated a community-based approach to identify and obtain ecosystem health goals and objectives.*

*The Peninsula Lake Plan is an action-oriented community document that blends land use planning and stewardship to provide a comprehensive approach to protecting the quality of life on and around the lake. The Plan is intended to be a living document that will be reviewed and updated as new information and issues are identified and it was developed with the guidance of the Peninsula Lake Working Group, the resort operators, the Township of Lake of Bays and the Town of Huntsville. A Background Report supplements this plan with more detailed information.*



*Grassy Island in Hill's Bay*

## ***Special thanks to...***

*Charlie Baker*

*Pat Doyle*

*Brian Goldthorp*

*Cedar Grove Lodge*

*Portage Inn*

*Hidden Valley Highlands*

*Township of Lake of Bays*

*Bruce Stimers*

*Dan McKeon*

*Barbara Stronach*

*Colonial Bay Cottages*

*Tally-Ho Inn*

*Hidden Valley Best Western*

*District of Muskoka*

*Bill Charlton*

*Len Ross*

*Ian Gilmour*

*Deerhurst Resort*

*Pow Wow Point Lodge*

*Town of Huntsville*

*Ministry of Natural Resources*

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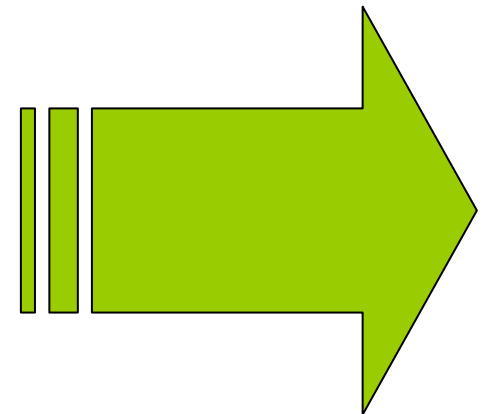
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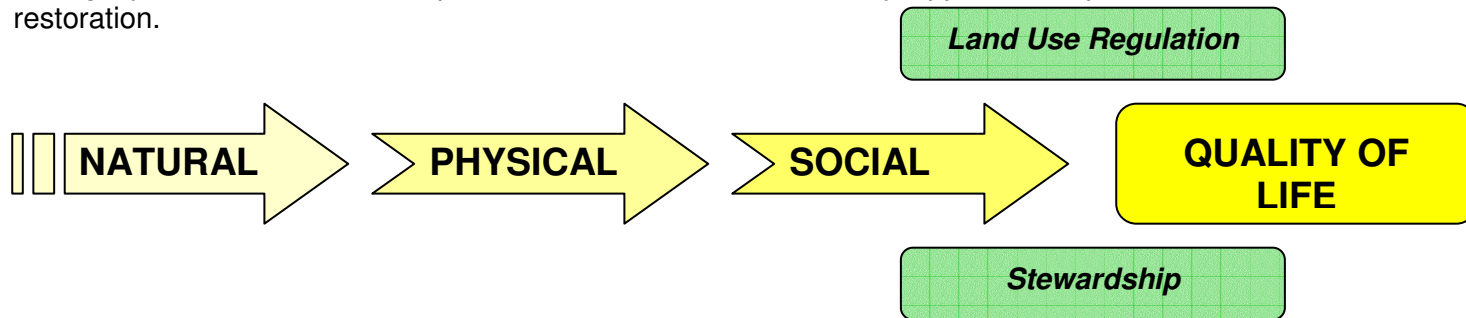
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# Section 1 - Introduction

## The Lake Planning Approach

The Peninsula Lake Plan was prepared through a community-based process to identify and protect natural, physical and social values that contribute to the “Quality of Life” on Peninsula Lake. The purpose of the Lake Plan is to recognize and protect the unique character of Peninsula Lake and to recommend a series of actions to ensure its long-term health and character for present and future generations. The Lake Plan provides a series of approaches that include both land use regulation, which is applied through municipal official plans and zoning by-laws, and stewardship which is a volunteer community approach to protection, rehabilitation and restoration.



The process to develop a Lake Plan is as important as the end result. 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.

The Lake Planning Process was started by the initiative of a few members of the Peninsula Lake Association. In December 1998 a workshop was held with members of the Peninsula Lake Association and municipal politicians and staff to develop an Action Plan for dealing with water quality issues. Through open discussions on important values it was quickly determined that the qualities of life that attract people to Peninsula Lake ranged beyond the limits of water quality, and that the need for a process to consider the carrying capacity of all elements was required. At the same time, the Township of Lake of Bays approved a new Official Plan that recommended the consideration of all significant factors that affect the character of the lake through the preparation of a Lake Plan.

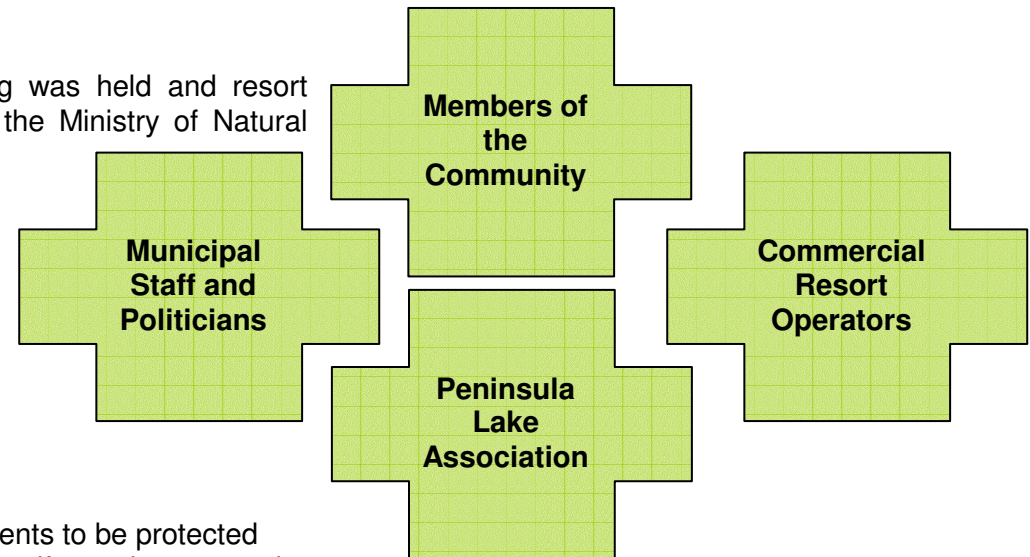


## Stakeholders

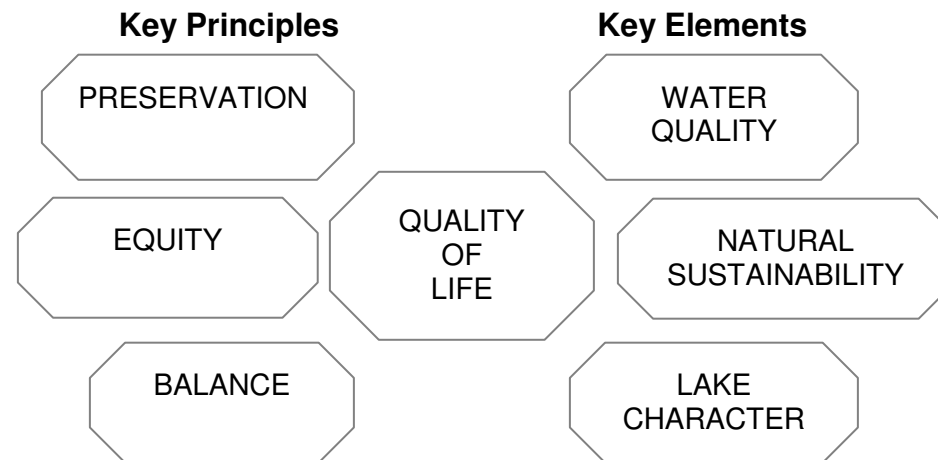
In January 2000, the first stakeholder meeting was held and resort operators, municipal politicians and staff, and the Ministry of Natural Resources were invited to identify their vision of the future of the lake and its values.

All stakeholders identified their expectations and made a commitment to ensure that their interests were considered in the Lake Planning Process. The municipal planners and government representatives provided a number of comments on the lake planning process:

- need to develop a vision
- the Plan must deal with the specific elements to be protected
- use approaches and strategies to identify and protect the character of the lake
- Lake Plans should be broader than land use planning. Stewardship and outreach is an important element.



Stakeholders identified that three key, yet potentially conflicting, principles should be considered when dealing with the quality of life on Peninsula Lake.



At the first stakeholder meeting, the resort operators and Peninsula Lake residents identified the following issues:

- the natural beauty and aesthetics of the lake environment is a critical element of its appeal
- visitors want to come to Peninsula Lake to see a natural environment that has not been spoiled
- must maintain and develop economically competitive resorts
- the lake provides a livelihood for the resorts
- decide on limits to development
- promote understanding through communication and education
- promote adequate and appropriate lake access
- encourage continued monitoring to anticipate future problems

A workshop for members of the community (Peninsula Lake Association, Hidden Valley Ratepayers Association, and others) was held in July 2000. The purpose of this session was to identify the lake values that are shared by the community members. Those attending the workshop were asked to identify:

Specific Places – *“My special place on Peninsula Lake is...”*

General Values – *“One of the most important values of Peninsula Lake is ...”*

Memories – *“I remember a time when ...”*

During the summer and fall of 2000, a Residential and Resort Survey was prepared and distributed to members of the community. This survey provided information on occupancy, preferred recreational activities, property information, shoreline activity areas, and personal observations about the change in activity and development over the past five years.

The results of the surveys are provided in a separate Background Report together with more detailed information on the lake. Together, this information has been used to identify the most important values on Peninsula Lake and to develop approaches (actions and project plans) to ensure their sustainability in the face of development and other human activity. It is intended that the Peninsula Lake Association use both the Lake Plan and the Background Report when determining future actions such as:

- improved municipal land use regulation
- stewardship approaches (communication, rehabilitation projects, community action plans)

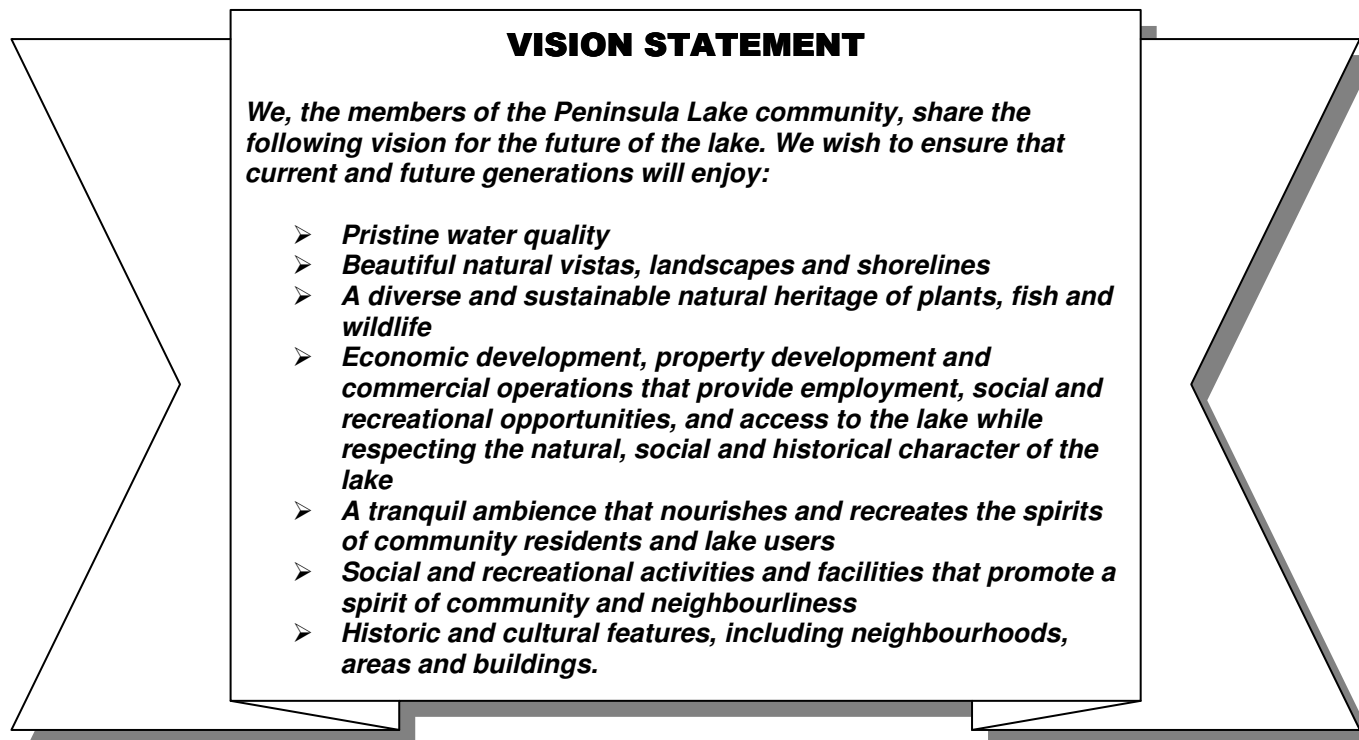


## ***Section 2 – The Lake Vision***

A Vision Statement was developed from the information collected during the initial stages of the community planning process. The Vision Statement describes how Peninsula Lake should “look, feel and be” in the future. These characteristics and values are the most highly valued by its community members and the intent of the vision is to clearly identify and seek their protection and enhancement, so that they may be enjoyed by current and future generations.

The Vision Statement guided the planning process and provided a focus for the Lake Plan. The vision was developed and confirmed through meetings with all stakeholders and represents the desires of the entire lake community.

**Figure 1 – Peninsula Lake Vision Statement**





## Principles

The following principles and planning criteria guided the development of the plan:

1. The natural, social and historic character of the lake must be protected and enhanced. Opportunities to rehabilitate degraded features and areas will be sought.
2. The plan will focus on end results and balance a range of means to achieve those results such as regulation, communication and education.
3. Education and regulation will support the implementation of the plan. Implementation will favour educational processes and voluntary compliance over legislative and regulatory constraints.

## Targets

To support the vision, the working group recommended the following draft targets for consideration in the development of the plan.

**Water quality** – The water quality of Peninsula Lake should not exceed natural background levels of pollutants (i.e. the level of pollutants that would occur in nature prior to human habitation). Significant pollutants would include phosphorus, nitrates and ecoli. Other pollutants may be identified in the planning process.

**Fish and wildlife** – Peninsula Lake should support a sustainable fishery and maintain stability in the bio-diversity and wildlife population of the natural environment and avoid the introduction of “invading species” such as zebra mussels.

**Natural shorelines and riparian areas** – The shoreline and riparian area is the “ribbon of life” that supports the diverse fish and wildlife that we enjoy. Members of the Peninsula Lake community will encourage the rehabilitation of the shoreline and riparian areas to increase the percentage of the shoreline that is natural to meet or exceed local planning targets.

**Trees and natural vistas** – Members of the Peninsula Lake community will maintain a natural vista and prevent the appearance of buildings and other structures above and below the tree line.



**Economic and property development** – Members of the Peninsula Lake community will support the competitiveness and viability of existing resorts and commercial operations. They will foster a cooperative working relationship to ensure that proposed commercial and residential activities and developments respect the environment and character of the lake and maintain property values.

**Historic and natural character** - Members of the Peninsula Lake community will strive to ensure that any future development, either commercial or residential, will fit within the historic and natural character of the lake.

**Cultural and historic elements** – Members of the Peninsula Lake community will recognize, protect and restore, where appropriate and feasible, the historic character of the lake including such sites as the Canal, Springsyde Dock, the Portage Railway and the log chute.

