



Coming through a culvert south of on the northern Grand River
Photo by Judy Luffman

Three Grand clubs for canoeing seniors

If you are over 55 and available during the day, you have many opportunities to join a canoe club.

All three are based in different cities. They are associated with local seniors clubs. The clubs provide equipment such as canoes and paddles.

The clubs in Cambridge and Waterloo are well established and sometimes have a waiting list for members in order to ensure that all receive training. The Guelph club is in its second year.

All three feature regular outings on the Grand River and elsewhere, training, and other activities.

The Ancient Mariners, Cambridge:

Website: www.ancientmariners.ca

Phone: 519-748-5386

E-Mail: wbellinger@primus.ca

Old Salts Seniors Canoe Club, Waterloo:

Membership meeting:, Feb. 18 at 1 p.m. at Wing 404, 510 Dutton Dr., Waterloo.

Phone: 519-888-7565

E-mail: oldsalts@gmail.ca

The Evergreen Canoe Club, Guelph

Phone: 519-824-3336 or 519-822-5789

Further information: *Paddling the Grand River*, published 2006, available in bookstores and through the GRCA website. Or, check the Canoeing section of www.grandriver.ca.

Lessons learned after '74 flood

This is one of a series of articles about the history of the GRCA, which was formed in 1934 and recently celebrated its 75th anniversary.

By Janet Baine
GRCA Communications Specialist

Recent flooding in the Grand River watershed would have been much more serious if it were not for the havoc wrought by the memorable flood of 1974.

That flood was a defining moment in the history of the Grand River. It resulted in numerous changes that have reduced the risk of flooding to people and property.

May 17, 1974, started out sunny and warm. It deceived people who were “unaware of the approaching catastrophe,” according to Judge W.W. Leach, who presided over a provincial inquiry into that flood.

When the rain came, there was little that could be done, because the GRCA’s reservoirs were already full. According to the inquiry, warnings were sent, but

they didn’t get through to everyone affected.

By 7 p.m. on May 17, the Grand was rushing through downtown Galt at a rate of 1,490 cubic metres per second (m³/s), a record flow that has yet to be surpassed. The summer low flow is only 15 m³/s.

Dikes gave way in Bridgeport and Brantford. For a time, the Brantford water treatment plant was knocked out of commission, creating a state of emergency.

Floodwaters also engulfed parts of Paris, Caledonia, Cayuga and Dunnville. All told, damages amounted to more than \$6.9 million (\$29 million in today’s dollars), excluding cleanup costs.

‘Apathy’ about floods

This flood left so many questions that the provincial inquiry into it went on for



A February thaw in 2009 brought the Grand River into this neighbourhood in Cayuga. To see more recent flooding pictures, check the [grandriverca](http://grandriverca.youtube.ca) page on youtube.ca.



Through flood damages have been reduced, some parts of the watershed are still susceptible to flooding, such as New Hamburg. Photo above was taken after a 1975 flood. Flooding is the leading cause of public emergencies in Ontario today.

months. Judge Leach found that “in 1974 there was apathy throughout the watershed, not only among the endangered, but in municipal governments and, to some extent, in the GRCA.”

He called for a better flood warning system to be tested annually. He proposed improvements in the reservoir network. He urged the development of a computer simulation model for the river. And he called on governments to buy more land and further control development in the flood plain to reduce future damages.

Even with all of that in place, Judge Leach pointed out that the threat of flooding would never disappear.

“The potential exists for very serious flooding in the watershed in the future, with real danger of loss of life and extensive property damage.”

Since then, \$43 million has been spent on new dikes and flood protection work in Brantford and Cambridge. Millions more have been invested in other communities.

Over the years, the GRCA has fine-

tuned the dam and reservoir system to hold water back and minimize flooding. Over the course of the last year, the reservoirs prevented millions in damages for each of three separate events, but there is no calculation of the savings.

The sudden mid-winter thaw on Dec. 28, 2008 and the ensuing flooding showed how flood damages were averted. The flooding could have been a lot worse if the reservoirs in the system hadn’t been nearly empty, said Dwight Boyd, Senior Water Resources Engineer at the GRCA.

At the time of the flood, the reservoirs were at their normal winter holding level, but they filled up quickly because the sudden warm temperatures caused the snow to melt rapidly as rain pelted down. The combination of snowmelt and rain was equivalent to rainfall of 110 mm to 215 mm (about 4.5 to 8.5 inches), Boyd said.

The reservoir system cut flood peaks by 40 to 80 per cent on the rivers and streams where there are reservoirs, otherwise they would have exceeded the

levels set during the 1974 flood in some areas.

There would have been extensive flooding in St. Jacobs on the Conestogo River. In Brantford, water would have been close to the top of dikes constructed after the 1974 flood. In Haldimand, water would have inundated portions of Caledonia, Cayuga and Dunnville.

The flood warning system is crucial to reducing the risk of flooding. This includes monitoring the temperature, rain, snow and river levels. Weather radar information has recently been integrated into this system to help make flood forecasting as accurate as possible.

Always on call

A GRCA staff member is on call at all times and is alerted of any unusual increase in river levels, and these staff members meet weekly.

This warning system is especially important during the era of climate change, because severe weather systems may increase the potential for flooding, especially in localized areas. Real-time streamflow information has been in place since 1989 and most of this information has been available in the River Data section of www.grandriver.ca since 2000.

When flooding is possible, messages are sent to municipal flood coordinators, who are senior municipal staff, such as fire chiefs and public works managers. They can mobilize the emergency response within their local community. The police and the media also receive these messages and help to let people know if they will be affected.

This flood warning system has been tested each year since 1976, just as Judge Leach recommended. After the test, the flood coordinators meet at the GRCA usually in February, to talk about the flood outlook for the coming year.

\$1 billion flood infrastructure

The province has about \$3 billion-worth of flood infrastructure and nearly a third of this is in the Grand River watershed.