

Recommendations from the Jack Lake Sustainability and Stewardship Plan July 2009

Explanatory notes:

The recommendations presented here are based on the input received between July 2007 and March 2009, on published draft Recommendations.

In this summary, the first digit of the number on a recommendation indicates the background section of the Stewardship Plan to which it relates.

The expression “the JLA should” refers to proposed action by the Jack’s Lake Association (JLA) Board and all stewardship volunteers from the lakeside community. It acknowledges the reality that the overall leadership will likely fall back on the JLA when no entity is designated or nobody volunteers.

The phrase “through education” implies a comprehensive education and communication plan using volunteers and experts in the field, and appropriate information vehicles.

The notation “Jack Lake” is used throughout, that being the lake’s title according to the *Canadian Geographical Names Data Base*. This database does not recognize possessive forms. However, it is acknowledged that some people prefer the possessive form of the name for tradition’s sake, and in fact “Jack’s Lake” appears in the official title of the lake association.

Whatever section it is in, a recommendation bearing the symbol * is related to **water quality** directly or indirectly.

Section 1 – Introduction

(no recommendations)

Section 2 – Lake Description

Historical Development recommendations –

- 2.1 Continue to compile information on and investigate the history of the area, and prepare articles in the interest of public awareness.

- 2.2 Residents and stakeholders on the lake should be encouraged to contribute their memories, anecdotes and photographs to an up-dated history book. The book is to be published, and perhaps sold, in order to increase awareness of the lakeside community's heritage. It could be donated to the local public and school libraries.

Watershed recommendations –

- 2.3 Continue to promote awareness and understanding among all shoreline property owners and share information and concerns with other area lakes and other reservoir lakes within the Trent Severn Waterway sphere, (e.g. members of the North Kawartha Lakes Association, NORKLA.) The associations should collaborate on matters having mutual benefit for all parties involved, including communication, education and stewardship opportunities.
- 2.4 If requested, (e.g. by a developer or township,) the JLA should be willing to comment fully and promptly on applications for development (e.g. for a quarry or large property/residential development) that have the potential to impact the health of Jack Lake.
- 2.5 The Jack Lake watershed is in a transitional ecosystem area which supports an unusually large diversity of vegetation and wildlife species. This is **unique** in Ontario and must be protected.

Water Level recommendations –

- 2.6 The Trent Severn Waterway(TSW) should maintain the lake level at its historic regulated level and gradual rate of drawdown (*i.e.* the systematic removal of stoplogs one at a time, spread over the boating season.) Given erratic dam-regulation performance negatively impacting the lake, a petition and/or form letter writing campaign should be organized for all stakeholders. When required, the JLA should write letters to the TSW and related authorities on behalf of its members.
- 2.7 There is a need for regular, formal communication between the JLA, the lake community and the TSW on all water management concerns. This could involve a dedicated project volunteer from the lake. Changes to the TSW control of water level should be negotiated in advance with the JLA, other lake associations and all shoreline property owners on affected reservoir lakes. Notification of unexpected, sudden changes in level by the TSW should be given to the JLA and commercial operators for posting on the lake well in advance.
- 2.8 The JLA should embrace an ongoing monitoring and dialogue requirement with the TSW regarding the health of the dam. Repairs to the dam should be carried out expeditiously.
- 2.9 The JLA should continue to monitor action on the recommendations of the federal government study carried out on the TSW in 2007-2008, and inform stakeholders of significant developments.

2.10* The JLA should continue to monitor the lake's oxygen for anoxic tendencies and report observations to the MOE, MNR and TSW.

Access recommendations –

2.11 Encourage local municipalities to retain and regularly maintain all public access sites.

2.12 Because the Narrows north-south lake interconnection does not freeze sufficiently in winter, the JLA should continue to encourage the townships and local snowmobile clubs to establish an acceptable winter cut-off route at a public access point to minimize private property destruction and trespassing, and to enable water-access-only cottagers a safe passage to their properties in the winter.

Ownership recommendation –

2.13* Encourage the MNR to retain all the existing Crown shorelines and land in a natural, undisturbed state in order to protect the natural elements of the area and to sustain the health and recreational capacity of the lake. This does not apply to the shoreline road allowances that property owners have the right to purchase.

