

SALERNO LAKE

LAKE PLAN



SPRING 2014

Salerno Lake Vision

To sustain, enhance and promote Salerno Lake's natural heritage for generations, through:

- preserving water quality, tranquility, natural environment and viewscape;
- sharing a balance between human activity and the environment with respect and dignity.

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The Salerno Lake Lake Plan Study

The Salerno Lake Lake Plan has been formatted so that each section can be read individually, or as a continuous reading of the plan.

1.0 INTRODUCTION

The purpose of the Lake Plan is to ensure that Salerno Lake continues to be a healthy lake for members of the Salerno Lake Community to enjoy today and into the future.

1.1 How it Began

At the Salerno (Devil's) Lake Cottagers' Association (SDLCA) 2012 AGM, members of the association approved the undertaking of a Salerno Lake Lake Plan Study. A Salerno Lake Lake Plan Study Committee was formed of volunteer members of the Salerno Lake Community.

Although initiated by the SDLCA, the Lake Plan Study includes all property owners within the Salerno Lake Community.

Salerno Lake Lake Plan Study Committee

Margaret Clayton – Chair
John Bradley
Barbara Gordon
Wendy Kidd
George Simmons
David Spiros
Brenna Thompson

1.2 What is a Lake Plan?

Lake Planning is a **community-based** approach to engage property owners within a waterfront community to have a voice in how their lake or river is managed. It involves identifying the natural and social characteristics of the lake environment that are important to the community, and developing stewardship initiatives and action plans to address any threats or concerns that may surround these features.

1.2.1 A Lake Plan is a 'Living Document'

A Lake Plan is a 'living document'. It can be amended and added to as necessary and as time and resources (volunteers, funding, etc.) permit.

1.3 Salerno Lake Lake Plan Boundaries

The boundaries for the Lake Plan were determined by the Lake Plan Study Committee. The area of the lake plan covers the Salerno Lake waterfront properties and adjacent lands, as well as the original Irondale Village/Community. The Salerno Lake Community refers to all property owners and/or residents within the Lake Plan boundaries.

The boundaries are White Lake Road to the south (north side only), Salerno Lake Road (both sides) to the west and north, Irondale Road from south of the bridge to Chimo Road (both sides), and both sides Chimo Road, Grandpa's and Andek Trails.

Due to the proximity of these properties to the lake, it was determined that they were likely to access the lake for recreational purposes and/or be affected by changes in the Salerno Lake watershed and water quality.



2.0 PUBLIC CONSULTATION

2.1 Lake Plan Study Survey

(See Appendix C for complete Survey and Results.)

In the spring of 2013, the Salerno Lake Lake Plan Survey was distributed to property owners in the Salerno Lake Community. The purpose of the survey was to obtain input from the Salerno Lake Community as to the values, characteristics and issues of concern regarding Salerno Lake from members of the lake community.

Surveys were mailed out to members of the SDLCA and hand delivered to the other properties. Approximately 280 surveys were distributed and 130 completed surveys were returned, a return rate of almost 47%. Of the 130 surveys returned, 87% were lakefront property owners.

In comparison, the return rates of other Lake Plan surveys were: Paudash Lake Management Plan 21% of residential properties; Halls and Hawks Lakes Lake Management Plan 33% of residential properties; and Grace and Dark Lakes Lake Stewardship Plan 27%.

2.2 Open House and Public Workshop July 27th, 2013

On July 27th, 2013 a Lake Plan Study Open House and Workshop was held at the Irondale Church. Posters announcing the event were posted at the Irondale Store, the Boat Launch, the entrances to the private roads into the lake, as well as prominent points along the Irondale and Salerno Lake Roads, and on the SDLCA website.



2.2.1 The Salerno Lake Lake Plan Vision Statement

Based on the results of the Survey and feedback from the Salerno Lake Community, attendees of the Workshop created a Vision Statement for Salerno Lake.

***To sustain, enhance and promote Salerno Lake's
natural heritage for generations, through:***

- preserving water quality, tranquility,
natural environment and viewscape;***
- sharing a balance between human activity
and the environment with respect and dignity.***

2.3 Draft Lake Plan

A draft Lake Plan was prepared by members of the Lake Plan Study Committee and posted on the Salerno (Devil's) Lake Cottagers' Association (SDLCA) website for comment. As well, a copy of the draft Lake Plan was provided at the Irondale Store/Post Office for members of the Salerno Lake Community to review and provide comments.

2.4 Open House and Public Workshop - July 5th, 2014

An Open House and Public Workshop was held at the Irondale Church on Saturday, July 5, 2014 for members of the Salerno Lake Community to review the draft Lake Plan and provide comments and feedback.



2.5 Public Meeting and Adoption of the Lake Plan Saturday, August 2nd, 2014

On Saturday, August 2nd, 2014, a public meeting was held to present the draft Lake Plan for approval by members of the Salerno Lake Community. The Lake Plan was approved and adopted as the Salerno Lake Lake Plan by community members present.



2.6 Recommendations – Public Consultation

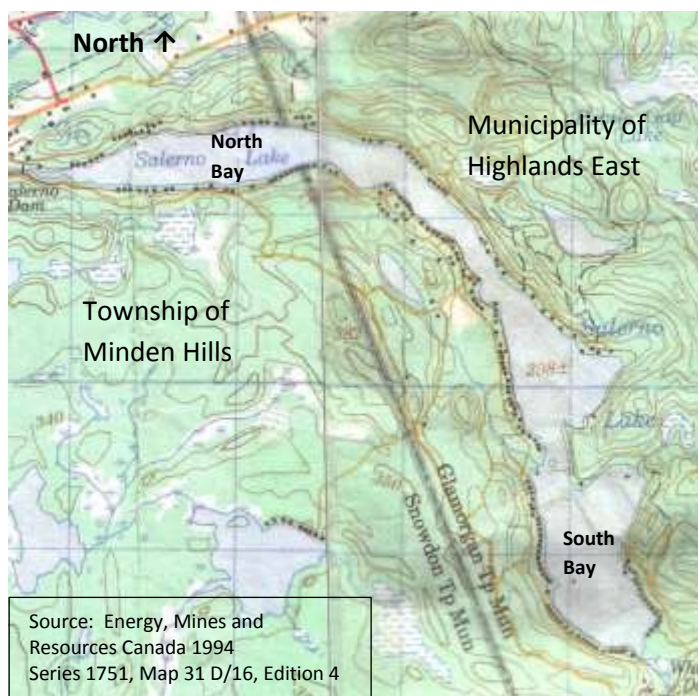
1. Continuing consultation with the Salerno Lake Community when reviewing and expanding the Salerno Lake Lake Plan Study.
2. Link SDLCA website with Township of Minden Hills and Irondale Historical Society websites.
3. Post notices of events, etc. at the Irondale Store and in local publications – (ie. Minden Times, Haliburton Echo, The Highlander, etc.).
4. Regular surveys (every 3 to 5 years) of the Salerno Lake Community to stay current on issues of concern to the community.
5. Create a “Comments” section in the public area of the Salerno (Devil's) Lake Cottagers' Association (SDLCA) website, to receive ongoing feedback from the Salerno Lake Community.

3.0 DESCRIPTION of the SALERNO LAKE COMMUNITY

The Salerno Lake Community encompasses the properties fronting on Salerno Lake, as well as adjacent lands including backlots, Highlands East's Mineral Lands, Crown Land, Salerno Creek, and the original Irondale Village/Community.

3.1 Location

Salerno Lake is situated on the Precambrian Shield in the south west corner of Haliburton County in the Province of Ontario, Canada. It straddles the Township of Minden Hills in the north and the Municipality of Highlands East in the mid and south sections. The settlement known as Irondale is at the north end of the lake and is approximately half way between the villages of Gooderham to the east and Kinmount to the west.



3.2 Salerno Lake Characteristics

Salerno Lake is a long narrow lake with steep slopes and a natural rock and bolder shoreline. The lake is 6.4 km (4 miles) long from the boat launch at the north end to

SALERNO LAKE DISTANCES

- Area: 3 km² or 309 hectares
 - 8 km from the north dam to the south wetland (to the White Lake Road add another 300 m)
- From West to East or North to South:
- North Bay Widest Point: 490 m
 - Middle Bay Widest Point: 950 m
 - South Bay Widest Point: 875 m
 - Narrowest Point (between the island): 90 m
 - From North to Middle Bay: 1350 m

the south wetlands, with a mean depth of 6 metres (20 feet) and a maximum depth of 12 metres (40 feet) in a small pocket of the south bay. It is approximately 0.72 km (0.43 miles) at its widest point and narrows to 90 metres (300 feet) by the island. The lake veers sharply through the narrows at an almost 90 degree angle between the mid and the north bays, a distance of approximately 1.6 km (1 mile). There is one small island and a number of submerged rocks.

3.2. Salerno Lake Characteristics (cont'd)

Although part of a four lake chain, Salerno Lake is a self-contained lake with dams at both the north and south ends. There is a dam and waterfall from White Lake into Salerno Lake, as well as rapids in Salerno Creek below the dam at the north end of the lake. The distance between the two dams is 8 km.



Salerno Lake is classified as a mesotrophic lake, meaning that the living organisms in the lake have a productivity rate that is naturally neutral. The water tends to be clear and aquatic plants are visible below the water's surface. There is also a rich diversity of plant and animal life within the lake.

3.3 Watershed

Salerno Lake is the last lake in the four chain lake system of Salmon, Fortescue, White and Salerno Lakes that are part of the Trent-Severn Waterway. Salerno Lake is classed as a 'flow-through' lake and empties into the Irondale River via Salerno Creek at the north end.

There are several small streams or rills that flow into the lake, usually during spring 'run off' and periods of heavy rain. In the summer months many of these streams are dry. A number of small ponds and lakes also flow into Salerno. The largest of the small lakes is Thompson Lake to the south east that flows into Salerno via a small stream that enters into the east shore of the south bay.

The term *flow-through* is used to describe a body of water whose levels are dependent on water flowing from an upstream lake. When flows into the lake are high, levels rise; when flows into the lake are low, levels decline. (Parks Canada – www.pc.gc.ca - Trent-Severn Waterway National Historic Site of Canada *Water Management FAQs*)

Although Devil's Gap Lake is a well-known name in the Salerno Lake Community, it actually flows into the Irondale River and is not formally a part of the Salerno Lake watershed.

3.3.1 Recommendations - Watershed

1. Undertake a study and mapping of the Salerno Lake Watershed. Determine availability of municipal and other maps of the watershed and whether these are still relevant or require updating. Consider submitting proposal to Trent University's U-Links Program.
2. As Salerno Lake is the last lake in a four chain system, contact Salmon, Fortescue and White Lake representatives to see if there is interest in meeting on a regular basis regarding common issues of concern (e.g. monitoring of water levels) to the watershed.

