Proposal of a special session at IAHR 2019 Biennial Congress (draft)

Sept 15, 2018

**Title: Riparian Vegetation Processes: Focused on Causes and Effects and Modeling**

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Synopsis: The riparian vegetation processes, recruitment, establishment, succession and retrogression, have been considered as a part of natural phenomena, like flood and drought and changes in river course in fluvial system. Accelerated riparian vegetation processes due to human impacts have caused dramatic changes in the riparian ecosystem functions, and in some cases, increased river-disaster risks. This special session focuses mainly on the human impacts on the riparian vegetation processes, and computer modeling of the processes based on the physical, chemical, and biological interactions. Relevant case studies in different geographic and climatic regions are also discussed.

Keywords: riparian vegetation, human impacts, dynamic succession model,

Topics of interest:

The topics of this special session are, but not limited to, the following:

 Fundamentals of riparian vegetation processes (including field observation)

 Riparian vegetation processes in different types of rivers (climate, morphology, land use,

etc.)

 Invasion of exotic species in riparian vegetation

 Human impacts on riparian succession dynamics

 Riparian vegetation models: dynamic succession models

 Evaluation of new ecosystems created by changes in riparian vegetation