

NRM Planning in Australia

February 2022





Australia is in a unique position internationally with its infrastructure of regional natural resource management (NRM) organisations. Regional NRM organisations cover the entire continent. They work with land managers, communities and industries across Australia to manage our land, water, coast, plants and animals for the benefit of people, environment and economy. All share the objective of creating a sustainable future.

NRM Regions Australia is the national peak body of Australia's 54 regional NRM organisations. The following provides an overview of the regions and a key role they share of integrated landscape-scale planning – or regional NRM planning.



Contents



1. NRM Network
2. Common characteristics between NRM plans
3. Differences between NRM plans
4. NRM planning history
5. What NRM plans offer
6. Applications of NRM plan
7. An overview of NRM bodies
8. Where to go for more information

1. NRM Network

There are **54 NRM regional bodies** in Australia that have formal boards of directors and strong governance arrangements.

Board members are representatives from their communities who set priorities for their regions.

Each NRM region has a 'regional plan' which prioritises local issues and actions.

Plans are reviewed every five years - they identify strategic priorities, align with existing efforts, are participatory, based on scientific and community knowledge, have scalable levels of planning and identify partners for delivery.

NRM Regions Australia link to each NRM body:
https://nrmregionsaustralia.com.au/nrm_regional_model/



Map of NRM regions across Australia

2. Common characteristics between NRM Plans

While governance arrangements, landscapes and communities are different, there are common characteristics between NRM Plans that guide regionally appropriate strategic priorities for natural resource management across Australia



Strategic priorities identified

Strategic priorities for natural resource management are identified through a robust planning process based on scientific, cultural and community understanding of the landscape.



Strong alignment with existing efforts

NRM plans align with national and state-based NRM policy and legislation and integrate with land use planning and statutory approvals. They also identify actions to achieve strategic priorities and link to supplementary or complementary processes or investments e.g., ecosystem services markets, stewardship incentives or restoration activities.



Participatory based planning


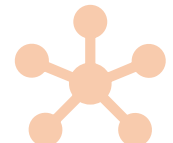



Participatory planning processes are used for designing NRM plans to ensure the plans reflect the issues and priorities of stakeholders and the broader community. The plans articulate who all the stakeholders are and ensure that public participation is embedded at all stages of the priority setting phase.



Knowledge based

The plans are based on the best available environment, social, cultural and economic data, and community knowledge at multiple scales. This includes Traditional Knowledge, scientific data and models to inform understanding of the social-ecological system, environmental impacts, targets, measures, priority areas and knowledge needs.

Common characteristics between NRM Plans continued

	Landscape scale	NRM plans are landscape scale. They work across tenures, and land and marine uses so they can address the complex and connected nature of our social-environmental systems. They also identify the spatial and temporal nature of environmental threats.
	Complex systems approach	NRM planning applies a complex systems-thinking approach - an analysis approach that acknowledges the system as a whole rather than in individual parts and how it operates through time. The purpose of using this approach in plans (e.g., considering environmental, social and economic outcomes) is to identify opportunities to build resilience to threats (e.g., climate change) over time.
	Transparency and accountability	Roles for implementation are clearly specified to ensure outcomes are achieved. This is a condition of the plan's endorsement. Community and stakeholder buy-in and confidence is also reinforced by providing opportunity for public participation during the planning phase.
	Adaptive	Rigorous monitoring, evaluation, reporting and improvement (MERI) processes are embedded into the NRM plans. This ensures that intended outcomes are clearly articulated, and that progress in their delivery can be monitored and reviewed. This also enables the plans to be adapted over time.
	Partnership delivery model	The delivery of NRM plans is through a partnership approach. Partners can involve NGOs, private sector, state governments, the Australia Government, community groups and / or partner agencies or organisations.

3. Differences between regional NRM Plans

Structures and delivery models

NRM plans vary according to what is appropriate for their region. Where administrative boundaries are very large, some NRM bodies will divide the region into sub-regions or landscapes e.g., WA Rangelands NRM and Territory NRM. In Victoria there is a single plan for each of 10 regions with a focus on assets e.g., biodiversity. The level of action planning described in regional NRM plans also varies with some containing clear on-ground actions whilst others refer to supporting theme-based action plan.

Nested planning arrangements

NRM plans are often nested between other levels of planning from local area or asset-based plans to national level plans. NRM plans seek to align with higher-level plans, and to help guide the development of local plans to address regional priorities. This helps to ensure that there is alignment of efforts to achieve joint outcomes.

Delivery partners

Each NRM works with various partners to deliver environmental outcomes in their region. This also varies significantly between regions. Some focus more on what they need to deliver and some cover all land managers.

