

## A meeting of the Australian Flood Early Warning System community

Delft-FEWS Users Days 2017, Melbourne 26 – 28 April

Bureau of Meteorology

The Delft-FEWS User Days 2017 event was another successful gathering with thanks to the generous contributions of the Australian Flood Early Warning System (FEWS) user community.

Special thanks went to South African colleagues from the eThekweni Municipality, for traveling 'Down Under' to showcase their comprehensive Delft-FEWS system for Durban.

Another highlight was keynote speaker Terry Malone from Seqwater, one of Australia's largest water businesses. Terry reflected on his diverse career in flood forecasting and warning, including many years at the Australian Bureau of Meteorology (Bureau), where this year's event was held. His valuable hindsight introduced two key themes which persisted throughout the 3-day event: the quality and quantity of observations ("I can't see the 5m mark"), as well as the calibration and set-up of models ("hydraulics vs hydrology"). With a particular focus on the final product of our systems, flood warnings, Terry's imparted this wise reminder:

*"What matters at the end of the day is that a clear and timely message about what is likely to happen in this flood is delivered to those who understand what actions they need to take to mitigate its impact. For this, procedures and training are just as important as observations and models."*

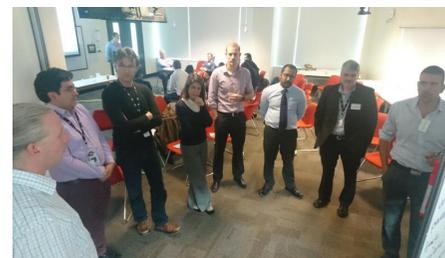


Terry Malone (Seqwater) reminds forecasters to be adaptive.

The Bureau also reflected upon the importance of a focus of flood warning after this year's wet season, as it shared an evaluation of the first 6 months of operation using the new Delft-FEWS based Hydrological Forecasting System, and its outlook towards 2020.

Will we see Google Flood develop in the next 10 years?

A lively break-out session on Day 2 of the event program encouraged a group to brainstorm wildly about what disruptions flood early warning system technology might be facing in 5, 8 or 10 years. A bracing thought was posed:



The 'future of forecasting' session had the users community thinking on their feet.

L-R: David Chalmers (Melbourne Water), Carlos Velasco, Yves Bessard, Agathe Boronkay, Andrew Preece, Shoni Maguire, Jeff Perkins (all Bureau of Meteorology), and James Charalambous (BCC)

*"How long before we see the introduction of Google Flood?"*

It was a welcome change of thinking from a focus on advanced operations and systems, and many thought it an exercise that the Australian community might do more often to keep its eyes clearly on the horizon for 'competitors'.

Deltares offered its insights from a recent dedicated 'future of flood warning' session held in the Netherlands. The full report (in English) will become available online shortly.

Delft-FEWS upgrade - Australia keen to contribute

Jeff Perkins, Manager of the Bureau's flood forecasting and warning operations, detailed the plans of the Community Strategy Board to upgrade the architecture and archives of Delft-FEWS. The enthusiasm from the Australian community to contribute was very encouraging, ensuring that in partnership with Deltares, the community will benefit greatly from the 2018 release of the software.

Other event highlights included:

- Adasa introduced the Australian community to Water Quality in Delft-FEWS.
- BMT-WBM and Water Technology demonstrated tools to support decision makers in making the best use of the available forecasts.
- Melbourne Water increased the relevance of water level forecasts for users in the tidal zone of the Yarra River by adding storm surge forecast.
- Murray Darling Basin Authority made a big step forward in their flood modelling capabilities.
- Seqwater uses the WaterCoach to train in a realistic environment, allowing them to get in depth knowledge of and experience with the extensive procedures
- The Bureau and Seqwater made the next step, by sharing forecasts on a data level, to improve their internal conversations during a flood event.



Deltares invites you to browse all presentations at: <http://oss.deltares.nl/web/delft-fews/dfuda-2017>.

Please save the date for the next Delft-FEWS User Days Australia: 2 – 4 May 2018