# NATIONAL WATER WATER WATER

**Bring Water into Focus** 

AUSTRALIAN WATER





The Australian Water Association acknowledges the Traditional Custodians across Australia, where we live, work and play, for their deep connection to our precious waters and land. We pay our respect to Elders past and present, and the ancestors who have cared, protected and nurtured Country for many thousands of years.



#### George Hill

### Civil and Water Engineer and Water Skills Network Manager, Arup





#### Young Water Professionals

Who are we?
How can you get involved?

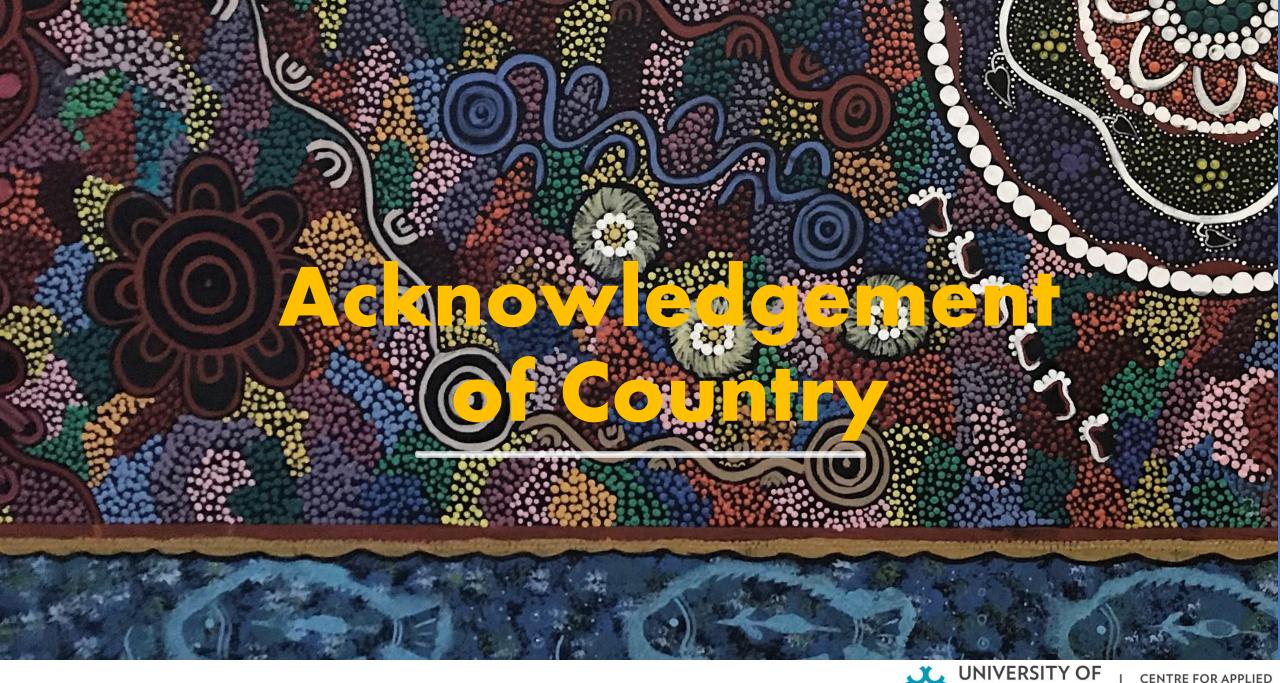




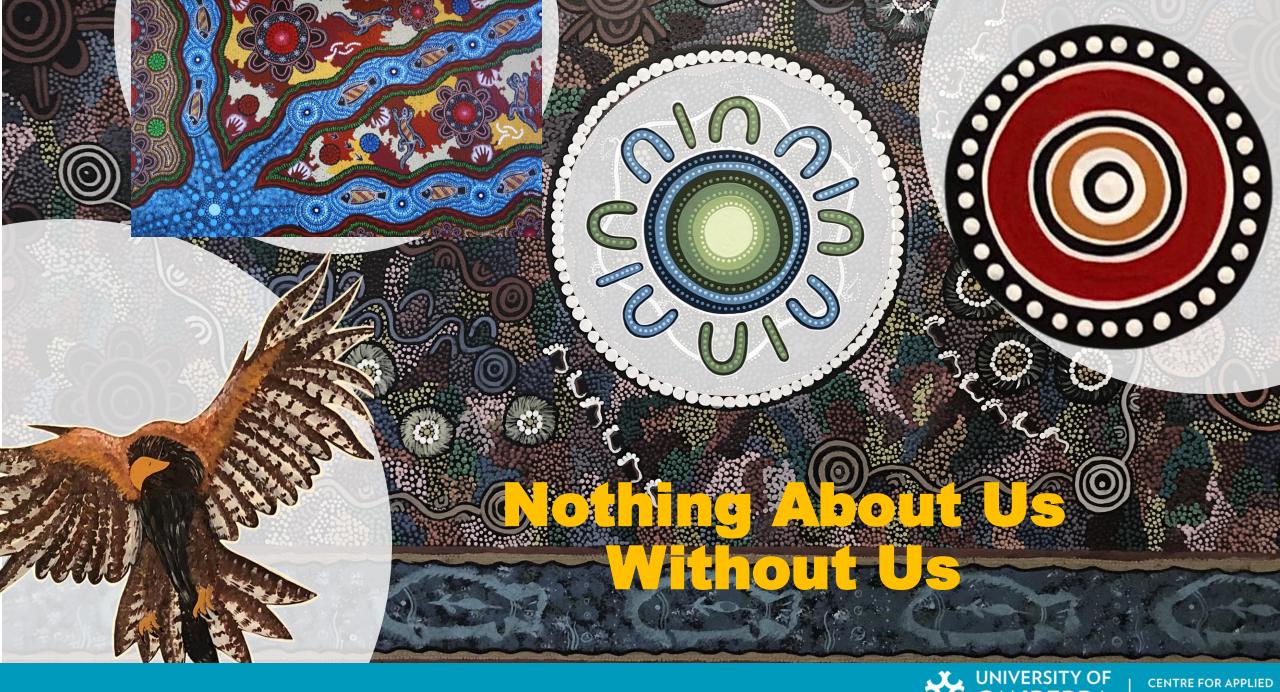
