



INNOVATIONS FOR BETTER WATER MANAGEMENT

A finance sector perspective

CONTENTS innovations for better water risk management

- Why is water a risk?
- Which sectors does water risk effect?
- Impact of drought on finance?
- Engaging on, and integrating, water into ESG risk management
- Financing opportunities

Water is critical not only to life, but also to economic growth and environmental outcomes.

Source: Water and Australia's future economic growth by Rowan Roberts, Nicole Mitchell and Justin Douglas

WATER the risks

Too little



Source: Centres for Disease Control and Prevention

<https://www.cdc.gov/features/drought/index.html>

Too much



Cyclone Debbie: Third person dies as flood crisis continues for NSW and Queensland

Source: ABC news, 2 April 2017

<http://www.abc.net.au/news/2017-04-01/cyclone-debbie-leaves-trail-of-destruction/8407530>

Lack of access/ availability

Poor quality

Wrong timing

SECTORS AT RISK

Primary sectors and uses



Secondary sectors and uses



Tertiary sectors and uses



IMPACT OF DROUGHT on finance

HARDSHIP MANAGEMENT

- We back our customers through good times and bad.
- Our financial resilience research has identified that only 1 in 3 Australians are financially secure, and natural disasters continue to impact our communities across Australia and New Zealand.
- To assist our customers experiencing financial vulnerability, NAB Assist tailors options to best assist our individual customer's needs through hardship options like:
 - reduced payment arrangements; and
 - Moratoriums.
- In 2017, over \$500,000 in donations provided to support communities recovering from cyclones, flooding and bushfires across Queensland and New South Wales.








CREDIT RISK

- Increased risk of default



SUSTAINABILITY ISSUES Important 3 Years ago and remains so today

Importance of Sustainability Business Issues to NAB Agri Customers

		2017	2015	2014
#1	 Soil Health	87	85	85
#2	 Water Scarcity	83	83	82
#3	 Energy Costs	83	81	83
#4	 Agri Chemical & By-products	78	77	76
#5	 Managing Waste	75	73	72
#6	 Biodiversity & Native Vegetation	75	72	72
#7	 Greenhouse Gas Emissions	67	64	62

WATER RISK as part of ESG risk management

- Screening customers to determine – have they identified potential water risk for their business and what mitigants have they put in place to manage them
- If this risk is material and unaddressed it may mean banks are willing to provide finance or they may provide capital to implement water risk management initiatives
- Water risk can be linked to:
 - Operational risks – inputs to production processes and manufacturing (availability and quality of water available), costs for water
 - Business continuity and disaster risks – due to extreme weather events (drought, floods etc)
 - Compliance and regulatory risk – access, over extraction, pollution
 - Social licence – as a result of having negative impacts on community water availability
 - Competing uses for the resource.
- Increasing need to consider catchment level uses of water
- Experimenting to incorporate water risk into quantification of credit risk assessment

QLD NEWS

Coca-Cola Amatil accused of draining Springbrook National Park on the Gold Coast

Jeremy Pierce, CourierMail
March 12, 2014 6:01pm



What lies beneath: Tamborine Mountain and its fears over corporate 'spring water'

When the bores that supply households and businesses in the Queensland tourist retreat run dry or slow down, fingers point at the water sellers. But no one really knows what's happening underground

Joshua Robertson
Tuesday 21 March 2017 08:00 AEDT

FINANCING OPPORTUNITIES to name a few



Project finance – for water infrastructure like treatments plants/desalination

Asset finance – for water efficient equipment

Green Bonds – to raise capital for water infrastructure

