



To Enhance, Preserve & Protect Pigeon Lake & Its Watershed

FLASH June 2009

WATER ISSUES, STEWARDSHIP PROGRAMS AND THE AGM

WATER ISSUES

Water level - over the past 12 months rainfall in the watershed has been more than 200 mm below the long term average contributing to a drop in the lake level of over 50 cm. In most locations the result is simply lower water and less convenient access to the lake for boaters. However in some locations sand bars have “grown” in the lake causing dead weeds and algae to accumulate and pools of stagnant water to be formed. There has also been an increase in hazards to navigation for boaters. Evaporation is the greatest cause of water loss, followed by withdrawal of water from the lake and the surrounding aquifer. The weir, a small dam built across Pigeon Creek, at the southeast end of the lake, regulates the level of the lake at higher water levels; however, the lake has been below the bottom of the weir for quite a while.

Water input - into Pigeon Lake comes primarily from rainfall and runoff, including inflow from Tide Creek, and also from springs which feed the lake. The springs are charged by the upper aquifer, layers of permeable rock, sand or gravel through which groundwater flows out of the ground under the lake. As a result of the limited flow it takes approximately 100 years to change over all of the water in the lake. The PLWA is reviewing a range of possible mitigating strategies to address the fluctuating water inputs, including: other possible sources of water, the cessation of all industrial uses of the fresh water from the aquifers which charge the springs, the careful assessment of all additional uses by developers of the fresh water from the aquifers for residential purposes, and education of all lake users about the careful use of water from the lake and the aquifer.

Dead vegetation and algae and pools of stagnant water:

- **Permitted Actions** - lake users, including cottagers, can gather up smaller amounts of dead vegetation and algae from the lakeshore and let them dry or compost them. They make excellent fertilizer. They can also be removed to a transfer station. For larger amounts of dead material, stagnant pools of water, new sand bars and islands there is a process which involves approval by Environment Alberta for the limited use of equipment or larger numbers of people. The PLWA is currently assessing situations where large amounts of material have accumulated, and cannot be removed easily by hand. The PLWA may expand its spring shoreline cleanups to include the dead vegetation and algae in certain situations.
- **Prohibited Actions** – under provincial and federal regulations residents cannot disturb the bottom of the lake or cut vegetation of any kind. Vegetation acts as a sponge to soak up the phosphorous and nitrogen that feed the awful blue-green algae.

The PLWA is working, on your behalf, with the counties, the provincial and federal governments, the health district, and the summer villages to produce a guideline and a process for timely and effective responses to these challenges.

It is critical to the resolution of these situations that the lake community works together and in co-operation with the government regulators. Any solutions to the problems mentioned above require careful assessment of the impacts on lake users, live vegetation, fish populations, and the potential release of the nutrients, like phosphorus and nitrogen, which have accumulated in the lakebed over many years. The nutrients are prime contributors to the blue green algae blooms which have occurred recently.

The Association understands the impact on lake users and cottagers caused by some of the more extreme scenarios which have resulted from the low water levels

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Upcoming Events & Programs

Stewardship Programs – We all do small things that make big changes... what change will it be?

The PLWA, partnering with the Federation of Alberta Naturalists, *Living By Water* Program, to sponsor:

- **Homesite Consultations** – FREE confidential on-site review of any first or second row cottage property to inform residents about positive actions they can make to their home and yard to maintain healthy shorelines and easily reduce impacts on the lake to improve water quality and habitat.
- **Environmental Workshops** – Free for all ages - “Healthy Shorelines 101” from 10 am to Noon on Saturdays:
 - **July 11 & 18** - Lakedell small Hall;
 - **July 25** – Ma-Me-o Hall
 - **August 8** - Sandholm Hall located on the intersection of Highway 616 and Highway 778 (immediately south of the TJ Trading Centre, formerly known as the Sandholm store)
 - **August 15** - Mulhurst Craft Hall

These informative, fun and interactive workshops will help shoreline and backlot property owners learn best management practices of shoreline living. Topic discussion will include riparian health, recreation, onsite wastewater management and more. Change does not happen overnight but with the help of Healthy Shorelines 101 residents can implement small changes to their lake property to the betterment of shoreline habitat, water quality and overall lake health without compromising their lifestyle.

Contact Jim Stevens at 780.586.0710 to register for homesite consultation or to a pre-register for an environmental workshop.

One copy of *Living on the Edge*, a fully illustrated book, will be distributed, at the workshops, one/per family to new or current members. The PLWA website offers more details on these programs and how you can pick up your copy of the book.

Love The Lake Pledge – Contact Don Davidson at 780.586-2710 or at lovethelake@telus.net to get involved.

Riparian Health Assessments, Environmental Farm Plan Workshops On Farm Water Quality Testing, Alberta Agriculture’s Growing Forward Initiatives, Stewardship Programs and Water Management – sponsored by Counties of Leduc and Wetaskiwin. Agricultural residents can call Robbin Nikiforuk at 780.387.6182 to participate.

Horticulture - Leduc and Wetaskiwin Counties share a horticulturist position that deals with *shelterbelt planning, tree orders, tree and plant disease, insects, lawns and pruning* – For more information contact Heather Dickau in Leduc 780.955.3555 or in Wetaskiwin at 780.352.3321, ext 270.

PLWA Annual General Meeting

Come to Lakedell Hall at 10 am on August 22 to:

- Receive an update on the Association’s activities;
- Elect directors to serve until the 2011 annual general meeting; and
- give your feedback about the Association initiatives for this year and provide your input on future activities.

Starting at 9 am a number of organizations interested in helping people to help the environment will have displays and are ready to answer your questions.

All Members are invited to stay for a BBQ lunch. (To help estimate ready food needed, please RSVP to Trudy at 780.467.5127)

CONTACT US

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For more information

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