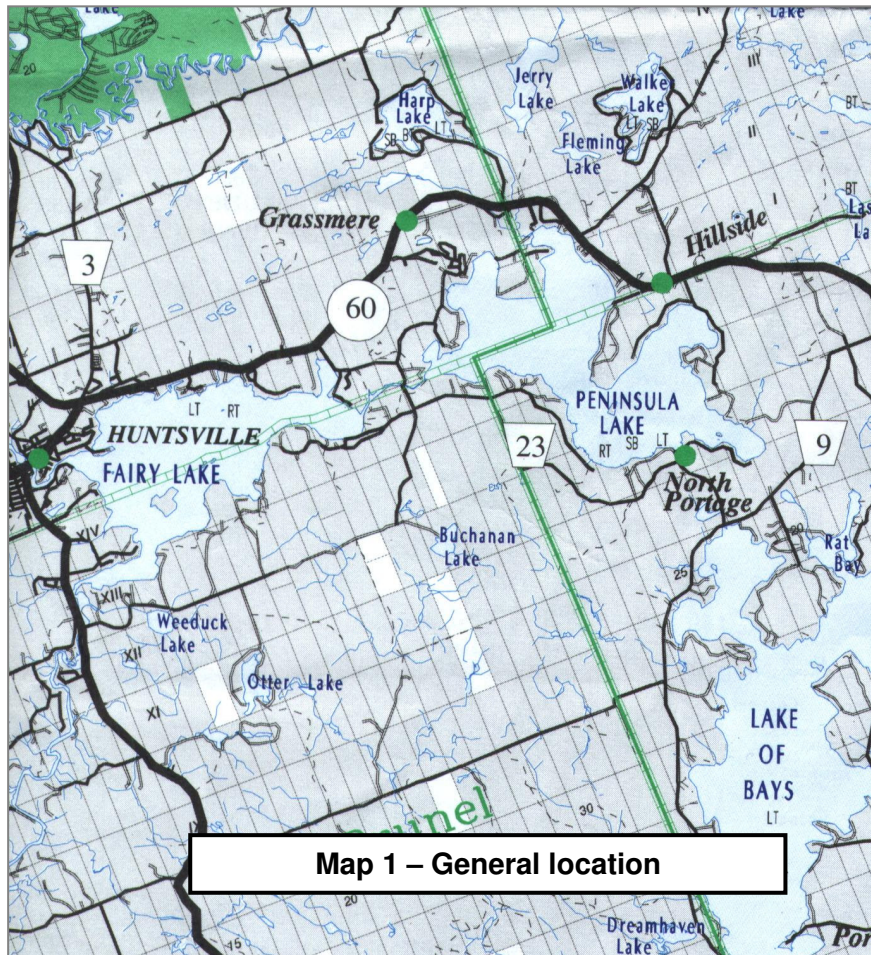
**Social life** – Members of the Peninsula Lake community will encourage a range of social and recreational activities that:

- are consistent with the natural character of the lake
- preserve the environment and ambience
- develop a sense of community around the lake



## Section 3 – Lake Description

### Location and Characteristics



Peninsula Lake is a mid-sized cold-water lake located just east of the Town Huntsville in the District of Muskoka (Map 1). Municipal jurisdiction is split between the Town of Huntsville and the Township of Lake of Bays.

Peninsula Lake encompasses a surface area of 868.8 ha (8.6 km<sup>2</sup>) and has a total shoreline length of 27.4 km. Its general characteristics are provided in Figure 1, on the following page.

The water level of Peninsula Lake is controlled at two points. The first control point, which is the outlet of the lake, is the Canal that is located between Fairy and Peninsula Lake. The canal was excavated in 1888 to facilitate access to Peninsula Lake by large steam ships. Before the canal was created the area consisted of a small stream and wetland. The second point is a water control structure located at the outlet of Fairy Lake. This dam was built in 1877 to control the water levels of Fairy and Peninsula Lakes to enhance navigation and logging operations.

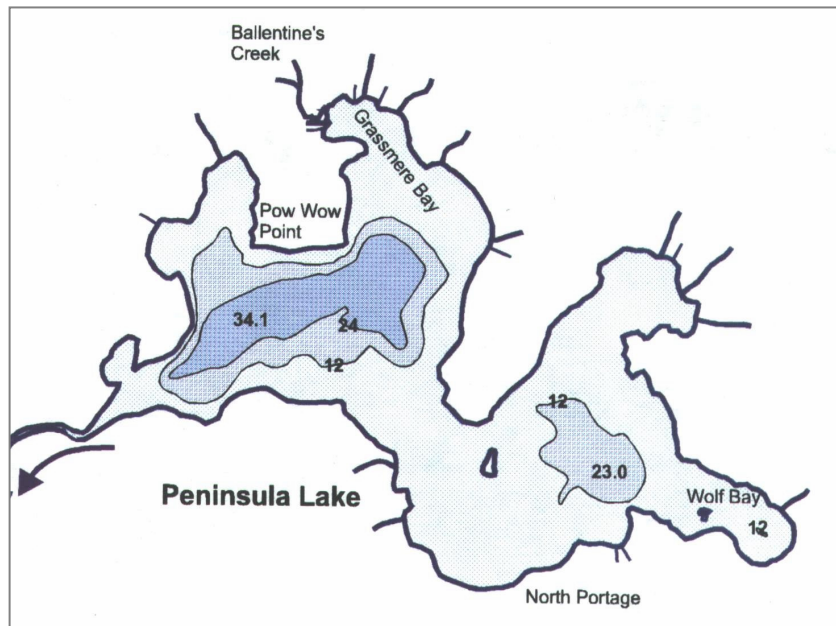


The lake is divided into two basins: east and west. The east basin has an average maximum depth of 23 metres and the west basin 34 metres. According to Nelson, 1995, “ the lakes western basin is considerably deeper than its eastern half, and thus is able to absorb more impacts on water quality and provides more suitable habitat for recreationally valued cold water fish such as lake trout. The shallower, eastern basin is more susceptible to water quality degradation and associated changes in plant and animal life.”

**Figure 2 – General Characteristics**

Latitude:	45° 20'	Longitude	79° 07'
Drainage Area	38 Km <sup>2</sup>	Surface Area	868.8 ha
Length	10.7 km	Perimeter	27.4 km
Mean Depth	9.7 m	Total Volume	7767.6x10 <sup>4</sup> m <sup>3</sup>
Outflow Volume	2.87x10 <sup>7</sup> m <sup>3</sup> yr <sup>-1</sup>	Flushing Rate	0.4 times year <sup>-1</sup>
Littoral Zone	43%	Max. Depth	34.1 m

Source: Fairy Lake and Peninsula Lake Study (1999) and Peninsula Lake MNR Map (1970)



Map 2 indicates the location of 21 year-round and seasonal streams that flow into the lake. The canal is the only outflow. In addition, there are numerous drainage courses that also flow into the lake. The eastern basin has 9 small streams flowing into it, 3 of which are intermittent (may not flow for part of the year). The western basin has 12 streams flowing into it, all located on the north and west shore. The Canal has two small streams flowing into it. Further information on streams is located in Section 2, Fish Habitat.

**Map 2 – Lake Bathymetry and Tributaries**

Source: Fairy Lake and Peninsula Lake Study (1998)



## Watershed



The Peninsula Lake Watershed is located within the Muskoka River Watershed, which is comprised of three smaller basins; the North Muskoka River, the South Muskoka River, and the Indian, Moon, Musquash and Gibson River sub watershed.

The drainage area of Peninsula Lake is located within the North Branch of the Muskoka River and it flows directly into Fairy Lake. As shown on Map 3, the Peninsula Lake sub basin comprises a very small area of the entire Muskoka River Watershed (about 1%).

There are three small upstream lakes (Harp, Jerry and Walker) and the total area of the Peninsula Lake Watershed is about 38 km<sup>2</sup>. The watershed is mostly forested. Harp and Walker lakes are cold-water lakes and

Jerry is a warm water lake. Harp and Walker have extensive shoreline development and Jerry is not developed. Harp Lake is located in the Town of Huntsville and Jerry and Walker Lakes are located in the Township of Lake of Bays. All three lakes flow into Grassmere Bay of Peninsula Lake.

## Land Use Patterns

Development around Peninsula Lake started in 1868 when land was granted for the purpose of settlement. The first homesteads focused on resource use (forestry and agriculture), however this changed when it was determined that the soils could not sustain agricultural operations and forest resources dwindled. The construction of the canal in 1889 created easy access to the lake by steamship and soon after resorts and cottages started to flourish. Steamships used the canal to access the community of North Portage, where a small railway was located to provide access across land to Lake Of Bays.

The shoreline is predominantly residential with tourist commercial nodes located in two areas, Hillside and



Hidden Valley, located in the west basin of the lake. The backlands are predominantly forested rural lands with interspersed residential properties and several small agricultural and aggregate operations. A substantial amount of land in the rural portions of the watershed is currently undeveloped.

While there were a number of historic communities, the District of Muskoka and local Official Plans only recognize two communities located on Peninsula Lake; Hidden Valley and Hillside. Hidden Valley, located in the Town of Huntsville, is a serviced resort community. Municipal water and sewer services are provided to the majority of development in the area. As a result this community has a higher density of residential and commercial development. Deerhurst Resort, Hidden Valley Inn and the Hidden Valley Highland Ski Resort provide a focal point for this recreational settlement.

The shoreline of Peninsula Lake is generally characterized as being “typical” of most developed cottage country lakes; there is substantial shoreline residential development together with resort development. Almost the entire shoreline is currently developed; there are only two properties of substantial shoreline frontage that are vacant. There is no industrial development, although the area was heavily logged during the past two centuries.

The land immediately surrounding Peninsula Lake is predominately comprised of residential uses with 7 commercial resorts, one commercial ski hill and one residential condominium. Figure 3 indicates the total number of shoreline lots (includes public and private sewage disposal). Assuming a total of 343 residential building lots the ratio of shoreline residential lots to surface area of the lake is 1 cottage to 6.2 acres.

**Figure 3 – Number of Shoreline Lots**

Residential		Condominium	Commercial	Vacant	Total
Permanent	Seasonal				
63	229	1*	8	51	352

- Notes – 1 - One residential condominium (Hidden Valley Condos), which is not fully developed, can have a maximum of 100 residential units.
- 2 - Deerhurst Resort (which has 245 commercial condominium units) is counted as one resort unit.

Source: French Planning Services – Review of Assessment Maps

An analysis of potential new lots to be created was conducted by reviewing the properties with substantial frontages on Peninsula Lake. These are limited to the commercial resorts, and two residential properties in



Wolf's Bay. Excluding the commercial properties, and based on a lot frontage requirement of 400 ft., there is the possibility of creating about 7 new residential lots.

It is likely that the impact on water quality from these seven new lots would be minimal (if properly developed) and therefore the greatest development impact on the lake would appear to be the re-development and increased density and occupancy of residential and commercial properties.

## **Residential**

The number of people living on and using the lake will have a direct effect on water quality as well as increasing social impacts resulting from a reduction in natural aesthetics, increased noise, and boating and recreational activity. Occupancy refers to the number and length of time that either residential or commercial users stay on the lake. As seasonal dwellings are converted to permanent, occupancy will increase, which will increase the amount of phosphorus generated through sewage. As a result, the conversion of seasonal dwellings to permanent occupancy will cause increased stress on water quality.

The conversion of seasonal homes to a permanent use has remained fairly stable for the past 15 years. In 1986 the Lakeshore Capacity Study, prepared by the Ministry of Municipal Affairs and Housing (MMAH), indicated that about 66% of all households on Peninsula Lake were seasonal and 33% were permanent. In the summer of 2000, the Residential Survey indicated that about 38% of those surveyed lived on the lake permanently, and 62% were seasonal or visited on weekends. The Summer 2000 Residential Survey also indicated that about 11% of the current seasonal residents intended to convert to permanent use, and an additional 7% may convert their homes to permanent use. About 78% intend to continue to use their cottages on a seasonal basis.

The Summer Survey also indicated that there is a long-term pattern of ownership. About 3% of those surveyed indicate that their families have been coming to the lake for over 100 years, and on average, families have been coming to Peninsula Lakes for about 35 years. About 60% of families surveyed have been coming to Peninsula Lake for greater than 20 years and only 14% are new comers (less than 4 years). Figure 4 indicates the average number of days used by seasonal occupants:

**Figure 4 – Seasonal Residential Occupancy**



Summer use (days)	Fall use (days)	Winter use (days)	Spring use (days)
58.59	15.87	12.33	15.18

Source: Residential Survey - Summer 2000

## Commercial

Commercial resorts have a long history on the lake and are part of the lake's heritage. Resorts provide a significant social and economic value to the lake by providing employment opportunities and an enhanced tax base. Their continued operation and future viability is viewed as a positive factor that contributes to the quality of life on Peninsula Lake.

**Figure 5 – Resorts - Year Established**

Resort Name	Year Established	# of Years Established
Cedar Grove Inn Lodge	1928	72
Colonial Bay Cottages	1940	60
Deerhurst Resort	1896	104
Hidden Valley	-	-
Portage Inn	1889	112
Pow Wow Point Lodge	1920	80
Tally-Ho Inn	1939	61

Source: Resort Survey Fall 2000

Figure 5 indicates that the number of tourist resort operations in the Township of Lake of Bays has decreased from 75 in 1957, to 21 in 1997, and this trend is similar throughout Muskoka. Many resorts have converted to other uses, primarily residential.





Currently, there are 7 commercial resorts and one ski hill located on Peninsula Lake. Figure 6 indicates that the 7 resorts have a total of 615 commercial accommodation units. Deerhurst and Hidden Valley Inn comprise about 83% of all resort units on the lake and are on municipal water and sewer services.

**Figure 6 – List of Commercial Operators and Type of Use (2000)**

<b>Resort Name</b>	<b>Hotel or Motel Units</b>	<b>House-keeping Units</b>	<b>Condo-minium Units</b>	<b>Cottage Units</b>	<b>Total Units</b>
Cedar Grove Lodge	8			19	27
Colonial Bay Cottages	8	7			15
Hidden Valley Best Western	95				95
Portage Inn	6				6
Tally-Ho Inn	8	10		9	27
Deerhurst Resort	173		245		418
Pow Wow Point Lodge	27				27
Total	325	17	245	28	615

Source – Resort Survey Fall 2000 and Ontario South Central Trip Planner 1997, MEDTT

Tourist resort operations have a major financial investment in the sustained health of Peninsula Lake. Due to this investment, operators have less of an opportunity to sell their properties and move to another location should the features that attract guests to their resort diminish.

The resort survey indicated that the highest value that their guests seek is the natural beauty, as well as the clean and quiet surroundings of the lake. The overall success of the tourist resort is directly linked to the same values that attract seasonal residents. Due to the significant investment and limited opportunity to replace commercial properties, the impact of the loss of features or values may be more significant to resorts than to residential uses.



# ***Land Use Regulation***

## **Official Plans**

There are three Official Plans that apply within the watershed of Peninsula Lake: District of Muskoka, Town of Huntsville, and the Township of Lake of Bays. Each of these plans provide detailed and comprehensive policy about future development.

The Muskoka Official Plan provides land use policies for the entire District Municipality of Muskoka, which includes both the Town of Huntsville and the Township of Lake of Bays. The Huntsville Official Plan was approved in 1987 and has had about 25 amendments to permit specific development proposals since it was approved. The Lake of Bays Official Plan was approved in January 2000 and went through a detailed consultation process and is a very comprehensive document. Generally the Lake of Bays Official Plan contains many policies that could be considered for use in the Town of Huntsville Official Plan.

All three plans provide strategic planning policies based on a hierarchical structure of density provisions from Urban Areas such as Huntsville and Recreational Communities such as Hidden Valley, to lower density designations such as Waterfront and Rural. In general, the density of development is expected to be higher in the urban and recreational communities as compared to the waterfront and rural areas.

All three plans provide general policies on the use and management of natural resources and the protection of the environment. Similarly all plans recognize that tourism is one of the strongest contributors in the Muskoka economy and while expansions to existing commercial infrastructure is promoted, new tourist commercial or marine related development may only be established by an amendment to local official plans.

The District of Muskoka is one of the first municipalities in Ontario to put in place a comprehensive water quality program. This program predicts the effects of shoreline development on recreational water quality by modeling the impacts of phosphorus. While the Official Plan recognizes that other carrying capacities may exist, current development limits are not based on matters such as aesthetics, character and other social factors.



**Figure 7 – District of Muskoka Water Quality Objectives for Peninsula Lake**

Lake	Municipality	Water Quality Objective	Sensitivity
Peninsula West	Chaffey/Brunel Huntsville	1.8 ug/l	Not Sensitive
Peninsula East	Sinclair/Franklin Lake of Bays	1.8 ug/l	Restrictive

Source: District of Muskoka Official Plan

Figure 7 indicates the water quality objectives as identified in the District Official Plan. A “sensitive” rating means that a lake is nearing capacity (less than ten lots left). “Restrictive” means that the lake is at capacity and no new lot creation will be permitted. As a result, the Muskoka Official Plan generally prohibits new lot creation or major development in the east basin of the lake, based on recreational water quality.

The west basin currently has similar development restrictions, but this is based on the presence of sensitive lake trout habitat. The Ministry of Natural Resources indicated in the 1990’s that the entire lake is at development capacity based on the impact on lake trout habitat from additional phosphorus loadings from new shoreline lots (see the section on Fish Habitat in this plan and the Background Report for details).

The Huntsville Official Plan sets the water quality objective (chlorophyll a) for Peninsula Lake at 1.5 micrograms per litre, which is a more restrictive value than recommended by the District of Muskoka.

