

Water Operations for Uncertain Futures 2023

7-9 June 2023, Canberra, ACT

An interdisciplinary, futures-focused workshop on water management for researchers and practitioners from Australia and beyond.

We are delighted to announce the third workshop in the Algorithmic Futures Policy Lab series: Water Operations for Uncertain Futures 2023. Water operations face an uncertain future with changing and broadening requirements, new technologies, and new conditions, including with land use and climate change. The workshop will bring together people working on water operations in research, government and industry for an interdisciplinary, futures-oriented exploration of water management. Participants will also include international experts on both water operations and participatory processes to support future water management.

A single day field trip will follow to Cooma, to see the [Snowy Hydro Discovery Centre](#) and guided tour of main control room.

We will take a broad, integrated view of automated and human-in-the-loop water operations as day-to-day management of water, including not just river operations, but also how it connects with farm and irrigation district water management, and an integrated view of water storage that includes soil moisture and groundwater, as called for by the [World Bank](#) and [Global Water Partnership](#).

Operational water management is emerging as a critical part of climate change adaptation and dealing with basin closure in order to maximise the flexibility and adaptive capacity of the system, and because it requires coordination across quite large areas, multiple scales and multiple interests, it has all the hallmarks of a wicked problem.

Taking a systems and foresight view will enable the workshop to explore complex issues around the role of algorithms and structured decision making, achieving multiple benefits of water, handling of climate change and variability through flood and drought, conjunctive use of surface and groundwater, integration of operations across scales, and interconnections with longer-term water policy. Activities will explore flow-on consequences, potential for system transformations, and will facilitate conversations about ideal visions and how to get there.

In a new era of collaborative interdisciplinary research and policy development, with organisations such as the One Basin CRC and the ANU Institute for Water Futures, we have the potential to rapidly explore, prototype and test possible innovations, collaborating with government, industry and community partners and First Nations to work towards putting concepts into practice.

Agenda

The workshop builds on wide participation, both domestic and international, by government, industry, and academia to provide space for relationship building, socialising of emerging water operations concepts, and testing against diverse views.

Discussion is centred around a set of concept pitches (EOIs due 26 May) to be prototyped and tested in participatory water operations simulations, identifying possible first/next steps in bringing the future alive.

- 7 June [The Gallery – Kambri]
 - Panel discussion [3-5 pm]: What water operations future could we build together?
 - Cocktail evening [5:30-7:30 pm]
- 8 June [Check-in from 8:30 am – The Gallery, Kambri]
 - Introductions and concept pitches [9-10:30 am]:
 - What part of the future am I working on?
 - Concept pitches: selected water operations concepts to be explored today.
 - Concept Pitch Open Space Workshop [11 am-12:45 pm]
 - Meet your team, vote with your feet
 - How could this concept be prototyped today?
 - Water operations participatory simulation: from intended policy to practical outcomes [1:45-3:45 pm]
 - Cooperative exploration and testing of the concept pitch
 - Concept pitch debrief [4:15 – 5 pm]
 - What did you learn?
 -
 - What could you tell others about this concept? To whom?
 - What might a next step look like?
- 9 June: Field trip to Snowy Hydro [Meet at D.A. Brown Building (Building 47), Daley Road, Acton ACT – Bus departs 8:30 am and returns to ANU at 5 pm]
 - Morning at the Discovery Centre
 - Afternoon tour of the Control room

Participants confirmed from One Basin CRC, MDBA, eWater, Murrumbidgee Irrigation, icon water, University of Virginia, Wageningen University, University of California, Irvine and more

The workshop is co-organised by the [Institute for Water Futures](#) at the Australian National University as part of the Water on the Horizon series, and the [One Basin CRC](#) in support of productive, resilient and sustainable irrigation regions.

We gratefully acknowledge the support of the Erasmus+ Programme of the European Union as the third workshop of the Algorithmic Futures Policy Lab (<https://algorithmicfutures.org/policy-lab/>).

You can visit the page for this workshop at: <https://algorithmicfutures.org/wouf23>

If you have questions, feel free to contact us at algorithmic.futures@anu.edu.au.



With the support of the
Erasmus+ Programme
of the European Union