3.4 Wetlands

There are several small identified wetlands in the Salerno Lake watershed and two identified along the lake's shoreline. A fairly significant wetland is situated at the south end of the lake where



the water flows from White Lake into Salerno Lake, and another is to the southwest of the island. Both these wetlands are identified in the Highlands East Official Plan. As well, several smaller wetlands within the watershed are identified in the Highlands East and Minden Hills Official Plans. (See Appendix B)

3.5 Land Use and Ownership

The Salerno Lake Community consists mainly of shoreline and/or waterfront properties with a large number of backlots to the west of the lake in Highlands East, as well as several properties within the original Irondale Village settlement area. There are also several large blocks of Crown Land in both Minden Hills and Highlands East in the immediate vicinity of the Salerno Lake Community (See Appendix D), as well as the Highlands East Mineral Reserve Lands.

There is one settlement area located in Minden Hills, the Village of Irondale at the north end of Salerno Lake. This community was originally settled in the 1870s and was a significant mining town in the 1880s and 1890s. The area was also heavily logged in the late 1800s and into the mid-1900s.

Survey results indicated that there were concerns about development and structures in regard to condominiums (79%), non-residential development (78%),

3.5 Land Use and Ownership (cont'd)

wind farms (65%), communications towers (48%), and solar energy developments (41%). Although, there is no indication of these developments occurring in the Salerno Lake Community in the near future, communications between the Community and local councils should be encouraged so that the Community is kept informed of new development proposals.

3.5.1 Shoreline and Backlots

There are approximately two hundred and fifty (250) waterfront properties on Salerno Lake between the two dams, as well as another five to seven (5-7) properties along Salerno Creek. Of these approximately thirty-six (36) are vacant



properties. There is one commercial property, Highland Lodge, situated on the northeast shore of the lake that has been in operation since the 1930s/1940s.

In Highlands East, there are several backlots located mainly along the non-waterfront sides of Hand Drive, Heart's Content, Bowbeck and Spencer Trails, and Twist Lane, as well as along the east side of Salerno Lake Road. Of the approximately ninety-eight (98) lots, about thirty (30) have buildings and the remaining are vacant.

Although, there are a significant number of vacant lots, both waterfront and backlots, many of these properties are the second and even third properties owned by property owners already within the Salerno Lake Community. However, backlot development was of concern to sixty-seven percent (67%) of respondents to the Lake Plan Survey.

There are several public access points, generally municipal road allowances, owned by the Townships, as well as the Public Boat Launch at the northwest end of the lake. These public access points are not marked and comments to the Lake Plan Survey were received in regards to these being identified, as well as concerns regarding neighbouring properties 'encroaching' onto these public lands. Also, for residents of the Salerno Lake Community who are not on the waterfront, that there should be more accessible public places than the boat launch for swimming.

3.5.2 Recommendations – Land Use and Ownership

1. Create a committee of Salerno Lake Community property owners to liaise with local councillors and municipal staff to monitor development proposals, variances and zoning changes, as well as to provide comment and input during review of the Official Plans.
2. Meet with local councils regarding the feasibility of identifying the municipal owned/public access locations into Salerno Lake and create a map showing these locations.

3.6 Steep Slopes

Highlands East and Minden Hills have sections in their Official Plans concerning development on steep and/or hazardous slopes. There are several areas of the Salerno Lake shoreline where the natural elevation is relatively steep. New development within these areas would have to meet the requirements of the respective official plans, if the slope falls within the steepness parameters identified. (See: Highlands East Official Plan - Section 2.3.15; Minden Hills Official Plan - Section 4.10.)



3.7 Roads

The Salerno Lake Community is serviced by a network of both private and public roadways.

3.7.1 Public Roads

The Municipality of Highlands East and Township of Minden Hills maintain the public roads within their respective municipal boundaries. The main roads are the Irondale Road, Salerno Lake Road, and White Lake Road. These roads are open and accessible year round.

3.7.2 Private Roads

With the exception of a few properties at the north end of Salerno Lake Road, most of the waterfront properties on Salerno Lake are accessed by private roads. These roads are maintained solely by the property owners who use them to access their properties.

In July 2013, the SDLCA hosted a Private Road Liability Workshop. The message received was that private roads required adequate liability insurance for the property owners who have roads passing through their property, and/or also maintain these roads. As a result of the workshop, property owners along some of these private roads formed formal road associations and acquired adequate coverage for their road.

At one time, the Municipality of Highlands East was considering offering minor assistance to private road associations for maintenance, however, due to concerns regarding liability this did not materialize.

In 2012, Minden Hills implemented Policy #75 in regards to Private Road Standards *“in order to receive Emergency Services to their property”*. The policy was established, *“In the event that private roads are not maintained to the standard as established herein then the provision of emergency services may be compromised and not be possible”*.

Both Minden Hills and Highlands East have sections in their Official Plans regarding private roads and specifically state neither municipality will assume nor maintain a road that does not meet municipal standards or is in the public interest to do so. (See: Highlands East Official Plan - Section 4.2; Minden Hills Official Plan - Section 5.14.4.)

3.7.3 Recommendations - Roads

1. Salerno Lake road associations should liaise with their local council/municipal staff
 - i) regarding standards for private roads;
 - ii) to see if there is interest in providing a small ‘grant’ to road associations to assist with maintenance costs.
2. Appoint a member of the Salerno Lake Community as Road Steward to liaise with both Highlands East and Minden Hills municipal staff and/or council representatives regarding the maintenance of the public roads within the Salerno Lake Community.

4.0 NATURAL HERITAGE – SHORELINES and WATER QUALITY

4.1 Natural Shorelines

Naturalized shoreline is generally considered the best multi-purpose approach to protecting the lake's edge. Maintaining or planting a buffer zone of native vegetation along your shoreline will slow erosion, provide food and shelter for fish and wildlife species and protect your property and investment. (FOCA's "A Shoreline Owner's Guide to Healthy Waterfronts", page 4.)

The Salerno Lake Lake Plan Survey results response to the question: "I would support efforts to protect my lake area's": Natural Shoreline (82%), Wetlands (85%), Watershed (81%), Wildlife Habitats (86%), and Water Quality (92%), indicate a high level of support for maintaining the natural environment of the Salerno Lake Community.

This indicates that property owners within the Salerno Lake Community are committed to sustaining the health of Salerno Lake and maintaining its natural shoreline and wildlife habitat areas and water quality. A healthy lake means a healthy community.

4.1.1 'Ribbon of Life'

"To maintain a healthy lake ecosystem, you need at least seventy-five percent (75%) of your shoreline in a natural state."

(A Beginners Guide to Shoreline Stewardship; The Lake Protectors Series; Sticks and Stones Production with the Coalition of Haliburton Property Owners' Association and Haliburton Highlands Stewardship Council; 2013-2014)

The shoreline and buffer zone around the lake is called 'The Ribbon of Life'. This zone is where up to 90 percent of the lake's fish and wildlife are born and raised, and where they find their source of food and nutrients. Plants and trees in the buffer zone filter contaminants before they can reach the lake water.



Although, Salerno Lake currently has an overall healthy shoreline, it is experiencing stress in some areas of its 'Ribbon of Life' from new development, redevelopment, and past alterations of the shoreline buffer zone.

4.1.1 ‘Ribbon of Life’ (cont’d)

As noted in the U-Links Report in regards to Salerno Lake’s shoreline, *“The overall score of the lake was 7.4/10. It should be noted that the average scores are higher than to be expected due to the amount of vacant lots and undisturbed wetlands found in Salerno Lake, these brought up the averages considerably.”*

(Salerno (Devil’s) Lake Shoreline Inventory Project; Fowler, Devon; 2012-2013, p.12-13)

4.1.2 Shoreline Inventory Project – 2012-2013

(See Appendix D for full Shoreline Inventory Report.)

In the fall of 2012, a Shoreline Inventory Project was undertaken by the SDLCA through Trent University’s U-Links Program. The purpose of the Project was to establish a base-line to assess and monitor developmental impacts on lake quality as well as the impact of boat traffic on shoreline erosion. By using the shoreline classification system, the Salerno Lake shoreline could be monitored going forward for any negative changes that may impact the lake’s water quality.

4.1.3 Municipal By-Laws

The Salerno Lake Community falls within two municipalities of Haliburton County, the Township of Minden Hills at the north end, and the Municipality of Highlands East at the mid and south ends. The Official Plans of Minden Hills and Highlands East have provisions that limit and restrict disturbance to the shoreline buffer zone for new development and redevelopment of waterfront properties.

(See: Highlands East Official Plan - Section 3.3; Minden Hills Official Plan - Section 3.2.)

Healthy Shoreline Tips

Healthy shorelines prevent erosion & property loss, increase fish habitat & promote a thriving lake ecosystem!

Easy tips for you to try include:

- Plant native vegetation close to shore as a buffer zone.
- Use aquatic friendly plants like bulrushes, cattails & lily pads to increase the water clarity of your waterfront by trapping sediments and dampening wave effects.
- Decrease erosion caused by runoff by using pea gravel or wood chips along your walk ways & paths instead of concrete or asphalt.
- Turf-lawns let up to 50% of rainfall wash away and increases the erosion potential of your shoreline. Try adding sections of tall grasses, wildflowers & shrubs to conserve shoreline stability.
- Use floating, seasonal docks for less shoreline impact.

(SDLCA Environment News, Salerno Lake News Letter, 2004)

4.1.3.1 Shoreline Buffer Zone

The Official Plans of Minden Hills and Highlands East recognize the importance of maintaining a shoreline buffer area. Both municipalities now require a 30 metre (100 feet) setback for new development on waterfront properties, and have policies that restrict the amount of disturbance and/or alteration to the natural vegetation and tree cover within the 30 metre setback.

Highlands East: Section 2.3.5.1

New development in the shoreline shall be sensitive to the preservation of tree cover and vegetation wherever possible so as to prevent erosion, siltation and possible nutrient migration. . .

3.4.16.1 *In shoreline areas, Council will encourage a minimum setback of 30 metres for new development on vacant lots of record and redevelopment or expansions to existing buildings and structures which are subject to a planning approval. In cases where this is not achievable, the greatest setback possible will be required.*

Minden Hills: Section 3.2.3.6.3

In general, development and site alteration should be set back a minimum of 30 metres (100 feet) from the high water mark of lakes, rivers and streams . . .

4.1.3.2 Shoreline Tree Preservation

In 2012, the County of Haliburton enacted a Shoreline Tree Preservation By-law in order to protect the County's shoreline areas. This was in response to County residents identifying this as a priority during the review of the County's Official Plan in 2010. The By-Law restricts the cutting of trees within the 30 metre (100 feet) set back from the shoreline.

"The Shoreline Tree Preservation By-law No. 3505 applies to all lands, in the County of Haliburton, that are within 30 metres of a watercourse. The goal is to minimize the destruction of trees, in order to protect our water resources and sustain a healthy natural environment."

4.1.4 MNR Permits

The Ministry of Natural Resources (MNR) requires permits for some work/activities along the shoreline including removal of rocks and boulders, and construction of shoreline protection works.

