The Queensland Water Modelling Network – an overview of the benefits of a growing collaborative network *(Part A)*

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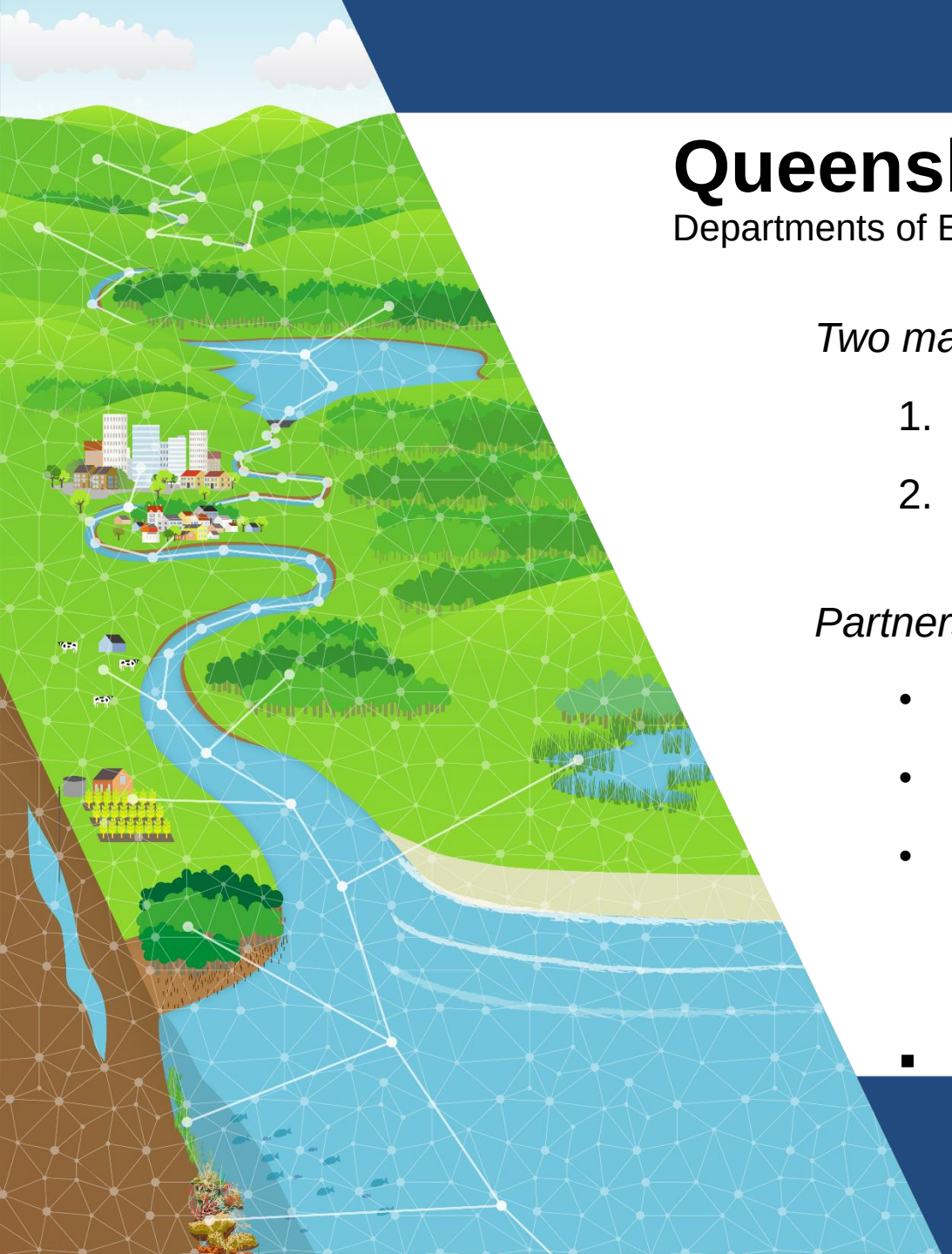

Queensland Water Modelling Network

Departments of Environment and Science and Natural Resources, Mines and Energy.