Although lot creation is prohibited, the District and Lake of Bays Official Plans recognize that some exceptions where new lots may be created or development can occur:

- existing vacant lots of record (but requires a 30 m setback, if possible)
- to separate existing uses on one lot (e.g. two cottages)
- where improved septic technology or design layout eliminates nutrient impacts on water quality



As a result, the Muskoka Plan may permit new lot development if new septic technology or design layout eliminates nutrient impacts on water quality. In the future when new phosphorus abatement technology is available, additional and more intense development may be permitted.

Both the Huntsville and Lake of Bays Official Plans require new lots to have a minimum frontage of 122 m (400 ft) on Peninsula Lake. However, in both cases this requirement appears to be related directly to the restriction on new lot creation. It is important that the 400 ft lot frontage requirement be established as the minimum lot frontage required, regardless of restrictions based on water quality or lake trout habitat.

The Lake of Bays Official Plan provides a series of comprehensive policies regarding the protection and enhancement of the natural environment and landscape, including the consideration of:

- natural landscape and vegetation conservation
- regeneration of tree cover
- natural vegetative buffers
- preservation of scenic sites and boating routes
- protection of natural watercourses
- natural landscape features
- fish and wildlife habitat
- visual impact
- ridges and skylines
- storm water management
- height of structures
- shoreline protection
- water quality
- visual impact

The Lake of Bays Official Plan also recognizes that environmental, physical and social factors other than recreational water quality may also present limits to the amount of development that would be desirable for a particular lake and strongly encourages the preparation of specific lake plans. However, it is important that a specific lake plan builds upon the existing policy base and not duplicate it. The Town of Huntsville should be encouraged to provide a similar policy.

The Background Report provides detailed information on the matters to be considered in the Huntsville and Lake of Bays Official Plans. In general, the Peninsula Lake Association should initiate an Official Plan Amendment to introduce special policy for the lake with regard to:

- recognition that the 400 ft lot frontage should be required regardless of water quality implications
- increase the backlot provisions of the Lake of Bays OP to a minimum lot frontage requirement of 660 ft (similar to Huntsville)



- to identify sensitive natural, social and historical sites on Official Plan Schedules or similar mapping
- to provide special policy on natural, social and historical sites (such as Wolf's Mountain)
- to ensure that there is a consistent approach across the lake.

## **Zoning By-laws**

Both the Town of Huntsville and the Township of Lake Of Bays have comprehensive zoning by-laws that applies to Peninsula Lake. Each by-law has its own set of standards and permitted uses, and although they are similar in many ways, development on the lake is not regulated in a consistent manner.

Zoning By-law 86-50 applies to the Township of Lake Of Bays. It was approved in 1986 and has not been updated to conform to current Official Plan policy. The Township recently initiated a comprehensive update of the by-law, and a consultation program was started in the summer of 2000. The Peninsula Lake Association should become involved in the preparation of the Lake of Bays Zoning By-law as soon as possible. Zoning By-law 74-8 applies to the Town of Huntsville and it was originally prepared in 1974 and has had some comprehensive updates as current as 1993.

Land surrounding Peninsula Lake is comprised of a mixture of residential, seasonal residential, tourist commercial and rural zones. The Background Report provides detailed information on the matters to be considered when working with the local municipalities to update their zoning by-laws. Some of the major issues include:

### **1. Inappropriate Uses Permitted in Zones**

- Permits golf courses - the Town of Huntsville and Township of Lake Of Bays Zoning By-laws permit golf courses in many existing zones. Lands should not be pre-zoned to permit golf courses until an environmental assessment and a public review is conducted.
- Permits wide range of uses – the current residential zones permit a wide range of uses: cemeteries, churches, nursery schools, nursing homes, private clubs or golf clubs. The Rural zone permits a wide range of agricultural and open space uses. Both by-laws permit a mixture of agricultural, golf courses, ski areas, churches, cemeteries and outdoor recreation areas. Agricultural uses can include feed lots, manure storage areas, piggeries and poultry farms. Outdoor Recreation Uses are defined to include golf



courses, driving ranges, and ski-lifts. Land should not be pre-zoned to permit intensive agricultural or recreational activities until an environmental assessment and a public review is conducted.

## 2. No Environmental Zone in Huntsville By-law

- No EP zone - The Huntsville By-law does not include a “no-development” zone, such as Environmental Protection, which can be used to protect sensitive environmental areas (e.g. Type 1 fish habitat, wetlands or loon nesting sites). The Town of Huntsville does have a Natural Resource Zone (NR), however it permits structural development such as new docks and boathouses, and these uses may be inappropriate in some environmental areas.

## 3. Residential Zones

- Lot Frontage – the waterfront residential zone should impose a minimum lot frontage of 150 m (400).
- Private cabins - also known as sleeping cabins, are accessory residential buildings but have no kitchen facilities. The maximum size of private cabins is 29 sq. m (312 sq. ft) in Lake of Bays and 45 sq. m (484 sq. ft.) in Huntsville. According to the Residential Survey conducted in the summer of 2000 the average size is 328 sq. ft and over 75% of all sleeping cabins are less than 400 sq. ft. Zoning should ensure that sleeping cabins are kept small in scale.
- Maximum residential lot coverage in Lake of Bays is 15% and 10% in Huntsville. Lot coverage restricts the amount of building and structural development that can cover the lot, and while there is only a minimal difference in lot coverage, the Lake Of Bays side of the Peninsula Lake would be permitted to develop at a slightly more dense scale. This is an important issue with respect to the current trend of replacing small residential buildings with large cottages.
- Family compounds are traditionally larger lots shared by a number of family members and have more than one dwelling unit (units with kitchens). If new family compounds are to be allowed on Peninsula Lake, they must have a minimum of 400 ft for each dwelling unit.
- Dock and Boathouse Width – The Town of Huntsville currently restricts the width of boathouses to a maximum of 8 metres or 20 percent of the lot frontage. The Township of Lake of Bays Official plan provides detailed policy on shoreline activity areas and they intend on including it in their Zoning By-law in the new update.



- No Residential Backlot Zone - Backlots are those areas that are within the waterfront designation, but do not abut the shoreline. They are the second tier of development around the lake. The Official Plans for Huntsville and Lake of Bays require increased lot frontage and area for new backlot development, but there is no zone that recognizes these areas in either municipality.

#### 4. Tourist Commercial Zones

- Lot Frontage - In both Lake of Bays and the Town of Huntsville, new tourist commercial establishments must proceed by an Official Plan Amendment and when this occurs the required lot frontage, will be determined. However, current zoning by-laws only require a minimum lot frontage of 60 metres (200 ft) Tourist Commercial Establishments and this should be increased to at least a minimum equal to residential lots, which is 122m (400 ft) of lot frontage.
- Lot Coverage - Lake Of Bays permits 50% and Huntsville permits 40% of a commercial lot to be covered by buildings and structures. While there is only a minimal difference in lot coverage, the Lake Of Bays Zoning By-law would permit higher lot coverage than Huntsville.
- Number of Accommodation Units – In Lake Of Bays the permitted number of commercial units is related to lot area and lot coverage. The minimum lot size required is .8 ha for the first 10 accommodation units and must be increased by 360 sq. m. per additional units. In the Town of Huntsville there is no limit on the number of accommodation units except for the lot coverage requirement. While both Official Plans identify that only limited expansion of existing commercial resorts is permitted without an Official Plan amendment, there does not appear to be any restriction or definition of what limited expansion means. The number of accommodation units permitted on a commercial property should also be related to the amount of lot frontage.

#### 5. General Standards

- Height Provisions - while height restrictions are similar in both by-laws (10.5m and 11.0m), the methods of defining height differ. The Lake of Bays by-law measures height from the shoreline side of the building and the Huntsville By-law defines height on the side of the building where principal access is maintained, which is interpreted as being the road-side of the lot. Since most shore lands slope towards the lake, building height will have its greatest impact on the shoreline side of the lot and not the road-side. Building height should be related to the shoreline.



- Septic Systems – Septic systems are defined as structures under both by-laws and minimum setbacks are currently 20m (66 ft.). Where possible this should be increased to 30m (100 ft).
- Shoreline Setbacks – Both by-laws require a minimum shoreline setback of 20m (66 ft.) for all buildings and structures (except docks and boathouses). Increased setbacks of 30 m. (100 ft) should be required adjacent to Type 1 fish habitat or other sensitive environmental features (wetlands, loon nesting sites).

## **Site Plan Control**

A site plan agreement is a contract between a municipality and the proponent of a development. An agreement is registered on title and can provide notice to future land owners regarding certain restrictions and conditions of development, such as:

- buildings and structures are specifically located
- new developments meet certain standards
- there is appropriate landscaping, parking, drainage and lighting
- there is safe and easy access for pedestrians and vehicles
- nearby properties are protected from incompatible development

Both the Town of Huntsville and the Township of Lake of Bays use site plan agreements. The Lake of Bays Site Plan Control By-law (95-23) requires an agreement for all new commercial and industrial development. It is also sometimes applied to residential development where there is a concern related to the protection of environmental values, development constraints, or when development is located on a shoreline. The Huntsville Site Plan Control By-law 95-76P is only applied to commercial or industrial development and minor developments (building additions or improvements) may be exempted.

Both municipalities should be encouraged to use site plan control for any development (residential or commercial) in or near sensitive habitat, cultural or historical heritage sites or physical constraints such as steep slopes. The purpose is to ensure that development either protects sensitive areas or blends in with the character of the site.





## Development Permit System

A Development Permit system is a new planning mechanism envisioned in the Planning Act that would blend the zoning, site plan approval and minor variance system into one process. According to the Act, a development permit system could regulate, vary or supplement the matters currently covered by the zoning and site plan approval process. Therefore this new system may provide the ability to deal with matters that are currently difficult to address by standard planning tools. The Province must enact a Regulation to enable municipalities to use this new system.

A demonstration project was undertaken for the waterfront designation in the Township of Lake Of Bays in order to illustrate how a development permit by-law could address lake planning policies. The demonstration project seemed to indicate that development permitting could provide a more effective and efficient tool to implement the policies of the Official Plan, particularly with regard to environmental issues associated with shoreline development. It could also provide flexibility to deal with the issues in the context of site specific environmental or terrain constraints.

## Natural Features

Natural heritage features and areas provide ecological functions that are critical to the survival of all species – including humans. Some of these ecological functions include the provision of habitat, hydrological functions, nutrient and energy cycling and storage, succession and disturbance functions, reproduction and dispersal, landscape linkages and others. Locally, these features and areas help to sustain a way of life that attracts people to live, work and play on Peninsula Lake.

*Water quality is an integral component of ensuring the quality of life and can be impacted by: turbidity, nutrient enrichment, waterfront alteration, increased boating, sewage effluent, and shoreline development.*

### Water Quality

In terms of biological productivity or “trophic status”, Peninsula Lake is considered to be slightly oligotrophic. Oligotrophic lakes have low biological productivity, which is indicated by secchi disk readings of greater than 5.0 m and total phosphorus levels less than 10.0 micrograms per litre. Oligotrophic lakes are generally clear lakes located on the Canadian Shield and are usually the most desirable for cottage development because they have low levels of phosphorus, algae and nutrients.



The setting of development capacities is currently based on the prediction of specific chlorophyll a objectives, by a computer model, for each lake. Chlorophyll a is a green pigment in plants that is a by-product of photosynthesis and is an indication of the amount of algae present in the lake. The objective set is based on the principle that a lake can generally sustain a small increase in predicted chlorophyll a without a noticeable change in water quality. When a lake is at capacity, new lot creation is prohibited. The District of Muskoka is responsible for monitoring water quality and together with the Town of Huntsville and Township of Lake of Bays regulate new development. Existing lots may only be developed after a site-specific evaluation has been completed to demonstrate how the lot can be developed with minimum impact on the lake's water quality. Phosphorus is the nutrient that limits or promotes biological productivity in most freshwater ecosystems. Its sources are both natural and anthropogenic.

## Wetlands

*Wetlands are an important natural resource. The ecological, social and economic benefits that can be attributed to wetlands are substantial.*

Wetlands are an important natural resource. The ecological, social and economic benefits that can be attributed to wetlands are substantial. Wetlands maintain and improve water quality; help control flooding; provide habitat for fish and wildlife; provide conditions for a wide variety of vegetation (including rare and unusual species); and result in substantial social and economic benefits and opportunities such as hunting, fishing, wildlife viewing and appreciation of nature in general.

There are numerous lacustrine and riverine wetlands on Peninsula Lake, and throughout the watershed. Map 6, Natural and Physical Features, provides the location of these wetlands. None of these wetlands have been evaluated according to the Provincial Wetland Evaluation criteria and their current significance (i.e. provincial, regional or local) is currently unknown. However all the wetlands do contribute to the health of the lake by providing ecological, social and economic benefits. The Provincial Policy Statement prohibits new development in provincially significant wetlands and similar protection should be afforded all wetlands within the watershed, regardless of their status.

The general tendency of residents is to remove aquatic vegetation in order to “improve” a portion of the shoreline for swimming and boating activities. Impacts can occur from direct removal of aquatic vegetation through dredging and filling activities, removal of riparian vegetation, construction of docks and boathouses and the general manual or chemical removal of aquatic vegetation. Shoreline property owners must be aware of these impacts and minimize shoreline alteration.



## Fish Habitat

Lakes, rivers, streams, ponds and wetlands provide fish habitat. Intermittent and seasonally flooded areas can provide important habitat for some fish species at different times of the year. In addition, in-water structures such as logs, stumps and other woody debris, pools and riffle areas, riparian and aquatic vegetation and ground water recharge/discharge areas also provide habitat. Fish habitat provides food and cover and conditions for successful reproduction and support of their life cycle. Peninsula Lake provides habitat for at least 16 fish species.

There are two types of fish habitat to be considered in Peninsula Lake; dissolved oxygen content in water for Lake Trout and site specific habitat for all species.

*MNR has stated that Peninsula Lake is currently at capacity and new lots may not be created.*

Lake Trout Habitat - Peninsula Lake is a cold water fishery that supports lake trout populations. Since the mid 1970's the Ministry of Natural Resources and the Ministry of the Environment (MOE) have used the Lakeshore Capacity Assessment Model, to set development capacities on Lake Trout lakes throughout Ontario. The Ministry of Natural Resources has stated that Peninsula Lake is currently at capacity and no new lots may be created. Severance applications that split existing residential dwellings or readjust lot boundaries may still be considered provided there are no new vacant lots.

Site Specific Fish Habitat - Both coldwater and warmwater fish species require specific habitats for spawning, rearing and foraging. There are four types of habitat identified by MNR. Lake Trout spawning shoals occurs primarily on deep-water shoals and are a good example of Type 1 habitat. Specific habitat locations must be protected from incompatible development.

Shoreline development and the clearing of forest cover in near-shore areas will reduce the amount of woody debris in the littoral zone and impact fish habitat. Woody debris in the littoral zone provides cover for small fish and their food. While this debris has taken centuries to accumulate, a weekend project at the cottage to clean up the shoreline can have instant and disastrous impacts on fish populations. The Fairy Peninsula Lake Study 1994-1996 determined that the removal of down woody debris at cottage sites has been extensive.

In "Assessing Environment and Development of Fairy and Peninsula Lakes"

*Lake Trout  
Brook Trout  
Lake Whitefish  
Lake Herring  
White Sucker  
Longnose Sucker  
Smelt  
Northern Pike  
Smallmouth Bass  
Largemouth Bass  
Yellow perch  
Trout perch  
Bullhead  
Blacknose Shiner  
Bluntnose Minnow  
Golden Shiner*



(Nelson, 1995) it was noted that information on phytoplankton and macrobenthos is lacking. “Phytoplankton (small floating plant life) and macrobenthos (small animals living on the bottom of the lake) are near the bottom of the food chain and serve to support higher orders of aquatic life such as lake trout.” Additional monitoring or assessment reports on phytoplankton and macrobenthos would help to develop an understanding of health of Peninsula Lake.

Streams - Streams are ecologically important to Peninsula Lake as habitat to many species of fish living in the lake. There are 21 permanent and intermittent streams as shown on Map 6, Natural and Physical Features. Protection for both should be treated in a similar fashion. There are also numerous intermittent drainage courses that flow directly into the lake. These areas should be protected from development and added precautions should be taken when development occurs adjacent to them. Unfortunately, there is little information about the health and habitats of streams in the watershed and further research is required.