Property owners should contact their municipal offices and the MNR before beginning any new development, redevelopment or alteration of their shoreline area.

4.1.5 Recommendations – Natural Shorelines

1. Show the Coalition of Haliburton Property Owners' (CHA) and Haliburton Highlands Stewardship Council (HHSC) videos '*The Ribbon of Life*' and '*A Beginners Guide to Shoreline Stewardship*' at the SDLCA AGM, and post link to videos on the SDLCA website.
2. Post the sections of Highlands East, Minden Hills and Haliburton County Official Plans regarding maintaining of a 30 metre buffer zone along the shoreline on the SDLCA website. Review and update as Official Plans are updated (e.g. every 5 years.)
3. Post the Haliburton County Shoreline Tree Preservation By-law on the SDLCA website.
4. Develop an educational and/or stewardship pamphlet on the importance of natural shorelines in sustaining the water quality and fish and wildlife habitats of Salerno Lake, with steps Salerno Lake property owners can take to maintain their natural shoreline, or to re-naturalize their shoreline, as well as a list of resources available such as the Living Sustainably in Seguin Township Handbook. Consider submitting a proposal to Trent University's U-Links Program for development of the pamphlet. The pamphlet to be distributed to all property owners within the Salerno Lake Community.
5. Through education and example, encourage property owners to adopt buffer zones and to restore their developed and/or degraded shorelines.
6. Provide information on the benefits of natural shorelines and how to maintain and/or restore these shorelines, on the SDLCA website.
7. Encourage waterfront property owners to access their property's shoreline evaluation by contacting the SDLCA.
8. Contact local nurseries/landscapers to learn more about what grows in the area and, include information on native plants and where they can be purchased.
9. Review the native plant list provided on the website to ensure that all species listed are appropriate to the Salerno Lake zone and location.
10. Host a workshop on Shoreline Naturalization.

4.2 Water Quality

When properly managed, ecosystems provide us with vital goods, such as agricultural products and fisheries, life sustaining services, such as pollination and water purification, and life-enriching contributions that include beautiful surrounds and healthy people. Often, the important ecosystem services are only appreciated after they stop being productive or impact our ability to use our lakes and waterways!

(Landowner Guide to Protecting Water Quality in the Kawarthas; p.1 Kawartha Conservation)

The quality of water on all lakes, including Salerno, is an important issue that needs to be addressed. Water quality is affected by many natural and human related processes, which impact the ecosystems and our ability to use the lake for necessary and recreational purposes. The lake's water quality can degrade through erosion, run-off, altering shorelines and removal of natural ecosystems.

Erosion of shorelines increases the amount of sediments and nutrients in the lake. Natural processes, such as rushing snow melt, high water levels, water currents, and intense rain storms can increase the amount of erosion.

These are natural processes which nature can often overcome. To reduce the amount of erosion, landowners can ensure that shorelines remain intact with native plants that have deep root systems. Preventing erosion is very important to reduce sediment and nutrients, while increasing the quality of water in the lake.

Run-off from pesticides, herbicides and other fertilizers can affect the lake's water quality. These products elevate the levels of natural occurring nutrients in the water and can lead to an increase in algal blooms. Eliminating their use will reduce the amount of run-off into our lake. Faulty or leaking septic and grey water systems can also leach contaminants into the soils, which will reach the lake during rainstorms.

Common contaminants that are found on the lake's surface are petroleum products. A single pint of spilled oil can cover an acre of the lake's surface. Petroleum products

Consider this:

Salerno is only 500 m across at its widest (only 20 m across at its narrowest). If a boat travels down the widest part of the lake creating a series of 1 foot waves, the energy of those waves only have 250 m to dissipate before they hit the shore on either side. If the waves only lose half of their strength over that distance, there will be a series of ½ foot waves impacting the shoreline. Multiply that force by the increasing number of boats and increasing wake sizes that travel up and down the lake on a busy Saturday afternoon and you can visualize how much of a beating our shorelines are starting to take.

(SDLCA Environment News,
Salerno Lake News Letter, 2005)

4.2 Water Quality (cont'd)

may evaporate, drift to other areas, be absorbed by living organisms or sink into the sediment and reappear at a later date. Wind and weather can push residual gasoline into shallow areas where it is easily absorbed and enters the food chain. We must ensure that our motors are functioning properly and practice safe fuelling to reduce our impact on the water quality.

Natural shorelines such as wetlands, swamps, bogs and marshes are often considered as mosquito-infested areas and are visually unappealing. They are often removed for development; however these areas play a vital role in purifying, filtering and renewing water. Most of the wetlands on Salerno Lake are small and found in little alcoves.

However, there is a larger wetland at the South end of the lake, at the base of the White Lake dam. This wetland filters the water and potential contaminants from White Lake, its watershed and the surrounding roads. It also is a vital habitat area for waterfowl, aquatic species, reptiles and amphibians.

An increase in nutrients, such as phosphorus and nitrogen, creates eutrophication in water bodies. This is a natural process that occurs as a lake ages, however the process can quickly accelerate due to human influence. 'Cultural eutrophication' occurs when a lake becomes old quickly. This process increases the amount of algae, aquatic plants and weeds; kills fish due to the lack of oxygen in the water; and can be visually unappealing as it creates a bad colour, odour and appearance of water. Reducing our human impact (as outlined above) can significantly decrease the cultural eutrophication of our lake.

Did You Know

When your soap or shampoo says 'biodegradable' it means biodegradable in soil. The product has to pass through the soil for it to breakdown properly. Even then, it may take months to degrade.

Ergo, washing with anything directly in the lake is still a very bad idea.

(Environmental News, Salerno Lake Sentinel, Summer 2007)

4.2.1 Recommendations – Water Quality

1. Continue yearly water quality monitoring with the Ministry of the Environment (MOE) and FOCA's (Federation of Ontario Cottagers' Associations) Lake Partner Program by testing the Total Phosphorous and post results on the SDLCA website.
2. Protect and encourage the growth of natural shorelines and wetlands that act as a natural water filtration system.

4.2.1 Recommendations – Water Quality (cont'd)

3. Provide information to landowners regarding the use of pesticides, herbicides and fertilizers, and suggest alternative environmentally friendly cleaning products. By-laws restricting or eliminating the use of these products within Salerno Lake's watershed should be supported.
4. Educate boat owners on the impact of boat fuel spillage and encourage safe fuelling practices. Provide easily accessible information regarding cleaning spills.

4.3 Septic Systems

Septic Systems are one of the main contributors to phosphorous in our lakes. Proper installation and maintenance of the systems is key in minimizing the amount of phosphorous that enters the lake. Regular pumping, every three (3) to five (5) years, of your septic is recommended. Retaining the setback buffer area and natural shoreline assist with the filtering of phosphorous and other nutrients before the effluent reaches the lake.

As noted in a Cottage Life article of April/May 2004, long-time Salerno Lake Cottager Heather Stuart in the summer of 2000:

"took cores from Ontario's Salerno Lake to study the lake's phosphorous cycle as part of her honours B.Sc. . . . Stuart found the bark needles, and debris left in the sediment from 19th-century log runs were contributing to the lake's phosphorous levels. Because that phosphorous will be trapped in the lake for a long time, Stuart says cottagers have to be doubly careful not to add to it. "it means we have to be vigilant when it comes to inspecting septic systems and holding tanks."(Ford, Ray; Environment - Core of the Matter; Cottage Life April/May 2004; p.36)

4.3.1 Recommendations – Septic Systems

1. Post link to the CHA video "Poop Talk" on the SDLCA website.
2. Educate landowners on how to identify malfunctioning or leaching septic and grey water disposal systems, and encourage them to fix/replace the problems.
3. Encourage property owners in the Salerno Lake Community to have their septic systems pumped every 3 to 5 years.
4. Support local council initiatives for implementing a septic monitoring and/or inspection program.
5. Educate new owners to the Salerno Lake Community on the function of septic systems and the importance of proper maintenance.

5.0 FISHING and WILDLIFE

The Salerno Lake area has a variety of wildlife and fish throughout its watershed. Although, the watershed has not been mapped as part of this Lake Plan Study, it is hoped that it will be completed as a follow-up to this study. A more comprehensive wildlife and fish survey should be included as part of the watershed study.

The Salerno Lake Lake Plan Survey results indicate that fishing is a popular past-time by Salerno Lake Community members throughout the year with 71% enjoying fishing and 19% enjoying ice-fishing. A small number, 12%, also enjoy hunting.

5.1 Fishing

Salerno Lake is a shallow narrow lake with a mean depth of 6 metres (20 feet). Large sections of the shoreline remain in a natural state and there are several small wetland areas as well as the main wetland at the south end and the one by the island that provide good habitat for fish spawning and growth. Fishing in the lake is generally good especially for bass and walleye. Species of fish include small and large mouth bass, walleye, muskie, yellow perch and sunfish. Ice fishing is popular in the winter months.

5.2 Animal Life

Sightings of beavers, otters, racoons, chipmunks, red, grey and black squirrels are common in the lake community as are deer mice and moles. Occasionally, foxes, bears, deer, rabbits and even moose will be spotted.

Fishers and martens also inhabit the area, but are rarely seen, as are porcupines, skunks and weasels, although the pungent aroma of a skunk will at times scent the air.



(Courtesy K. Pepper)

Turkeys are becoming more common as well.

5.3 Amphibians and Reptiles

At least two species of turtles, snapping and painted, inhabit the wetlands and are sometimes seen feeding on the seaweed along the shore of the lake. Bull frogs can be heard singing out in the early evening air. Crayfish scurry along the shoreline rocks just below the water.



(Courtesy K. Pepper)

There are garter and water snakes, ring-neck, green and northern ribbon snakes. Also, the eastern hog-nosed snake, identified by the provincial government as a 'Species at Risk', is indigenous to the area, but rarely spotted, preferring to isolate itself from human activity. Leopard, green, chorus, wood and grey tree frogs as well as spring peepers are common in the Salerno Lake watershed, as are several species of toads.

5.4 Birds and Waterfowl

Waterfowl nest in the undisturbed areas of the shoreline and in the spring young goslings and ducklings are often spotted following their mothers along the shallow waters of the shoreline. In 2013, a baby loon was observed and watched as it grew into a young loon through the summer. The cry of the loon can be heard throughout the summer on the lake.



(Courtesy K. Pepper)

The great blue heron is another common sighting on and around the lake. It is quite frequently spotted in the wetlands and the marshy shores of the mid-eastern bays of the lake. On occasion, kingfishers have been spotted in these areas as well. Other waterfowl seen on and around the lake are woodland ducks and Canada geese.

5.4 Birds and Waterfowl (cont'd)

There are a number of varieties of birds that frequent the Salerno Lake area. Hummingbirds, robins, grosbeaks, swallows, wrens and finches are seen during the summer months. Blue jays, chickadees, nuthatches, and woodpeckers are common throughout the year, and the 'hammering' of the pileated woodpecker can be heard echoing through the air. Turkey vultures are a common sight and occasionally a hawk will be spotted. In the spring partridges and grouse can be heard making their mating call with thumping that sounds like the starting of a lawnmower. Owls, although not commonly seen, can be heard hooting in the night. The bat population has been diminished by the White Nose Syndrome.