#### Dr Leslie 'Phil' Duncan

## Galambany Professorial Fellow Canberra University Australian Principal Aboriginal Cultural Advisor Beca Hunter H20









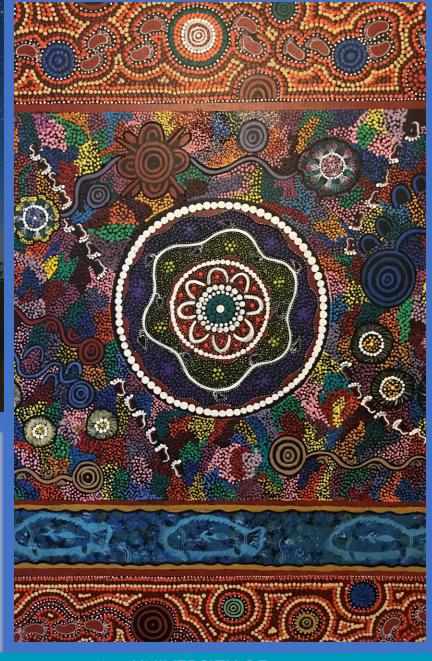


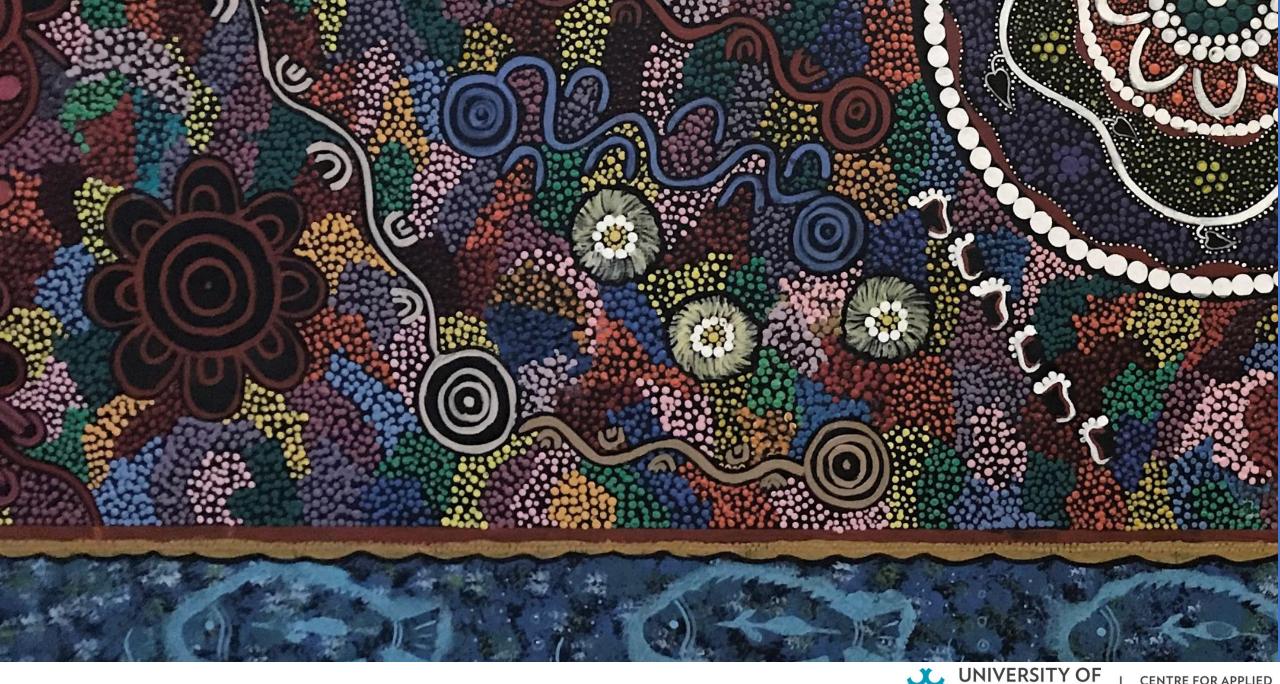




My Dreaming
Dhinawan
My Mother

"The Dreaming is the dimension of sacred eternal time when Ancestors Spirits came up out of the earth & down from the sky to shape the land, rock, rivers, mountains, forests and deserts. The Spirit Ancestors created all the people, animals & plants that were to live in the country & laid down the laws, customs and codes of conduct that Aboriginal people lives were to follow"