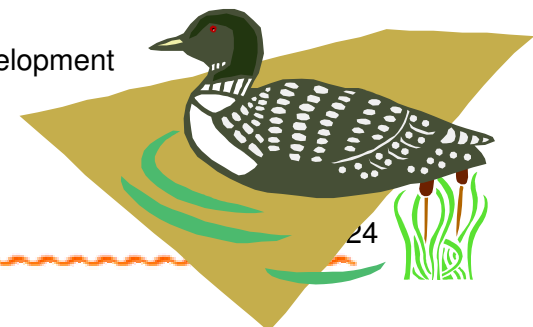
### **Significant Wildlife Habitat**

The provision of wildlife habitat is one of the primary ecological functions of natural heritage features and areas. The protection and management of wildlife habitat is fundamental to the maintenance of self-sustaining populations of wildlife, and to biodiversity. The fragmentation of wildlife habitat through indiscriminate development will result in the loss of wildlife opportunities, such as recreational viewing that is important to the Lake Stakeholders.

Winter Deer Habitat - provides shelter and food for deer during the critical winter months and is a limiting factor in the suitability of habitat for deer. Deer wintering habitat is comprised of dense, mature conifer forests, with ready access to young hardwood growth suitable for browsing. Removal of significant amounts of critical conifer cover could result in deer being exposed to harsh winter conditions or forces them to move to other suitable areas, which may already be heavily used.

Map 6, Natural and Physical Features, indicates the areas identified by the Ministry of Natural Resources as significant winter deer habitat. As indicated by the Fairy Peninsula Lake Study these areas are ranked by the Canada Land Inventory as being generally poor for ungulate production, however, the major valleys may provide better production capabilities.

Loons - Loons nest along the shoreline and are susceptible to shoreline development



and wave action. Preferred loon habitat includes small islands and bogs that are characterized with flat shorelines with gentle inclines to permit easy access to and from the nest. Loons commonly arrive on the lake in mid to late April, as soon as the ice is out, and return to the south in November. Loons lay their eggs as soon as the ice is out and they usually hatch in early July.

According to information provided through the Summer Residential Survey, there are three known loon nesting site on Peninsula Lake; a small island located in Hills Bay, an area located on the mainland to the south west of Hills Bay, and another area in Ballantyne Bay (see Map 6). Further known and potential nesting sites should be identified and protected. New nesting sites can be found when site evaluations are completed for new development or through a field bird inventory. The Official Plan should provide policy that provides for the provision of mitigation measures when new sites are found.

### Natural Vegetation

The Peninsula Lake watershed predominately consists of a tolerant hard Maple forest. Shoreline regeneration projects should use tree species that are indigenous to the area. Local species that are suitable to the local climate and soil conditions will help to ensure the success of the project as well as provide suitable habitat.

<i>American Elm</i>	<i>Ash</i>
<i>Balsam Fir</i>	<i>Beech</i>
<i>Black Cherry</i>	<i>Black Spruce</i>
<i>Eastern White Cedar</i>	<i>Eastern Hemlock</i>
<i>Sugar Maple</i>	<i>Red Maple</i>
<i>Red Pine</i>	<i>Red Oak</i>
<i>White Birch</i>	<i>White Pine</i>
<i>Yellow Birch</i>	

Source: Fairy Peninsula Lake Study and FRI date (MNR)

### Exotic Species

The introduction of exotic species affects the natural balance of ecosystems in any lake. To date there have been no records of the invasion of Zebra Mussels, however, Ontario Federation of Anglers and Hunters (OFAH) have indicated that Spiny Water Fleas were found in Peninsula, Fairy and Mary Lakes in 1998. Spiny Water Flea competes with natural fish species by feeding on zooplankton, which is their same food. The Peninsula Lake Association already has taken action on the invasion of exotic species, and should work with other cottage associations in the watershed and on Fairy Lake and Lake Vernon to improve implementation and protection.

## Physical Elements

A review of physical elements such as soils, floodplains, nonrenewable resources (aggregates and forestry),



steep slopes and narrow waterbodies has identified natural and physical terrain constraints that affect the location, form and construction of new development. Map 6 identifies these constraints.

## Soils

*Shoreline soils consist of fine-grained silt and clay which increases the risk of sedimentation events during construction*

Soils in the watershed are shallow, stony, sandy and acid, with low fertility and frequent bedrock outcrops (Nelson, 1995). The lack of good fertile soils is the fundamental reason why many of the small farms in the area have failed in the past. The soils on the west, north and east shore of Peninsula Lake consist of fine-grained silt and clay. The Fairy Peninsula Lake Study (1996) indicates that, “when eroded, finer soil particles such as clay and silt remain in suspension longer than larger particles such as sand and fine sand. Therefore, the soils on the west, north and east shore of Peninsula Lake, and the north and south shores of the canal have a greater potential to be carried in suspension. Sediment and erosion control during development of these sites will be more difficult.”

The potential for negative impacts from stormwater sedimentation during construction increases in areas where there is a high presence of silts and clays and it is important that stormwater mitigation measures be used for all forms of development (i.e. residential and commercial).

## Floodplains

Generally, flooding is not a major concern on Peninsula Lake. A conservative estimate for the 100 year floodplain has been identified by MNR as 286.46 metres above sea level, which has been identified in local official plans and zoning by-laws.

## Mineral Aggregates

Map 6 identifies the location of aggregate deposits, according to the Official Plans. The primary aggregate area is located to the north of the community of Hillside and there appears to be at least 5 pits that have been established (current and historical). The quarrying of flagstone, used by the construction industry, has occurred along the highway #60 corridor. Current operations are small and limited in size, however, these sites could expand or new sites, if identified, could be developed into larger quarries.

This area is located in the headwaters of two small cold water streams that flow into Peninsula Lake as well as within the only winter deer yard. Future development of this resource must ensure protection of these features



and ensure that appropriate rehabilitation plans are in place to ensure re-vegetation to predevelopment conditions.

### **Narrow Waterbodies**

The Official Plans for District of Muskoka, Town of Huntsville and Township of Lake of Bays recognizes narrow waterbodies as a physical constraint. The Background Statement in the District of Muskoka Official Plan states:

“Development on narrow waterbodies, tends to create problems for navigation and decrease the aesthetic beauty of the immediate area. Too many docks and boathouses protruding into a narrow bay or portion of a river may increase congestion and create a hazard with respect to water users. In addition, a congested portion on a waterbody detracts from the overall usual beauty of a waterbody. To discourage congestion in these areas, policy requiring increased frontage in narrow portions of lakes and rivers has been developed.”

Map 6, Natural and Physical Features, shows the location of areas that meet these requirements: the canal, the mouth of the canal, Ballantines Creek and the area surrounding Wolf Island, in Wolf’s Bay. Development standards in Official Plans and Zoning By-laws, other than lot frontage, will help to reduce the impacts such as: decreased dock length, decreased height provisions and increased requirements for buffer and vegetation retention.

### **Steep Slopes**

The Background Statement in District of Muskoka Official Plan states “Development in building hazard areas must be done carefully and with full knowledge of possible slope instability and visual intrusion. Some of the more scenic homes in Muskoka are located on steep slopes and where appropriate, future development may also locate in these areas.”

The Township of Lake of Bays Official Plan recognizes that “... if development on a steep slope is not undertaken carefully, it can result in substantial alteration of the natural landscape, visual intrusion due to the prominence and location of development, intrusion of the skyline, erosion, slope instability, damage to fish and wildlife habitat and a significant increase in storm water run-off...”. Map 6, Natural and Physical Features, identifies areas that exhibit areas of steep slopes.



## Social Elements

Social elements enhance the quality of life on a lake. Most people like going to the cottage to get away from the busy urban environments. It is the place where they relax, recreate and “get away from it all”. While social elements are often difficult to deal with, they are often the most important elements that contribute to one's experience at the lake. Not all residents and visitors have the same social values. Some people from urban settings bring urban planning designs, landscape ideas and activities to the lake and often these values are in conflict with the natural environment, aesthetics, and landscapes that is the character of Muskoka.

### Landscape and Aesthetics

One of the amenities that are invaluable to lake communities is the physical landscape and natural aesthetics of their environment. The residential survey indicated that over 50% of those surveyed believed that the highest value on the lake was peace and quiet and natural beauty. “Natural beauty” incorporates features such as natural shoreline vegetation, the skyline or horizon, the relatively un-built appearance of the shoreline as well as the natural beauty, views and a balance of landscape types (bush, wetland, open view). Aesthetic values differ greatly from person to person and often depend on the context of a person's lifestyle. Some people prefer the “urban park like setting” that is characterized by manicured lawns and vegetation, while others prefer the wilderness or natural setting with few human interruptions.

*The most important landscape features are the shoreline and the tree line, or horizon.*

The two most important landscape lines to be protected are the shoreline and the tree line or horizon. When viewing the opposite side of the lake, our eyes are immediately drawn to these two lines and anything that stands out on these lines can greatly impact the natural character. The main source of impact on these areas is the construction of buildings, structures and associated utilities that require the removal of natural vegetation.

The most significant landscape feature on Peninsula Lake is Wolf's Mountain. Both the current property owner and the Peninsula Lake Association should consider preservation of this site in its natural state. However, at a minimum, it is extremely important that any development in this area must blend in with the surrounding environment. Consideration should be given for building scale, landscaping and exterior lighting.

### Cultural and Historic Sites

Peninsula Lake area has many locally important cultural and historic sites and areas that define the character of





the lake and its neighbourhoods. All of these sites are in private ownership and many have deteriorated over time. Private stewardship of these sites is imperative and a landowner contact program would help to promote their protection and rehabilitation. Cultural and Historic Features are at following sites:

- *The Canal*
- *The Canal Lighthouse*
- *The Canal Bridge*
- *North Portage Railway*
- *Flat Rock*
- *Diving Rock*
- *Springsyde Path*
- *Peninsula Lake Golf Course*
- *Log shoot, Log Staging areas and Brook's Sawmill*
- *Public Access Points*
- *Possible Native Seasonal Hunting Camp*
- *Hillside Church*
- *St. Paul's Anglican Church*

## **Boating Use**

According to the Summer 2000 Residential Survey there are approximately 3.2 boats per household (including motorized and non-motorized). The survey also indicated that boating ranked as the second favourite recreational activity (next to swimming). About 78% of those surveyed indicated that boating was a favourite activity. As result of the high use of boating on the lake there were two concerns identified – Safety and Intensity of Use and Pollution.

Safety and Intensity of Use - The survey indicated by 48% of those surveyed that over the past five years that boating activity on the lake was perceived to have increased. The survey ranked jet skis as the primary source of increased boating activity (over 75% of those surveyed), yet only about 2% of those surveyed own jet skis. With this increase in activity the safe handling of boats is becoming an important issue. A safe boating program would increase awareness about the effect of boating activity on lake users. The new boat licensing provides an opportunity to educate boat operators about safe handling as well as potential hazardous areas.

Pollution - There is an increasing amount of information on the use of two-stroke vs. four stroke engines. Environment Canada's Environmental Technology Centre tests show that two stroke outboards produce 12 times as much benzene, toluene, ethylbenzene and xylenes, and five times as much oil and grease as four-stroke outboards. Environment Canada's Green Lane Web site indicates that:

“Further comparisons of the exhaust emissions from a light-duty van, a 9.9 two stroke outboard



and a 9.9 four-stroke outboard showed that the two-stroke produced 50 % more carbon monoxide than the four-stroke and nearly 60 times more than the van, The two-stroke also emitted 15 times more unburned hydro-carbons than the four-stroke, and nearly 125 times more than the van.

Unfortunately, there is no specific information about the impact of boat pollution on Peninsula Lake. However, the general information provided by Environment Canada should make us more cautious about purchasing older two stroke outboard motors.

### **Recreational Opportunities**

There are numerous private and commercial recreational opportunities available that contribute to the overall quality of life on the lake. Some of these include:

Private – swimming, boating, sport fishing, hiking trails

Commercial – good dining, golf courses, resort facilities and activities, pike tournament

### **Neighbourhood Character**

Neighbourhoods on Peninsula Lake have been defined by historic settlements. The character of these areas are primarily established by density and architectural standards and relationship to a central focus such as a post office, general store or public dock. Three historical settlement nodes exist; Springsyde, North Portage and Grassmere. These areas were once important due a transportation link (steam ships, North Portage Railway), local store or post office. These communities have generally blended in with the shoreline community and primarily exist by name.

### **Noise and Lighting**

Peace and tranquility is highly rated as one of the essential elements of life on Peninsula Lake. Noise and indiscriminate lighting impact the enjoyment of the natural setting.

### **Social Opportunities**

Another element recognized by Peninsula Lake residents is the social events and activities that provide a focus



for neighbourhood and lake wide interaction. Interested and caring people, family focused activities, cottage projects and an active Lake Association are among the important social elements that are mentioned in the Summer Survey 2000.



# Section 4 – Issues and Concerns

## Overview of Key Elements

Determining appropriate carrying capacities is one of the most difficult matters to deal with for the comprehensive planning of lakes. In the past, water quality for lake trout habitat, was the keystone resource for determining carrying capacities for new development on Peninsula Lake. While the local Official Plans recognize other constraints to development such as natural habitat, water quality was the main element used to limit the total number of lots that could be developed on the lake.

During the past decade, the Ministry of Natural Resources, in conjunction with the Ministry of the Environment indicated that Lake Trout Habitat was sensitive on Peninsula Lake and it became the limiting factor to further development. The health of Lake Trout habitat has been linked to phosphorus loadings from anthropogenic sources, especially sewage disposal systems and landscaping. However, the science on phosphorus loading is not exact and there may soon be new septic system technology (that is acceptable to MOE) or extension of municipal sewers that will reduce the amount of phosphorus released into the natural environment.



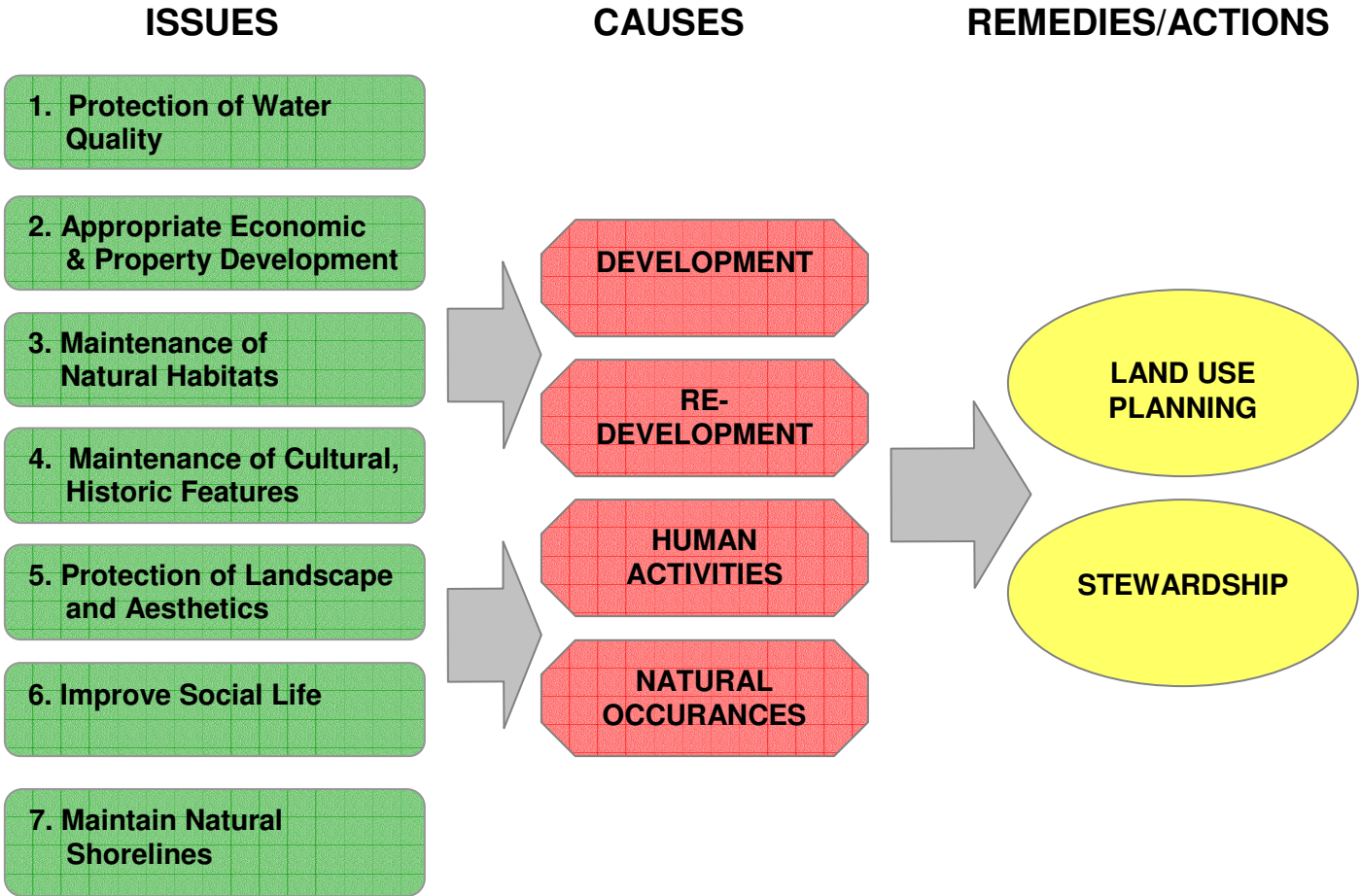
This is a double-edged sword, because although this new technology will help to improve water quality and lake trout habitat by decreased phosphorus loadings, the current restrictions on development may be lifted and new lot creation would be permitted. It is for this reason that the Background Report and Lake Plan identify other carrying capacities to consider. Generally, the key elements that affect the quality of life on Peninsula Lake are shown in Figure 8. However, in most cases, the exact density of development cannot be directly determined through a subjective analytical process such as determining the effect of phosphorus loadings on water quality and lake trout habitat.