Funding arrangements

Funding arrangements differ between NRM organisations. This influences the extent of planning they can undertake, the activities they deliver and their capacity to monitor and evaluate implementation.

While NRM plans share some common characteristics, there are also differences in how they are formed and operationalised to ensure they are appropriate for their region's landscapes, stakeholders and communities.

4. NRM Planning in context

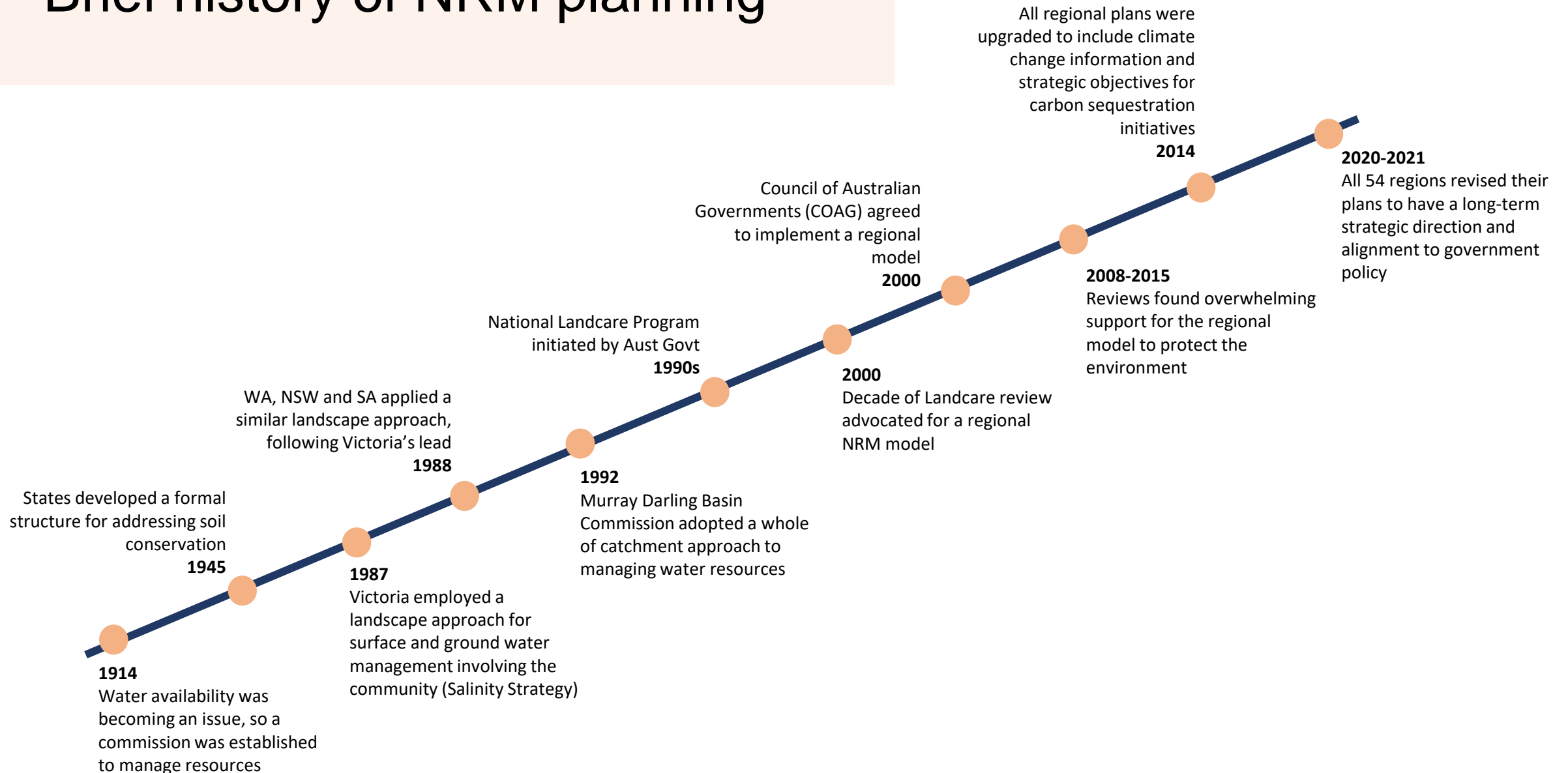
NRM planning has evolved over the last 100 years and has come to reflect the complex landscapes we operate in and the increasing need to build resilience in a changing climate.

NRM Plans are reflective of the issues our regions are facing. They evolve over time to cover the issues of the day and serve to guide strategic decision making in each region.

