Climate change essential planning factor

By Paul Mayne

Communities along the upper Thames River need to begin planning for the impact that climate change will have on the watershed, says Faculty of Engineering professor Slobodan Simonovic.

"The time to act is now," Simonovic told a climate change workshop last week.

Simonovic says high river flows or flooding — as well as the magnitude of the events — can be expected to be grow, with extreme events during the summer months.

With drought, he doesn't see a major change, but "it doesn't mean it's not already critical and affecting us now."

Simonovic used what he refers to as the global equation model and focused it on a local scale to assess what action needs to be done locally to prepare for different weather patterns as the Earth's average temperature warms.

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>
> *Slobodan Simonovic*

The basis for his assessment is a recently completed four-year study, conducted with researchers from the University of Waterloo, that used the Upper Thames River basin to examine the impact of climate change on a broad array of water management issues.

As global temperatures continue to rise and extremes in weather become more frequent and less predictable, Simonovic says local communities need to recognize the risk that climate change represents to future development.

He adds the implications are serious for the management and regulation of cities.

"Those who develop land use will benefit from this study," says Simonovic, noting population and housing growth, along with business growth, are factors that need to be part of the equation.

"The extent of the climate change will help the decision makers in determining the use of land. It will have some implications."

As an example, Simonovic outlined the possible impact on the campus of The University of Western Ontario, focusing on the south portion. The projected 100-year flood line — the line most often used when determining where new construction will be permitted — would include the former rugby field and potential location of the proposed new Ivey building across from the Arthur and Sonia Labatt Health Sciences Building within the area vulnerable to flooding.

Siminovic said the 250-year flood line (marking events likely to occur only once in 250 years) would bring such extreme flooding events to the door of the Health Sciences Building.

Environmental planning will become increasingly important, however Simonovic says immediate concerns, including budgetary matters, can't be neglected by looking too far into the future.

"Budgets need to be reviewed to ensure for the safe operation of existing maintenance of flood management infrastructure, as well as future levels of investment," he says.

"Climate change can't be neglected. This should be seen as a time of opportunity to push economic, social and environmental agendas."