

# 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

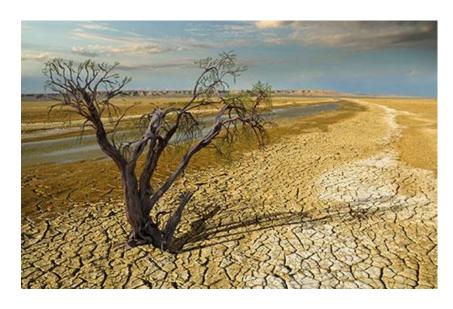
## Water is critical not only to life, but also to economic growth and environmental outcomes.

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

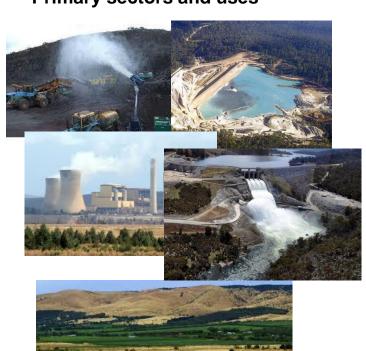
**Poor quality** 

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

		nce of Sustainability Bus ues to NAB Agri Customers		ean Score (/100 <b>2015</b>	) 2014
#	1	Soil Health	87	85	85
#	2	Water Scarcity	83	83	82
#	3	Energy Costs	83	81	83
#	4	Agri Chemical & By-produc	c <b>7</b> \$	77	76
#	5	Managing Waste	<b>75</b>	73	72
#	6	Biodiversity & Native Vegetation	<b>75</b>	72	72
#	7	Greenhouse Gas Emission	<b>1557</b>	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











When the bores that supply households and businesses in the Queensland tourist retreat run dry or slow

#### 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





