

In March 2006 the County of Peterborough adopted its current Official Plan, a watershed management plan. This is a "...document developed cooperatively by government agencies and other stakeholders to manage the water, land/water interactions, aquatic life and aquatic resources within a particular watershed."(County of Peterborough Official Plan 3.3.1). The County of Peterborough then encouraged Lake Associations to develop their own Lake Plan to help articulate and preserve the unique character of individual lakes within this watershed.

The Jack's Lake Association has taken on this challenge. Over the course of the last three years, through information obtained from surveys of stakeholders and workshops, the Lake Plan Steering Committee has collected detailed information about Jack's Lake. All this information, "background data", is available at [www.cpresults.com/jlca.htm](http://www.cpresults.com/jlca.htm). Based on this data, an Action Plan has been drafted as a means to accomplish the major objectives identified by you the stakeholders.

It is hoped that this Lake Plan will be a template which will:

Encourage volunteers ; Coordinate future projects.

Five Actions were recommended to ensure enduring healthy water quality for our lake:

- Monitoring (water quality)
- Researching (opportunities, history)
- Preserving (natural heritage)
- Promoting (social involvement)
- Planning (future land use)

Projects already underway are indicated with \*

## MONITORING (WATER QUALITY)

**Jack Lake is unique because most of it is surrounded by the Peterborough Crown Game Preserve, a preserve managed by the MNR. The watershed is now also identified as The Land Between because it is between two ecosystems. This helps to explain why the area around Jack Lake has an abundant, diverse wildlife population which includes mammals, birds, reptiles, amphibians, and invertebrates – insects. This is unique in Ontario and must be protected. Further, the number of endangered species found in the Jack Lake watershed makes the area unique. Known, questionable, rare and at-risk species observed at Jack Lake include: Five Lined Skink, Blandings Turtle, Osprey, Barred Owl, Great Horned Owl, Bald Eagle, Monarch Butterfly, Luna Moth, Pink Ladyslipper, Red Shouldered Hawk, Eastern Ribbon Snake and Least Bittern.**

- Collect water quality information through the Lake Partner Program. \*
- Install and maintain a boat wash/spray system to prevent the spread of invasive species; installed at a public launch.
- Educate boaters to invasive species for the protection of the lake system. \*
- Prepare results of water testing and best management practices for all property owners and renters.
- Inventory and Monitor 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.\*
- Local universities and colleges should be encouraged to use Jack Lake as a sampling site for well-supervised research. \*
- Participate in the Invasive Species Watch (zebra mussels, spiny water flea) and monitor the spread or discovery of other invasive species. \*

- Work cooperatively with local naturalist groups and government agencies to ensure the inventory of all local animal and plant species.\*
- Pursue various government agencies, Non-Governmental Organizations (NGOs) and educational institutes which may have funding or research projects to inventory, monitor or study rare or at risk species. \*
- Identify and monitor sensitive natural areas (e.g. wetlands, fish spawning areas) and habitats which sustain species at risk. \*
- Report to the Bancroft MNR biologist on the spring's Walley Watch count as well as the winter and summer creel counts and any other volunteer project overseen by the MNR. \*

**Our dam-controlled water level, which is unique in Havelock-Belmont-Methuen, may have helped contribute to the lake's high retention time, which can lead to a lack of oxygen (anoxic) at lower depths.**

- Monitor the lake's oxygen for anoxic tendencies and report observations to the Ministry of the Environment (MOE), Ministry of Natural Resources (MNR) and Trent Severn Waterway (TSW). \*
- Dialogue with the TSW regarding the historic regulated lake levels and the deteriorating condition of the dam. Repairs to the dam should be carried out expeditiously. \*
- Collaborate with members of the North Kawartha Lakes Association, NORKLA, on matters having mutual benefit specifically concerns related to reservoir lakes. \*

#### RESEARCHING (OPPORTUNITIES, HISTORY)

- Prepare an education program emphasizing the importance and sensitivity of wetlands and the need to protect wetlands and streams.
- Approach the MNR annually for fisheries management expertise and funding to support the monitoring and rehabilitation of spawning sites. \*

- Explore with the MNR fisheries specialists the status of the remnant lake trout population in Jack Lake with the goal of sustaining this important fish species.
- Identify important historic sites.
- Encourage residents to contribute their memories, anecdotes and photographs to a Jack Lake history book. \*

### PRESERVING (NATURAL HERITAGE)

**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. Jack Lake is unique in the town of Havelock, Belmont, Methuen for being on the Canadian Shield. However, the township by-laws are based on the topography for non-Canadian Shield lakes. Jack Lake is well protected for the effects of acid rain and natural erosion by the Precambrian Bedrock and the resulting carbonates. This granite has high conductivity. According to an expert at the Ministry of Northern Development and Mines, the lake is not protected from man-made causes of erosion. Erosion has an impact on water quality through surface runoff and it buries spawning beds, negatively impacting the reproductive potential of fish.**

- Encourage through education the preservation and restoration along the lake's riparian sections (10 – 15 metre vegetation shoreline buffer zone). This information should be available to all property owners on the lake. \*
- The township should refer to 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.
- Through education encourage lakefront owners 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 (planting native grasses, sedges, shrubs and trees).

- Emphasize protecting and retaining existing native vegetation. A group discount on native tree saplings for interested cottagers could be arranged.
- Meet with local townships, MNR, MNDR, and property owners to request that high profile building development and resource management activities like forestry and quarries do not impact the visual environmental integrity of Jack Lake.

### PROMOTING (SOCIAL INITIATIVES)

- Offer an Education Campaign to promote safe boating practices. \*
- Educate and encourage boaters to voluntarily reduce speed and minimize wake (wakeless) in narrow areas or within 200 feet of the shoreline. \*
- Through education encourage the use of appropriate shoreline and landscape lighting to minimize light intrusion and preserve natural dark night skies.
- Encourage through education awareness of the cumulative effects of the size and location of docks, boathouses and other marine facilities on neighbours.
- Through education increase awareness of the serious environmental impacts resulting from failing sewage systems. \*
- Encourage Kawartha Utility Services to be available on the lake more often and thus encourage island and water access property owners to pump out septic systems regularly.

### PLANNING (FUTURE LAND USE)

**According to T.M. Robinson Planning Consultants, “there is a very limited supply of vacant waterfront properties at a suitable standard on Jack Lake. It is**

**important to also appreciate the uniqueness of this water body due to the fact that other remaining undeveloped/vacant shoreline locations are under the jurisdiction of the Crown and are not available for development.” This undeveloped land helps sustain the health of the lake and the naturally vegetated shoreline buffer zone around the shore.**

- Encourage the MNR to retain all 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. Overnight camping on Crown Land should be discouraged.
- Explore placing limits on ATV travel across Crown Land resulting in destruction of forest habitats (eg; Little Jack).
- Request that the townships conduct a Lakeshore Capacity Study of Jack Lake prior to updating their next set of Official Plans as per the methods in the Lakeshore Capacity Assessment Handbook, protecting Water Quality in Inland Lakes on Ontario’s Precambrian Shield.
- Request that the townships in cooperation with the MNR conduct a formal assessment of wetlands in the Jack Lake watershed.