



Panta Rhei – Everything Flows  
Change in Hydrology and Society  
IAHS Scientific Decade 2013-2022  
[www.iahs.info/pantarhei](http://www.iahs.info/pantarhei)

## Summary of the activity of the Panta Rhei Working Groups – Year 2014

Title of the Working Group: Evolving Urban-Water Systems

### Report of the activity of the working group in 2014

The following papers have been published (a few others are in preparation) that acknowledge the Panta Rhei Research Initiative:

Rossel, F., J. Gironás, A. Mejía, A. Rinaldo, and F. Rodriguez (2014), Spatial characterization of catchment dispersion mechanisms in an urban context, *Advances in Water Resources*, 74(0), 290-301.

Mejia, A., E. Daly, F. Rossel, T. Jovanovic, and J. Gironas (2014), A stochastic model of streamflow for urbanized basins, *Water Resources Research*, 50, 1984–2001, doi:10.1002/2013WR014834.

Kesserwani, G., and Y. Wang (2014), Discontinuous Galerkin flood model formulation: Luxury or necessity?, *Water Resour. Res.*, 50, 6522–6541, doi:[10.1002/2013WR014906](https://doi.org/10.1002/2013WR014906).

Kesserwani, G., and Q. Liang (2015), RKDG2 shallow-water solver on non-uniform grids with local time steps: Application to 1D and 2D hydrodynamics, *Applied Mathematical Modelling*, 39(3–4), 1317-1340.

A meeting was organized during AGU 2014 and was attended by 4 of the working group members. We are planning a second meeting to occur in March 2015 in Santiago, Chile.

### Description of the opportunities provided by Panta Rhei

It has provided an outlet for the working group members to come together, discuss priorities, and begin developing a joined vision. The initiative has also being useful in supporting the preparation of grant proposals where Panta Rhei can be used as an example of a synergistic activity as well as to connect potential collaborators.

### Suggestions for the future development of Panta Rhei

No suggestions at this point but finding funding has been challenging.