Section 3 – Social Elements

Boating recommendations –

3.1* Given that the lake supports approximately 2200 boats, plus those of casual visitors and renters, encourage stakeholders through education to purchase high efficiency, environmentally friendly motors.

3.2* Encourage environmentally friendly boating practices. This can be promoted through signage at boat ramps, as well as by newsletters.

3.3 In order to help prevent recreational boating accidents, there should be a continuous education campaign, using well recognized sources for safe boating practices and annotated lake maps provided at marinas and resorts.

Social, Cultural and Historic Sites recommendations –

3.4 Important historic sites should be identified by an expert. Because some of these sites are on private property, it is important that contact be made with the owner to discuss if the site can be protected.

3.5 Unique or special social and cultural sites need to be agreed upon by the lakeside community with input from all interested property owners.

Landscapes and Visual Environmental Integrity recommendations –

- 3.6 Discussions should occur with the local townships, the Ministry of Natural Resources, Ministry of Northern Development and Mines, and property owners, to request that high profile building development and resource management activities like forestry and quarries do not affect the visual environmental integrity of Jack Lake. Preservation of existing trees where safe and/or planting of native trees and bushes lakeside of development should be encouraged through education, as should the preservation of the treed horizon and visibly vegetated hills.
- 3.7* For cottages and commercial resort operators, the significant preservation and restoration along riparian sections (10 - 15 metre vegetation shoreline buffer zone) should be encouraged through education. This information should be available to all property owners on the lake as soon as they purchase their properties, and regularly thereafter. The Township should refer to the appropriate sections of the Official Plans and include best practices for maintaining a naturally vegetated buffer zone with their planning documents (e.g. building permit, minor variance) when approval is provided.

Lighting recommendation –

- 3.8 Through education, property owners should be encouraged to use appropriate shoreline and landscape lighting techniques.

Section 4 – Natural Heritage

Water Quality recommendations –

- 4.1* Shoreline property owners, businesses and contractors should consider developing storm water management plans to reduce erosion and deposition into the adjacent water bodies that can cause siltation and increase eutrophication. This may include enhancing and widening a buffer zone of natural vegetation.
- 4.2* (a) The JLA should continue to collect water quality information through the Lake Partner Program. (b) It should arrange for a thorough inventory and monitoring of the water quality, benthic and plankton communities of the lake, its streams and the wetlands in the Jack Lake watershed, particularly those that are identified as sources that impact lake water quality and are known bodies for fish spawning, namely Apsley Creek, Redmond

Creek and Sucker Creek. (c) Local universities and colleges should be encouraged to use Jack Lake as a sampling site for their well-supervised research.

(d) An annual report of the results of the water testing should be prepared, and best management practices emphasized and made available to all property owners and renters on the lake.

- 4.3* A continuous education and communication campaign designed for property owners and renters at commercial operations should:
- promote a phosphorus free life style;
 - provide accredited information regarding the proper maintenance of septic systems and the signs of an improperly functioning system for property owners;
 - provide information on the Fisheries Act, Section 35(1), Section 36(3) and the Public Lands Act. Property owners should be encouraged through education to voluntarily avoid using and storing fertilizers, herbicides, insecticides and pesticides. The discretionary application by professionals of insecticides, and pesticides should be encouraged. (In this regard, people should be encouraged to avoid storing fertilizers, herbicides, insecticides and pesticides and all other chemicals less than 100m. from the lake, or on any land that slopes directly into the lake. As well, the planting of native vegetation along the shoreline to enhance the buffering capacity and uptake of nutrients should be promoted, to reduce erosion and protect fish habitat.)
- 4.4* Various levels of government and their related agencies should continue to identify, protect and monitor sensitive natural areas (e.g. wetlands, fish spawning areas,) and habitats which sustain species at risk.
- 4.5* The Public Health Department should routinely take water quality measurements around the public boat launches and beaches in Brooks Bay.
- 4.6* Before the townships update their next set of Official Plans, they should conduct a lakeshore capacity study of Jack Lake as per the methods in the *Lakeshore Capacity Assessment Handbook, Protecting Water Quality in Inland Lakes on Ontario's Precambrian Shield* Dec. 2008 and approved May 2010

Wildlife recommendations –

- 4.7 (a) Cottagers and residents in the area who may have maintained lists of various types of wildlife they have observed over the years should contact the JLA to ensure that all species sightings are documented.
- (b) Turtle observations should be recorded and their nesting sites should be identified and protected against predation; property owners should be aware of the techniques available to protect turtle nesting sites by contacting MNR, Kawartha Turtle Watch or the Toronto

Zoo *Adopt a Pond* program. The Blandings turtle is a species at risk which appears to be widespread within the area of Jack Lake and should be protected.

