Fact sheet

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Climate Systems

National Environmental Science Program

The State of Climate Change Adaptation in Australia - Q2 2026

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The Australian Adaptation Database was developed to increase understanding of Australia's progress toward climate change adaptation. The database is a systematic collection and categorisation of adaptation activities occurring across multiple scales, sectors and geographic locations throughout Australia. The database is updated on an ongoing basis.

As new entries are added, we will release quarterly reports providing an overview of emerging trends in the database and progress in our research.

In this report we introduce new categories as additions to the existing database and provide information on AI automation methods we're testing.

January 2026
902 entries

June 2026
953 entries

June 2026 key insights

- In this reporting period, **there have been an additional 51 entries coded** into the database. There are few changes to the trends outlined in Q1; entries will increase later in 2026 and additional changes are expected.
- State and territory governments (Table 1) remain the most common actors responsible for adaptation initiatives in our data, connected to 40% of initiatives, however local government representation is increasing.
- Different types of governance instruments (e.g. policies) can be differentiated according to their **intention** and **substance**. Intention refers to commitments made and substance refers to how they will be realised.
- The Australian Adaptation Database uses '**tags**' to keep track of networks between related initiatives. These tags can be accessed on the website.
- AI large language models can search the web with greater nuance than standard key word searches, capturing a broad array of adaptation relevant activities. **We are testing if AI can automate how we collect and categorise adaptation data**

Increasing local government representation

Table 1: *Number of entries in the database for each actor in January and June 2026.*

State or Territory	January	June	Percentage increase
State or territory government	484	495	2%
Local government	192	226	18%
National or federal government	175	176	1%
Private and non-profit organisations	134	138	3%
University or research institution	104	110	6%
Regional organisation	72	80	11%
Civil society	49	53	8%
Other	2	2	0%

Key:
Blue: High increase (≥ 75%)
Green: Medium increase (25–75%)
Yellow: Low increase (< 25%)

What it is:
This shows the actor(s) or organisation(s) who are responsible for implementing each adaptation initiative (table 1). The 'other' category includes 2 entries of initiatives implemented in Australia with international involvement (i.e. national security). Each initiative can be linked to up to three different actors.

Key trends:

- State and territory governments remain the most frequent actors represented in the database, currently making up 40% of the data.
- Local government representation has increased by 18%, to 226 entries.

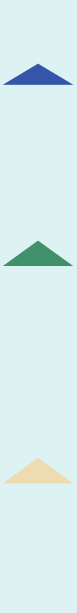
What this means:

- State and territory governments remain the most frequent actors linked to adaptation initiatives in the database. Local government is still likely under-represented in the data.
- These patterns reflect reporting capacity, with federal and state government agencies more likely to document and publish adaptation activity online.
- Improving the visibility of local adaptation continues to be a priority for 2026.

Stable geographical distribution

Table 2: *Number of entries in the database for each jurisdiction in January and June 2026.*

State or Territory	January	June	Percentage increase
QLD	171	173	1%
SA	155	157	1%
VIC	129	144	12%
NSW	99	127	28%
WA	94	95	1%
TAS	50	51	2%
NT	27	30	11%
ACT	20	21	5%
National	106	155	46%



Key:
Blue: High increase (≥ 75%)

Green: Medium increase (25–75%)

Yellow: Low increase (< 25%)

What it is:
This category identifies the Australian state or territory where each initiative is located (table 2).

Key trends:

- 83% of entries have been assigned to a specific state or territory, with the rest being national or international.
- Queensland and South Australia continue to be the most represented states in the database.
- New South Wales recorded the largest proportional increase in entries from January to May 2026.

What this means:

- Most entries are geographically identifiable and can be linked to a specific state or territory.
- At this point in time, the authors have low confidence that all states or territories have been adequately represented. Trends instead reflect the presence of well-documented, publicly available adaptation information.
- It is likely that those states and territories that have greater capacity to report also have greater capacity to undertake adaptation.

Using a typology to distinguish between governance instruments

What it is:

A wide variety of policies, plans, strategies, laws, and other institutional documents can contribute to climate change adaptation, with varying relevance. In our existing typology, these are all categorised as "governance instruments". Now we are testing a subcategory to distinguish between different types of governance instruments according to their ***intention*** and ***substance,*** to assess if they are actionable. This is based on the work of Dupuis and Biesbroek (2013).

