STATEMENT OF THE

7TH INTERNATIONAL CONFERENCE ON FLOOD MANAGEMENT (ICFM7)

"Resilience to global change

- Anticipating the unexpected"

5-7 SEPTEMBER 2017, Leeds, UK

From September 5th to 7th 2017, the 7th International Conference on Flood Management (ICFM7) was held in Leeds with more than 300 participants gathered from over 30 different nations across the continents. The participants were grateful to the local organisers for their efforts to ensure a successful conference and were pleased to have the opportunity to learn of the flood risk challenges faced in the UK and the responses adopted.

Following three days of extensive exchanges and discussion of the challenges faced by individuals, communities, local authorities, businesses, nations and regions in terms of flood risk, the participants of ICFM7 agreed the following declaration as their own commitment and their appeal to the public, professionals, managers and decision makers in this crucial task to carry out actions for the security of life, social welfare, and enhancement of land- and water-related environmental management:

Acknowledging:

- The large range of impacts from small localised flooding of a few dwellings to the huge human impacts seen in the weeks leading up to the conference in countries as widespread as the USA, Bangladesh, Nepal, India, Pakistan, Sierra Leone, Nigeria amongst many others.
- 2. Since the last conference flood risk has continued to increase due to urbanisation, economic growth, population growth, migration and climate variability.
- The acceptance amongst radical flood risk experts that the paradigm of resilience has replaced that of defence, but acknowledging that this is less accepted by some political leaders and even less accepted by those affected by flooding.
- 4. The increasing importance of local government as the implementation agents of flood resilience, while acknowledging that local governments often exhibit limited technical and financial capacity to implement flood resilience measures.

- 5. Many countries, both developed and emerging economies, need to spend significant sums of money on increasing flood resilience, but the traditional routes to provide this funding are less and less available.
- 6. The existence of differential levels of vulnerability in populations and sectors affected by flood events.
- Major, regional flood events have the potential to disrupt society at national and international scales due to the interconnectedness of socioeconomic activities between regions.

Declaring:

- 8. Flood risk can only be reduced, not eliminated and requires detailed planning at a system level.
- 9. Recent events have shown the acute need for planning and preparation for quicker and more complete emergency response and recovery.
- 10. Continuing uncertainties demand that we adopt flexible responses without "lock-in" to particular measures. More research is required to demonstrate to decision-makers how to implement adaptive approaches to flood resilience and to understand their benefits.
- 11. The tendency for flood risk management to become more inter-disciplinary has not abated and in fact becomes more pronounced with the need to influence individual and collective decision-making.
- 12. Multiple sources of flood risk must be considered together. Separate sources of flood, including coastal, river, rainfall and groundwater flooding, often occur together and the combined impact can be greater than the sum of each alone.
- 13. The need to consider the multiple benefits of flood resilience measures is increasing; however, there is a considerable need for research on the mechanisms for doing this and for understanding the inherent uncertainties associated with multiple benefits of flood resilience measures.
- 14. Flood resilience measures are not stand-alone solutions and have to be embedded in wider systems analysis and decision making.
- 15. Resilience strategies are best when they are generated bottom-up rather than top-down.
- 16. Flood resilience measures require actions to be taken by all levels of government. Regional and local governments must work in conjunction with national governments to effectively apply local flood resilience measures.

- 17. City-to-city learning is becoming an increasingly effective way of making change internationally.
- 18. Flood risk experts need to move the issues of flood resilience into the mainstream.
- 19. The significant need for funding for flood resilience requires the development of innovative financial mechanisms.
- 20. Understanding the preparation by individuals requires research on attitudes to risk and resilience, and the balance people expect between their own responsibility and that of their government. Thus flood resilience requires a range of disciplines including engineering, environmental science, information science, psychology, social science, economics, law, governance and cultural studies.
- 21. There is significant potential for the role of sustainable urban drainage systems, sponge cities, natural infrastructure, and similar "Nature Based Solutions" in flood resilience. There exists a continuing need to document and analyze the utility of these approaches for flood resilience.
- 22. Effective application of flood resilience approaches requires improved and ongoing integration of practitioners representing a variety of disciplines, including engineering, insurance, land-use planning, emergency management, communications, building science, and sustainability.
- 23. The importance of international partnerships to promote flood resilience. Particularly, the ICFM should provide the foundation to support the work of the International Flood Initiative.
- 24. Climate change and variability is no longer a potential risk it is a lived reality in many parts of the world.
- 25. Continued development of the built environment must be turned into an opportunity to promote flood resilience, including implementation of flood resilient urban development and infrastructure.

Agreeing:

- 26. Actions stemming from the Hyogo Action Plan have reduced flood risk and this declaration supports their continuation. Policies and measures being developed for the period after 2015 beyond the MDGs must enhance resilience to natural hazards globally, in particular in relation to flooding.
- 27. Whilst each flood and flood risk area has its own characteristics, sharing of experiences brings benefits to all in responding to future floods.

28. Flood resilience members demand co-creation with stakeholders, particularly empowering local governments, cities and communities.

Inviting:

- 29. In order to continue the benefits of sharing experiences and approaches, the Ad Hoc Committee is invited to convene the ICFM8 in 2020 in Iowa City, USA, to further develop flood risk management research and practice at individual, community, business, local authority, national and regional levels under the title "Achieving Flood Resilience sustainable adaptation to global and regional change".
- 30. In order to facilitate accumulation of outcomes in promoting flood management and sustainably expand influence of ICFM, the Ad Hoc Committee determines to set a permanent secretariat in China Institute of Water Resources and Hydropower Research.