Two major programs:

1. A Research, Development & Innovation (RDI) investment program
2. Capability building in government, research and private sectors through an External Engagement Program (EEP)

Partners:

- The modelling community (private, government and research)
- End users (policy makers, planners and investment programs)
- Enablers: (universities, workplace capability and direction setters)

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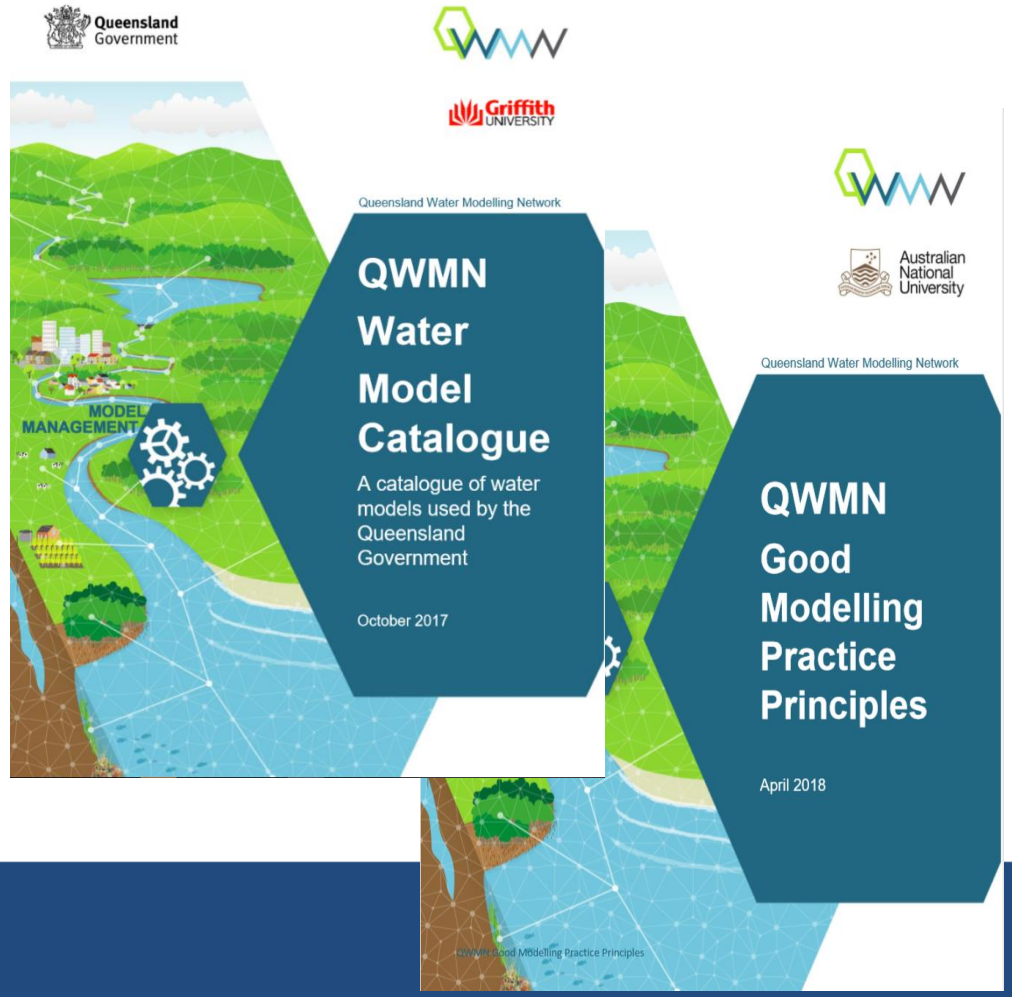
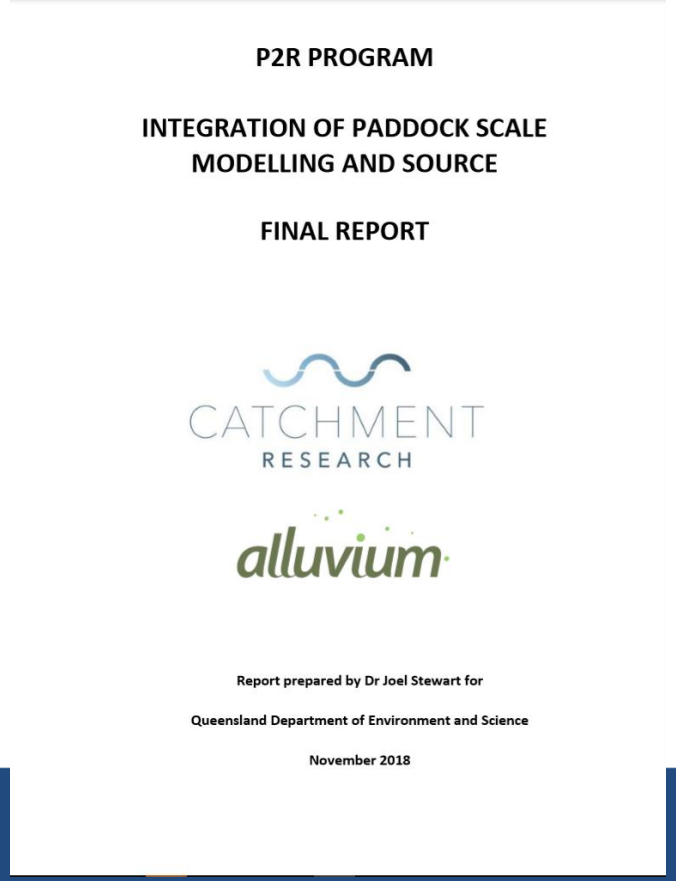
1. RDI strand – Some QWMN products to date