- 4.8 Volunteers should continue to participate in the Bird Studies Canada program to monitor bird activity (loons and raptors) within the Jack Lake watershed while respecting property rights.
- 4.9* Shoreline property owners should consider protecting existing wildlife habitats and native shorelines and to consider returning a portion of their shoreline to natural vegetation which will provide nesting and habitats for many desirable species.
- 4.10 The JLA should work cooperatively with local naturalist groups and government agencies to ensure the inventory of all local animal and plant species.
- 4.11 Information from experts on the best ways to ensure that wildlife does not become dependent on human intervention for survival should be shared.
- 4.12 The JLA should ask Health Canada for updates on Lyme disease and how people can protect themselves and their pets against it if it is found in the area.

Exotic and Invasive Species recommendations –

- 4.13 The JLA should:
 - (a) look for additional information or signage to alert boaters to other invasive species for the protection of the lake system. These should be posted at marinas, public boat launches and at the entrance to private roads.
 - (b) continue to promote and distribute information regarding invasive species using resources available from various government agencies and awareness programs.
 - (c) continue to participate in “Invading Species Watch”, a volunteer-based monitoring program to detect zebra mussels, spiny water flea, and other invasive plankton species, as well as future invasive species.
- 4.14 A baseline natural and invasive species aquatic vegetation survey should be conducted by an environmental consulting company or a well supervised university study group.
- 4.15 All stakeholders, through education should be encouraged to:
 - (a) take precautions to prevent the transport of exotic and invasive species from one lake, river or stream to another. This is important for all motorized and non-motorized boaters, and for pilots of float planes.
 - (b) be aware of where to look on a boat, motor and trailer for evidence of an invasive species.
 - (c) assist efforts to raise awareness of invading species, prevent their spread, and track their distribution by participating in various innovative projects.
 - (d) ensure that proper identification of any invasive species has been made by an expert.

- (e) remove purple loosestrife plants and yellow irises by the root or by cutting off the flower spikes and dry seed heads in areas with high densities; also, pull Eurasian water milfoil up by the roots and carefully place all the plant and its fragments on land well back from the water's edge or it will re-root itself.
- 4.16 All organizers of fishing tournaments and touring boating clubs should take steps to ensure that all boats, motors and trailers are inspected prior to entering and exiting Jack Lake to ensure that invasive species are not introduced to the lake or are not transported to other lakes. They should ensure that the boat, motor and trailer have been through a boat spray system, or alternatively have been out of the water or in the sun for five days. Marina operators that charge a fee for launching boats should also inspect boats for invasive species.
- 4.17 All government boats (e.g. Ontario Provincial Police, MNR, Health Inspectors, DFO, Transport Canada,) plus Ontario Hydro, Bell Canada, etc., and those of contractors entering and leaving Jack Lake should follow recommended inspection, disinfection and protection measures to ensure invasive species are not transported from one water body to another.
- 4.18* A boat wash/spray system is essential to prevent the spread of invasive species. It should be installed and maintained by the townships close to a public launch on Jack Lake or on easily accessible public land close to Apsley, in order to wash down boats that are going to or coming from other lakes. Run-off must not drain back into any nearby water body.

Rare Species and Species at Risk recommendations –

- 4.19 Through education, stakeholders should be encouraged to:
- (a) become familiar with the “rare” and at “risk” species that are in our vicinity;
 - (b) become knowledgeable that there are provincial and federal species-at-risk legislation and that there are protection and penalties associated with the regulations;
 - (c) report species at risk observations to the JLA or interested government agencies;
 - (d) naturalize their property in order to enhance the possibility of rare species becoming established.
- 4.20 The JLA , through education, should:
- (a) promote the different types of incentives that are in place for private stewardship efforts;
 - (b) encourage local enthusiasts and naturalists to “ground truth” (field survey) for rare species, and report the location of any endangered or threatened species to the JLA and the Natural Heritage Information Centre (NHIC), the Ontario Ministry of Natural Resources, Peterborough, or Bancroft offices, in order to protect the rare species’ habitats;
 - (c) continue to promote participation with local MNR or other volunteer initiatives, while respecting personal property rights. This is intended to generate a thorough inventory of

all rare and at risk species for reptiles (turtle tally and snakes,) invertebrates, amphibians (frog watch,) fish and birds (raptor watch and loon watch,) and to identify gaps in the data.