These documents now cover a wide breadth of integrated landscape scale challenges from land, water, ecosystems, cultural heritage, community, industry, and climate change.

The NRM planning process is periodically reviewed to ensure that it is fit for purpose: addressing regional NRM priorities, meeting the needs of the community and accommodating emerging threats and opportunities.

Brief history of NRM planning



5. What NRM Plans offer

Regional NRM Plans are the product of a rigorous planning process...



...ensuring they are useful for...

Identifying opportunities and targeting investment

Aligning with local/ regional /national priorities and policy

Achieving value for money

Maximising impact through system response

Leveraging funding
Identifying potential partners

Reference for regional development eg. local planners

Developing community support

Avoiding perverse outcomes

Providing continuity through start stop investment

6. Application of NRM Plans

NRM Plans

Can guide investment in a range of areas including:

Environmental markets

Investments through environmental or carbon markets should align to strategic priorities identified in NRM plans to minimise –ve outcomes and increase +ve. They are referenced in the Carbon Farming Act (2011)

Climate adaptation, drought and bushfire

NRM Plans take account of impacts of climate change and how drought and bushfire will affect environmental, social and economic values of that region. Some can be used to respond quickly to extreme events and get action on the ground.

Regional conservation planning and works

NRM plans detail the natural features, areas of significance, projected climate change impacts and biodiversity values of their regions. They can be used as a prospectus to invest in Matters of National Environmental Significance.

Industry or product sustainability programs

Regional NRM organisations are strengthening their role in sustainability and seeking opportunities for regional plans to align with industry sustainability reporting.

Environmental markets

Investments through environmental or carbon markets should align to strategic priorities identified in NRM plans e.g., regionally appropriate plantings in strategically important locations, complementing habitat restoration works. NRM plans provide a list of actions to protect natural assets and minimise threats which can be referred to for carbon projects. Rangelands NRM in WA has a methodology clearly outlined in the NRM Regional Plan as guidance.

NRM plans were updated in 2014 to include guidance on protecting or enhancing landscape resilience in a changing climate. The purpose of this was to enable planned carbon projects to assess their alignment with NRM plans. This was designed to avoid perverse outcomes and generate co-benefits so that biodiversity is enhanced rather than lost or degraded by carbon projects.

CASE STUDY:

Australian Government Carbon and Biodiversity Pilot

– 6 regions tested biodiversity protocols: Burnett-Mary (Qld), Central West (NSW), NRM North (Tas), Eyre Peninsula (SA), South West (WA), North Central (Vic).

The pilot was developed with ANU and was trialing an environmental market for farmers to generate income from native species plantings that deliver biodiversity and carbon abatement.

Farmers who plant native trees in line with a regional biodiversity protocol, guided by NRM Plans, were paid a stewardship payment and registered the project with the Emissions Reduction Fund as an eligible offset project.

Amounts of carbon sequestered and carbon credits generated (for sale as ACCUs) were modelled using the *Reforestation by Environmental or Mallee Plantings – FullCAM method*.

Carbon + Biodiversity Pilot

Planting Protocol: North Central CMA
(NRM Region Victoria)



Example biodiverse planting protocol document

- plantings will need to be established and maintained in accordance with regional planting protocols to receive a biodiversity payment offer

Climate adaptation, drought, and bushfire

NRM plans take account of the impacts of climate change and how impacts such as drought and bushfire will affect environmental assets, and the social and economic prosperity of that region. Programs delivered under the plans are a natural fit for drought resilience measures; interventions that aim to increase groundcover, raise water use efficiency, retain soil organic matter and improve decisions on managing risks during drought (for example).

The programs support innovation, assist adjustment and increase self reliance, building resilience to future natural disasters. The priorities and information set out in NRM Plans can guide (and in some cases must guide, where there is a statutory role) investments in these regions.

CASE STUDY:

Hunter LLS, Mallee CMA, North Central CMA & others
Drought and Flood Recovery Employment programs: operating teams to deliver on-ground works (and local employment)

These programs provided participants with income and training while delivering on-ground works that protect and improve the environment. Enrolled participants were provided with two to four days of work a week for a minimum of two months. This allowed people to continue to work on their farms as well as supporting them to upskill and undertake environmental works.

Works included pest plant and animal control and fencing for environmental values. Wider benefits such as lifted morale, improved resilience to future drought and financial support for farmers were evaluated and reported. NRM Plans identified areas where to target environmental works. This was a collaborative program through multiple NRM bodies and achieved multi-landscape scale outcomes - guided by the plans to achieving the maximum benefit.