5.5 Plant Life - Trees, Shrubs, Flora and Fauna

There is a rich diversity of plant life in the area of the Salerno Lake Community. Most of the area on and around the waterfront of Salerno Lake was heavily logged in the late 1800s through the first half of the 1900s. A historical study of the impact of logging within the community area should be undertaken to better understand the loss of the original forests and time for regeneration, and what, if any, changes in species of trees and plant life, and abundance of species occurred during, and as result of the logging.

Today there is healthy tree cover in the watershed areas, and within the 30 metre shoreline buffer area where trees are now protected under the County of Haliburton's Shoreline Tree Preservation By-Law.



(Natural shoreline with native Cardinal Plant.)

5.5.1 Trees and Shrubs

Several species of trees are prominent in the Salerno Lake area – white and yellow birch, beech, ash, several species of maple, red and white oak, hemlock, cedar, pine, and basswood, to name a few, as well as some cherry and ironwood trees. Identifying and mapping of the tree species in the Salerno Lake Community would help to identify the species within this area and the abundance of each – a few in isolated pockets, common throughout, or high concentrations in some locations.

5.5.1 Trees and Shrubs (cont'd)

Sumac, pussy willows, raspberries, blackberries and other shrubs and small trees are seen throughout the Salerno Lake area.

5.5.2 Flora and Fauna

Many species of wild plants display their orange, yellow, red, pink and purple colours along the paths and trails, and open spaces. Red and white trilliums are abundant in the spring and leeks appear soon after the snow has melted. Indian pipes, mushrooms and several varieties of tree and ground fungi are common in the area, as are scotch thistle, ferns and fiddleheads. Occasionally, a pink lady's slipper will appear. Wild strawberries send out their runners in the exposed areas along roadways.



In the water, water-lilies and other plants are visible in the wetlands and along the natural shorelines of the lake. There are several 'weed beds' in the shallow sections of the lake, especially in the wetlands and around the island where fish and other water creatures – frogs, turtles, crayfish, minnows – spawn and feed.

5.6 Insects, Moths and Butterflies

Blackflies arrive in the spring, followed by mosquitoes and dragonflies. Bees and wasps buzz through the air. Water spiders skit across the surface of the lake and dock spiders hide in between the dock boards and in the water-craft. Daddy-longlegs stride on the ground and trees. Moths flit about attracted by the night lights and several species of butterfly flutter by during the day. Several species of centipedes, millipedes, beetles, bugs and ants are spotted on the ground, in the grass and on the leaves and branches of shrubs and trees.

5.7 Invasive Species and Fungi

Although, there is a rich and healthy diversity of wildlife in the area, there are also threats from invasive species and diseases that could have a devastating effect on Salerno Lake's eco-system. Some of these are the Beech Bark Disease that is already affecting the beech trees in the area, the emerald ash borer which has not yet reached Haliburton County, invasive plant species such as giant hogweed that can cause

5.7 Invasive Species and Fungi (cont'd)

chemical burns if touched, purple loosestrife, and invasive water species such as milfoil which has been spotted in the lake.

Common garden plants goutweed and periwinkle are identified as invasive plant species. Gardeners should be encouraged to use native plants in waterfront property gardens.

To date, the lake has tested free of zebra mussels, although the larvae was found in the lake several years ago, fortunately it never developed. To help prevent the introduction of zebra mussels and other invasive water species, proper care and cleaning of watercraft should be posted in a prominent place at the Salerno Lake Boat Launch. This will remind owners of the necessary precautions to be taken when relocating their watercraft from one body of water to another.

To prevent the spread of the emerald ash borer and other invasive species harmful to woods and forests, signs should be posted at all entrances to the private roads reminding people not to bring firewood, old crates and wooden slat boxes from home to burn at the cottage, but to source their firewood locally.

5.8 Recommendations – Fishing and Wildlife

- 1.** Educate boat owners on the impact of wakes on the shoreline and nesting and spawning areas.
- 2.** Educate owners and visitors to the Salerno Lake Community on best practices for the prevention of introducing invasive species into Salerno Lake and adjacent streams and wetlands.
- 3.** Continue to monitor the fish and wildlife of the Salerno Lake Community to ensure populations are healthy and sustainable.
- 4.** Initiate a photo record of fish and wildlife in the Salerno Lake Community. Establish a section of the SDLCA web-site for posting of photos of fish and wildlife species indicating date and place of sightings. The postings should be categorized as per fish, animals, birds, reptiles/amphibians, insects, flora and fauna, etc.
- 5.** Using the data from the fish and wildlife photo sightings, create an inventory and mapping to identify areas of habitation that may require protecting for rare species native to Salerno Lake, as well as for quick identification of invasive species.
- 6.** Post Emerald Ash Borer signs at the entrances of all roads into the lake, reminding people to source their firewood locally.

5.8 Recommendations – Fishing and Wildlife (cont'd)

- 7.** Post information on the SDLCA website regarding identifying and disposing of the invasive plant known as the Giant Hogweed, emphasizing that contact with the weed will result in severe chemical burns. Include photos of the Giant Hogweed and a similar harmless non-invasive native plant commonly known as Wild Carrot and/or Queen Anne's Lace.
- 8.** Post on the SDLCA website, a list of the 'Top Ten' invasive species to watch for (e.g. invasive species already in the Trent-Severn System) and include photos and information on how to identify and not confuse with common native species; and provide a link to the Ontario Federation of Anglers and Hunters (OFAH) Invading Species website.
- 9.** Post information on ticks and Lyme Disease on the SDLCA website.
- 10.** Post information on the West Nile Virus on the SDLCA website.
- 11.** Prepare a historical study on the positive and negative impact of logging within the Salerno Lake Community to gain an understanding of regeneration of the 'forest' and what if any, changes in species of trees and plant life resulted. Consider submitting proposal to Trent University's U-Links Program.



(Snowshoe Hare spotted March 17, 2011 along Chimo Road. An early spring 'caught' the hare in its winter coat. - Courtesy B. Clayton)

6.0 RECREATION and AESTHETICS

Salerno Lake has been described in Cottage Life Magazine as a ‘Sleeper Lake’ (Cottage Life March 2003, p.45). It is a long narrow lake with steep slopes. It is approximately 0.72 km (0.43 miles) at its widest point and narrows to 90 metres (300 feet) by the island. The lake veers sharply through the narrows at an almost 90 degree angle between the mid and the north bays, a distance of approximately 1.6 km (1 mile).

SALERNO LAKE DISTANCES

- Area: 3 km² or 309 hectares
 - 8 km from the north dam to the south wetland (to the White Lake Road add another 300 m)
- From West to East or North to South:
- North Bay Widest Point: 490 m
 - Middle Bay Widest Point: 950 m
 - South Bay Widest Point: 875 m
 - Narrowest Point (between the island): 90 m
 - From North to Middle Bay: 1350 m

The Lake Plan Survey had a response of 130 surveys, 112 who identified as having property on the lake front. Seventy-three percent (73%) of respondents identified boating as one of the activities in which they participate on the lake. This was separate from the non-motorized boating activities: canoeing (78%), kayaking (61%), and sailing (7%) enjoyed by lake front residents, as well as the 8% who enjoy jet skiing. Other water activities enjoyed were swimming (92%), fishing (71%), water skiing (37%), scuba diving (8%), and flying (2%).

6.1 Recreational Carrying Capacity

With approximately 220 cottages on the lake, it can become congested on a busy summer weekend. In recent years, there has been one major incident on the lake, and several near misses and minor mishaps. It is important that everyone who engages in water activities on the lake do so in a safe and responsible manner and is aware of their surroundings.

Both Minden Hills and Highlands East have sections within their Official Plans in regards to Recreational Carrying Capacity.

Minden Hills – Section 3.2.3.1.2.1

“Research has established relationships between recreational development on a given lake, and the resulting use of the lake’s surface area for fishing, boating, swimming, water skiing, and other related activities. Beyond a certain limit, the amount of recreational use on a given lake will significantly reduce its attractiveness for shoreline residents. As well, in some circumstances, recreational boating can intensify to the point where public safety is at risk.”

6.1 Recreational Carrying Capacity (cont'd)

Highlands East – Section 2.3.9.1

“ . . . Council shall have regard for the ability of the lake to accommodate additional recreational users. . . . ”

6.1.1 Recommendation – Recreational Carrying Capacity

1. That the SDLCA consider undertaking a Recreational Carrying Capacity Study for Salerno Lake.

6.2 Swimming, Canoeing and Kayaking

Most of the respondents to the Lake Plan Survey enjoy swimming (92%), canoeing (78%) and kayaking (60%). The high percentage of people who enjoy swimming in the waters of Salerno Lake make it imperative that swimmers and boaters be aware of their surroundings. This may also explain why a significant number (40%) of survey responses identified swimming areas as a concern. Further research into what the concerns are regarding swimming areas should be conducted.

Canoeing and kayaking are both popular on the lake with many properties having more than one of these non-motorized watercraft, and over 50% of survey respondents also had a paddle boat. Motor boats have to be aware of the presence of non-motor boats and avoid ‘swamping’ these craft when travelling in the same area of the lake.

6.2.1 Recommendation – Swimming, Canoeing and Kayaking

1. Conduct a follow-up survey through the SDLCA Newsletter and website to determine what the concerns are regarding swimming areas.

6.3 Safe Motor-Boating

The long narrow character of the lake makes it necessary for boaters to practice safe boating procedures. In Ontario, speed limits of 10 km/h apply within 30 m (98.5 feet) of the shore.

It is very important that operators of motorized water craft be aware of their surroundings and activities in the lake while operating a boat on the lake, and practise

6.3 Safe Motor-Boating (cont'd)

good boating etiquette. As well, there are a small number of private planes that frequent the lake that boaters must also accommodate. “Keeping constant watch for others on the water is common sense and the law”. (Transport Canada - “Safe Boating Guide” 2012, p.49)

Water-skiing was identified as an activity enjoyed by thirty-seven (37%) of the Lake Plan Study responders. Tubing is also enjoyed by a noticeable number of people on the lake. Information on safe practices while enjoying these motor-based water sports should be posted on the SDLCA website, to remind participants of the rules to follow when engaging in these activities.

As of 2009, all operators of a motorized boat must have ‘proof of competency’ such as a Pleasure Craft Operator Card. Children and youth under 16 years of age must also have a ‘Pleasure Craft Operator Card’ to operate a motorized boat of any size, and are further restricted as to the motor size and type of watercraft that they may operate unsupervised. Children and youth under 16 years of age cannot operate a PWC under any circumstances.

Although, the majority of boat motors identified in the survey are 2-stroke, there is a noticeable trend to 4-stroke motors, especially in the higher horsepower, and 10% of survey respondents had an electric motor.