What this means:

Because each policy differs and there can be large variation in intention and substance, classification of policies in this way requires careful judgement. Despite this, classifying adaptation policies on the degree of intention and the degree to which they can be actioned is useful because:

- Reliance on contiguous and contributive policies which are not purposely designed for adaptation could result in maladaptation.
- A 'contiguous' policy might still be of high quality, but not specific to adaptation.
- Policies often lack the mechanisms for them to be actioned, widening the adaptation implementation gap.

This provides a basis for sorting government instruments but is not a substitute for measuring effectiveness.

Table 3: Outline of the typology for governance instruments, adjusted from Dupius and Biesbroek (2013).

Purpose	Description	Example
Contiguous	Initiated with primary objectives other than climate change; these have limited impact on reducing vulnerability, but are important because they enable adaptation. For example, existing laws around natural resource protection have often been used to justify a responsibility to undertake adaptation.	Environmental Planning and Assessment Act 1979 (NSW)
Contributive	Contribute substantively to reducing future climate vulnerability, but are not designed with climate change in mind. For example, historic disaster risk reduction policies that don't consider climate change. Note that these risk maladaptation.	The Australian Building Codes Board standard on construction of buildings in flood hazard areas
Intentional	Purposefully address the impacts of climate change and sets intention to undertake climate change adaptation, but are not necessarily actionable	National Statement on Climate Change and Agriculture
Actionable	Building on intention with a clear agenda that includes directives to undertake climate change adaptation. This includes thorough planning and typically monitoring and evaluation that addresses the impacts of climate change.	Climate Adaptation Strategy: Building Western Australia's Climate Resilient Future

Using ‘tags’ to capture complex relationships

What it is:

When an initiative is part of something bigger and related to other entries in the database, we use ‘tags’ to link them together. For example, several initiatives that are funded by the same program might be tagged with the name of that program. Or, when a state has created a climate change adaptation plan for each region these could be tagged together.

What this means:

- A tag can be used to keep track of networks between related initiatives, for data analysis.
- The tags can be accessed on The Australian Adaptation Database website: when you open an initiative, click the tag to show all other related initiatives.

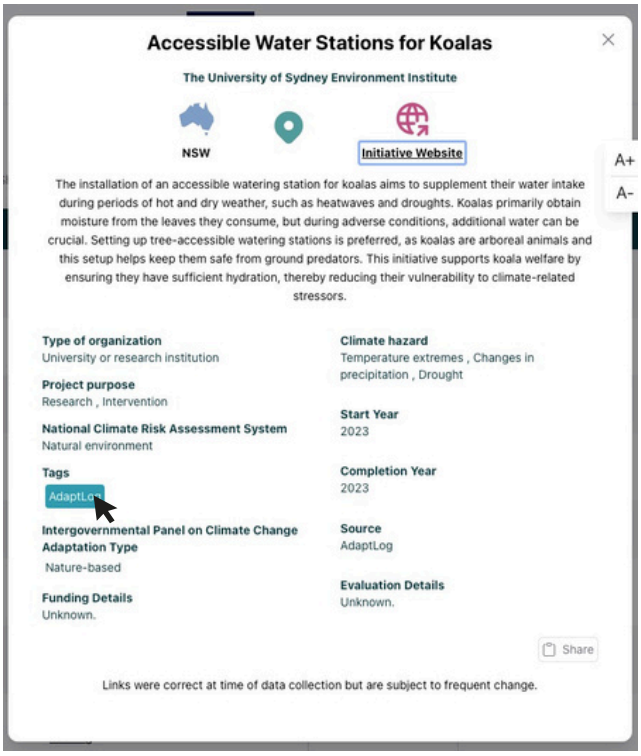


Figure 1: *Finding and clicking on the ‘AdaptLog’ tag to see connected entries.*

Table 3: Examples of the tags and details of what they include, note data collection is still underway for several of these large funding programs.

Tag example	Details
Adapt Log	Initiatives collected from the NESP Adaptation Catalogue for Conservation (AdaptLog) Database.
Living Shorelines	Initiatives collected from the Living Shorelines Database.
Victoria’s Regional Climate Change Adaptation Strategies	Each of the adaptation strategies for the six Victorian regions.
Future Drought Fund	Initiatives collected which are funded by the Future Drought Fund.
Disaster Ready Fund	Initiatives collected which are funded by the Disaster Ready Fund.
Natural Resource Management (NRM) Programs	Initiatives collected which are part of NRM regional programs.

