

Benchmarking government adaptation progress: identifying barriers and enablers

Christopher Lee¹, Aaron Coutts-Smith¹, Brent Jacobs² and Louise Boranyak²

Author affiliations:

¹ NSW Office of Environment and Heritage

² Institute of Sustainable Futures, University of Technology Sydney

NSW Context



- Population: 7.5 Million (23 Million Australia)
- Area: 800,000 sq km
- GDP: A\$490B (30%)
- Largest Australian city Sydney accounts for 25% of Australia's GDP.
- Industry dominated by Services sector (83% of GDP)
- Government Assets A\$280B

What we set out to achieve

Drive improvements in climate preparedness and practice by:

- a) Establishing the current state of Government agency preparedness**
- b) Evaluating current practice against good practice**
- c) Understanding the organisational capacity of government agencies to manage climate change risks**
- d) Understanding the barriers and enablers active within and across government agencies**
- e) Using the above information to develop a program tailored to our context that will drive any necessary improvements in practice and preparedness**

How we did it

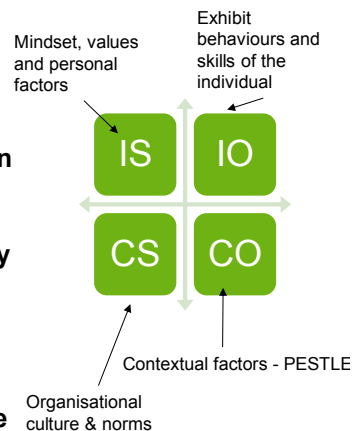
- **Within the context of government service delivery we reviewed international literature on:**
 - **Good Climate Change Risk Management practices,**
 - **Organisational capacity**
 - **Barriers and enablers**
- **Incorporated the above into a survey to be completed by government agencies**
- **Further investigated barriers and enablers through a workshop with agencies**

The survey

- Assessed existing exposure to extreme weather related events
- Established organisational capacity across 8 attributes
- Identified progress through the adaptive management cycle
- Identified implementation of good practice (absent to comprehensive) across key aspects of the AM cycle:
 - Governance arrangements that support management of climate change risks
 - Build understanding through assessment of impact, vulnerability and risk
 - Strategies and planning for action
 - Identifying and implementing actions
 - Monitoring and evaluation of adaptation responses

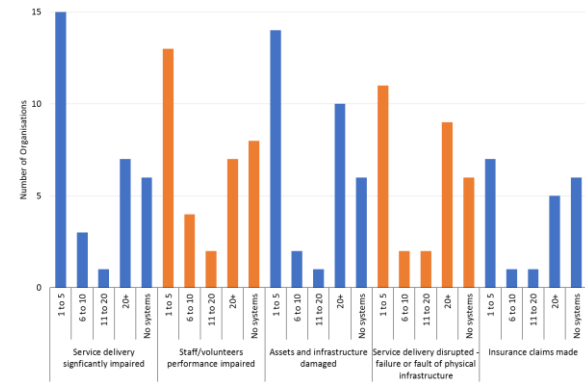
The workshop

- Participants:
 - identified barriers and enablers active in trying to manage climate change risks
 - mapped the barriers and enablers to a matrix to help establish the context they operate in
 - voted on how active the barriers (and effective the enablers) are for their agency
 - Mapped the barriers and enablers to the various attributes of organisational capacity



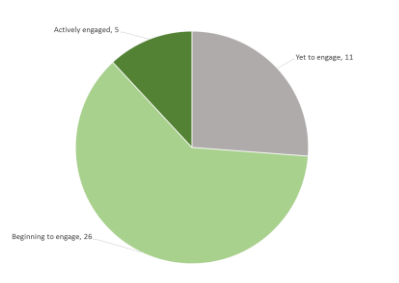
What we found - exposure

- Majority of surveyed agencies exposed – 90% affected in past 10 years
- Some greater than 20 times in past five years
- Not all agencies able to track impacts