Salerno Lake has a public boat launch at the north end of the lake. To date, the lake appears to be free of invasive species such as zebra mussels, however, boaters to the lake should be made aware of best practices for the prevention of the spread of these invasive species.

Waterskiing and Other Recreational Towing Activities

(Transport Canada - “Safe Boating Guide” 2012, p.50-51)

1. “There must be a spotter on board the boat who can keep watch on each person being towed and communicate with the operator.
2. There must be an empty seat on board your boat for each person being towed in case they need to come on board.
3. Only personal watercraft made to carry three or more people may be used for towing.
4. No towing is allowed when visibility is poor or from one hour after sunset to sunrise.”

“The rules that govern waterskiing also apply to other towing activities like barefoot skiing, tubing, knee-boarding and parasailing.” p.50

(For further information go to www.tc.gc.ca/boatingsafety)

6.3.1 Recommendations – Safe Motor-Boating

1. Post Safe Boating pamphlet produced by Kim Fields on the SDLCA web-site and distribute at community and SDLCA events, and include in the annual “Dock Packages”, and “Welcome Package” that is being developed for new owners in the Salerno Lake Community.
2. Post information on water-safety regulations regarding safe boating and water aircraft (i.e. sea planes, float planes, etc.) on the SDLCA website, and include with Safe Boating pamphlet.
3. Post 10 MPH signs at strategic locations on Salerno Lake to remind boat operators to slow down when travelling within 30 metres (100 feet) of the shoreline.
4. Educate Salerno Lake motor boat users of the impact of wakes on the shoreline, nesting areas, and fish and spawning areas, as well as the impact of some motor types on the health of the lake. Post information on the SDLCA website.
5. Post “Good Practice” signs at the Boat Launch to remind boat owners bringing boats from other waterways to make sure that there is no risk of introducing invasive species into the lake.
6. Post on the SDLCA website the characteristics of Salerno Lake and the kind of activities that are safe to conduct, as well as constraints regarding boat and motor size, so that potential and new owners to the lake will be aware of appropriate activities for Salerno Lake, and boat and motor size.
7. Develop a ‘Code of Conduct’ for boat and water aircraft (i.e. sea planes, float planes, etc.) operators, as well as recreational users (ie. swimming, canoeing, kayaking, etc.) of Salerno Lake, to be respectful of the natural shoreline, water quality and other persons enjoying the lake.
8. Develop an incident report form and appoint a representative to coordinate reports and liaise with local OPP detachment as required.

6.4 Aesthetics Defined

Aesthetics is a branch of philosophy dealing with the nature of art, beauty, and taste, with the creation and appreciation of beauty. It is more scientifically defined as the study of sensory or sensori-emotional values, sometimes called judgements of sentiments and taste. More broadly, scholars in the field define aesthetics as “critical reflection on art, culture and nature.” (Wikipedia)

6.4.1 Gardening, Hiking, and Reading

According to the Lake Plan Survey, gardening (54%), hiking (57%) and reading (79%) are activities enjoyed by a significant number of residents within the Salerno Lake Community.

Using native plants in gardens should be encouraged. Many seasonal gardeners may not be aware that some plants brought from their urban gardens can be harmful to the natural vegetation when introduced into the shoreline and buffer areas of the lake. Steps could be taken to determine the feasibility and interest in starting a “Salerno Lake Gardening Club” where members could learn about good gardening practices.

6.4.2 Viewscapes, Tranquility, and Light

Most Lake Plan Survey respondents supported efforts to protect the Salerno Lake Community’s peacefulness (86%) and night sky (82%) with a further 65% indicating concerns regarding artificial night lighting.

Fireworks are generally discouraged due to the harmful effects on pets and wildlife as well as the environment if not properly used. If fireworks are used at the lake, please ensure they are the environmentally friendly kind and only set-off between the hours of dusk and 11:00 p.m.

Minden Hills has enacted By-Law 13-54 that only permits fireworks on

- (a) New Year’s Eve - between dusk and 1 AM;*
- (b) Canada Day - between dusk and 11 p.m. the weekend prior to Canada Day, the weekend directly following Canada Day or on the day of Canada Day.*
- (c) Victoria Day and Labour Day - between dusk and 11 p.m. on the weekend in which the holiday falls.*

**Please respect the tranquillity of your fellow
Salerno Lake Community members and refrain
from the unnecessary use of fireworks.**

Maintaining and protecting the Salerno Lake Community viewscapes was also identified as being of concern by responses in support of efforts to protect Salerno

6.4.2 Viewscapes, Tranquility, and Light (cont'd)

Lake's shoreline (82%), wetlands (85%), watershed (81%), and wildlife habitats (86%). Further responses indicated concerns regarding development and built structures such as backlot development (67%), non-residential development (78%), condominiums (79%), trailers (65%) and wind farms (65%).

In light of these concerns, a committee of Salerno Lake Community members should be formed to liaise with the local municipal staff and councillors to ensure that new structures and/or development within the Salerno Lake Community is sympathetic to the vistas and viewscapes of the community.



**(Viewscape: Deer in wetlands by the Island
Courtesy K. Pepper)**

6.4.3 Recommendations – Aesthetics

- 1.** Liaise with local councillors and municipal staff to ensure that new developments are in character with the density, scale and massing of adjacent lots within the Salerno Lake Community.
- 2.** Support municipal restrictions on development of undersized lots, and within the 30 metre buffer zone.
- 3.** Encourage property owners to use environmentally friendly fireworks and to minimize their use of fireworks as outlined in the Minden Hills By-Law. Post By-Law on the SDLCA website.
- 4.** Educate property owners on the negative effects of fireworks on wildlife and the Salerno Lake ecosystem, as well as the enjoyment of other property owners within the lake community.
- 5.** Post information on 'What Not to Burn' on the SDLCA website and include in 'Welcome Package'.
- 6.** Educate property owners on the negative effects of artificial night lighting and encourage the use of low impact night lighting.
- 7.** A high number of survey respondents expressed interest in gardening, hiking and reading. Conduct a survey to see if there is an interest in establishing a club or clubs for each of these interests.

7.0 HISTORY and CULTURE

The history of an area gives us a perspective on how it came to be, the factors that have shaped it, and where we stand in its ongoing story.

7.1 History of the Salerno Lake Community

Salerno Lake was originally known as Devil's Lake. There are a number of stories and old tales as to how the lake got its name "Devil's". One is that the high mineral/iron concentration in the rock around the lake gave it a red glow when the sunlight struck the rocky surfaces around its shore at the right angle. Another is that the narrow middle curve of the lake made it a "devil of a place" for moving logs from the south to the north end of the lake. And still another was that the lake was thought to be bottomless because one year horses went through the ice and no trace of them was ever found. Whatever its origins, the name of the lake was changed by the Ontario government in 1944 in honour of the actions of the 1st Canadian Armoured Brigade in supporting the British advance to assist the Salerno landings in Italy during WWII. In 1953 the Canadian Board on Geographical Names formally approved the renaming of Devil's Lake to Salerno Lake

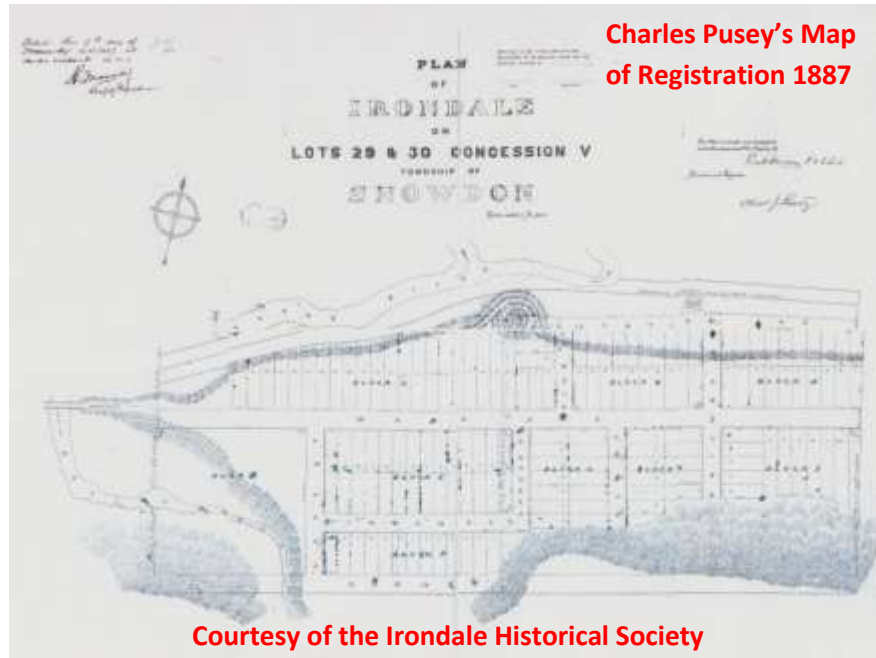
The Salerno Lake Community falls within two townships of the County of Haliburton. The original townships were Snowden at the north end of the lake, and Glamorgan at the mid and south end of the lake. Both townships were place names of Wales.

There has been settlement in the Salerno Lake Community since the early 1870s when the government of the Province of Ontario built the Monck Military Road that passed through the north end of the lake along the Irondale River. The road was built from Lake Couchiching to Bancroft between 1866 and 1874 to open up the area for settlement, and as a northern military route as an alternative to the southern route along the St. Lawrence, in the event of an American invasion. By 1871, the road had reached Gooderham and settlers were already moving into the area. The government offered free land grants to the settlers, however, the land was not good farm land and the settlers hunted, fished and trapped as well as farmed to earn a living.

The settlement at the north end of the lake was originally known as Devil's Creek and a Post Office of that name opened in 1874 with Peter Barr as the Postmaster. In the early days of the settlement, iron deposits were discovered by two of the new settlers to the area, W. Robinson and J. Campbell when clearing their land grants for farming. Iron mining ventures began developing along the Irondale River from Furnace Falls to Devil's Creek in the late 1870s.

7.1 History of the Salerno Lake Community (cont'd)

The Toronto Iron Company owned by Charles Pusey and L.B. Howland established an iron mine in the Devil's Creek area in 1881. The mine was composed of two blast furnaces



for producing pig iron and employed 500 men. To meet the labour requirements to operate the mine, 300 men were hired from Italy to work in the quarry and run the smelter. (Brown, Ron; "Ghost Towns of Ontario", Vol.1; Cannon Books, 1978; p.171) Who could have known then, that in less than 70 years, the name of the lake would be changed from Devil's to Salerno.

The Irondale, Bancroft and Ottawa (IB&O) Railway arrived in Irondale in 1887 and the mine continued to operate until 1900. At its height, Irondale had two general stores, three hotels, a staving (barrel) factory, the Railway Station, a blacksmith's shop, a shoe maker and a Church.