#### **Tracey Willingham**

### Manager, Water Literacy and Education Sydney Water





#### 3 mindset shifts



From hidden to visible - consider where water really lives in our lives (food, clothes, landscapes, and systems).



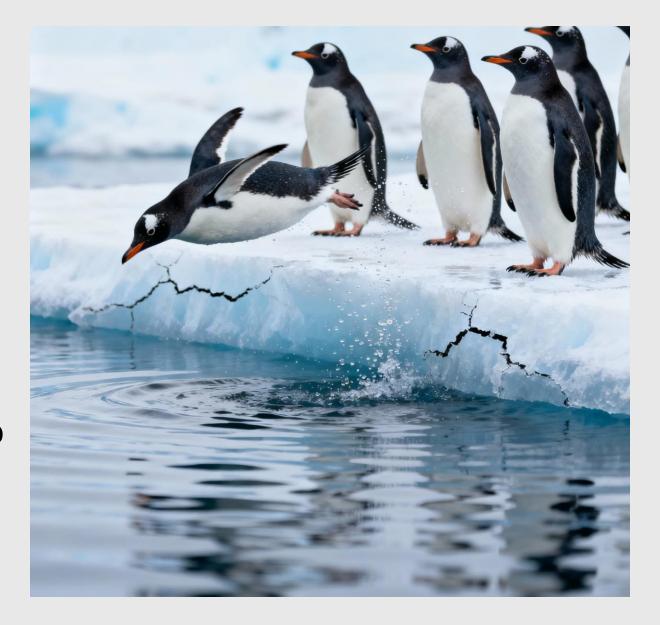
From passive use to active value - notice, respect, and protect it through everyday actions.



From isolated to interconnected - consider how water links communities, cultures, economies, and ecosystems.

## Be the first penguin

When a penguin jumps first, the others follow - it takes one clear line of sight (or action) to change the group's focus.