Can AI be used to automate adaptation stocktaking?

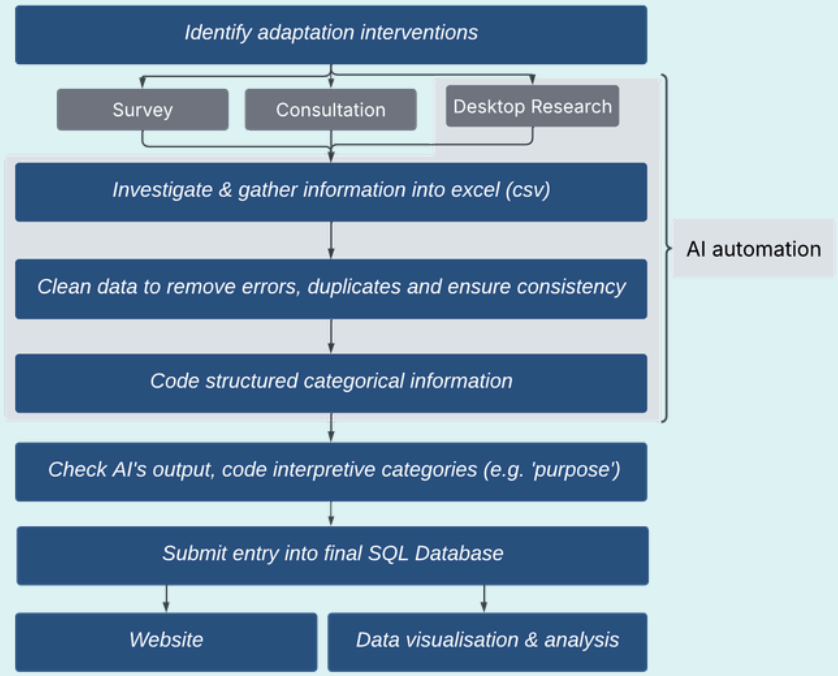


Figure 2: The data collection flowchart with the processes being tested for AI automation highlighted in light grey.

What it is:

To scale up the Australian Adaptation Database requires ongoing improvement of our method and increased efficiency. To date our data collection, entry and management is done manually by the research team. We are now testing if a Large Language Model (LLMs, AI) can automate how we collect and categorise adaptation data, in collaboration with Melbourne Data Analytics Platform.

Key points:

- Using AI requires knowledge of how these models should be used and what their limitations are. Consider using an AI fluency framework to test your knowledge before using AI in your own work.
- AI can hallucinate or misinterpret adaptation – particularly since there is so little understanding of what adaptation action looks like. Any AI needs to be given strict parameters to work within.

What this means:

Large language models can search the web with greater nuance than standard key word searches, capturing a broad array of adaptation activities even when they don't use conventional terminology.

We are testing if AI can:

- identify adaptation examples online, for example on local government websites.
- help identify updates to existing entries in the Australian Adaptation Database.
- categorise adaptation data, particularly for structured data like ABS Local Government Areas (LGA) and SA2 areas.

This could speed up review of large data sources like local government websites and other relevant funders or programs – which would take a human many hours. Data collected by AI will be reviewed by humans before being included in the Australian Adaptation Database.

Further information

Australian Adaptation Database
https://australianadaptationdatabase.unimelb.edu.au

Australian Adaptation Database Methodology
https://australianadaptationdatabase.unimelb.edu.au/storage/01KG3MTJQ1ZCR8RK19A185F0FZ.pdf

A method for tracking national progress towards climate change adaptation
Brullo, T., Barnett, J., Waters, E., Boulter, S. 2026. Climate Risk Management.
https://doi.org/10.1016/j.crm.2026.100800

Comparing apples and oranges: the dependent variable problem in comparing and evaluating climate adaptation policies
Dupuis, J., Biesbroek, R.
https://doi.org/10.1016/j.gloenvcha.2013.07.022

Scaffolding GenAI Literacy and Fluency at Scale: A Practical Self-Assessment Framework for Personalised Learning
Dal Ponte, C., English, N., Lyons, K., Eduardo, A.
https://osf.io/preprints/osf/u8crd_v3

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