- 4.21 The JLA should continue to pursue various government agencies, Non-Governmental Organizations (NGOs) and educational institutes that may have funding or research projects to inventory, monitor or study rare or at risk species.

Vegetation recommendations –

- 4.22* The MNR should update their existing shoreline inventory to allow stakeholders and MNR to monitor the shoreline condition and better assess requirements in specific areas. This could be a job for the MNR Junior Stewardship Rangers.
- 4.23* Through education (e.g. voluntary on-site visits by Peterborough Green-Up and Lakeland Alliance staff) lakefront owners should be encouraged to have less than 25% disturbance of their shorelines. Information on how to restore property shoreline areas back to a natural state should be available. It should emphasize protecting and retaining the existing native vegetation and planting only native species (grasses, sedges, shrubs and trees.) Ideally, 75% of the shoreline lot should remain in a natural state with the exception of marinas.

Wetlands recommendations –

- 4.24* Havelock-Belmont-Methuen in co-operation with MNR should conduct a formal assessment of wetlands in the Jack Lake watershed.
- 4.25* An education program emphasizing the importance and sensitivity of wetlands and the need to protect wetlands and streams should be prepared. It should include the significance of wetland and stream habitats for “species at risk” conservation as well as their filtering capabilities that improve water quality.

Streams recommendations –

- 4.26* A detailed benthic study, which includes standardized monitoring protocols, should be completed for the major streams that flow into Jack Lake.
- 4.27 Expand stream inventories to identify and map their condition and important fish habitats.

Fisheries recommendations –

- 4.28 The JLA should continue to approach the Ontario Ministry of Natural Resources annually for fisheries management expertise and funding to support the monitoring and rehabilitation of spawning sites. Currently funding is provided under the Community Fish and Wildlife Improvement program. Specifically, advice would be sought for the following:
- Continue efforts to create or enhance fish habitat in Jack Lake with the support of MNR.
 - Solicit expert advice from MNR on the benefits of a walleye stocking program on Jack Lake.
 - Review the need for spring sanctuary status on Jack Lake.
 - Solicit advice from MNR on how the JLA and volunteers can assist in managing the Jack Lake recreational fishery.
- 4.29* The JLA should continue to carry out educational activities related to improving the fisheries of Jack Lake. Education would include demonstrations at local events.
- 4.30 Promote the harvest of underutilized fish species in Jack Lake instead of more heavily sought species such as walleye.
- 4.31 Encourage MNR to carry out both summer and winter creel census with the help of local volunteers from the lake. The creel census would provide data to help assess angling success, the summer and winter harvest of fish, and the success of the walleye spawning site rehabilitation activity. If the evidence warrants it, the JLA should support the opening of more area lakes for winter fishing.
- 4.32 The JLA should explore with MNR fisheries specialists the status of the remnant lake trout population in Jack Lake with the goal of sustaining this important sports fish species.
- 4.33 The JLA should continue to report to the Bancroft MNR biologist on the spring's Walleye Watch count as well as the winter and summer creel counts and any other volunteer project overseen by the MNR. (This will help to assess the effectiveness of the new fisheries regulations on controlling angling pressure to maintain species such as walleye, muskellunge, lake trout, small and large mouth bass in sufficient numbers to provide a viable sports fishery.)
- 4.34 Document and consolidate information on fish habitat and other sensitive aquatic areas on Jack Lake. Because the MNR does not have a map of privately owned drowned lands, it will be very difficult to determine these lands.
- 4.35 Request that MNR conduct a fish community assessment program to determine the status of key fish species in Jack Lake.
- 4.36 Maintain an ongoing dialogue with MNR, the Trent-Severn Waterway and DFO regarding water levels and potential impacts on the Jack Lake fishery.