Photo: North Central CMA, 2020

Regional conservation planning and works

NRM plans detail the natural features, areas of significance, projected climate change impacts and biodiversity values of their regions. All NRM plans provide priorities for investment in these areas and have outlined actions or approaches for improving land use practices, managing water in the landscape and improving biodiversity in the area in the context of a changing climate. There are opportunities to use these plans to guide landscape conservation works such as pest plant and animal control, revegetation and fencing works.

CASE STUDY: **Territory Conservation Agreements**

Territory Conservation Agreements (TCAs) support land managers to protect areas of conservation importance on their properties. They are a 10-year agreement between Territory Natural Resource Management (TNRM) and the land manager.

As of March 2017, 37 TCAs exist which collectively encompass around 50,000ha of ecologically significant habitat, including wetlands, rivers, escarpments and woodlands.

Terms of the TCA are jointly agreed which generally includes management actions such as fencing, weed removal, establishing alternative watering points for livestock, removal of feral animals or changes to burning practices.

This was most recently funded by the Australian Government's National Landcare Program, which has complemented the \$1.8 million of in-kind investment from land managers.

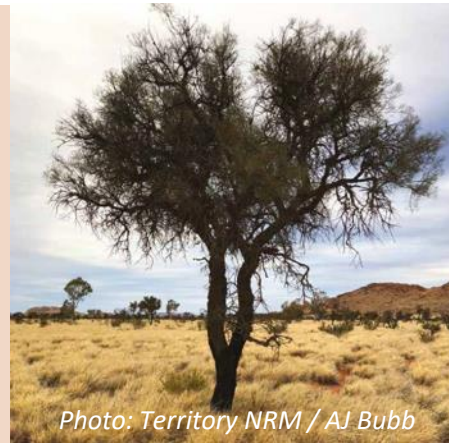


Photo: Territory NRM / AJ Bubb



Photo: Rangelands NRM 2011

CASE STUDY: **Reducing risks to bilby habitat across the northern rangelands**

Rangelands NRM facilitated the engagement of Traditional Owners, Indigenous rangers and pastoralists to address known threats such as unmanaged fire, predation and land degradation to support bilby conservation efforts and protect the *EPBC*-listed Monsoon Vine Thickets ecological communities.

Rangelands NRM used existing partnerships between individual groups and/or collectives of Traditional Owners and their ranger programs (including Kimberley Land Council, Kanyirninpa Jukurrpa and Desert Support Services) as well as innovative pastoral producers, agency and NRM body partners.

On-ground works were focused around priority areas as shown in the Rangelands NRM regional plan to encourage vegetative diversity, break up vegetative age classes and protect key habitat.

Industry and product sustainability programs

NRM regional organisations have begun building partnerships with agricultural industries across Australia. They have sought to strengthen their role in delivering sustainability projects and build opportunities for NRM regional plans to align with industry sustainability reporting. The goal of these partnerships is to have better integration between industry, farmers and NRM bodies so collectively they can achieve better social, environmental and economic outcomes, including market access. There are a broad range of opportunities for industry and NRM bodies to work together towards shared outcomes, such as through environmental markets and projects for soil conservation, circular economy, climate change adaptation, reducing carbon emissions through the supply chain, and protection of waterways and significant ecological areas (including marine environments).

CASE STUDY: Better farms leads Bega to circular economy

South East Local Land Services (NRM organisation) and Bega Cheese have built a trusted partnership to boost sustainability and encourage innovation in the local community.

Together they have developed a partnership between community, government and private enterprise to implement Bega Environmental Management Systems for the local dairy industry. They have also sought funding to establish a Bega Valley circular co-operative, a Bega biodiversity and carbon trading desk, an on-farm smart water storage network, the Bega smart good and logistics program, and a regional circularity baseline assessment of material flows.

One of the projects through this arrangement is establishing 9000 ML of on-farm water storage on dairy, beef and poultry farms with sensors that tell the Rural Fire Service the location, amount and water quality available for use during bushfires. Other projects include enhancing irrigation efficiency and a smart food and logistics program to transport fresh produce efficiently in an environmentally sustainable way.

This is estimated to be a \$100 million partnership and Bega Cheese has approached the Australian Government for a contribution of \$7.5M in.

CASE STUDY: Pathway to carbon neutral for red meat sector

The Tasmanian Institute of Agriculture is leading a consortium to establish case study farms in ten different agro-ecological zones across Australia that produce red meat.

The consortium aims to evaluate the biodiversity of grazing systems and design pathways that will make beef, lamb and goat meat production carbon neutral by 2030, which will align with Meat and Livestock Australia's CN2030 goal.