The Church known as St. John's Church was built in 1887 by Charles Pusey and was non-denominational. It was sold to the Anglican Diocese of Canada in



7.1 History of the Salerno Lake Community (cont'd)

1901 for fifty dollars (\$50), and became St. John's Anglican Church. In 2010, the Anglican Diocese closed the Church and sold it to Bark Lake Aboriginal Tribe in August 2012 and it is now overseen by the non-profit organization Bark Lake Cultural Developments. The Church was designated a Municipal Historical Resource by the Township of Minden Hills in October 2012. Today, the Church is known as the Irondale Community Church and holds non-denominational services for the Salerno Lake Community.

After the mines closed, the population of Irondale dropped to less than 50 in the early 1900s. The farmers in the area managed to survive by working in the lumber industry that was still viable because of the railway.

There was a sawmill at the north end of Salerno Lake where the lake enters Salerno



**(Simmons Sawmill North End Salerno Lake
Courtesy G. Simmons)**

Creek, as well as a log chute. In the winter months, half of the lake (1/2) was cut into blocks of ice. These blocks were packed into sawdust filled rail cars and shipped to the states to be used in their ice boxes (early refrigerators).

(Source: George Simmons)

In 1932 the railway station burned and rather than rebuilding, three box cars were configured on the site to serve as the station. With the demise of the lumber industry, the railway shut down in 1960 and the tracks were taken out the same year.



(Log Chute - Courtesy G. Simmons)

Charles Pusey was enchanted with the Salerno Lake area and built a large summer home (cottage) on the shores of the lake in the late 1800s.

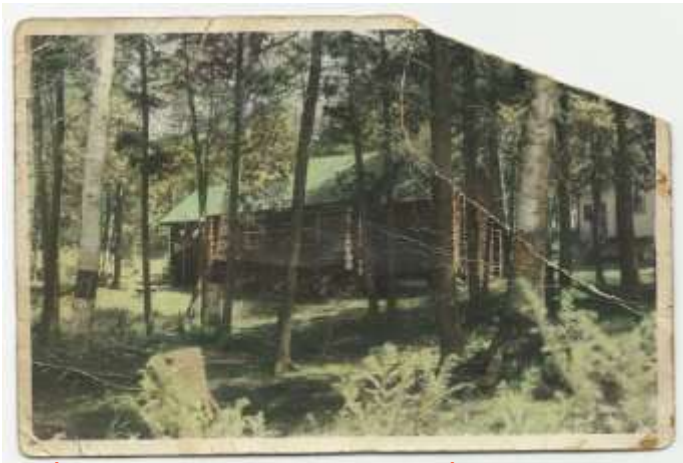
7.1 History of the Salerno Lake Community (cont'd)

In the later years of the 1800s and early decades of the 1900s, several cottages were built along the east shore at the north end of the lake. Many of these early cottages were used as hunting and fishing cabins as well.

The Highland Trail Lodge on the northeast shore of the lake built in the 1930s by Luella Griffin (Flood) as a fishing lodge still survives, and has been operated by the Brown Family as a summer resort since the 1940s. It is the only remaining commercial property on the lake.



(View from Northeast Shore near Narrows c. 1930s/40s - Courtesy S. Thompson)



(All Go Camp – Courtesy J. Proud)

All-Go Camp, at the south end of the lake, was built in 1947 and operated as a camp by the Lancaster-Proud Family in the 1950s and some of the original buildings still survive. There was also a music camp on the north east shore of the middle bay of Salerno Lake in the 1940s and 1950s.

As the automobile became more affordable for families and roads into the Haliburton area improved, demand for private waterfront property increased and cottages began to dot the shores of Salerno Lake. These cottages were generally built for summer living and close to the water's edge, and usually water accessible. In the



(Building a Dock c. 1940s - Courtesy S. Thompson)

7.1 History of the Salerno Lake Community (cont'd)

1960s and 1970s, cottage roads began to appear on the lake connecting the cottages to the municipal roadways. Hydro service was also becoming available to the cottages on the lake. Lot sizes became larger and setbacks from the shoreline increased.

In 2001, the Township of Snowdon at the north end of the lake became amalgamated into the new Township of Minden Hills. The same year, the Township of Glamorgan became part of the new amalgamated Municipality of Highlands East along with Bicroft, Cardiff and Monmouth townships. In a way, this was a somewhat 'Back-to-the-Future' experience as Cardiff, Monmouth and Glamorgan had been a single Township in 1874.

7.1.1 Recommendations – History

1. Consult with knowledgeable long-time residents (e.g. Carol Simmons, George Simmons, Susan Thompson, etc.) about resources and valuable contacts.
2. Include history and historic photos in the Salerno Lake Lake Plan.
3. Work with the Irondale Historical Society to learn more about the aboriginal and early pioneer settlements of the Salerno Lake Community.
4. Create a link on the SDLCA for posting of historic photos and articles on the history of the Salerno Lake Community on the *www.irondaleontario.ca* website.

7.2 Community Events

A number of community events are held each year by the SDLCA and Irondale Community Groups such as the Irondale Historical Society.

The SDLCA puts on a July 1 Fireworks Display on the Saturday evening of the July 1st weekend that can be enjoyed by all Salerno Lake Community members. The association also hosts a Concert on the Lake and the Annual Canoe Race and BBQ that are also open to the Salerno Lake Community.

The Irondale Historical Society hosts a Victorian Tea as well as a Wild Game Night during the summer months. The Irondale Community holds a Ball Tournament in July and there are regular Euchre nights at the Irondale Community Centre.

7.2.1 Recommendation – Community Events

1. Post Community and SDLCA Events on the SDLCA website and Irondale Community Centre and Store inviting all members of the Salerno Lake Community to attend.

APPENDIX A
SALERNO LAKE LAKE PLAN
RECOMMENDATIONS

2.0 PUBLIC CONSULTATION

Purpose: to ensure that all members of the Salerno Lake Community have an opportunity to provide input on issues of concern to their Community.

Recommendations – Public Consultation

1. Continuing consultation with the Salerno Lake Community when reviewing and expanding the Salerno Lake Lake Plan Study.
2. Link SDLCA website with Township of Minden Hills and Irondale Historical Society websites.
3. Post notices of events, etc. at the Irondale Store and in local publications – (ie. Minden Times, Haliburton Echo, The Highlander, etc.).
4. Regular surveys (every 3 to 5 years) of the Salerno Lake Community to remain current on issues of concern to the community.
5. Create a “Comments” section in the public area of the Salerno (Devil’s) Lake Cottagers’ Association (SDLCA) website, to receive ongoing feedback from the Salerno Lake Community.

3.0 DESCRIPTION of the SALERNO LAKE COMMUNITY

Purpose: to gain a better understanding of the Salerno Lake watershed, land use and development within the Salerno Lake Community.

Recommendations - Watershed

1. Undertake a study and mapping of the Salerno Lake Watershed. Determine availability of municipal and other maps of the watershed and whether these are still relevant or require updating. Consider submitting proposal to Trent University’s U-Links Program.
2. As Salerno Lake is the last lake in a four chain system, contact Salmon, Fortescue and White Lake representatives to see if there is interest in meeting on a regular basis regarding common issues of concern (e.g. monitoring of water levels) to the watershed.

Recommendations – Land Use and Ownership

1. Create a committee of Salerno Lake Community property owners to liaise with local councillors and municipal staff to monitor development proposals, variances and zoning changes, as well as to provide comment and input during review of the Official Plans.
2. Meet with local councils regarding the feasibility of identifying the municipal owned/public access locations into Salerno Lake and create a map showing these locations.

Recommendations - Roads

1. Salerno Lake road associations should liaise with their local council/municipal staff
 - i) regarding standards for private roads;
 - ii) to see if there is interest in providing a small 'grant' to road associations to assist with maintenance costs.
2. Appoint a member of the Salerno Lake Community as Road Steward to liaise with both Highlands East and Minden Hills municipal staff and/or council representatives regarding the maintenance of the public roads within the Salerno Lake Community.

4.0 NATURAL HERITAGE – SHORELINES and WATER QUALITY

Recommendations – Natural Shorelines

Purpose: to educate Salerno Lake property owners of the importance of maintaining a natural buffer zone along their shorelines and to restore altered shorelines to their natural state.

1. Show the Coalition of Haliburton Property Owners' (CHA) and Haliburton Highlands Stewardship Council (HHSC) videos '*The Ribbon of Life*' and '*A Beginners Guide to Shoreline Stewardship*' at the SDLCA AGM, and post link to videos on the SDLCA website.
2. Post the sections of Highlands East, Minden Hills and Haliburton County Official Plans regarding maintaining of a 30 metre buffer zone along the shoreline on the SDLCA website. Review and update as Official Plans are updated (e.g. every 5 years.)
3. Post the Haliburton County Shoreline Tree Preservation By-law on the SDLCA website.

Recommendations – Natural Shorelines (cont'd)

4. Develop an educational and/or stewardship pamphlet on the importance of natural shorelines in sustaining the water quality and fish and wildlife habitats of Salerno Lake, with steps Salerno Lake property owners can take to maintain their natural shoreline, or to re-naturalize their shoreline, as well as a list of resources available such as the Living Sustainably in Seguin Township Handbook. Consider submitting a proposal to Trent University's U-Links Program for development of the pamphlet. The pamphlet to be distributed to all property owners within the Salerno Lake Community.
5. Through education and example, encourage property owners to adopt buffer zones and to restore their developed and/or degraded shorelines.
6. Provide information on the benefits of natural shorelines and how to maintain and/or restore these shorelines, on the SDLCA website.
7. Encourage waterfront property owners to access their property's shoreline evaluation by contacting the SDLCA.
8. Contact local nurseries/landscapers to learn more about what grows in the area and, include information on native plants and where they can be purchased.
9. Review the native plant list provided on the website to ensure that all species listed are appropriate to the Salerno Lake zone and location.
10. Host a workshop on Shoreline Naturalization.

Recommendations – Water Quality

Purpose: to address water quality issues and to improve the water quality of Salerno Lake.

1. Continue yearly water quality monitoring with the Ministry of the Environment (MOE) and FOCA's (Federation of Ontario Cottagers' Associations) Lake Partner Program by testing the Total Phosphorous and post results on the SDLCA website.
2. Protect and encourage the growth of natural shorelines and wetlands that act as a natural water filtration system.
3. Provide information to landowners regarding the use of pesticides, herbicides and fertilizers, and suggest alternative environmentally friendly cleaning products. By-laws restricting or eliminating the use of these products within Salerno Lake's watershed should be supported.
4. Educate boat owners on the impact of boat fuel spillage and encourage safe fuelling practices. Provide easily accessible information regarding cleaning spills.

Recommendations – Septic Systems

Purpose: to ensure that septic systems in the Salerno Lake Community are properly maintained and replaced as needed.

1. Post link to the CHA video “Poop Talk” on the SDLCA website.
2. Educate landowners on how to identify malfunctioning or leaching septic and grey water disposal systems, and encourage them to fix/replace the problems.
3. Encourage property owners in the Salerno Lake Community to have their septic systems pumped every 3 to 5 years.
4. Support local council initiatives for implementing a septic monitoring and/or inspection program.
5. Educate new owners to the Salerno Lake Community on the function of septic systems and the importance of proper maintenance.