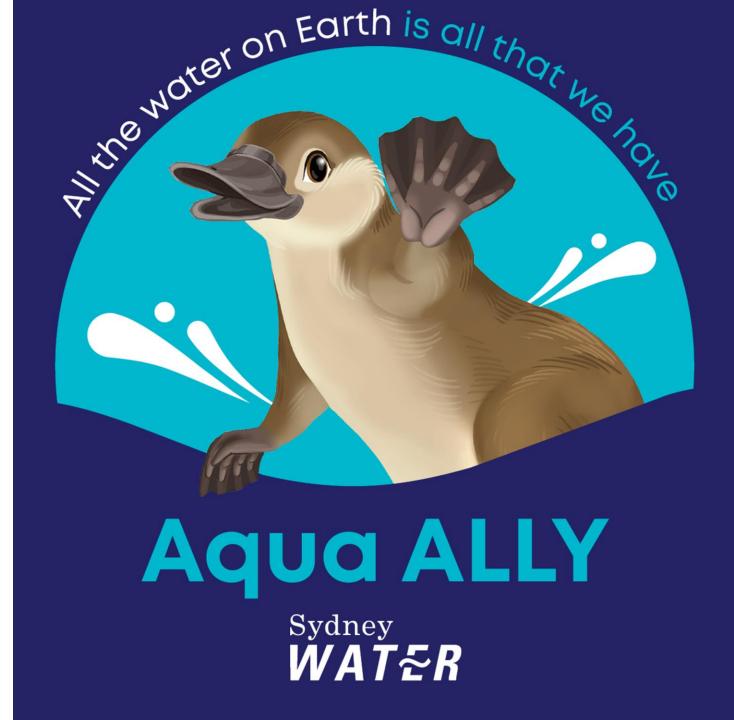


What if we paused to trace the journey behind every drop?



## Building Young Water Stewards

Aqua Allies



#### Reframing Our Vision

Is this just a glass of water?







#### John Brelsford

## Business Development Lead Optimatics



#### Bring Water into Focus: Data to Support the Value of Water

YWP National Water Week Webinar 2025

#### John Brelsford

Business Development, Optimatics (ANZ) & RiSWP Leadership Team



21 October, 2025

#### Overview

- Who We Are (RiSWP at a glance)
- From Global to Local: Valuing Water
- How Data Creates Impact
- A Clearer View of Water
- How can you use data in your life to bring water into focus?



#### SWAN Members Global leaders in advancing smart water worldwide.









#### **RiSWP Initiatives**

(1) Career Development Portal



(2) Smart Water Courses



(3) Mentorship Programme



(4) Ambassador Programme





#### What do Customers and the Community Value?

#### How do we provide this?

- •Reliable, clean water supply
- Affordability
- Water Quality
- •Environmental Sustainability
- •Infrastructure Investment
- Transparency
- Innovation
- Equity
- Community
- •Stakeholder Engagement





#### **How Data Creates Impact**

#### How can data support the value of water?

- Realtime, accurate info (both customer and operation)
- Optimised investment
- Minimal subjective intervention
- Data literate workforce
- Proactive maintenance schedules
- Maximise Customer satisfaction
- Self-diagnosing
- Self-healing





#### From Global to Local

#### Greater Western Water System Planning Optimization

- **1.Blockage Analysis**: The criticality of each pipe in terms of spill and flood volume was assessed, providing a metric for the consequences of blockages across the system. 2.
- **2.Growth Analysis**: The optimization aimed to maximize growth while minimizing hydraulic penalties. Critical areas where growth could not be accommodated without increasing hydraulic penalties were identified.
- **3.Master Plan Optimization Analysis**: Using population scenarios for 2023 and 2072, the optimization process evaluated potential interventions, including new pipelines and upsizing existing ones. The objective was to minimize both total costs and hydraulic penalties, with results presented in Pareto curves.

Original plan was for around \$9m in repair and replacement costs, and we helped them bring that down to around \$3.5m.







#### **Data Cleanliness**

Do we have sufficient, clean data available?

Maintenance	Investment
Maintenance History	Consumer Trends
Asset Inventory / Condition	Growth Data
Failure Locations	Geospatial Data
Weather Data	Labor Costs
Customer Data	Risk Profiles
Sensor Data	Failure Patterns



#### SMART Networks, SMART People

How do we keep up with the demands of the future?

- (1) Upskill the current workforce
- (2) Career Development
- (3) Smart Water Courses
- (4) Ambassador Programmes
- (5) Mentorship Programmes











#### **Bring Water Into Focus**

Panel Discussion and Questions

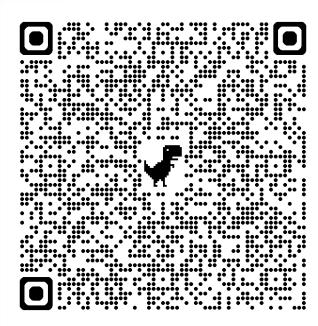






#### **Get Involved**

- Events
- Become an Ambassador
- News
- Resources



https://www.nationalwaterweek.org/