Section 5 – Physical Elements

Soils recommendations –

- 5.1 Through education, provide information on man-made shoreline erosion and stabilization techniques by referencing FOCA's and government agencies' information and materials.
- 5.2* Research is needed to determine the effectiveness of the soil to retain run-off on the land instead of letting contaminants readily flow into the lake water.

Minerals and Aggregates recommendations –

- 5.3 The JLA supports the application of the Aggregate Resource Act through advocacy and education.
- 5.4 For any resource extraction there should be minimal related increased traffic and road maintenance. Safety on the roads is important for all lake users and wildlife.
- 5.5 Encourage our townships to have Official Plans to prohibit the creation of new pits and quarries or mining sites within the site horizon and local area of Jack Lake.

Narrow Waterbodies recommendations –

- 5.6 Through education, boaters should be encouraged to voluntarily reduce their speed in narrow areas of more than 200 feet /60 metres, that are prone to man-made erosion from extra wave action. This will also improve the recreational safety in these areas.

Steep Slopes recommendations –

- 5.7* Through education, property owners with steep slopes who are planning property development or redevelopment should be encouraged to make choices that address visual environmental impact and the vegetation buffer zone within these steep areas.
- 5.8 Obtaining access to GIS (satellite) mapping of the Jack's Lake watershed should be investigated in order to monitor erosion of the shorelines.

Forestry recommendations –

- 5.9* Using government publications, demonstrations or workshops, property owners should be encouraged to follow sound forestry practices, especially near the lake, wetlands and streams. Visual environmental integrity should be addressed, but the impact on water quality and wildlife should be emphasized.

- 5.10 The JLA should encourage volunteers to participate in the local Forest Management Plan to determine the implications, if any, on the Jack Lake watershed.
- 5.11 Currently, the MNR encourages the planting of red and white pine, red oak and white spruce. Instruction on how to place netting to protect the sapling or seedling from browsing deer should be sought.
- 5.12 The issue of planting native species trees that are insect and disease resistant and are able to survive in an area affected by climate change should be emphasized in workshops and material prepared by experts in the field.
- 5.13 A group discount on native tree saplings that can be sold to interested cottagers wishing to enhance their property's diversity should be arranged. Local nurseries should be invited to bid on a group discount for saplings and larger native species.

Section 6 – Land Use

Land Use and Development recommendations –

- 6.1 It is the firm opinion that the remaining Crown land around Jack Lake should be kept as such in perpetuity.
- 6.2 Property owners should be encouraged to install cantilever and suspension or lift docks, floating docks, pipe docks, or permanent pile docks because of their lower impact on the lakebed and aquatic life. Through education, shoreline property owners should be encouraged to obtain appropriate permits and advice from MNR when it is required. The recommendations described by DFO in the booklet Dock Primer are helpful. (http://www.dfo-mpo.gc.ca/regions/central/pub/dock-quais-on/07_e.htm.)
- 6.3* Through education, property owners should be encouraged to consider the advantages of creating a balance between natural state and built-up sections of shoreline. In addition, property owners should be encouraged through education to be aware of the cumulative effects of the size and location of docks, boathouses and other marine facilities on their neighbours.

Sewage System recommendations –

- 6.4* Increase awareness of the environmental impacts in the present and future of failing sewage systems through continuing education by licensed or government experts. Ongoing care, and timely maintenance should be emphasized regularly. Stress that the proper daily use of sewage systems reduces the impact of a well functioning sewage system.

- 6.5 Combined with negotiations for discounts, the JLA should urge Kawartha Utility Services to be available on the lake more often and thus encourage island and water only access property owners to pump out more frequently.
- 6.6 Well located and constructed older septic systems can work safely, and can be maintained and operated in compliance with the standards in the Ontario Building Code. If a system is deemed faulty and needs to be replaced, the current Code shall apply.

At the time of print, the Ontario government's Sewage System Maintenance Inspection Program is in draft format.

Crown Land Use Regulations recommendations –

- 6.7* The JLA in cooperation with the appropriate authority should encourage and support the identification, regulation and enforcement of protected sites, sensitive habitats and habitats supporting species at risk within the watershed of Jack Lake.
- 6.8 The JLA should support the recommendation made by the MNR that a comprehensive survey of wildlife and preferred browse species should be conducted within the Peterborough Crown Game Preserve when time and resources allow.
- 6.9 Through education, encourage the availability of some designated county roads and hydro right-of-ways for use by motorized recreational vehicles.