5.0 Fishing and Wildlife

Purpose: to maintain, enhance and protect wildlife and fish habitats in Salerno Lake and adjacent streams and wetlands.

Recommendations – Fishing and Wildlife

1. Educate boat owners on the impact of wakes on the shoreline and nesting and spawning areas.
2. Educate owners and visitors to the Salerno Lake Community on best practices for the prevention of introducing invasive species into Salerno Lake and adjacent streams and wetlands.
3. Continue to monitor the fish and wildlife of the Salerno Lake Community to ensure populations are healthy and sustainable.
4. Initiate a photo record of fish and wildlife in the Salerno Lake Community. Establish a section of the SDLCA website for posting of photos of fish and wildlife species indicating date and place of sightings. The postings should be categorized as per fish, animals, birds, reptiles/amphibians, insects, flora and fauna, etc.
5. Using the data from the fish and wildlife photo sightings, create an inventory and mapping to identify areas of habitation that may require protecting for rare species native to Salerno Lake, as well as for quick identification of invasive species.
6. Post Emerald Ash Borer signs at the entrances of all roads into the lake, reminding people to source their firewood locally.

Recommendations – Fishing and Wildlife (cont'd)

7. Post information on the SDLCA website regarding identifying and disposing of the invasive plant known as the Giant Hogweed, emphasizing that contact with the weed will result in severe chemical burns. Include photos of the Giant Hogweed and a similar harmless native non-invasive plant commonly known as Wild Carrot and/or Queen Anne's Lace.
8. Post on the SDLCA website, a list of the 'Top Ten' invasive species to watch for (e.g. invasive species already in the Trent-Severn System) and include photos and information on how to identify and not confuse with common native species; and provide a link to the Ontario Federation of Anglers and Hunters (OFAH) Invading Species website.
9. Post information on ticks and Lyme Disease on the SDLCA website.
10. Post information on the West Nile Virus on the SDLCA website.
11. Prepare a historical study on the positive and negative impact of logging within the Salerno Lake Community to gain an understanding of regeneration of the 'forest' and what if any, changes in species of trees and plant life resulted. Consider submitting proposal to Trent University's U-Links Program.

6.0 RECREATION and AESTHETICS

Purpose: to ensure that property owners, their families and visitors continue to enjoy the natural beauty, vistas, tranquility and recreational opportunities of Salerno Lake and the surrounding Community.

Recommendation – Recreational Carrying Capacity

Purpose: to ensure that future development proposals within the Salerno Lake Community do not negatively impact the recreational use of Salerno Lake.

1. That the SDLCA consider undertaking a Recreational Carrying Capacity Study for Salerno Lake.

Recommendation – Swimming, Canoeing and Kayaking

Purpose: to gain a better understanding and clarification of the concerns regarding swimming areas and if necessary, take steps to alleviate these concerns.

1. Conduct a follow-up survey through the SDLCA Newsletter and website to determine what the concerns are regarding swimming areas.

Recommendations – Safe Motor-Boating

Purpose: to ensure that all members of the Salerno Lake Community enjoy participating in activities in and on the lake in a safe and friendly atmosphere.

1. Post Safe Boating pamphlet produced by Kim Fields on the SDLCA web-site and distribute at community and SDLCA events, and include in the annual “Dock Packages”, and “Welcome Package” that is being developed for new owners in the Salerno Lake Community.
2. Post information on water-safety regulations regarding safe boating and water aircraft (i.e. sea planes, float planes, etc.) on the SDLCA website, and include with Safe Boating pamphlet.
3. Post 10 MPH signs at strategic locations on Salerno Lake to remind boat operators to slow down when travelling within 30 metres (100 feet) of the shoreline.
4. Educate Salerno Lake motor boat users of the impact of wakes on the shoreline, nesting areas, and fish and spawning areas, as well as the impact of some motor types on the health of the lake. Post information on the SDLCA website.
5. Post “Good Practice” signs at the Boat Launch to remind boat owners bringing boats from other waterways to make sure that there is no risk of introducing invasive species into the lake.
6. Post the characteristics of Salerno Lake and the kind of activities that are safe to conduct on the SDLCA website, as well as constraints regarding boat and motor size, so that potential and new owners to the lake will be aware of appropriate activities for Salerno Lake, and boat and motor size.
7. Develop a ‘Code of Conduct’ for boat and water aircraft (i.e. sea planes, float planes, etc.) operators, as well as recreational users (ie. swimming, canoeing, kayaking, etc.) of Salerno Lake, to be respectful of the natural shoreline, water quality and other persons enjoying the lake.
8. Develop an incident report form and appoint a representative to coordinate reports and liaise with local OPP detachment as required.

Recommendations – Aesthetics

Purpose: the continued enjoyment of the viewsapes and tranquility of Salerno Lake by members of the Salerno Lake Community.

1. Liaise with local councillors and municipal staff to ensure that new developments are in character with the density, scale and massing of adjacent lots within the Salerno Lake Community.

Recommendations – Aesthetics (cont'd)

2. Support municipal restrictions on development of undersized lots, and within the 30 metre buffer zone.
3. Encourage property owners to use environmentally friendly fireworks and to minimize their use of fireworks as outlined in the Minden Hills By-Law. Post By-Law on the SDLCA website.
4. Educate property owners on the negative effects of fireworks on wildlife and the Salerno Lake ecosystem, as well as the enjoyment of other property owners within the lake community.
5. Post information on 'What Not to Burn' on the SDLCA website and include in 'Welcome Package'.
6. Educate property owners on the negative effects of artificial night lighting and encourage the use of low impact night lighting.
7. A high number of survey respondents expressed interest in gardening, hiking and reading. Conduct a survey to see if there is an interest in establishing a club or clubs for each of these interests.

7.0 HISTORY and CULTURE

The history of an area gives us a perspective on how it came to be, the factors that have shaped it, and where we stand in its ongoing story.

Recommendations – History

Purpose: to learn about the early history of the Salerno Lake Community and the unique attributes that define the culture of the Community.

1. Consult with knowledgeable long-time residents (e.g. Carol Simmons, George Simmons, Susan Thompson, etc.) about resources and valuable contacts.
2. Include history and historic photos in the Salerno Lake Lake Plan.
3. Work with the Irondale Historical Society to learn more about the aboriginal and early pioneer settlements of the Salerno Lake Community.
4. Create a link on the SDLCA for posting of historic photos and articles on the history of the Salerno Lake Community on the www.irondaleontario.ca website.

Recommendation – Community Events

Purpose: to welcome all members of the Salerno Lake Community to participate in and enjoy the activities and events within the community.

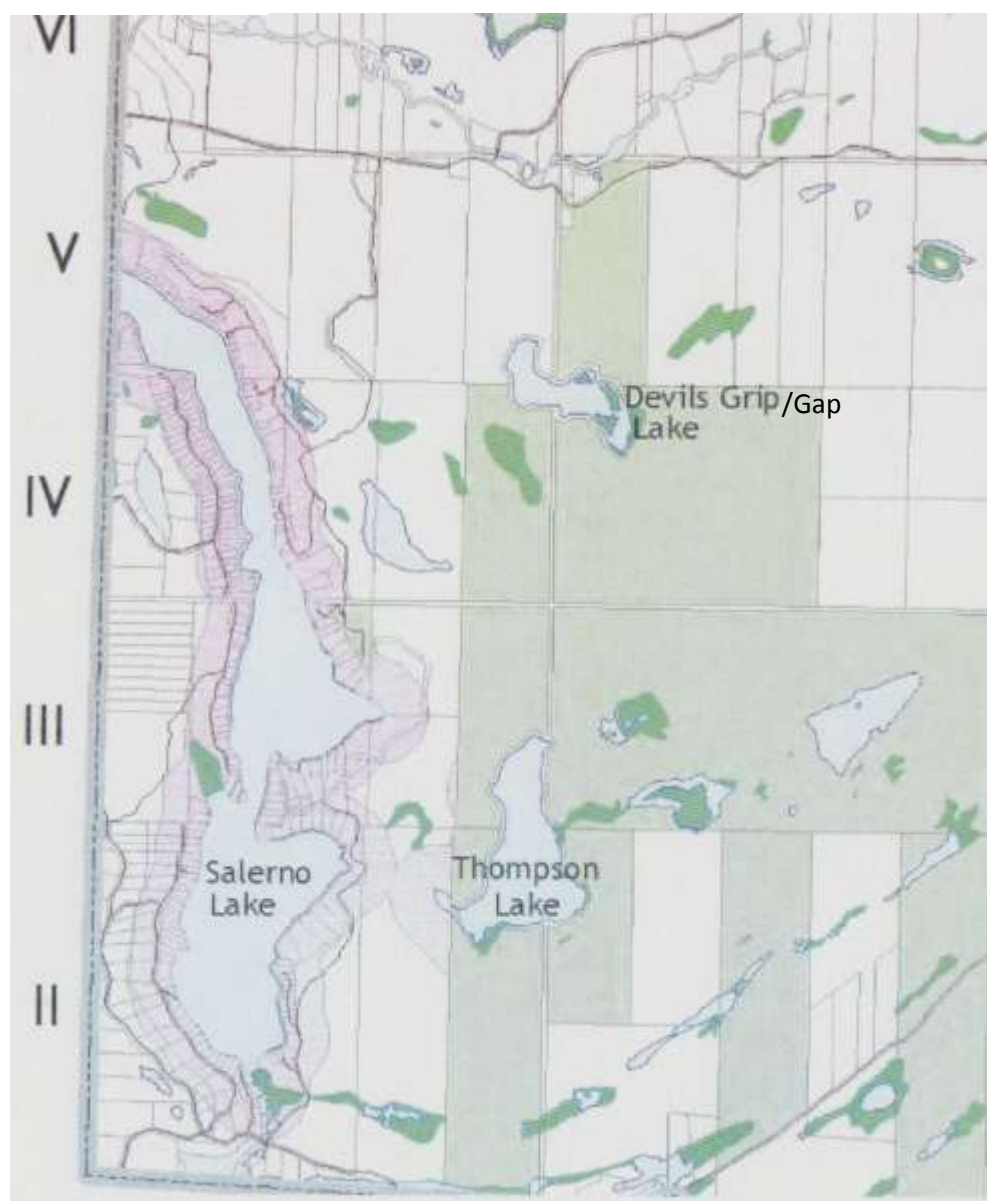
1. Post Community and SDLCA Events on the SDLCA website and Irondale Community Centre and Store inviting all members of the Salerno Lake Community to attend.