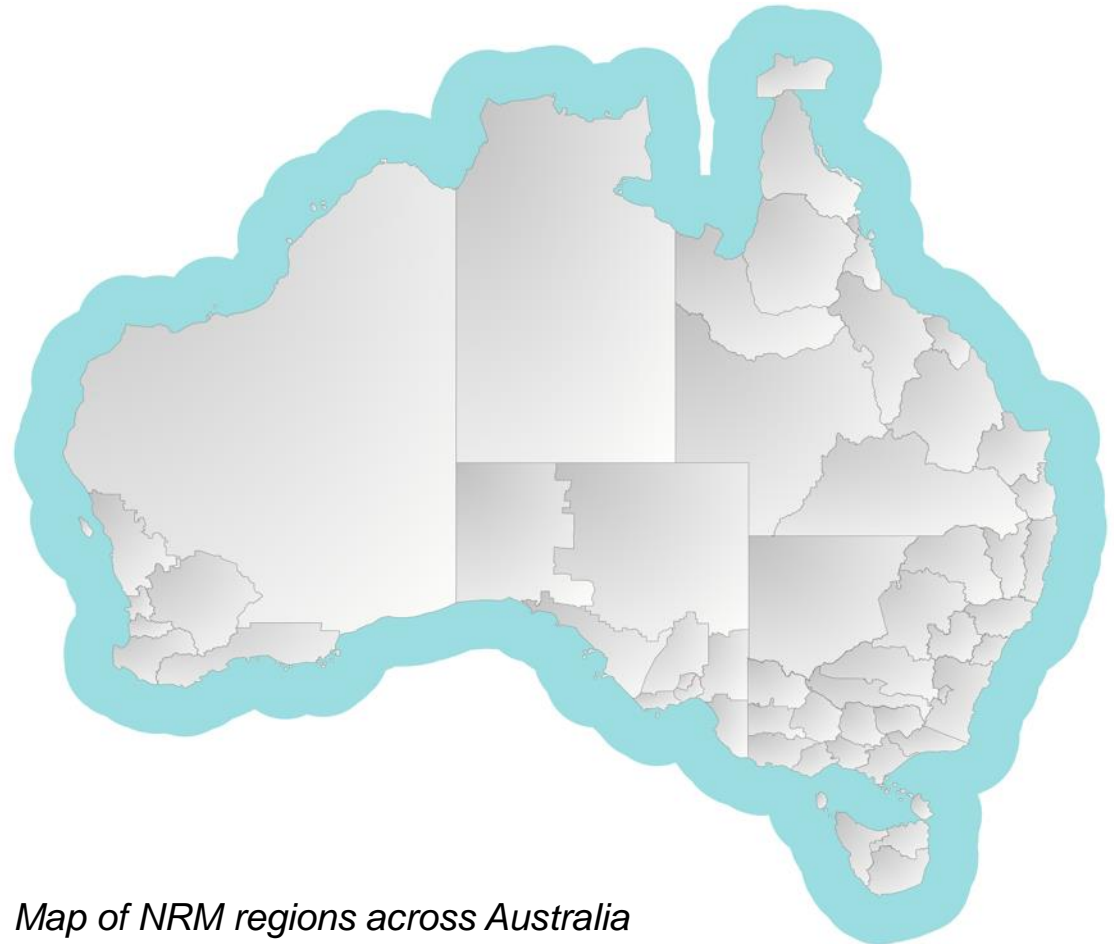
Workshops with farm advisory groups are helping farmers to understand factors affecting greenhouse gas emissions mitigation, and how this interacts with productivity, profitability and natural capital. This will be translated into actions that can be taken on farm that will help the red meat industry achieve carbon neutrality.

South Coast NRM in Western Australia and other regional NRM organisations bring "paddock credibility" to the project. Their established relationship with farmers and their understanding of how farmers learn and like to be engaged are key factors which have contributed to the projects success to date.

7. Overview of NRM bodies

There are **54 NRM regional bodies** in Australia that have formal boards of directors and strong governance arrangements.

This section provides a snapshot of each regional NRM body across Australia



Map of NRM regions across Australia

NRM Network:

Australian Capital Territory

Body: ACT Natural Resource Management

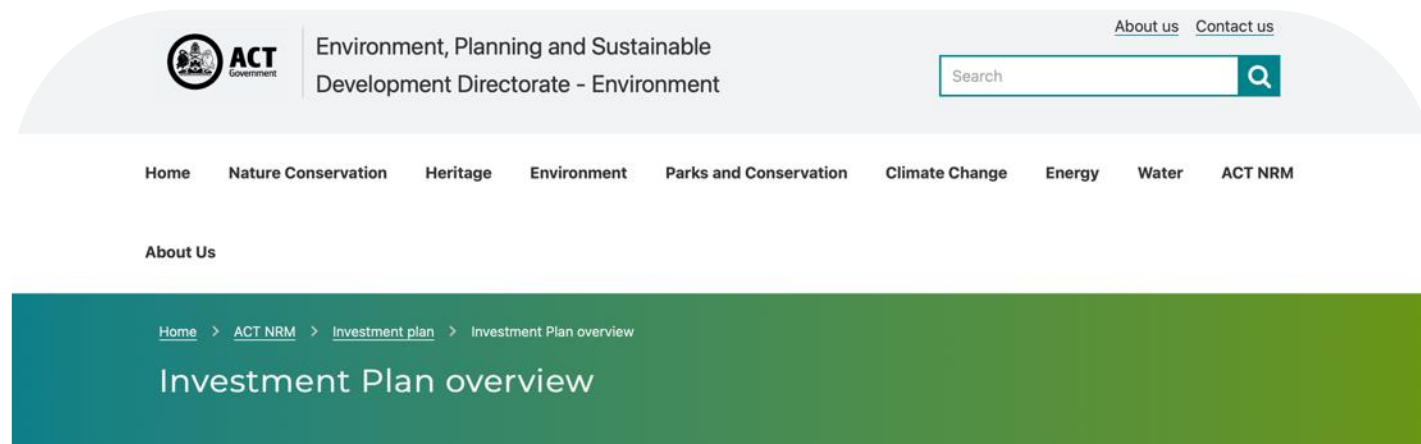
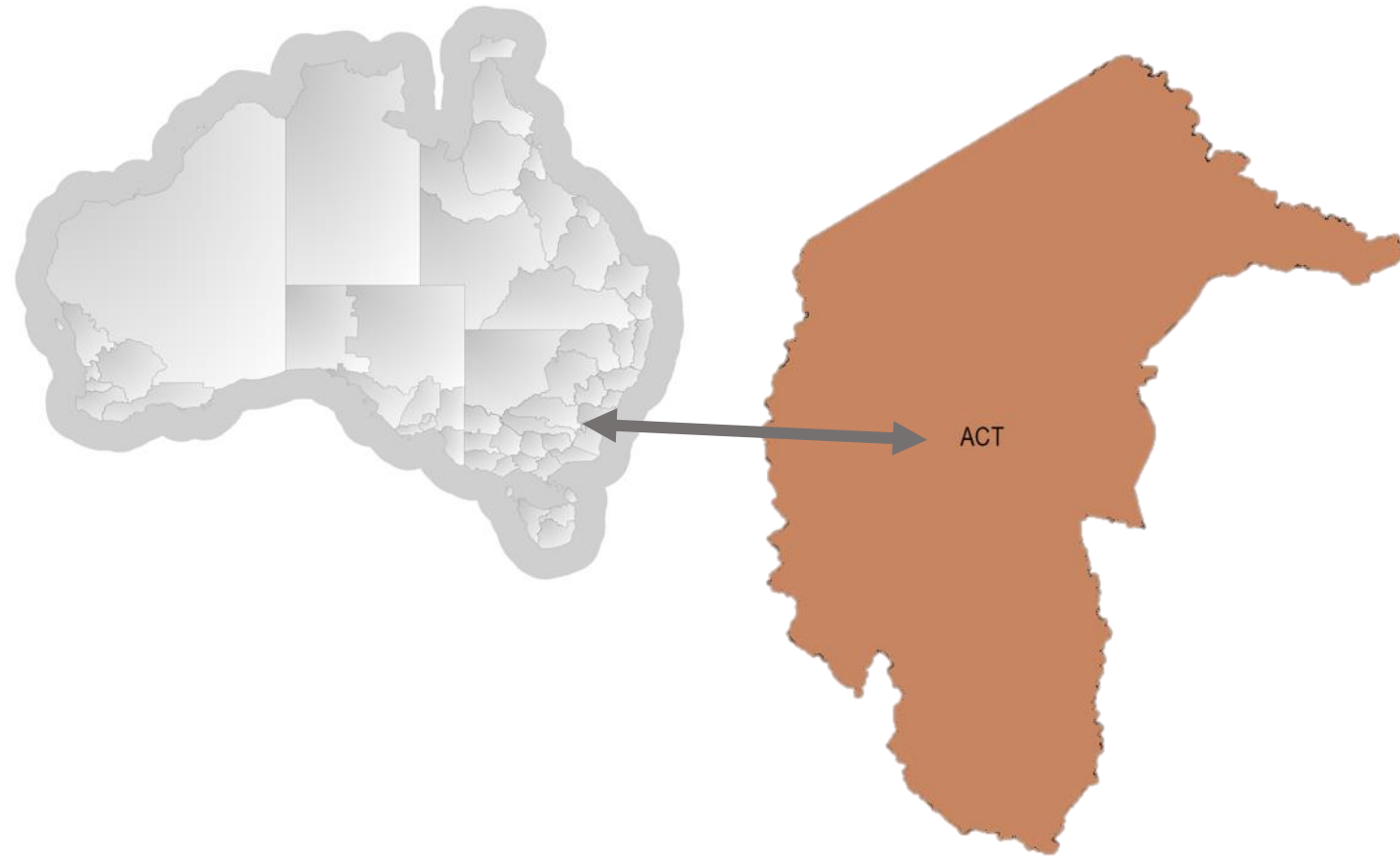
(hosted within the ACT government
Environment, Planning and Sustainable
Development Directorate)