Municipal Planning recommendations –

Because this is a Stewardship Approach to a Lake Plan, there are no recommendations under the Municipal Planning Section. There simply are quotes from the County of Peterborough's Official Plan that support the proposed stewardship projects and education program. The education program will be designed to encourage lake users and property owners to voluntarily adopt the recommended best practices.

Peterborough County Official Plan Excerpts Related to Water Quality and Vegetation

Section 4.3 Rural and Cultural Landscape

4.3.3.1 – General

Local municipalities should encourage and, where appropriate require, through the passage of tree cutting by-laws public and private land owners to maintain the forested appearance of the landscape.

Section 4.4 Shoreland Areas and the Waterfront

4.4.1 – Goal

to improve and protect the waterfront areas in Peterborough County as a significant cultural, recreational, economic and *natural environmental resource and enhance land*

areas adjacent to the shore.

4.4.2 – Objectives

- to improve water quality on a watershed basis;
- to recognize and preserve *to the greatest extent possible* the character of waterbodies and lands adjacent to the shoreline;
- to ensure that the built form along the shoreline is *not overly concentrated or dominating to the detriment of the natural form*;
- to maintain, enhance or restore the majority of the developed and undeveloped shorelines in their natural state by promoting property stewardship*;
- to preserve and enhance *fish and wildlife habitat areas within and along waterbodies*;

4.4.3 – Policies

- The character of Shoreland Areas is linked to the natural and built form associated with the lakes and rivers in the County.... The Shoreland Areas are generally associated with leisure, recreation, water supply, support for fisheries and wildlife habitat. As such, development occurring in the Shoreland Areas **should enhance and protect**, where possible, those qualities that contribute to the *area's character*.
- Shoreline alterations must be approved by the appropriate agency... Local Official Plans **may** include shoreline alteration policies more restrictive than those of the approval agencies;
- The development of lots where possible **shall** be undertaken using a “best management” approach. Biophysical information for the siting of the building, septic and *any buffer zone should* take into account the soil type, depth and slope of the land when determining the best location for any buildings.
- The County **shall** promote the development and management of existing and future open space buffers in a natural state so that they may serve as vegetated protection zones to ensure water quality by controlling erosion and preventing nutrient overloading in waterbodies and preserve and enhance wildlife habitat areas
- Tree cover and vegetation are encouraged* to be retained along the shoreline to uphold the *visual and environmental integrity* of waterfront areas. Where development is proposed along shoreland areas, local official plans **should** contain policies relating to the incorporation of a *natural undisturbed buffer* between the water's edge and the development. Any such buffer **shall** be stipulated as being a *specific depth from the water's edge and be represented as a percentage of the water frontage*.

North Kawartha's Official Plan Amendment #3, approved September 18, 2008.

Section 6.2.5.3 Seasonal Residential Policies

h) General

The preservation of naturally-vegetated shoreland is **encouraged** in order to minimize destruction to the shoreline and wetbeach habitat, minimize visual impact on the waterbody, maintain wildlife habitats and corridors and improve water quality.

In this regard, structures permitted in the Seasonal Residential designation, including septic systems, on lots created by consent or plan of subdivision after the date OPA #3 comes into effect, **shall** be set back a minimum of 30 m from the shoreline ... in order to ensure adequate protection from changes in water level and flooding and to ensure maintenance of water quality and protection of fish and wildlife habitats.

Permitted exceptions

Notwithstanding anything in this section to the contrary, structures such as pump houses, boat houses, docks, open decks and stairs **shall** be a permitted use and **may** encroach into the 30 m setback without a minor variance provided that the property owner can demonstrate to the Township's satisfaction and, if appropriate, the authority having jurisdiction over the waterway, that it does not negatively affect the waterfront environment. If addressed in the Zoning By-law, applicable standards **must** be met (i.e. deck width, area, etc.)

Existing Structures

Minor variances or zoning changes to accommodate proposed expansions of a structurally-permanent nature to existing structures and/or septic systems that further reduce any applicable minimum water setback **shall not** be permitted unless it is a matter of public health and/or safety.