APPENDIX B
MUNICIPAL MAPS
HIGHLANDS EAST & MINDEN HILLS

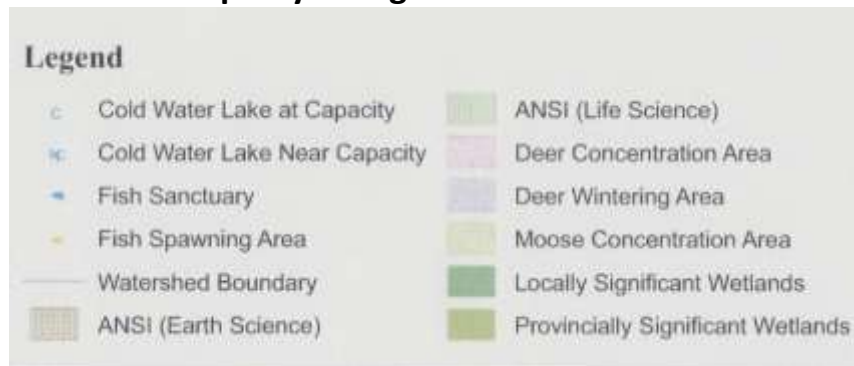
**MAP – Schedule A: Land Use -
Municipality of Highlands East Official Plan**



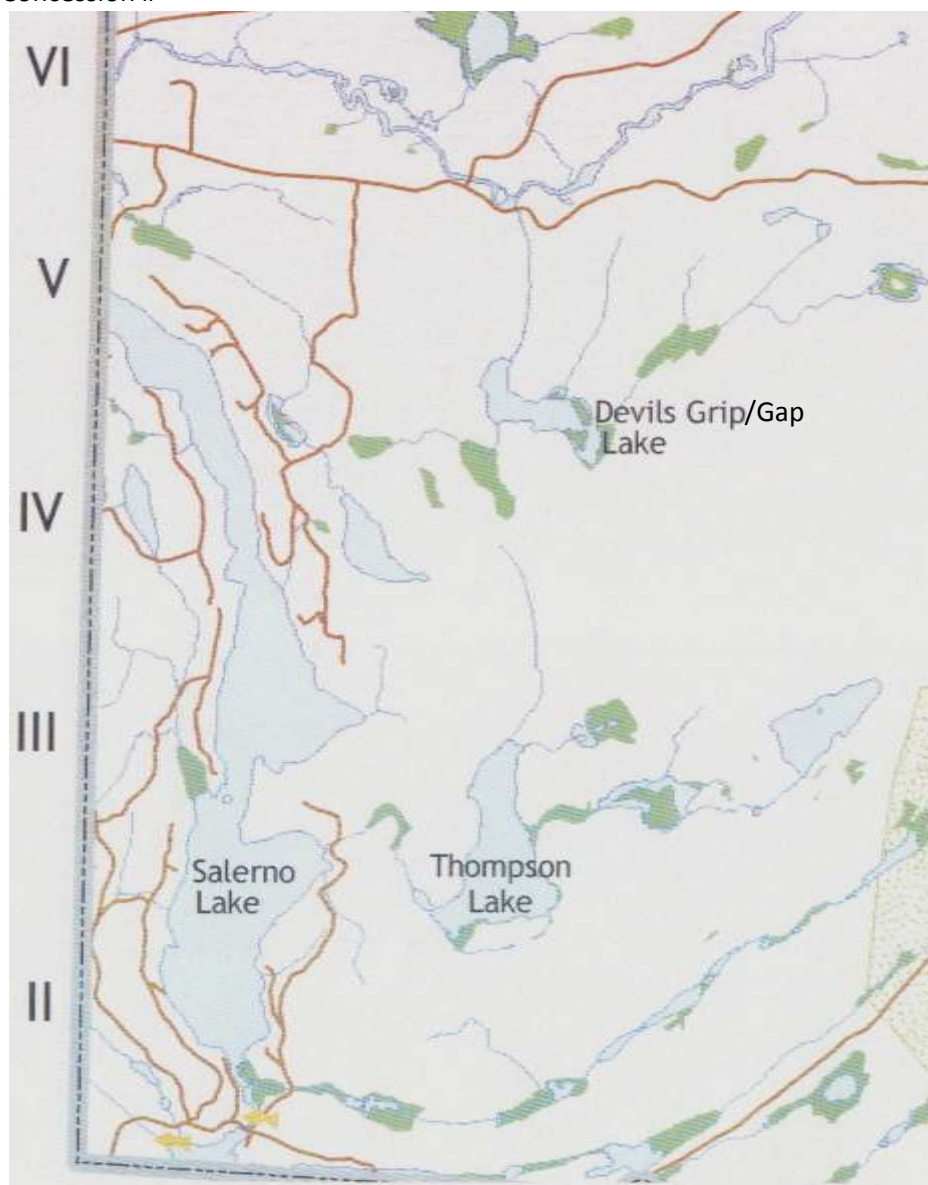
Concession #



**MAP – Schedule B: Environmental Features -
Municipality of Highlands East Official Plan**



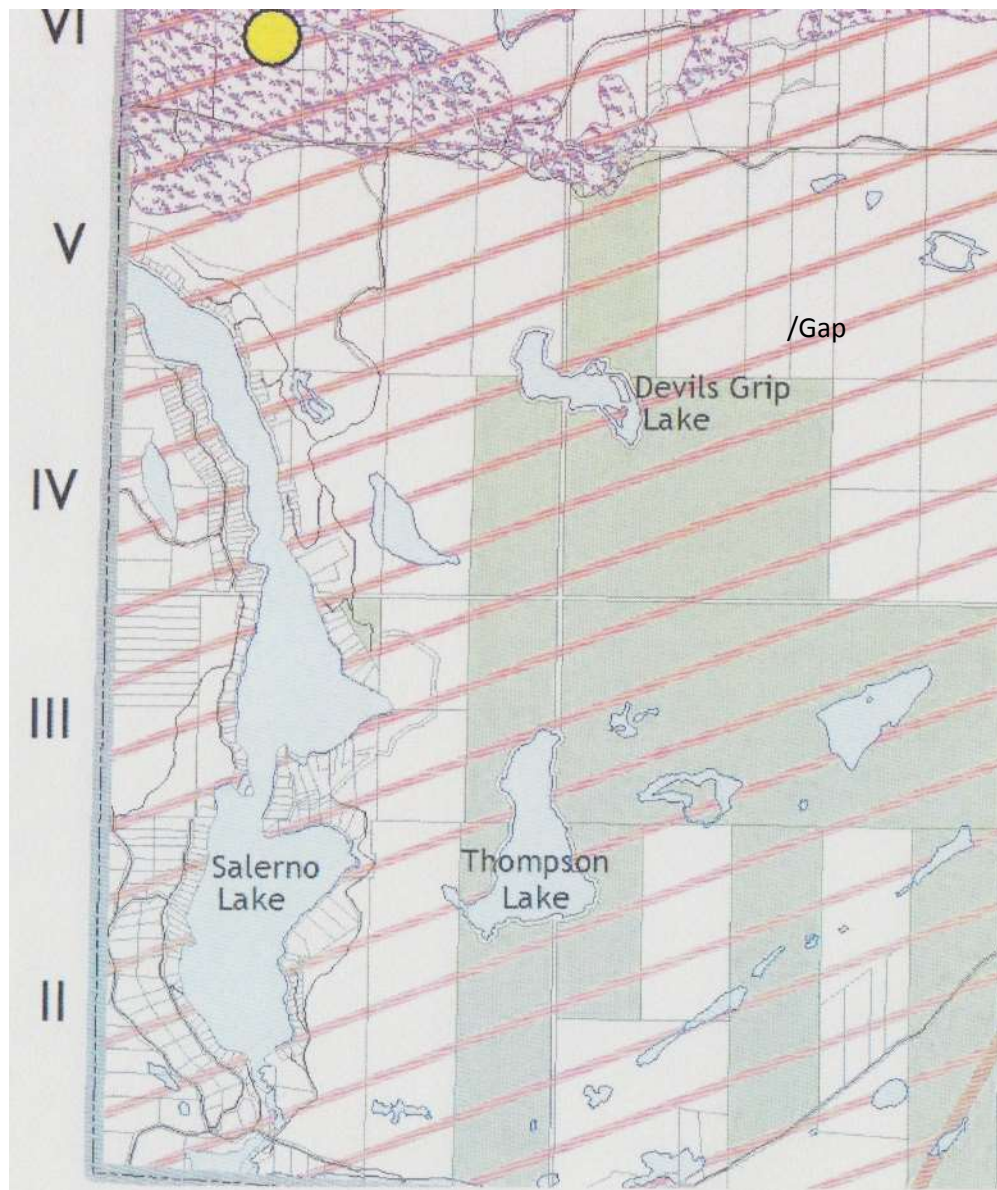
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**MAP – Schedule D: Aggregate Resource/Metallic Mineral Potential and
Abandoned Mine Sites -
Municipality of Highlands East
Official Plan**



Concession #



MAP – Schedule A5: Township of Minden Hills Official Plan

Concession #



MAP – Schedule B5: Township of Minden Hills Official Plan



APPENDIX C

**SALERNO LAKE
LAKE PLAN SURVEY**

Salerno Lake Lake Plan Survey – Background and Methodology

Purpose: to obtain input from the Salerno Lake Community as to the values, characteristics and issues of concern regarding Salerno Lake from members of the lake community.

Survey Area: the boundary for the Salerno Lake Lake Plan Survey was the same as the boundary determined by the Lake Plan Study Committee. The area took in the Salerno Lake waterfront properties and adjacent lands, as well as the original Irondale Community.

The boundaries were White Lake Road to the south (north side only), Salerno Lake Road (both sides) to the west and north, Irondale Road from south of the bridge to Chimo Road (both sides), and both sides Chimo Road, Grandpa's and Andek Trails.

Due to the proximity of these properties to the lake, it was determined that they were likely to access the lake for recreational purposes and/or be affected by changes in the Salerno Lake watershed and water quality.

Distribution: surveys were mailed to members of the SDLCA and hand delivered to the other properties with buildings situated on them. Pre-addressed stamped envelopes were included with each survey to encourage completion and return of the survey. Known owners of multiple properties received only one survey to ensure that only one survey per property owner was completed.

Methodology: to ensure that surveys weren't copied and multiples returned, only surveys returned in the envelope provided were counted in the final survey results. The answers to the questions in each of the surveys returned were recorded on a spreadsheet and final results were tabulated.

Conclusion: approximately 280 surveys were distributed and 130 completed surveys were returned, a return rate of almost 47%. Of the 130 surveys returned, 87% were lakefront property owners. The return rate for members of the SDLCA was more than 90%.

In comparison, the return rates of other Lake Plan surveys were: Paudash Lake Management Plan 21% of residential properties; Halls and Hawks Lakes Lake Management Plan 33% of residential properties; and Grace and Dark Lakes Lake Stewardship Plan 27%.

Survey data was compiled and formatted in Chart form and posted on the SDLCA website. It was also included in the Appendix of the Salerno Lake Lake Plan document.

It should be noted, that future surveys should include a question regarding the township/municipality (Minden Hills or Highlands East) in which the property is located.