# Identification of Issues

Through the background work, the following issues, causes and remedies were identified:

Figure 9 – Issues, Causes and Remedies/Actions



## ***Discussion of Issues***

The following seven issues were identified through the lake planning process and are directly linked to the original targets identified by the stakeholder group. Many of the Issues are inter-connected and the action plan will recommend some projects that address several issues at one time.

The following provides a general description of the issues to be addressed by the 20 project plans:

### **1. Protection of Water Quality**

The density and scale of development and the general urbanization of shoreline areas within the watershed is the main impact on water quality. Development on the lake and within the watershed results in nutrient enrichment (phosphorus and ecoli) and turbidity.

Nutrient Enrichment – Nutrient enrichment occurs as a result of both natural and man-made sources, and it is the man-made sources that we can primarily deal with. The predominant source of increased nutrients is from phosphorus loadings from septic systems, fertilizer application and storm water run-off. Increased phosphorus causes increased plant growth and can result in algae blooms.

Turbidity – Turbidity is the result of silt that is either stirred up from the bottom from boating activity in shallow areas or from storm-water runoff from adjacent lands. Several siltation events have occurred during the past decade as a result of stormwater washing away exposed topsoil on construction sites. Construction mitigation should be encouraged for all shoreline and backlot development, including: residential, commercial and highway. Results in impacts to water quality as well as fish habitat.

Upstream and Watershed – Development on upstream lakes and streams can cause increased nutrient and silt loading. Actions taken to prevent this should be applied to the all upstream lakes and rivers.

### **2. Appropriate Economic and Property Development**

Economic and property development is seen as the major source of “change”. While it is important to recognize that “change” is not necessarily bad, it is important that all development be treated consistently across the lake and occurs within the zone of tolerance for social and natural elements.



A Lake Wide Approach - There are three municipalities involved in land use planning and water quality modeling in the watershed. Peninsula Lake is located entirely within the District of Muskoka but is split between the local municipalities of the Town of Huntsville and the Township of Lake of Bays. Different official plans, land use bylaws and communication networks divide Peninsula Lake into two areas. There is a need for the Peninsula Lake Association to interface with municipalities and others to ensure that similar policies and regulations apply to the entire lake.

Density and Scale of Development – At present the creation of new lots on Peninsula Lake is prohibited as a result of lake trout habitat. Accordingly, both the Huntsville and Lake of Bays Official Plan contains specific policy regarding this restriction, as well as requiring new lot frontage to be 400 ft. It is interesting to note that based on the 400 ft frontage restriction, only 7 additional lots could be created if the lot creation restriction was lifted. However, if the 400 ft lot frontage restriction was reduced to 200 ft. (which is consistent with most other lakes), many additional lots could then be created. In order to maintain the existing character of the lake, official plans and zoning by-laws should stipulate that the 400 ft lot frontage requirement should remain in place, regardless of new development pressures or improved status of water quality or lake trout habitat.

Replacing smaller older cottages with “monster” cottages is an increasing trend throughout the District of Muskoka and the redevelopment of larger buildings and structures on existing lots can increase impacts through occupancy, phosphorus loading, use and aesthetics.

Resort Viability - Commercial Resorts provide recreational, social and economic benefits to residents of the lake and surrounding area, and add to the desired character of the lake. Resort visitors are attracted by the natural character and beauty of the lake, which are the same amenities that shoreline residents seek. Recent trends throughout Muskoka indicate that the number of resorts have steadily declined over the past decades by conversion to residential properties. In order for resort operations to survive it is important that they be allowed an opportunity to grow and re-develop within the natural, social and physical carrying capacities of the lake.

Impact on Natural/Physical/Social - High profile or highly visible development can impact or detract from the natural beauty of the lake. It is important that the natural, social and physical sites, features and areas identified in the plan are protected from inappropriate development.



### 3. Maintenance of Natural Habitats

Healthy populations of fish and wildlife are directly linked to healthy habitats. Map 6, Natural and Physical Features, identifies the significant areas and features to be protected through land use policy and rehabilitated through stewardship. While many areas have been identified, there is still a need to compile additional information on streams, wetlands, loon habitat and other environmentally sensitive areas. Generally there is a lack of awareness about the natural habitat features on the lake and within the watershed. Monitoring the health of the watershed is a long-term goal that should be implemented.

Fish – Peninsula Lake is a cold-water lake that provides habitat for Lake Trout among many other species. Lake Trout lakes only represent about 10% of all lakes in Ontario and are among the most desirable due to their clear and clean water. Critical fish habitat (Type 1) is identified on Map 6 and should be a priority for protection.

Deer – There is a large winter deer habitat located to the north of Peninsula Lake. Development on smaller lots with extensive clearing will negatively impact the health of this important feature.

Loons – Some loon nesting sites have been identified and more information needs to be collected to confirm nesting sites and to understand their impacts.

Streams – Very little information is known about the 21 streams that flow into Peninsula Lake. Some of these streams have been greatly altered (e.g. Hidden Valley Beach) and stream bank rehabilitation efforts would help to improve the health and diversity of fish populations.

Exotic Species Invasion – Peninsula Lake and many surrounding lakes were invaded by the Spiny Water Flea in 1998. Continuation of the Exotic Species Program with the OFAH is encouraged to reduce the number of future problems.

### 4. Maintenance of Cultural and Historic Features

Cultural and historic features add to the ambiance and the character on Peninsula Lake. The protection, maintenance, rehabilitation and promotion of these features and sites are important. Map 7 indicates the cultural and historic sites to be protected through land use policy and maintained and rehabilitated through private land stewardship.





Historic settlements – Development on Peninsula Lake evolved around historic settlements (such as Springsyde, North Portage, and Hillside). These areas are still a focal point and help to provide a sense of community.

Special sites/features (canal) – All of these sites and features (such as the canal, local churches, flat rock, etc.) are in private ownership, and stewardship provides the best opportunity for maintenance and rehabilitation. The Canal is one of the most significant areas that have cultural, historic and natural features and participation with local property owners is encouraged to maintain this area in a natural state.

Public Access – There are only three public access points on the lake. These areas should be retained in public ownership and used as a point of contact for non-resident lake users.

## **5. Protection of Landscape, Aesthetics**

The protection of landscape and maintenance of aesthetics is important to the natural beauty and ambiance of Peninsula Lake. Map 7 – Cultural and Historic Sites shows the location of important landscape features to be protected through land use policy and private land stewardship.

Wolf Mountain – Wolf’s Mountain is identified as one of the most significant landscape features on Peninsula Lake and uncontrolled development would impact the scenic beauty of the surrounding area. The Peninsula Lake Association should promote the preservation of this area by promoting the use of a land trust or through acquisition.

Noise and Lighting – About 16% of those surveyed indicated that noise and lighting has increased over the past five years. Education and communication are among the best options to deal with this issue.

Shoreline and Treeline – The shoreline and treeline are two important landscape features and efforts should be made to ensure the naturalness of these areas.

## **6. Improve Social Life**

Peninsula Lake has a long history of social activity and the resident survey indicated that the social life is an important aspect of living on Peninsula Lake.



Boating Activity – The Summer Residential Survey indicated that there are about 3.2 boats per household and that boating was the second favourite recreational activity. Two boating matters that impacts the quality of life on Peninsula Lake include i) safety and intensity of boating use and ii) pollution.

Recreation - There are many recreational opportunities in the Peninsula Lake watershed. Resorts and commercial operators provide many opportunities and others are provided by natural amenities such as the lake and trails.

Character/Neighbourhood – An important aspect of living on the lake is the “sense of community”. Historical settlements such as North Portage, Springsyde and Grassmere Bay provide a focus for shoreline residents.

## **7. Maintain Natural Shorelines**

The de-naturalization of shorelines is perceived as a major impact on natural and landscape features. The maintenance of water quality and the provision of fish and wildlife habitats depend upon healthy shoreline environments.

Vegetation Removal - All shoreline and riparian areas that have over 25% vegetation removal are good candidates for shoreline rehabilitation projects, however areas with greater than 50% removal should be a high priority. The Peninsula Lake Association should initiate volunteer shoreline restoration projects in these areas by encouraging property owners to replant their shorelines with indigenous species. Communication and education provides the best approach to encouraging property owners to promote healthy shorelines.

Docks and Boathouses – The location, size and type of docks and boathouses can directly impact the health of fish habitat. New docks and boathouses should avoid critical fish habitat areas and shoreline wetlands. The type of construction as well as timing restrictions should be communicated through approval agencies to contractors and property owners.

Removal of substrate from Littoral Zone – The maintenance of the natural substrate (rocks, logs, debris) under the water is important to ensure healthy fish populations. Many residents remove this material in an effort to “clean up” their waterfront. These areas should be left undisturbed or at a minimum, shoreline activity areas should be kept to as small an area as possible.



Increased setbacks and shoreline buffer areas – Development that encroaches upon the shoreline impacts on the health of the natural buffer area. Increased setbacks and mitigation measures should be considered adjacent to significant or critical habitat areas.

## ***Discussion of Causes***

**New Development** - New development includes new buildings or structures and new lot creation. Almost the entire shoreline of Peninsula Lake has been developed and the opportunity for new development is very limited (about 51 lots).

**Re-development** – Redevelopment includes the replacement of older cottages with new and increased residential or commercial densities. The re-development of residential and commercial existing lots may have the greatest potential to cause impacts to all natural, social and physical elements. Land use policies that regulate redevelopment must be consistent across the lake and ensure compatibility with the desired lake character. There are some lots that have less than 100 ft of frontage and the size and density of new development should be in character with the size of the lot and the surrounding neighbourhood.

**Human Activities** – Human Activities include boating, snowmobiling, and landscaping. Many activities that impact natural, cultural and historic features, as well as generate noise, light and boating pollution are the direct result of human activities, which cannot be regulated by land use planning. Positive results are best achieved through long term education, communication and promotion of proper conduct, and good stewards.

**Natural Occurrences** – Natural occurrences include natural cycles or elements such as weather, rainfall and temperatures and people cannot be held responsible for everything that impacts the quality of life on Peninsula Lake. These natural cycles and variations can cause temporary problems and result in increased awareness of the environment. The recent Gloeotrichia algae bloom and the continuing occurrence of swimmers itch, which is caused by parasites, resulted in immediate reaction and involvement of local residents. Other such occurrences include: global warming or invading species such as purple loose strife and zebra mussels.



# ***Section 5 – Remedies and Actions***

There are 20 potential actions that the Peninsula Lake Association should consider initiating. Five of these actions relate to the land use planning regulations and 15 involve stewardship actions. Both land use planning and stewardship approaches should be used to deal with the wide range of issues identified by the Peninsula Lake Association.

The following provides a brief summary of the Land Use Regulations and the Volunteer Actions. Figure 9 - Project List and Issues, identifies which 20 actions will most effectively deal with the 7 issues that were identified and described in Section 4 (Discussion of Issues).

## **Land Use Planning Regulations**

Local land use planning policies and regulations include Official Plans, Zoning By-laws and other Municipal Tools such as site plan control, septic re-inspection and Stormwater guidelines. These tools provide the direction and requirements for new development and redevelopment. It is important that these tools reflect the intent and provide protection of the lake values. Projects 1 through 5 deal with Land Use Regulation.

Lake Stakeholders must be satisfied that current development standards (setbacks, building envelopes, shoreline buffers, boathouse regulations, and resort conversion) provide appropriate safeguards. Other municipal regulations regarding tree cutting, soils, and the use of pesticides and fertilizers must be reviewed and communicated.

## **Stewardship and Partnerships**

The following projects provide a number of approaches to increase awareness and the wise stewardship of Peninsula Lake resources and features. Projects 6 through 20 deal with Stewardship.

- Communication
- Land Stewardship
- Awareness
- Training and Education
- Protect and Mitigate
- Restore – Rehabilitation
- Information Systems
- Monitoring



Figure 10 – Project List and Issues

ISSUES	# 1 Water Quality			#2 Economic and Property Development				#3 Natural Elements					#4 Cultural & Historic Features			#5 Landscape Aesthetics			#6 Social Elements			#7 Natural Shorelines				
	Nutrient Loading	Turbidity	Upstream/Watershed	Lake Wide Approach	Scale of Development	Resort Viability	Impact on Features	Fish Habitat	Deer	Loons	Streams	Exotic Species	Historic Settlements	Special Sites/Features	Public Access	Wolfs Mountain	Noise and Lighting	Shoreline to Treeline	Boating	Recreation	Neighbourhood	Vegetation Removal	Docks and Boathouses	Substrate Removal	Natural Buffers	
<b>PROJECT LIST</b>																										
✓ Most Effective Approach																										
✓ Least Effective Approach																										
- Not Effective																										
<b>LANDUSE</b>																										
1. Official Plan Update	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	✓	✓	✓	✓	✓	✓
2. Zoning By-law Update	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	✓	✓	✓	-	✓	-	-	-	-	✓	-	✓	✓
3. Site Plan Control	✓	✓	-	✓	-	✓	✓	✓	✓	✓	✓	-	-	-	-	✓	✓	✓	-	-	-	-	-	-	-	-
4. Stormwater/Construction	-	✓	✓	✓	-	-	-	✓	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5. Septic Re-inspection	✓	-	✓	✓	-	-	✓	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>STEWARDSHIP</b>																										
6. Stewardship Awards	-	-	-	✓	-	✓	-	✓	✓	✓	✓	-	-	✓	-	✓	✓	✓	✓	-	✓	✓	✓	✓	✓	✓
7. Communication Plan	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
8. Shoreline Rehabilitation	✓	✓	-	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-	-	-	✓	-	-	-	-	✓	✓	✓	✓	✓
9. Stream Rehabilitation	-	✓	-	✓	-	-	-	✓	✓	✓	✓	-	-	-	-	-	✓	-	-	-	-	✓	-	-	✓	✓
10. Stream Inventory	-	-	-	✓	-	-	-	✓	✓	✓	✓	-	-	-	-	-	✓	-	-	-	-	✓	-	✓	✓	✓
11. Loon Survey	-	-	-	✓	-	-	✓	-	✓	✓	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12. Boating Awareness	-	-	-	✓	-	-	✓	-	-	✓	-	-	-	-	-	-	✓	-	✓	-	✓	-	-	-	-	-
13. Code of Conduct	✓	-	✓	✓	-	-	✓	✓	✓	✓	✓	✓	-	-	-	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
14. Monitoring	✓	✓	✓	✓	-	-	✓	✓	-	✓	✓	✓	-	-	-	-	-	-	-	-	-	-	✓	-	✓	✓
15. Invasive Species	-	-	-	✓	-	-	-	✓	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16. Land Trust	-	-	-	✓	-	-	✓	-	✓	-	✓	-	✓	✓	-	✓	-	✓	-	-	-	✓	-	-	-	✓
17. Lake Watch	-	-	✓	✓	-	-	-	✓	-	✓	✓	✓	-	-	-	-	✓	✓	✓	-	-	✓	-	✓	✓	✓
18. State of Lake Reporting	✓	✓	✓	✓	-	-	✓	✓	-	✓	✓	✓	-	-	-	-	-	✓	✓	-	-	✓	-	✓	✓	✓
19. Specific Site Stewardship	-	-	-	✓	-	-	✓	✓	-	✓	✓	-	-	✓	-	✓	-	✓	-	-	✓	✓	-	✓	✓	✓
20. Working with Partners	✓	-	✓	✓	-	✓	✓	✓	-	✓	✓	✓	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	✓	✓	✓



## Implementation

Figure 10 – Project Schedule identifies the proposed schedule for the 20 proposed actions. Prior to initiating implementation of the projects it is recommended that the projects be reviewed and confirmed. The following five steps provides a process to identify the projects, and implement a work plan:

- Step One Identify projects to be undertaken.
- Step Two Select “champions” or leaders for each project, and committee members, if required.
- Step Three Review details of project and confirm a work plan.
- Step Four Implement work plan.
- Step Five Monitor progress and undertake follow up actions, if necessary.