Regions: 1

Plan: *Investment Plan*

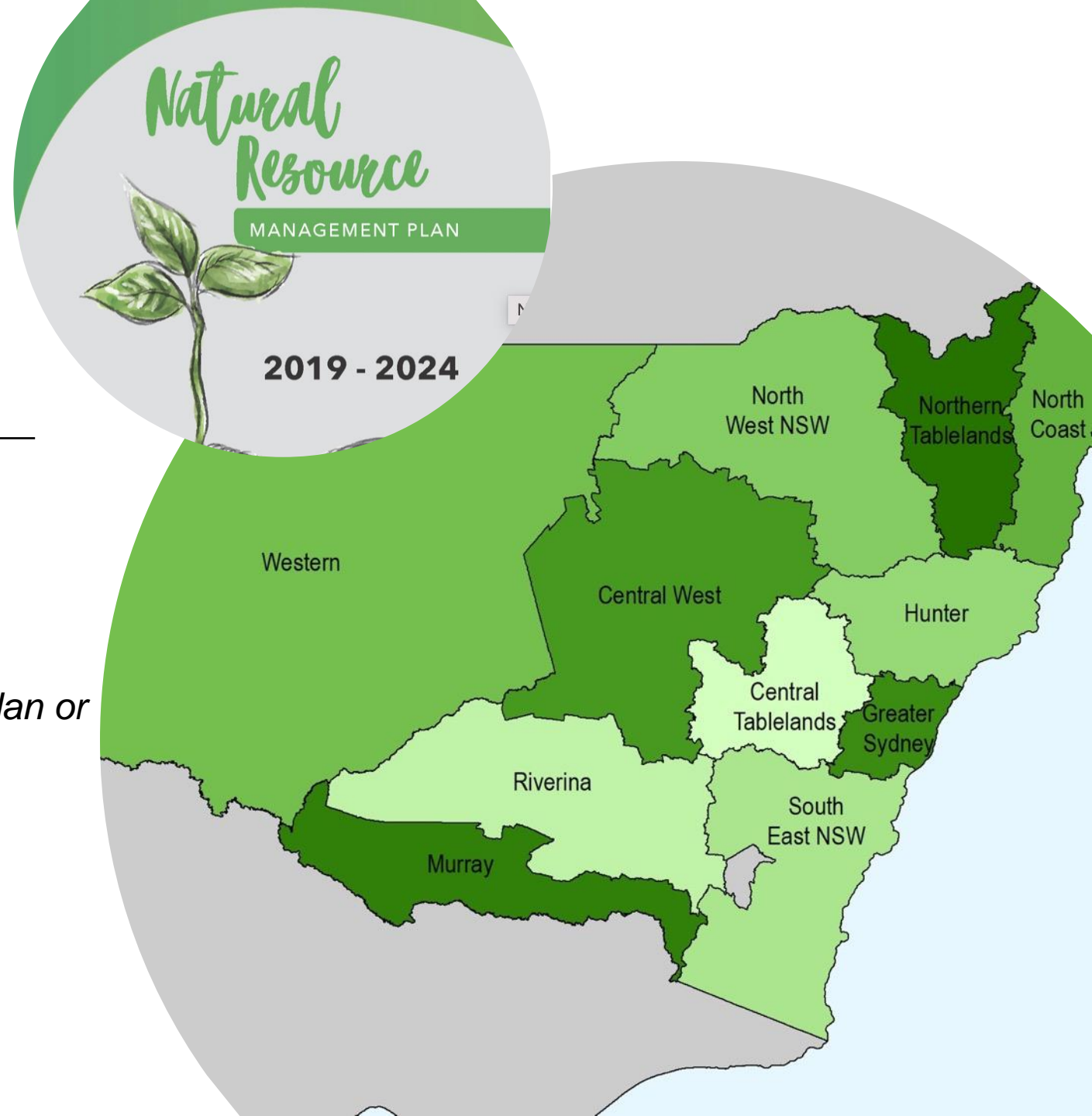
Governance: Defined statutory function

Board: Steering committee advising territory
government



NRM Network:

