

Adam Charette-Castonguay

Curriculum Vitae

EDUCATION

PhD Civil Engineering (Water) 2015-Present

Monash University, Melbourne, Australia

Thesis: Modelling the adoption of nature-based solutions for stormwater management: An agent-based approach.

MSc Environmental Management 2011-2014

University of Kiel, Kiel, Germany

Thesis: Assessment of resilience and adaptability of social-ecological systems - a case study of the Banaue rice terraces

BA International Relations 2007-2011

Laval University, Quebec, Canada

Thesis: Agricultural protectionism in international trade: the case of U.S. cotton production support (in French).

WORK EXPERIENCE

Research officer 2015-2016

CRC for Water Sensitive Cities, Clayton, Australia

Provide a diagnostic and best practice knowledge to guide investment programs linked with the Asian Development Bank operations and private sector partners in developing cities of the Asia-Pacific region. Apply the Water Sensitive Cities Index in Mandalay (Myanmar) and Suva (Fiji).

Intern 2013

Secretariat of the Convention on Biological Diversity, Montreal, Canada

Internship on the contribution to the 4th Global Biodiversity Outlook (GBO-4). Review literature on Aichi Targets 6 (global fisheries) and 9 (invasive alien species). The information gathered in the literature review was summarized and published in the GBO-4 in 2014.

Collaborative research fellow 2013

German Society for International Cooperation (GIZ), Los Banos, Philippines

Research stay for master's thesis at the Crop and Environmental Science Division of the International Rice Research Institute (IRRI). The research was part of the LEGATO Project and was funded by the Advisory Service on Agricultural Research for Development (BEAF) of GIZ.

PUBLICATIONS

Peer-reviewed articles

- **Castonguay, A.C.**, Iftekhar, M.S., Urich, C., Bach, P.M., Deletic, A. 2018. Integrated modelling of stormwater treatment systems uptake. *Water Research, Under review*.

- **Castonguay, A.C.**, Urich, C., Iftekhhar, M.S., Deletic, A. 2018. Modelling urban transition: a case of rainwater harvesting. *Environmental Modelling and Software*, *Under review*.
- Barron, N.J., Kuller, M., Yasmin, T., **Castonguay, A.C.**, Copa, V., Duncan-Horner, E., Gimelli, F.M., Jamali, B., Nielsen, J.S., Ng, K., Novalia, W., Shen, P.F., Conn, R.J., Brown, R.R., Deletic, A. 2017. Towards water sensitive cities in Asia: an interdisciplinary journey. *Water Science & Technology*, 76(5-6):1150-1157. DOI: 10.2166/wst.2017.287
- **Castonguay, A.C.**, B. Burkhard, F. Müller, F. G. Horgan, and J. Settele. 2016. Resilience and adaptability of rice terrace social-ecological systems: a case study of a local community's perception in Banaue, Philippines. *Ecology and Society* 21(2):15.

Conference papers

- Barron, N.J., Kuller, Yasmin, M.T., **Castonguay, A.C.**, Conn, R.J., Copa, V., Duncan-Horner, E., Gimelli, F.M., Jamali, B. Nielsen, J.S., Ng, K., Novalia, W., Shen, P.F., Brown, R.R., Deletic, A. 2016. Towards Water Sensitive Cities in Asia: An Interdisciplinary Journey. Conference paper presented at the World Water Congress and Exhibition 2016, 9-14 October 9-14, Brisbane, Australia.
- **Castonguay, A.C.**, Urich, C., Iftekhhar, M.S., Deletic, A. 2016. Modelling urban transition: a case of rainwater harvesting. In: Sauvage, S., Sánchez-Pérez, J.M., Rizzoli, A.E. (Eds.), 2016. Proceedings of the 8th International Congress on Environmental Modelling and Software, July 10-14, Toulouse, FRANCE. ISBN: 978-88-9035-745-9
- Chesterfield, C., Urich, C., Beck, L., Burge, K., **Castonguay, A.C.**, Brown, R.R., Dunn, G., de Haan, F., Loyd, S., Rogers, B.C., Wong, T. 2016. A Water Sensitive City Index – Benchmarking cities in developed and developing countries. Conference paper presented at the 2016 International Low Impact Development Conference, June 26-29, Beijing, China.
- **Castonguay, A.C.**, Iftekhhar, M.S., Urich, C., Deletic, A. 2016. Simulating the adoption of green infrastructure: agent-based approach. Conference paper presented at the 2016 International Low Impact Development Conference, June 26-29, Beijing, China.

SKILLS AND SOFTWARE

Programming languages

Python, R, SQL, JavaScript (intermediate)

Spatial analysis

ArcGIS, QGIS, GDAL

Data visualisation

R Shiny, Leaflet, Highcharts