



# What is FloodNet News?

FloodNet News is a new short publication designed to provide very brief and relevant updates to the FloodNet community. You will find information on recent and upcoming events, significant research findings, new tools and more.

#### FloodNet AGM 2017 Update

On June 27-28, many researchers and partners from the network joined together for the 3<sup>rd</sup> Annual General Meeting (AGM) hosted by the Brace Centre for Water Resources at McGill University. We were very pleased with the turn out and participation in the AGM and excited about the feedback on new elements added to the event. Posters and presentations are now available online at <u>www.nsercfloodnet.ca/annual-meeting-2017</u> or in the members only web pages.

The panel discussions were newly added this year featuring a mix of university researchers and members from FloodNet partners to discuss issues faced within the network from multiple perspectives. Key topics for Theme 1 panel were on the understanding of risks in changing conditions and how to communicate those risks to decision makers, and making network outputs accessible to a broad community. The Theme 2 & 3 panel discussed translating project results for end-users, the engagement of policy makers and the importance of forecast verification. The Theme 4 panel discussed challenges to build resilient communities in Canada flood prone areas, availability of data, transfer of knowledge and risk transference through insurance.

### FloodNet AGM 2018 – Save the Date

Arranging travel can be difficult for many partners so this year we are booking early. **The AGM will be hosted at Université Laval in Québec City from June 18-20**. Responding to feedback that timings at the AGM were a little tight, Year 4 AGM will be a 2 <sup>1</sup>/<sub>2</sub> day event to allow more interactions, social time and the opportunity to catch a departing flight on June 20. See you in 'La belle province'!

#### Year 3 (2016-2017) in Review

This year has been very busy across the network both from a research and practitioner perspective.

The research management committee worked hard to complete a comprehensive Mid-Term (2.5 Year) Report submitted to NSERC in March. The Report received very positive reviews from NSERC and the independent external experts. All should be proud of the work being done in FloodNet!

Dr. Coulibaly presented the main findings of the Canadian Hydrologic Forecasting Centres review to the CWRA meeting and the final report is now in the last stages of revision. FloodNet also cosponsored the CSHS Hydrological Modelling Short Course at the lead by James Craig and Bryan Tolson at the University of Waterloo. Dr. Xenopoulos was invited to present on "Disentangling the effects of agriculture land use on the export of nutrients and carbon during flood events" at the prestigious AGU Chapman Conference. FloodNet provided an "Overview of the State of Floods Across Canada" at the Western Canada Water Conference and at the McMaster Centre for Climate Change Fall Public lecture.

This Summer, nine grad-students have completed internship positions with various FloodNet partners. *Please continue to take advantage of this fully funded internship program*. For more information, email: floodnet.manager@mcmaster.ca.

This spring/summer also saw major flooding in many parts of Canada keeping many in the community busy. It caused several prominent media outlets including the Globe and Mail, CTV, and CBC to keep FloodNet researchers busy with interviews.

# CaSPAr – Canadian Surface Prediction Archive

Partnering with Environment and Climate Change Canada and ESRI Canada, FloodNet researchers have successfully gained resources from Compute Canada to develop CaSPAr. This will be an accessible big data portal and rolling archive of numerical weather prediction data. See the flyer in *flash* **FloodNet** Vol. 2 (www.nsercfloodnet.ca/flashfloodnet). CaSPAr is expected to release in late Fall 2017!

## **Reflections on the Summer 2017 Floods**

The spring and summer of 2017 saw widespread flooding in Ontario and Québec which can serve to highlight some important lessons for future water management. As recently as 2013-2014 the major news topic was the record low water levels in Lake Ontario and the costs associated with low water in the future. At that time, no-one would have predicted late spring rain to push Lake Ontario to the highest water levels recorded in nearly a century. The challenges of high lake water were compounded by flooding in the Gatineau and Ottawa Rivers discharging near Montreal. Water managers were faced with a dilemma. Releasing more water through the Moses-Saunders Dam to relieve flooding along Lake Ontario would increase water in the St. Lawrence River, which would be exasperated by flooding in the Gatineau and Ottawa River.

There are several important lessons from this event that can be translated and re-scaled across the country. First is the critical importance of investing in greater understanding of our water systems specially in the light of extreme events. The variability of record low to high waters in a system the size of the Great Lakes in a period of 5 years deserves careful consideration and certainly a greater scientific understanding. Particularly considering climatic changes to flow regimes (see articles in *flash* FloodNet; http://www.nsercfloodnet.ca/flashfloodnet).

Second, we can see the value of collaboration in water management. Water does not respect political boundaries and management of these events involved partnerships across provinces and countries. The water boards and IJC show the value of pre-existing relationships and regular contact to discuss water management and everyone benefits from greater sharing of data resources and standardized data collection and management practices.

Lastly, the media coverage shows how much water is taken for granted by the public and how the complexity of flood and water management challenges are underestimated. This is a grand challenge which the water community should rise to meet. Water critically affects so many aspects of Canadian's everyday lives but most have a better understanding and greater personal interest in their hockey pool.

It is appropriate to conclude this reflection by saying kudos and thanks to water managers, both in this instance and across Canada. Your dedication and willingness to make hard decisions for the benefit of everyone is very much appreciated and not acknowledged enough.

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