

INTEREST STATEMENT FOR WAS*IS

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This document outlines my interest in the WAS*IS workshop, and its overall goal of better integrating social science with weather forecasts.

In terms of my background, I have had experience in investigating the impacts of natural hazards on society, and researching how we can use scientific information in a way that contributes to creating resilient societies.

While my interest covers all kinds of natural hazards I have also had a great deal of experience looking at the social implications of weather-related hazards. Some of the projects I have been involved in include:-

- Investigating the impacts of the 2004 storm and flood events in the lower North Island of New Zealand and the Bay of Plenty, NZ (including physical, social and economic impacts, preparedness and warning systems);
- Investigating preparedness and response to warning systems along the Waikanae River, New Zealand. The survey for this research included questions about weather forecasts and how residents use weather forecasts;
- Investigating preparedness for flooding in New South Wales Australia with a view to improving flood education and response to warning systems;
- Testing of a proposed Flood Alert System in Northland, New Zealand;
- Researching good practice land-use planning options for weather related hazards (e.g., flooding, coastal hazards);
- General community resilience work – i.e. investigating what personal, community and institutional factors contribute to creating a resilient community and how these can be applied in reality.

For some of the impact-related case studies above (i.e. Manawatu-Wanganui, 2004) weather forecasts (heavy rain warnings) were available in advance, but were not used at the time to feed into the response level. It is evident that there is some potential for using these forecasts in future to give populations more information about what actions they should be undertaking to avoid or mitigate flood impacts. It would be fantastic to integrate these different aspects more fully, into a comprehensive and effective warning system, so that communities have the tools to respond better in future.

Currently we are also testing a warning model (the Flood Alert Scale) in Northland New Zealand. The Scale has a range from 0 to 5, and links information about weather and flood levels to actions that residents should be undertaking (e.g. moving animals, evacuating, etc). The WAS*IS forum would be an excellent place to undertake discussion around the range of potential methods (such as a Flood Alert Scale) that could help to integrate weather and social information.

In summary, I am interested in integrating science with social science, to create more resilient communities. The WAS*IS workshop will allow an excellent forum to advance this thinking with respect to weather related hazards.