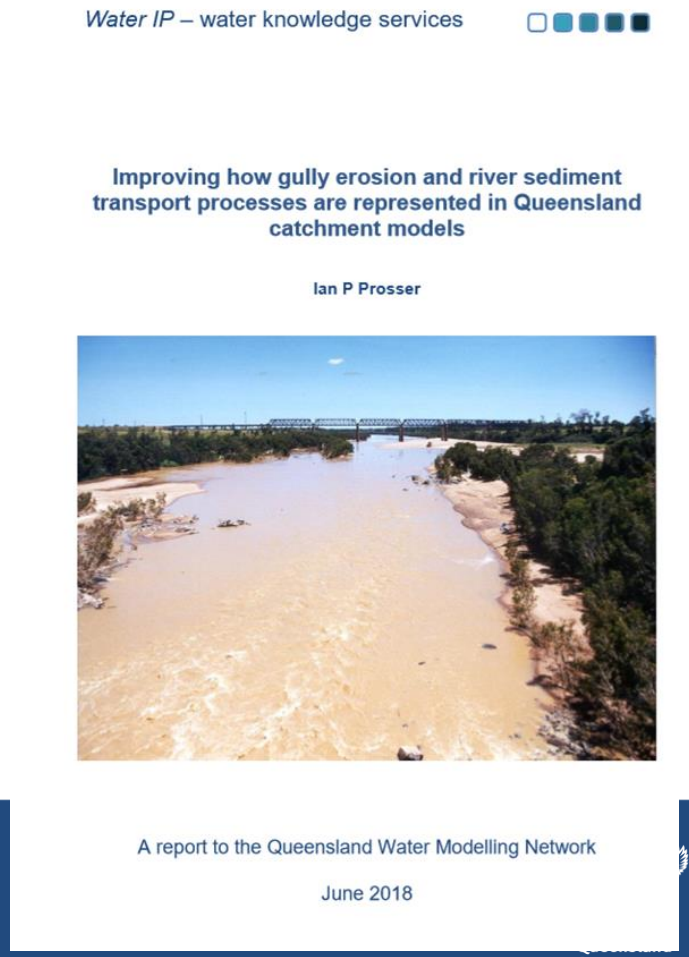
Baseline practice



Model enhancements



Think-pieces



2. QWMN External Engagement Program

- **Aim** – complement/extend the work of the QWMN beyond government into broader Queensland water modelling community
- **Components and activities**

Education, Research and Training	Engagement and Communication
• Water modelling skills and knowledge audit • Water modelling mentoring program • QWMN Innovation Program • Water Modelling Hack Challenge • Priorities for Future investment	• Website for the Qld modelling sector • QWMN Forum 2018 and 2020 • Water Modelling Community of Practice

The QWMN Evolution – tapping external capability, innovation and resources

2017 – *foundation*

- QG focus
- Limited engagement
- Project level impact

2019 - *expansion*

- RDI & EEP launch
- Cross sector projects
- Increased co-investment
- Local impact

The Future - *collaboration*

- Co-designed projects
- Working with other networks
- Significant leveraging & co-investment
- Cross sector impact

Key Opportunities

Strengthening the Foundations

- Data sharing and access - data/metadata, collaboration platforms
- Groundwater principles
- Strategic Review of Models
- MEDLI science review

Building Sector Capacity

- External Engagement Program
- Skills and Knowledge Audit response

Linking RDI Strategy and Investment

- Focus limited resources on agreed priorities
- Explicitly sets out strategic priorities and invites engagement

Listen, Adapt and Evolve

Foundational

Monitoring & Evaluation 2019/20

Assess the health, indicators for the future, delivery models

Co-investment

Integrating the response

Strategic review of models, QG priorities reviewed

Co-management

Partnering to deliver

Next 4 year program design for approval (2020-2024)

Case examples of collaborative approaches to Queensland Water Modelling Network projects *(Part B)*

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Collaboration – why bother?

