Special Issue Water Resources Economics based on Contributions to the 8th International Conference on Water Resources and Environment Research, 14-18 June 2019, Hohai University, Nanjing, China

Organizer/chair: Roy Brouwer, Executive Director of the Water Institute and Professor in the Department of Economics, University of Waterloo, Canada

Scope and aims:

Planet earth faces increasingly imminent water resource scarcity challenges due to population growth, climate change and society's increasing demand for cleaner and more resource efficient production and consumption. Meeting growing demand and avoiding catastrophic global water resource scarcity requires water technology innovation on the one hand and behavioral change on the other hand. These push/supply and pull/demand factors ideally go hand in hand, but typically lack, in practice, necessary institutional-economic governance structures. In addition, evidence-based transformative strategies based on cost-effective and efficient economic policy instruments towards a blue economy are missing despite increasing policy and political interest in concepts such as a circular economy.

This special issue, organized by the editor in chief of the Elsevier journal Water Resources and Economics, aims to highlight, discuss and advance state-of-the-art thinking and research to support the transition towards a blue economy, in particular the role of water technology innovation and the necessary institutional-economic enabling environment to foster sustainable behavioral change in current water use and depletion. Economic paper presentations are solicited on the relevant technological, economic, social and governance dimensions underlying technology adoption and behavioral change towards a blue economy in urban and rural water systems in China and elsewhere in the world.

Especially papers focusing on methodological development and innovation in *hydro-economic modelling*, *non-market valuation* of water externalities and the design and evaluation of *economic policy instruments* are welcomed.

Possible topics include (but are not restricted to):

- Food, energy and water security
- Droughts and water scarcity
- Climate-smart agriculture
- Climate change adaptation and mitigation
- Valuation and insurance of climate change risks

- River restoration
- Economic costs and benefits of eutrophication
- Environmental flows
- Payments for watershed services
- Economic growth, water pollution and water use efficiency

- Blue cities
- Storm water harvesting
- Centralized versus decentralized urban water systems
- Resource recovery
- Business models to support a blue economy
- Water pricing and full cost recovery

The special issue will be based on selected papers presented at the conference, following a standard double blind peer review procedure. More information about the conference can be found here.