



Professor Emeritus at Griffith University (Australia). Her research focuses on river and fish conservation, especially through the science and management of environmental flows.

Her work has underpinned several globally adopted environmental flow frameworks (DRIFT, ELOHA).

She received the “Making a Difference Award” from the US Instream Flow Council (2015) and led a team of experts who produced “The Brisbane Declaration and Global Action Agenda on Environmental Flows (2018)”

ANGELA H. ARTHINGTON

AUSTRALIA

HER STORY

Angela joined the School of Australian Environmental Studies at Griffith University in 1975 and it has been her academic home ever since. In 2018 she received the the Australian Society for Limnology Medal, its highest award.

E-FLOWS: HOW MUCH WATER DOES A RIVER NEED?

Environmental flows:

Quantity, timing, and quality of freshwater flows and levels necessary to sustain aquatic ecosystems.

These ecosystems, in turn, support human cultures, economies, sustainable livelihoods, and well-being.



Grand River Dam (Canada) release in May 2019.
retrieved from <https://search.creativecommons.org/>

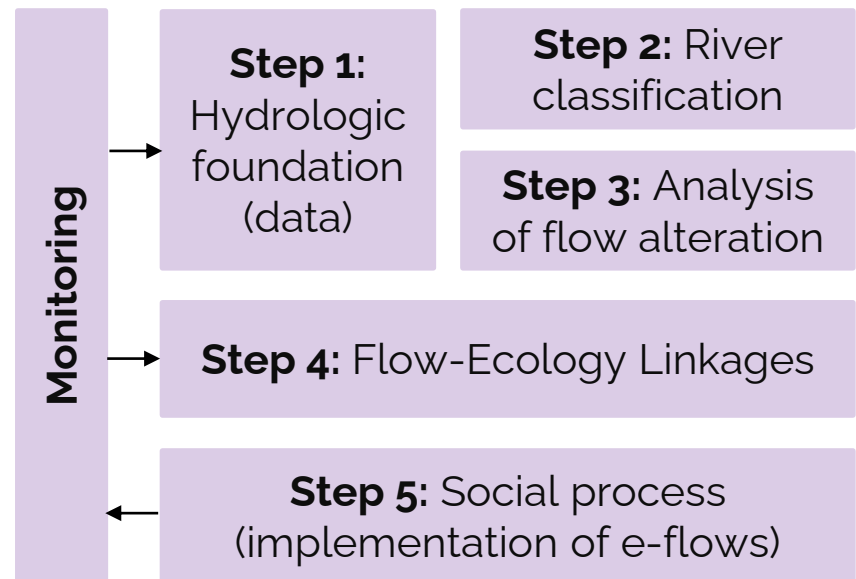
Data from: Angela H. Arthington et al. (2018).
Frontiers in Environmental Science.

E-FLOWS: HOW MUCH WATER DOES A RIVER NEED?

Ecological Limits Of Hydrologic Alteration (ELOHA): Framework to assess environmental flow.

It includes a synthesis of existing hydrologic and ecological databases to develop scientifically defensible and empirically testable relationships between flow alteration and ecological responses.

These relationships serve as the basis for the societally driven process of developing regional flow standards.



Adapted from: N. Leroy Poff et al. (2010).
Freshwater Biology.

RELEVANT CONTRIBUTIONS

Pusey, B., Kennard, M. J., **Arthington, A. H.** (2004). Freshwater fishes of north-eastern Australia. CSIRO publishing.

Arthington, A. H., Bunn, S. E., Poff, N. L., Naiman, R. J. (2006). The challenge of providing environmental flow rules to sustain river ecosystems. *Ecological applications*, 16(4), 1311-1318.

Arthington, A. H., Naiman, R. J., McClain, M. E., Nilsson, C. (2010). Preserving the biodiversity and ecological services of rivers: new challenges and research opportunities. *Freshwater Biology*, 55, 1-16.

Arthington, A. H. (2012). Environmental flows: saving rivers in the third millennium (Vol. 4). Univ of California Press.

Arthington, A. H., Bhaduri, A., Bunn, S. E., et al. (2018). The Brisbane declaration and global action agenda on environmental flows (2018). *Frontiers in Environmental Science*, 6, 45.

LOOKING
FOR MORE?

You can find more information about her story and research at:

<https://experts.griffith.edu.au/9829-angela-arthington>

<https://scholar.google.com/citations?hl=en&user=ArZmQtoAAAAJ>