Access other capabilities & resources

Leverage other networks

Build engagement, reduce pushback

Share/manage risk

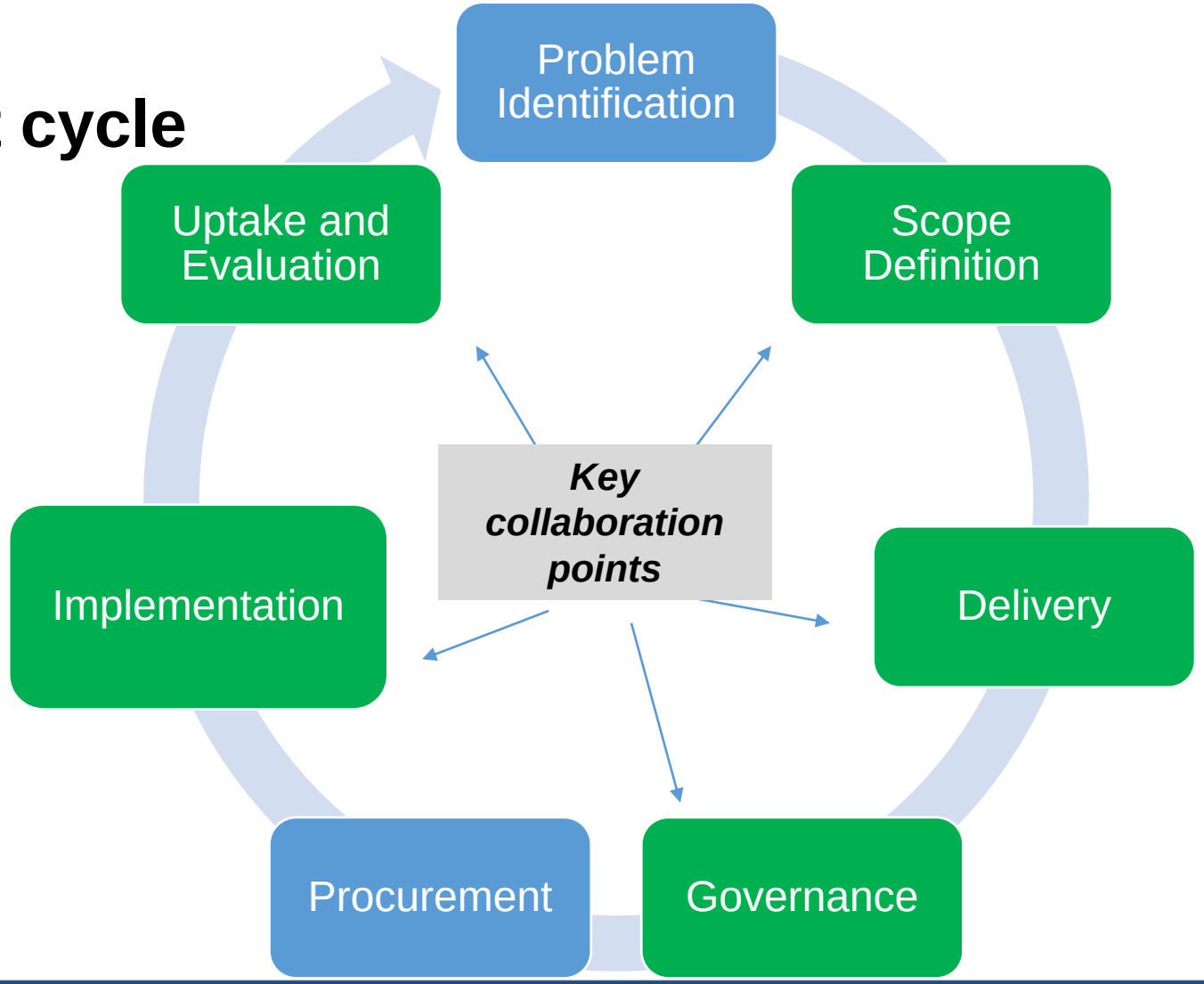
Significant time and resources to service