**Figure 11 – Project Schedule**

		2004	2005	2006
<b>Land Use Planning</b>	1. Official Plan Updates and Amendments	✓	✓	✓
	2. Zoning By-law Updates and Amendments	✓	✓	✓
	3. Site Plan Control	✓	✓	✓
	4. Stormwater and Construction Mitigation	✓	✓	✓
	5. Septic System Re-inspection	✓	✓	✓
<b>Volunteer Actions</b>	6. Communication Plan	✓	✓	✓
	7. Stewardship Awards	-	✓	-
	8. Shoreline Re-vegetation	✓	✓	✓
	9. Stream Rehabilitation	-	-	-
	10. Stream Inventory	-	-	-
	11. Loon Survey	✓	✓	✓
	12. Boating Awareness	✓	✓	✓
	13. Code of conduct – lake manners	✓	✓	✓
	14. Monitoring – Macro Benthic, Water Quality, Development	✓	✓	✓
	15. Invasive Species	✓	✓	✓
	16. Land Trust	-	-	-
	17. Lake Watch	✓	✓	✓
	18. State of the Lake Reports	-	-	-
	19. Site Specific Stewardship	✓	✓	✓
	20. Working with Partners	✓	✓	✓



## 20 Project Plans

Details of the 20 actions are provided on the following project sheets. Each sheet identifies the objective of the project, together with a general description and a list of the series of tasks to be completed.

<b>1. Update Official Plans</b>	
<b>Objective</b>	To ensure the Town of Huntsville and Township of Lake of Bays Official Plans have appropriate policy direction to guide development and redevelopment on the lake.
<b>Description</b>	The Association work with the Town of Huntsville and the Township of Lake of Bays to initiate discussion on the development of more specific Official Plan policy consistent with this study and the Background Report.
<b>Tasks</b>	<ol style="list-style-type: none"> <li>1. The Association must have a good understanding of the current land use pattern and identify potential development pressure points. Review Background Report and Official Plans.</li> <li>2. Work with local municipalities to determine if appropriate standards and safeguards are in place for new or redevelopment proposals.</li> <li>3. Use the following checklist of issues and those identified in the Background Report.</li> </ol>
<b>Issue Checklist</b>	<p><u>Town of Huntsville</u> - Encourage the municipality to process a lake specific Official Plan Amendment, which incorporates the principles and policy direction provided in this study, including:</p> <ol style="list-style-type: none"> <li>a) specific policy to ensure natural habitat are identified;</li> <li>b) specific policy that will apply the principles of shoreline activity areas (such as in the Lake of Bays Official Plan) for all designations across the entire lake;</li> <li>c) design principles for shoreline development, similar to Lake of Bays Official Plan;</li> <li>d) specific policy to adopt higher standards of stormwater management and construction mitigation in areas</li> </ol>



# 1. Update Official Plans

- with silty and fine soils (Map 9 – Surficial Geology).
- e) specific policy to ensure appropriate setbacks for streams (30m is recommended for cold-water streams and 15 m of warm water with the setback areas to be maintained as natural buffers).
- f) special policies to prohibit the redevelopment of small lots with over sized cottages.
- g) specific policy to recognize the special character of Peninsula Lake, including:
  - o minimum 122m. (400 ft) lot frontage for all new lots across the entire lake;
  - o special natural, social or physical areas; and
  - o special character areas (canal).

Township of Lake of Bays - Encourage the municipality to process a lake specific Official Plan Amendment, which incorporates the principles and policy direction provided in this study, including:

- h) the identification of specific natural habitats, social and historical sites are identified on maps and impose shoreline setbacks that are at least 100 ft adjacent to sensitive features such as Type 1 fish habitat, and loon nesting sites;
- i) special policy that ensures social and historical elements (Wolfs Mountain, the canal, and others listed in this report) are identified on maps and protected;
- j) specific policy to adopt higher standards of stormwater management and construction mitigation in areas with silty and fine soils (Map 9 – Surficial Geology);
- k) specific policy to increase the lot frontage requirements for back-lots to be consistent with the Town of Huntsville (660’);
- l) specific policy to ensure appropriate setbacks for streams (30m is recommended for cold-water streams and 15 m of warm water with the setback areas to be maintained as natural buffers).
- m) specific policy to recognize the special character of Peninsula Lake, including:
  - o minimum 122m. (400 ft) lot frontage for all new lots across the entire lake.
  - o special natural, social or physical areas
- n) special policies to deal with the redevelopment of small lots with monster cottages.

**Contact**

Terry Sararas- Huntsville, Derrick Hammond - Lake of Bays, Margaret French - District of Muskoka





## 2. Update Zoning By-laws

<b>Objective</b>	To ensure the Town of Huntsville and Township of Lake of Bays update their local zoning by-laws in a manner consistent with this report and the Background Report.
<b>Description</b>	The Association should initiate discussion with the Town of Huntsville to encourage the update of their zoning by-law. The Township of Lake of Bays is currently updating their Zoning By-law and the Association should become more involved in their community program.
<b>Tasks</b>	<ol style="list-style-type: none"> <li>1. The Association must have a good understanding of the current zoning by-laws and identify potential development pressure points. Review Background Report, Official Plans and Zoning By-laws.</li> <li>2. Work with local municipalities to determine if appropriate standards and safeguards are in place for new or redevelopment proposals.</li> <li>3. Ensure that the Town of Huntsville and Township of Lake of Bays have similar zoning by-law provisions that regulate similar forms of development.</li> <li>4. Encourage local municipalities to adopt lake wide standards that are consistently applied (e.g. height, shoreline setbacks, sleeping cabins, lot coverage).</li> <li>5. Use the following checklist of issues and those identified in the Background Report.</li> </ol>
<b>Background Information</b>	<p><u>Town of Huntsville and Township of Lake of Bays</u></p> <ol style="list-style-type: none"> <li>a) Work with the municipalities to update their zoning by-laws.</li> <li>b) Ensure the Waterfront/Rural/Community interface is identified in the Zoning By-law.</li> <li>c) Discuss and identify appropriate development limits with commercial operators and include in zoning by-law.</li> <li>d) Encourage the Town of Huntsville to amend their zoning by-law to eliminate Golf Courses as a right in zones such as rural or open space, to ensure a proper environmental analysis and public review is conducted</li> </ol>



## 2. Update Zoning By-laws

- through a rezoning process.
- e) Encourage the Town of Huntsville to create a new Environmental Protection or Conservation zone, to be used to protect sensitive features such as wetlands, fish habitat, and loon nesting sites.
  - f) Encourage local municipalities to adopt and use a waterfront residential zone that requires a 120m (400 ft) lot frontage.
  - g) Encourage Huntsville and Lake of Bays to create and apply a new backlot residential zone in accordance with their official plans (request a minimum lot frontage of 660 feet).
  - h) Encourage local municipalities to increase lot frontage requirements for new Tourist Commercial establishments to a minimum of 400 ft.
  - i) Encourage local municipalities to adopt similar standards for lot coverage and for calculating the number and density of accommodation units on tourist commercial properties.
  - j) Height should be measured on the side of the building that faces the lake and should be measured from the finished grade to the highest point of the roof. A maximum height of 2 stories for residential and 3 stories for commercial development should be required consistently, regardless of location on the lake.
  - k) Shoreline setbacks should be increased to 100 ft adjacent to sensitive features such as Type 1 fish habitat, or loon nesting sites.
  - l) Ensure sleeping cabins have a maximum floor area that is appropriate (e.g. 400 to 600 sq feet).

### **Contact**

Terry Sararas, Town of Huntsville  
Derrick Hammond, Township of Lake of Bays



### 3. Site Plan Control

<b>Objective</b>	To ensure the Town of Huntsville and Township of Lake of Bays Official Plans use site plan control to regulate development, require appropriate stormwater and construction mitigation practices and to protect shoreline buffer areas.
<b>Description</b>	The Association should work with the Town of Huntsville and the Township of Lake of Bays to ensure proper use of Site Plan Control Agreements.
<b>Tasks</b>	<ol style="list-style-type: none"> <li>1. The Association must develop a good understanding of the current use of site plan control and identify potential development pressure points. Review Background Report, Official Plans, Zoning By-law and Site Plan Control By-law.</li> <li>2. Work with local municipalities to determine if appropriate standards and safeguards are in place for new or redevelopment proposals.</li> <li>3. Require Site Plan Control to be used for all residential and commercial shoreline development to require appropriate stormwater management and construction mitigation measures. Encourage the use of site plan control across the entire lake and especially in areas adjacent to shorelines, natural features and important historic sites. Provide map of sensitive areas.</li> <li>4. Ensure there is a provision in the Site Plan Control Agreement to ensure that all external lighting is pointed downward, to the interior of the lot, and minimized wherever possible.</li> <li>5. Ensure provision in Site Plan Control Agreement to ensure that the removal of vegetation is minimized, the shoreline buffer areas are maintained and do not break the natural tree line. Buildings should be constructed in a manner that is less visually obtrusive to the lake.</li> <li>6. Encourage the use of a monitoring system to ensure that site plan agreements are enforced.</li> </ol>
<b>Contact</b>	Terry Sararas, Town of Huntsville Derrick Hammond, Township of Lake of Bays



## 4. Stormwater and Construction Mitigation Plans

<b>Objective</b>	To ensure the Town of Huntsville and Township of Lake of Bays Official Plans have appropriate guidelines to deal with Stormwater Management and Construction Mitigation plans.
<b>Description</b>	The Association should encourage the Town of Huntsville and the Township of Lake of Bays to increase their standards for Stormwater Management Plans and Construction mitigation plans for all shoreline properties. This is especially important in areas where fine or silty soils exist as identified on Map 9 Surficial Geology (in the Background Report).
<b>Tasks</b>	<ol style="list-style-type: none"> <li>1. The Association must develop a good understanding of current Stormwater Management Plan and Construction Mitigation standards. Review Background Report, and Official Plans. Contact the municipal office for more information on their requirements.</li> <li>2. Work with local municipalities to determine if appropriate standards and safeguards are in place for new or redevelopment proposals.</li> <li>3. Collect existing information (e.g. District of Muskoka pamphlet) and distribute to local contractors.</li> <li>4. Work with local contractors and developers to help promote proper construction mitigation practices are in place to ensure appropriate protection against siltation events.</li> <li>5. Ensure local official plans contain appropriate policy to require Stormwater Management and Construction Mitigation practices.</li> </ol>
<b>Contact</b>	Terry Sararas, Town of Huntsville Derrick Hammond, Township of Lake of Bays Geoff Bache, District of Muskoka Ministry of Environment/ Ministry of Natural Resources



## 5. Septic Re-Inspection Program

<b>Objective</b>	To support the Township of Lake of Bays on their Septic Re-Inspection Program and encourage them to inspect the septic systems on Peninsula Lake as soon as possible. To encourage the Town of Huntsville to initiate a Septic Re-inspection Program as soon as possible.
<b>Description</b>	The focus of this project is to improve septic systems on Peninsula Lake. In the past the Peninsula Lake Association has worked with the Ministry of Environment to inspect and update septic systems through the Cottage Pollution program. Recently, the Township of Lake of Bays initiated a Septic Re-inspection program to ensure all systems in the Township are functioning properly. The Township intends to undertake their inspections on Peninsula Lake in the next couple of years. The Town of Huntsville has not initiated a re-inspection program and should be encouraged to do so.
<b>Tasks</b>	<ol style="list-style-type: none"> <li>1. Continue to educate septic system owners on the maintenance and operation procedures to ensure systems are functioning correctly. Such tips include regular pump out (every 5 years), water conservation and no chemicals, and locate as far from the shoreline as possible.</li> <li>2. Encourage the Township of Lake of Bays to conduct the Septic Re-inspection Program for Peninsula Lake as soon as possible.</li> <li>3. Encourage the Town of Huntsville to initiate a similar process.</li> <li>4. Follow up MOE's Cottage Pollution Control Program (1988) in 2004, if the municipal re-inspection program has not been initiated.</li> <li>5. Encourage the use of phosphorus abatement technology and consider a joint monitoring program with the MOE for systems that are used on Peninsula Lake. This should be linked to the Communication Project.</li> </ol>
<b>Contact</b>	Township of Lake of Bays and Town of Huntsville



## 6. Communication Plan

<b>Objective</b>	To prepare a strategy that promotes communication with all stakeholders and lake users. The strategy will provide a consistent approach and messages to deal with the identified issues.
<b>Description</b>	<p>Ongoing communication with shoreline residents is the best way to educate everyone about the impacts of development and human activity on the environment. There are many simple techniques that the Association can use, to make information available. It is important that any approach is user friendly and persuasive, builds on the desires of the reader and provides rationale for their actions. The Association should increase its visibility by improving their use of media tools. Communication must build upon the passions of residents by explaining rationale and obtaining buy-in of both commercial and residential interests.</p> <p>Important topics to be addressed include:</p> <ul style="list-style-type: none"> <li>○ Shoreline alteration/ Urban Development</li> <li>○ Watershed Awareness</li> <li>○ Exotic Species</li> <li>○ Special Features on Our Lake</li> <li>○ Lessening Development and Construction Impacts</li> <li>○ Septic Systems</li> <li>○ Low Phosphorus lifestyle</li> <li>○ Boating Conduct</li> <li>○ Official Plan and Zoning By-law content</li> </ul>
<b>Tasks</b>	<p>1. Prepare a communication strategy to identify the messages and the recipients of the information:</p> <ul style="list-style-type: none"> <li>i) Distribute existing information (e.g. MNR's Extension Notes).</li> <li>ii) Consider the following approaches:</li> </ul>



## 6. Communication Plan

- Create a Welcome Wagon pamphlet to new cottagers
- Promote best examples on the lake through awards and media releases
- Provide workshops for contractors, real estate agents and residents
- Boating tours for residents
- Tour Grandview's nature efforts with Association members
- Monitor activity and provide information to people who are developing their property.
- Shared Website with other Lake Associations (Fairy Lake has already initiated this project)
- Partner with real estate agents, contractors, other lake associations

2. Consider the following approaches:

- community map
- newsletters in mail outs and “dock drops”
- workshops
- signage at public access points and canal “Welcome to the community of Peninsula Lake”

4. Continue lobbying and discussion with key interest groups is an important aspect of communications.

5. Develop partnerships with other lake associations (Fairy Lake, Walker Lake, Lake of Bays, Harp Lake) municipalities, MNR, MOE, developers, resort operators and local nature clubs.

6. Promote watershed awareness by contacting and initiating discussion with Harp and Walker Lake Associations;

### **Contact**

Points of contact – Cottagers, resort visitors, contractors, connecting with youth, fish tournament, municipalities (staff and politicians), real estate agents, retail stores



## 7. Stewardship Awards

**Objective**

To recognize and reward “good stewards” of the land.

**Description**

Awards recognize good efforts and help to promote the values of good stewardship. The focus of this project is to use other award systems (e.g. Muskoka Heritage Foundation) and to development one especially for Peninsula Lake.

**Tasks**

1. Develop a system of awards.
  - set criteria for awards (natural stewardship, architectural, contractors who are environmentally friendly)
  - publish in association newsletter – ask for nominations
  - set up a committee to review
  - present at AGM and publish results in local newspaper and association newsletter
  - AGM awards and presentations
2. Consider the use of award systems already in place (e.g. Muskoka Heritage Foundation – shoreline stewardship) and submit names for consideration.
3. Consider certification of real estate agents or contractors.