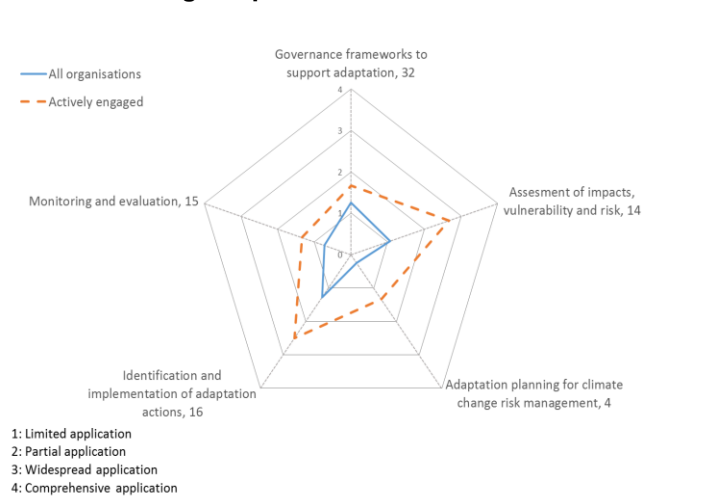
What we found - progress

- Some agencies are way out in front and leading their sectors
- Most agencies recognised there are risks that need to be managed



Progress through the adaptive management cycle					
Assessment (I/V/R)	Developed a Plan	Actions Identified/Implemented		Monitoring implementation	Evaluated action
25 to 50%	<25%	25 to 50%	25 to 50%	25 to 50%	<25%

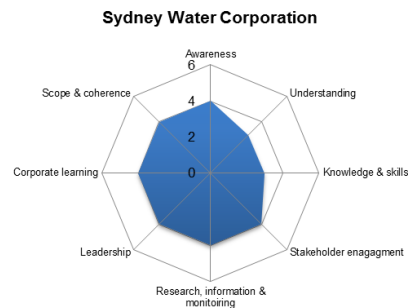
What we found – good practice



Case studies – Sydney water – early adopter

Executive leadership focusing organisational capacity for adaptation

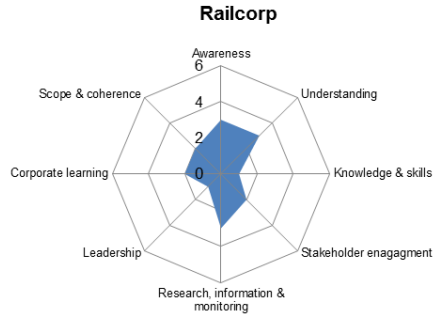
- Core skills required to address climate risk exist within the organisation.
- Active across all phases of the adaptive management cycle.
- They are recognised leaders in the adaptive management of water



Case studies – Sydney Trains – getting started

A data-driven approach to inform action on climate adaptation

- **An in-house champion with the capability to comprehensively assess climate risk has built the business case for action, driving leadership.**
- **Active in the assessment and implementation phases and are developing a plan.**



What we found – barriers and enablers

Resources

Barriers (lack of)	Enablers (availability of)
Staff	Skills and technical ability
Funding	
Knowledge	
Skills	

Operating context

Barriers (lack of)	Enablers (availability of)
Risk awareness (internal)*	Risk assessment and management (internal)*
Stability in government organisations (external)	Executive leadership (internal)*
Strategic direction (internal/external)*	Extreme event impacts (external)*
Continuity of programs (internal/external)*	Customer/stakeholder interest (external)*
Cluster co-ordination (internal/external)*	
Prioritisation of climate change (internal/external)*	
Consistency in political settings (external)	
Whole-of-government coordination (external)*	

Pulling it all together

- **Recall that we want to drive improvements in preparedness and practice**
- **Combined these findings provide a powerful tool to help design a work program that targets action:**
 - **specific to where an agency is in the adaptive management cycle, and**
 - **to implement enablers that remove multiple barriers and unlock multiple constraints on agency capacity**
- **We have a baseline against which we can measure improvement and assess the effectiveness of program interventions**
- **We have agency snapshots that can facilitate a more in depth discussion with an agency about how they can:**
 - **Build their capacity,**
 - **Improve their practice and overall preparedness**

climatechange.environment.nsw.gov.au

christopher.lee@environment.nsw.gov.au