Complex and complicated

Expensive

Potential impact on scope

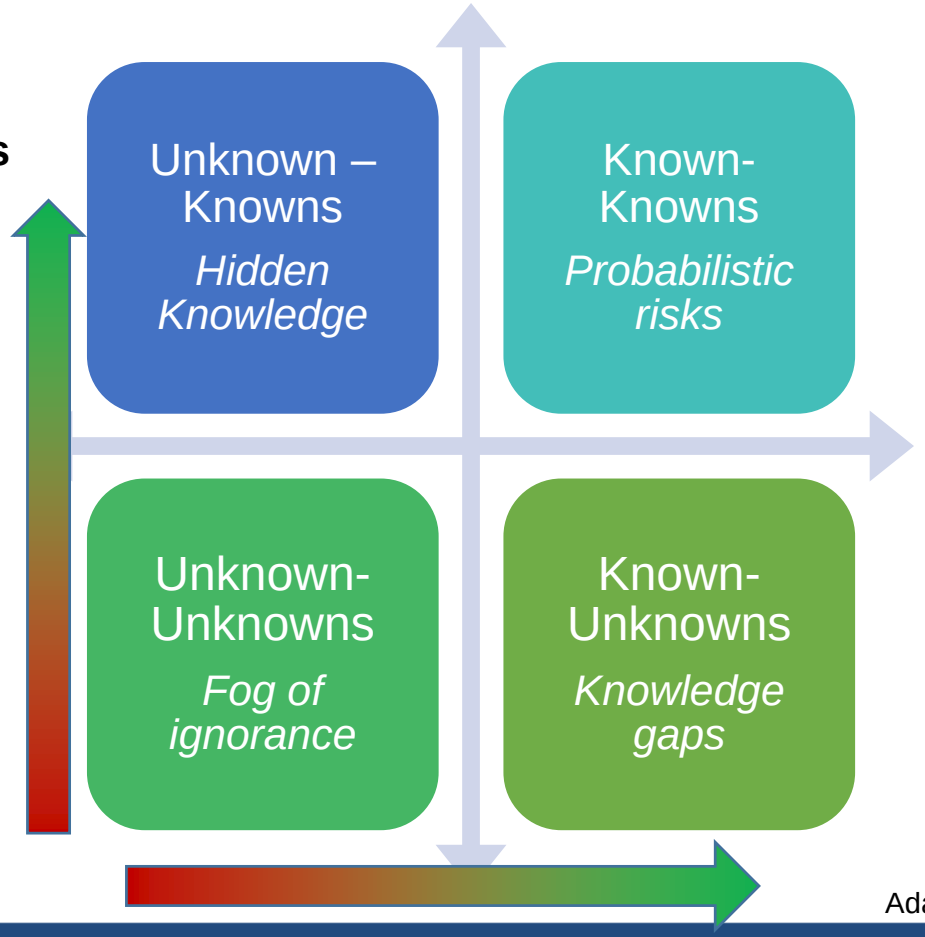
QWMN project cycle



Collaboration to reduce project risk

QWMN RDI Challenge Statements
project design and delivery

External Engagement Program
QWMN Research Fellow
project delivery partners



Groundwater workshop
project scope definition

Climate change
project focus and implementation

Adapted from https://onlinepmcourses.com/sources-of-project-risk/

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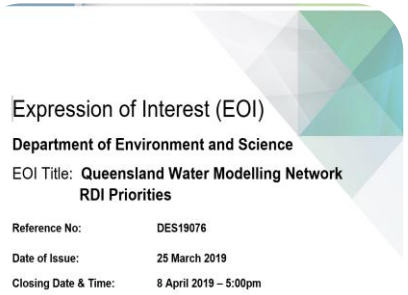
How does collaboration help?

Scope definition

Where the issue is nebulous or emerging – *the wisdom of the crowd*



Delivery

Where a partnership is needed to deliver a complex project - *mandating collaboration*

Governance

Where the project helps drive the relationship

Implementation

Where the project is complex and multi-player to keep to scope

Uptake and evaluation

Where the project is co-managed, to ensure buy-in and support

Key Opportunities

Co-design

Developing a response

- Climate change
- Skills and knowledge gaps
- Groundwater R&D
- Data issues

Co-investment

Integrating the response

- MEDLI Science Review
- Gully classification project

Co-management

Partnering to deliver

- External Engagement Program
- QWMN Research Fellow

Challenges

- Find your ‘burning platforms’

- Creating big shared vision – and goals

- **Trust** - existing networks and relationships