**Contact**

Other contacts – Bill Dickinson, Natural Heritage Committee (Muskoka Heritage Foundation)





## 8. Shoreline Re-vegetation

<b>Objective</b>	To encourage residential and commercial property owners to re-naturalize their shoreline properties.
<b>Description</b>	Shoreline property owners need to understand the impacts of replacing natural shoreline vegetation with urban style lawns and shoreline break walls. The Association should look for opportunities to promote and distribute information on shoreline protection as well as undertake projects to re-naturalize shorelines that have been altered.
<b>Tasks</b>	<ol style="list-style-type: none"> <li>1. Contact local municipalities, MNR, DFO, Muskoka Heritage Foundation and Lake Associations to discuss approaches to ensuring shoreline protection.</li> <li>2. Develop or obtain literature from existing sources to provide information to shoreline residents and developers about the following:             <ul style="list-style-type: none"> <li>○ Urban landscaping and related maintenance</li> <li>○ Hardening of shorelines</li> <li>○ Alteration of riparian and littoral zones</li> <li>○ Do's and Don'ts in Buffer Zones (don't rake your leaves, don't cut trees, don't construct manicured lawn to water's edge, do maintain natural shorelines)</li> <li>○ Rehabilitate your shoreline property (how to improve wildlife habitat)</li> <li>○ Use existing inventories to identify sensitive shoreline areas. Provide information to adjacent landowners and ensure protection in local land use by-law and official plan policies.</li> </ul> </li> <li>3. Identify priority areas on the lake to undertake a naturalization project (use maps 12 and 13 Vegetation Disturbance in Upland and Riparian Areas – Background Report).</li> <li>4. Contact commercial nurseries to obtain indigenous vegetation stocks.</li> <li>5. Publicize project through Pen Notes, news releases, and local newspapers (Forester and Muskoka Sun).</li> <li>6. Contact property owners who have less than 50% natural vegetation on the lots and promote interest in shoreline re-generation (Map 8).</li> </ol>



	<ol style="list-style-type: none"><li>7. Consider hiring Summer Students to promote initiative, distribute trees and undertake plantings where necessary.</li><li>8. Work with the Muskoka Heritage Foundation for information and assistance (Naturalize Muskoka Project).</li></ol>
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<b>Contact</b>	List of Commercial Nurseries Bill Dickinson, Natural Heritage Committee, Muskoka Heritage Foundation
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## 9. Stream Inventory

<b>Objective</b>	To inventory the resources and habitat features (fish and wildlife) of all streams and drainage courses that flow into Peninsula Lake.
<b>Description</b>	Streams are ecologically important to Peninsula Lake as refugia to many species of fish and wildlife living in and around the lake. There are 21 permanent and intermittent streams that provide the lakes primary source of water and little is known about this important resource. The purpose of this project is to gain a better understanding of these streams and to promote awareness about the importance of their protection and rehabilitation.
<b>Tasks</b>	<ol style="list-style-type: none"> <li>1. Determine Partners who are willing to help and participate in the project. <ul style="list-style-type: none"> <li>○ MNR has expressed a need and past willingness to undertake an inventory (Dr. Evans).</li> <li>○ Upstream Lake Associations of Harp and Walker</li> <li>○ Local Schools (SAVE)</li> <li>○ Consultants</li> </ul> </li> <li>2. Conduct an inventory of streams. <ul style="list-style-type: none"> <li>○ habitat features and function of stream</li> <li>○ potential impacts (forestry practices, shoreline development, channel alteration)</li> <li>○ areas to rehabilitate (e.g. raised culverts, fish spawning areas, stream banks)</li> </ul> </li> <li>3. Ensure appropriate setbacks are in Official Plans and Zoning By-laws. 30m is recommended for cold-water streams and 15 m of warm water with the setback areas to be maintained as natural buffers.</li> <li>4. Require the proponents of major development adjacent to steams to undertake inventories.</li> <li>5. Increase awareness of streams and undertake rehabilitation and restoration where appropriate.</li> <li>6. Undertake rehabilitation or restoration where appropriate.</li> </ol>
<b>Contact</b>	Other lake associations (Fairy, Walker, Harp)



## 10. Stream Rehabilitation

<b>Objective</b>	To undertake a community work party to rehabilitate the shorelines and substrate of streams that flow into Peninsula Lake.
<b>Description</b>	A weekend work project to rehabilitate streams flowing into Peninsula Lake to improve fish habitat and natural vegetation. This project could be merged with the Shoreline Re-vegetation Project.
<b>Tasks</b>	<ol style="list-style-type: none"><li>1. Identify streams that require rehabilitation. The small stream located on the Hidden Valley Association Beach property is a good candidate for the first project.</li><li>2. Contact property owners to promote participation and approval.</li><li>3. Obtain funding (CFWIP, Tembec, MNR).</li><li>4. Develop a detailed project plan and work plan.</li><li>5. Establish a work party including youth.</li><li>6. Obtain necessary material and approvals.</li><li>7. Conduct project.</li><li>8. Rehabilitate other streams on an annual basis.</li><li>9. Monitor results (MNR, Universities).</li></ol>
<b>Contact</b>	Ministry of Natural Resources (Jan McDonnell) for CFWIP funding



## 11. Loon Inventory

### **Objective**

To ensure that Loon habitat is identified and protected in order to maintain a healthy loon population on Peninsula Lake.

### **Description**

Undertake an inventory of known and potential loon nesting sites. Contact Canadian Lakes Loon Survey to determine the survey requirements and to participate in their program. Information collected will be shared with other stakeholders through the Communication Plan

### **Tasks**

1. Contact Canadian Lakes Loon Survey.
2. Confirm location of existing sites as identified by map 6.
3. Gather and distribute information on loons.
  - location of sites
  - activities that disturb loons (development, lead sinkers etc.)

### **Contact**

Canadian Lakes Loon Survey  
Bird Studies Canada  
P.O. Box 160, Port Rowan, ON N0E 1M0  
[www.bsc-eoc.org.org](http://www.bsc-eoc.org.org)



## 12. Boating Awareness

### **Objective**

To make recreational boaters more aware of the impact of their activities on others and to promote safe boating habits.

### **Description**

This is an education/communication project to improve boater safety.

### **Tasks**

1. Design a boater safety program. Consider:
  - opportunities to hold workshops to obtain boat licenses and awareness of safe operation of boats and jet skis
  - safety regattas
  - decals to recognize those who have participated in the program (placed on stern of boat).
2. Post signs about boater awareness at public access points and the canal.
3. Prepare a navigational chart in connection with Fairy and Vernon Lake Associations. Include safety tips.
4. Points of Contact
  - Residents and resort users
  - recreational users
  - Huntsville Fish Tournament
5. Link with Code of Conduct Project and Lake Watch. Work with OPP and hire summer students to promote boat safety awareness.
6. Encourage OPP to set up radar traps and boat safety tours on Peninsula Lake. Consider having a "boat steward" located in the Canal on long weekends and during the Huntsville Fish Derby event.
7. Use a positive and helpful approach.
8. Encourage jet ski operators to stay away from shoreline areas.

### **Contact**

Canadian Power Squadron, Fairy, Vernon and Mary Lake Associations



### 13. Code of Conduct – Lake Manners

<b>Objective</b>	To prepare a voluntary “Code of Conduct” for all lake users to make everyone aware of the impact of their actions on others.
<b>Description</b>	Design and promote a proper and accepted voluntary code of conduct through communication and education opportunities.
<b>Tasks</b>	<ol style="list-style-type: none"><li>1. Prepare a statement on “code of conduct”</li><li>2. Distribute through Pen Notes, news releases to local newspapers.</li><li>3. Use stickers, flags or another visual aid to promote acceptance and awareness.</li><li>4. Link with Boating Awareness and Lake Watch program.</li></ol>
<b>Contact</b>	Other Lake Associations



## 14. Monitoring

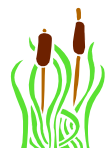
<b>Objective</b>	To develop a monitoring program on Water Quality, Macro-benthic, and Development Applications.
<b>Description</b>	<p><u>Water Quality</u> - The Association's past involvement in self help programs with MOE, MNR, and the District of Muskoka must continue. This type of monitoring provides a current measure of water quality health through specific techniques such as secchi disc readings, dissolved oxygen, and phosphorus levels.</p> <p><u>Macro-benthic</u> - In order to assess the long-term health of the lake, a monitoring program could be established for littoral zone species such as macro-benthic species. Partnership of agencies willing to participate should be promoted.</p> <p><u>Development Applications</u> - Increased development on the shoreline and backlots of Peninsula Lake, as well as the shorelines of Harp and Walker Lakes may result in impacts that are harmful to Peninsula Lake. The Association must be aware of contentious development issues occurring in the watershed, and provided an opportunity to comment.</p>
<b>Tasks</b>	<p><u>Water Quality</u></p> <ol style="list-style-type: none"> <li>1. Review and understand current efforts of the District of Muskoka. Determine what parameters should be tested to determine aquatic ecosystem health.</li> <li>2. Develop an approach to ensure the continuance of water quality monitoring.</li> <li>3. Consider partnering with District of Muskoka, Town of Huntsville, Township of Lake of Bays, Walker and Fairy Lake Associations, resort operators and local business.</li> </ol> <p><u>Macro-benthic</u></p> <ol style="list-style-type: none"> <li>1. A small committee should prepare a proposal for the establishment of a long term monitoring program. The proposal should address the following: partnering, terms for implementation, matters to be monitored, funding opportunities.</li> </ol>





	<p><u>Development Applications</u></p> <ol style="list-style-type: none"><li>1. Contact municipality to request formal notice of major developments.</li><li>2. Review and monitor land use plans and development applications within watershed</li></ol>
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<b>Contact</b>	
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## 15. Invasive Species

**Objective**

To reduce the possibility of the invasion of Exotic Species on Peninsula Lake.

**Description**

Continuation of current program to ensure awareness and to encourage boaters to take precautionary measures to reduce the possibility of exotic specie invasion.

**Tasks**

1. Obtain and distribute information on exotic species.
  - news releases in local papers
  - Pen Notes
2. Continue to work with OFAH to monitor the health of the lake.
3. Partner with all associations and resort operators in the Watershed (Vernon, Fairy, Mary, Harp and Walker).
4. Post signs at all access points on the four lakes.

**Contact**

Ontario Federation of Anglers and Hunters



## 16. Land Trust

**Objective**

To promote an approach for interested landowners to ensure the long-term protection of properties and features.

**Description**

Land Trusts are designed to provide tax incentives for property owners to designate their lands for their protection

**Tasks**

1. Gather Information on Land Trusts and promote awareness (provide articles in Pen Notes).
2. Contact selected property owners to discuss options.

**Contact**

Muskoka Heritage Foundation



## 17. Lake Watch

**Objective**

To create a system to identify and report inappropriate development and human activity to appropriate authorities.

**Description**

Lake Watch is a program to help identify and report on inappropriate development and human activities. It is based on the same premise as the Cottage Watch Program initiated by FOCA and the OPP, but its focus can incorporate environmental, boating activities and other matters. The Lake Watch program would provide information about who to contact regarding specific issues (e.g. silt spills) and could incorporate the review of municipal development applications (major developments).

**Tasks**

1. Set up a summer program, hire summer students, to deal with water and land issues.
2. Prepare a list of contacts (e.g. destruction of fish habitat – DFO, boating practices – OPP, building infractions – municipality).
3. Program could initially focus on boating activity, shoreline buffers, and development.
4. Consider partnering with Vernon and Fairy Lake Associations

**Contact**

## 18. State of Lake Reports

**Objective**

To create an annual system of reporting on the health of the lake.

**Description**

The State of the Lake Reports would be completed for each AGM and provides a way to consistently measure the state of the lake. The purpose is to identify past and future trends of development and state of the environment so that the Association may actively deal with them.

**Tasks**

1. Select performance measures to be collected on an annual basis (e.g. number of seasonal cottages and permanent dwellings, water quality, measures, exotic species, amount of wetland in watershed, results of creel surveys, number of association members). May consider the review of past information to start a base line.
2. Prepare a report for the Pen Notes and presentation at the AGM.
3. Continue to monitor every year.

**Contact**

## 19. Site Specific Stewardship

**Objective**

To protect and enhance the significant features of Peninsula Lake.

**Description**

Many of the Lake's cultural and historic features are located on private land and the private stewardship of these resources is an essential ingredient to their protection and enhancement.

**Tasks**

1. Set up a committee to identify priority projects.
2. Contact property owners.
3. Prepare a strategy for the protection of these areas.
4. First project – Canal - The Canal area is one of the most sensitive environmental sites on the lake and its importance is linked to historical as well as environmental values. There are a number of issues that may impact the health of this area; golf course run-off, encroachment by development and recreational boating impacts.
5. Other projects to be considered – restoration of North Portage Flyer, lighthouse, Wolf Mountain (refer to plan for other ideas).
6. Consider purchase of significant properties,

**Contact**

## 20. Working With Partners

### **Objective**

To work with Local Lake Associations, commercial operators, local municipalities and other agencies on common objectives and goals.

### **Description**

Working in partnerships can enhance the success of many projects and it is essential that we share our ideas and work together on common objectives.

### **Tasks**

1. Contact other Lake Associations to promote a partnership on common causes and objectives.
2. Consider Political Representation
  - survey local politicians (especially candidates before an election) on their values and motives when in office and provide a news release or information in the Association newsletter
  - invite local politicians to all events and especially workshops
  - prepare a strategy to work closely with them during their term of office.

### **Contact**



# Appendix 1 - Funding and Volunteer Sources

## **Community Fish and Wildlife Improvement Plan (CFWIP)**

Contact Jan McDonnell  
Bracebridge Area Office, Ministry of Natural Resources

## **Muskoka Heritage Foundation (MHF)**

9 Taylor Road  
Box 482  
Bracebridge ON  
P1L 1T8  
705 645 7393  
705 645 7888 fax  
[www.muskokaheritage.org](http://www.muskokaheritage.org)

## **Parry Sound- Muskoka Stewardship Network**

Contact Mike Walsh 705 646 5530 [mike.walsh@mnr.gov.on.ca](mailto:mike.walsh@mnr.gov.on.ca)  
Ontario Stewardship Website [www.ontariostewardship.org/parry.htm](http://www.ontariostewardship.org/parry.htm)

## **SAVE**

Huntsville High School  
Contact - John Riviere Anderson  
705 789 5594

## **Canadian Wildlife Service**

350 Michael Cowpland Drive  
Kanata, ON, K2M 2W1  
800 563 WILD  
613 599 4428  
[info@cwf-fcorg](mailto:info@cwf-fcorg)      [www.cwf-fcorg](http://www.cwf-fcorg)      [www.wildeducation.org](http://www.wildeducation.org)





**Federation of Ontario Cottagers' Association**

239 McRae Drive

Toronto, ON

M4G 1T7

416 429 0444

416 429 4944 (fax)

[info@foca.on.ca](mailto:info@foca.on.ca)

[www.foca.on.ca](http://www.foca.on.ca)

**LandOwner Resource Centre**

5524 Dickinson Street, P.O. Box 599

Manotick ON K4M 1A5

613 692 2390 phone

613 692 2806

[lrc@sympatico.ca](mailto:lrc@sympatico.ca)



# Appendix 2 – Background Report Recommendations

A background report collected information from existing sources and summarized information on the watershed and the lake, including; use, natural, physical and social elements and land use regulations. Its purpose was to identify issues and recommendations. The following is a summary of the recommendations:

## 1 – Peninsula Lake Plan

- a) That the Pen Lake Plan clearly identifies the objectives and targets to accomplish this vision together with a detailed implementation plan to complete these tasks.

## 2 – Promote Watershed Awareness

- a) Ensure local official plans address the consideration of water quality impacts from upstream development in any water quality modeling or land use decision.
- b) Initiate contact with Jerry, Harp and Walker Lake Associations (upstream) and the Fairy Lake Association (downstream) to foster awareness of watershed issues and to collaborate on joint projects.
- c) Request the Township of Lake Of Bays and the Town of Huntsville to notify the Peninsula Lake Association (PLA) about major development applications (i.e. Official Plan and Zoning By-law Amendments) located within the watershed, especially those developments located on upstream lakes and tributaries.

## 3 – Maintain Resort Establishments

- a) Ensure all Official Plans support the continued viability of commercial resorts in order to lessen the likelihood of conversion to other non commercial uses.
- b) Work with Resort operators to ensure commercial development is appropriate, in character and within

carrying capacities of the lake and its surrounding environment.

## 4 – Land Ownership

- a) Existing public access points should be retained.
- b) Foster stewardship projects that encourage shoreline owners to take ensure the naturalness of their properties.

## 5 – Land Use Considerations

- a) Request the District of Muskoka to determine the impact of 7 additional residential lots (at 400 ft. frontage) and consider whether the impact is significant or minimal.
- b) Official Plan policies must address the development and redevelopment of existing properties.
- c) Ensure that potential commercial development permitted under new zoning regulations addresses impacts on water quality.
- d) Become more involved in the planning approval process for new development. Request the local planning approval authorities to advise the Peninsula Lake Association about major development proposals in the Watershed.
- e) Encourage the District of Muskoka to up date background information (e.g. development levels) for its water quality analysis.
- f) Peninsula Lake Association should conduct a survey in



5 years to identify current development levels and provide information to District of Muskoka for their water quality program.

## 6 – Occupancy Rates

- a) Provide the District of Muskoka with current occupancy information for water quality analysis.
- b) Conduct a survey in 5 years to determine if there is a greater permanent occupancy of lands and ensure the water quality program includes these figures when conducting modeling.

## 7 - Water Quality

- a) Contact the District of Muskoka and express an interest in the review of the Water Quality Model to ensure proposed changes are appropriate for Peninsula Lake. Provide up to date information on current development, occupancy rates and capacities.
- b) Continue to support the District of Muskoka's water quality program.
- c) Promote a low phosphorus impact lifestyle by encouraging the use of phosphorus free products through education and communication.
  - do not use lawn fertilizers, pesticides or herbicides
  - do not bath in the lake
  - maintain shoreline vegetation
  - use of P free products (provide list and where to obtain)
  - promote local stores to provide P free and other environmentally friendly products
- d) Encourage local retailers to make a range of phosphorus free products available.
- e) Discourage the use of fertilizers in riparian and upland areas.
- f) Prepare Annual State of the Lakes Report to promote

awareness of water quality and other matters.

- g) Provide a regular ongoing forum to educate Peninsula Lake Stakeholders about impacts on water quality.

## 8 – Protect Wetlands

- a) Undertake measures to protect and enhance all wetlands within the watershed.
- b) Promote local municipalities to identify all wetlands with protective “no-development” zones in local zoning by-laws.
- c) Provide information to residents about the importance of wetlands and create guidelines for their protection. Create a landowner contact program.
- d) Work with Deerhurst Resort and abutting land owners along the canal to promote a conservation program to protect the canal wetland and educate others about its function and protection.

## 9 – Lake Trout Habitat

- a) Ensure new development (new lot creation) and redevelopment (increased density) does not impact lake trout habitat. Contact the MNR for comments about new planning approvals within 300m (1000 ft) of the shoreline.
- b) Ensure that the current official plan policy and zoning by-laws reflect the current restriction on new lots.
- c) Ensure that the expansion of commercial operations reflects this restriction.
- d) Continue to monitor water quality. Initiate contact with the District of Muskoka to provide assistance with their water quality program. Specifically, the PLA could undertake water quality monitoring during the years that DOM doesn't do monitoring. Ensure up to date shoreline, backlot development, and golf courses are included in the model.
- e) Determine other parameters that should also be



- monitored.
- f) Further creation of lots or increase in commercial density should not be permitted until impacts on water quality and lake trout habitat are better understood or municipal sewage services are provided.

#### **10 – Site Specific Habitat**

- a) Encourage the protection of Type 1 fish habitat.
- b) Educate shoreline residents about the impact of the removal of substrate and woody debris in the littoral zone.
- c) Ensure municipalities incorporate and implement strong Official Plan policies with respect to shoreline alteration.
- d) Advise MNR/DFO of any infractions.
- e) Work with District of Muskoka and Ministry of Environment to establish appropriate monitoring program.
- f) Consider undertaking additional monitoring of phytoplankton and macrobenthos. Contact the District of Muskoka and Ministry of Environment (and other organizations) to determine guidelines and potential for partnerships.

#### **11 – Protect and Enhance Streams**

- a) Protect and rehabilitate streams and drainage courses.
- b) Conduct an inventory of streams to determine function, flow and impacts.
- c) Ensure appropriate setbacks from stream banks are in Official Plan and Zoning By-laws to ensure protection of natural vegetation buffers. 30m is recommended for cold water streams and 15 m for warm water streams and drainage courses with the setback areas to be maintained as natural buffer.
- d) Require the proponents of development to undertake inventories and mitigation plans, if appropriate, to ensure their protection. Alteration of natural streams

through straightening or re-channelization must be prohibited.

- e) Undertake rehabilitation or restoration where warranted.
- f) Increase awareness about existing streams and drainage courses. Challenge residents with the “Name the stream contest”. Initiate a Land Owner Contact program.

#### **12 – Endangered or Threatened Species**

- a) Encourage local municipalities to include Official Plan policy that protects habitat of endangered and threatened species, when identified. Proponents may be required to prepare an additional assessment before development is approved.

#### **13 – Winter Deer Habitat**

- a) Encourage municipalities to include Official Plan policy and Zoning By-law Provisions to protect Deer Winter Habitat. A minimum standard for new lot creation is 90m x 90m.
- b) Encourage municipalities to consider the use of site plan control and tree cutting by-laws to regulate the cutting of vegetation important to wintering deer.

#### **14 – Loons Nesting Sites**

- a) Identify known sites in the Official Plan and zoning by-law with appropriate development restrictions to protect from incompatible development and activity.
- b) Conduct a loon nest survey to confirm the location of other sites. Participate in the program with the Canadian Lakes Loon Survey.
- c) Obtain additional information to promote awareness and educate lake users.

#### **15 – Regeneration Projects**



- a) Identify sources of indigenous species and use in regeneration programs.

#### **16 – Impacts from Exotic Species**

- a) Educate lake users about the presence and control of spiny water flea. Post signs at all public access points warning boaters about the proper requirements for controlling the invasion of exotic species.

#### **17 – Fine and Silty Clay Soils**

- a) Ensure municipality requires Stormwater Mitigation measures for all residential and commercial development on the west, north and east side of the lake.

#### **18 – Aggregate and Quarrying Activities**

- a) Ensure new and expansion of existing aggregate operations (pits and quarries) have no negative impacts on streams and other natural features.
- b) Encourage the municipality to require the proponent to rehabilitate lands after use has occurred.
- c) Encourage municipalities to adopt a Pits and Quarry By-law to regulate the operation and rehabilitation of existing and future operations in the watershed.
- d) Request municipalities to notify the Peninsula Lake Association about new planning act approvals within the Peninsula Lake Watershed.

#### **19 – Narrow Waterbodies**

- a) Identify narrow waterbodies and encourage the municipality to consider development standards other than lot frontage, such as decreased dock length, and increased requirements for buffer and vegetation

retention in the zoning by-law.

- b) Consider setting a higher standard for defining narrow waterbodies to include Wolfs Bay, a portion of Halls Bay and Grassmere Bay, and the channel on the west side of Hill's Island.

#### **20 - Steep Slopes**

- a) Identify steep slopes areas and consider development standards regarding density, visual impact and increased requirements for buffer and vegetation retention in the zoning by-law and official plan, where appropriate.

#### **21 – Private Land Forestry**

- a) Private property owners should be encouraged to prepare Wood Lot Management Plans and follow sound forestry practices, especially when operating near streams that flow into Peninsula Lake or other significant natural features such as the deer wintering areas identified on Map 7.
- b) Encourage municipalities to enact an amendment to the tree cutting by-law to enforce more strict regulations.

#### **22 – Landscapes and Aesthetics**

- a) Ensure large profile (mass, height and density) development does not occur in the backlands, on heights of land, or scenic areas.
- b) Ensure that significant removal of vegetation does not occur along the treed horizon of the lake.
- c) Process an Official Plan Amendment that recognizes the importance of landscapes and natural vistas on Peninsula Lake.
- d) Discuss options (e.g. land trust) for protection of landscapes with property owners (e.g. Wolf's Mountain).
- e) Ensure that provisions are placed in Lake Of Bays



Official Plan and Zoning By-law to protect Wolf's Mountain from incompatible and high profile development.

### **23 – Cultural and Historic Sites**

- a) Ensure cultural and historic sites are recognized in Land Use Planning Regulations to ensure that future development does not jeopardize their integrity.
- b) Contact current property owners to increase awareness of these features and promote private stewardship of these areas.
- c) Determine the feasibility of rehabilitating these areas for future use (e.g. Canal). Financial assistance and volunteer community effort should be available to willing property owners. Land Trusts could be established as an incentive for property owners wishing to become involved.
- d) Consider the use of historical plaques and information pamphlets to promote the awareness of these resources.

### **24 – Boating Activity**

- a) Consider the use of a voluntary program that promotes proper boating safety, such as the Lake Code.
- b) Encourage licensing of boat operators by providing courses to obtain boat license.
- c) Consider conducting a Boat Capacity Study to determine the actual numbers using the lake, where they are from, and identify the busy areas. This will help to determine whether and where other safety precautions are necessary (e.g. more buoys).

### **25 - Two and Four Stroke Motors**

- a) Provide information to boat operators on the impact of boating and encourage proper maintenance and

operating procedures.

- b) Encourage the replacement of two-stroke outboard engines with four-stroke. All lake users should be aware of the benefit four-stroke engines.

### **26 – Recreational Opportunities**

- a) Fish Tournament Organizers must educate their anglers about the impacts of boating activities.
- b) Fish Tournament Organizers should return fish to the areas they were caught in.
- c) Maximum speeds must be enforced in the canal area.

### **27 – Neighbourhood Character**

- a) Neighbourhood character, architectural style and focal points must be identified and considered. Information promoting character should be made available to residents, contractors and the development industry.

### **28 – Noise and Lighting**

- a) Through communication encourage the limiting of excessive noise after 11 p.m. and contact sources.
- b) Prepare an information bulletin on “good examples” of lighting, and discourage the excessive use of lighting along shorelines.
- c) Include in the Lake Code.

### **29 – Social Opportunities**

### **30 – Fertilizers**

- a) Discourage the use of lawn fertilizers along shoreline areas, or provide information on best application techniques to reduce migration to Peninsula Lake.



### 31 – Shoreline Protection and Rehabilitation

- a) Ensure that a natural buffer is maintained between main buildings and the shoreline.
- b) Where riparian and upland areas have been disturbed, contact property owners and provide information on the benefits of natural shorelines and initiate a Lake wide replanting program promote naturalization and assist willing property owners.
- c) Tree removal in shoreline buffer areas should only be permitted for building construction or structural safety reasons. Tree removal for landscaping purposes must be minimized.
- d) Encourage the use of less obtrusive structures in the water. Pole docks and cantilevered structures are the preferred option, and floating docks are appropriate where there is no emergent vegetation. Crib structures are the least desirable type of dock.

### 32 – Septic Systems

- a) Continue to educate septic system owners on the maintenance and operation procedures to ensure systems are functioning correctly. Such tips include encourage regular pump out (every 5 years), water conservation and no chemicals, and locate as far from the shoreline as possible.
- b) Follow up MOE's Cottage Pollution Control Program (1988) in 2004, if the municipal Re-inspection Program has not been initiated.
- c) Ensure other carrying capacities for determining development limits are in place.
- d) Encourage the Township of Lake of Bays to conduct the Septic Re-inspection Program for Peninsula Lake as soon as possible.
- e) Encourage the Town of Huntsville to initiate a similar process.
- f) Encourage the use of phosphorus abatement

technology and consider a joint monitoring program with the MOE for systems that are used on Peninsula Lake.

### 33 - Stormwater and Construction Mitigation

- a) Request municipalities to increase standards for storm water management and construction mitigation practices in areas of clay and silty soils for all development (residential, commercial, large or small). Apply increased standards to those areas identified as having fine silts and clays as identified on Map 9.
- b) Work with municipalities and other associations to prepare educational material and guidelines to work with contractors.
- c) Encourage municipalities to provide information to all building permit applicants and contractors about proper stormwater management approaches.
- d) Educate local contractors about the importance of construction mitigation, and the impacts of sediment loading.
- e) Ensure that siltation events are reported to the municipality, MOE and MNR (fish habitat impacts).

### 34 – Update Land Use Regulations

- a) Encourage the Town of Huntsville to initiate a By-law update, and participate with the Township of Lake of Bays in their current consultation process.

### 35 – One Lake-Wide Approach

- a) Ensure that the Town of Huntsville and Township of Lake of Bays have similar policy and land use provisions regulating new development

### 36 – Muskoka Official Plan

- a) Ensure that the Town of Huntsville and Township of



Lake of Bays Official Plan provides a mechanism to ensure tourism-based development requires appropriate development approvals and public participation.

- b) Request the local planning approval authorities to advise the Peninsula Lake Association about major shoreline development proposals.
- c) Ensure the Waterfront/Rural/Community interface is clearly identified in the Official Plan or Zoning By-law of the Town of Huntsville and the Township of Lake of Bays (not currently done).
- d) Ensure that current development restrictions incorporate other constraints, such as social, natural and physical elements.
- e) Ensure the Township of Lake of Bays and the Town Huntsville Official Plan policy and Zoning By-laws sets development capacities based on factors other than water quality.

### **37 – Lake of Bays Official Plan**

- a) Support and participate in the implementation of the Official Plan policies.
- b) Ensure natural constraints to development (narrow waterbodies, steep slopes, natural habitat) are identified on maps, and recognized in a Specific Lake Plan Amendment..
- c) Encourage specific policies for Peninsula Lake to increase the backlot requirements for new back lots to be consistent with the Town of Huntsville.
- d) Ensure the Lake Plan provides specific direction to amend the Official Plan on matters not presently dealt with (e.g. identification of historical and cultural sites, landscape, areas where increased stormwater management and construction mitigation is appropriate).
- e) Ensure the Waterfront/Rural/Community interface is clearly identified in the Zoning By-law of the Township of Lake of Bays.
- f) Encourage members of the Peninsula Lake Association

to be actively involved with the Township on the preparation of the new zoning by-law. Discuss and identify appropriate development limits with commercial operators and include in zoning by-law.

- g) Encourage the Township of Lake Of Bays OP to recognize a minimum 122m. (400 ft) lot frontage for all new lots across the entire lake.

### **38 – Huntsville Official Plan**

- o) Encourage the municipality to update the Official Plan.
- p) Ensure natural constraints to development (narrow waterbodies, steep slopes, natural habitat) are identified, and recognized in the appropriate municipal document (Specific Official Plan Amendment such as a Lake Plan, Zoning By-law).
- q) Encourage the municipality to implement the policies of the official plan.
- r) Encourage the Town to identify the Waterfront/Rural/Community interface in the Zoning By-law.
- s) Ensure the Peninsula Lake Association encourages and is actively involved with the Town on the preparation of a new zoning by-law. Discuss and identify appropriate development limits with commercial operators and include in zoning by-law.
- t) Adopt the principles of shoreline activity areas across the entire lake (all designations) and promote shoreline preservation through stewardship opportunities.
- u) Encourage the District of Muskoka to use the more restricted water quality objectives as recognized in the Town of Huntsville OP for the western basin for the entire lake.
- v) Encourage the Town to adopt design principles for shoreline development
- w) Work with the Town of Huntsville Planning Department to prepare and process an official plan amendment to deal with specific issues and identify specific lake





values. Examples include special character areas such as the canal, recognition of no more development, identification of historical and cultural sites, landscape, or areas where increased stormwater management and construction mitigation should be required.

### **39 – Permitted Uses in Zoning By-laws**

- a) Participate with the Township of Lake of Bays to update their Zoning By-law to ensure permitted uses are appropriate and the waterfront boundary is identified.
- b) Encourage the Town of Huntsville to amend their zoning by-law to ensure permitted uses are appropriate and to identify the waterfront boundary.
- c) Ensure that the Town of Huntsville and Township of Lake of Bays have similar zoning by-law provisions that regulate similar forms of development.
- d) Encourage the Town of Huntsville to create a new Environmental Protection or Conservation zone, to be used to protect sensitive features such as wetlands, fish habitat, and loon nesting sites.

### **40 – Development Standards – Zoning By-laws**

- e) Encourage local municipalities to adopt lake wide standards that are consistently applied (e.g. height, shoreline setbacks, sleeping cabins, lot coverage).
- f) Encourage local municipalities to adopt a waterfront residential zone that recognizes existing lot frontages and areas.
- g) Encourage Huntsville and Lake of Bays to create and apply a new Backlot residential zone to control the density of development.
- h) Encourage local municipalities to increase lot frontage requirements for Tourist Commercial establishments to

a minimum of 400 ft.

- i) Encourage local municipalities to adopt similar standards for lot coverage and calculating numbers of accommodation units on tourist commercial properties.
- j) Encourage local municipalities to ensure development is not allowed to break the natural tree top line. Buildings should be constructed in a manner that is less visually obtrusive to the lake.
- k) Height should be measured on the side of the building that faces the lake and should be measured from the finished grade to the highest point of the roof. A maximum height of 2 stories for residential and 3 stories for commercial development should be required consistently, regardless of location on the lake.

### **41 – Site Plan Control**

- a) Encourage both local municipalities to use site plan control on the entire lake to deal with lot and building design matters, especially adjacent to shorelines, natural features or other important heritage sites.
- b) Ensure municipality considers the use of storm water management and construction mitigation measures as a requirement of site plan control.
- c) Ensure that site plan agreements are enforced and monitored.

### **42 – Development Permit system**

- a) Work with the Township of Lake Of Bays to determine the effectiveness of Development Permitting.
- b) If Lake Of Bays proceeds with Development Permitting, ensure that they monitor all development activity and enforce the conditions of approval and review the results.