New South Wales



Bodies: Local Land Services

Regions: 11

Plan names: *Natural Resource Management Plan or Regional Landscape Management Strategy*

Governance: Defined statutory function

Board: Combination of State appointed and community elected

NRM
Network:

Northern Territory

Body : Territory NRM

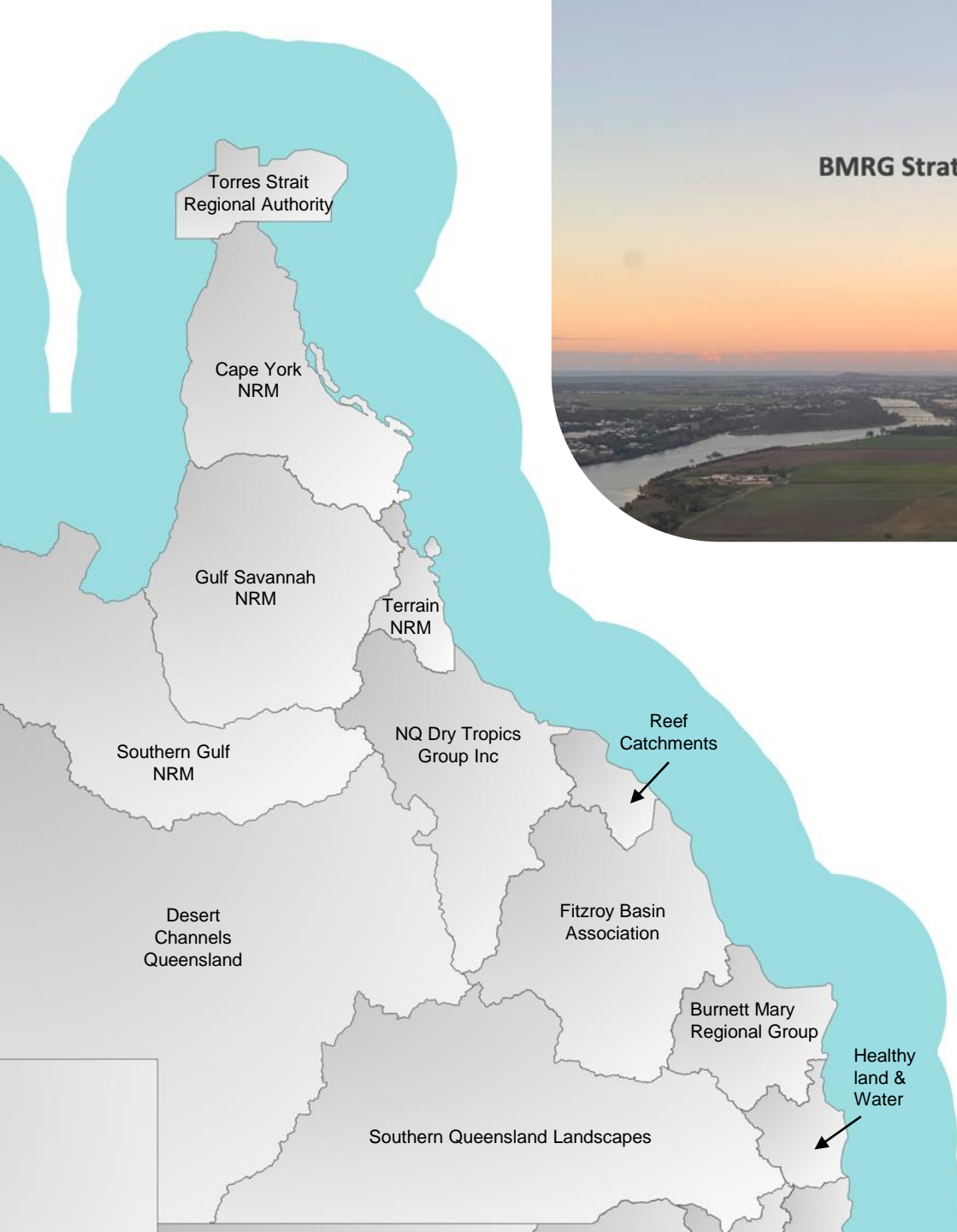
Regions: 1

Plan name: *Natural Resource Management Plan*

Governance: Non-government organisation

Board: Community elected





NRM Network: Queensland

Bodies: Various names including Natural Resource Management, Regional Group, & Landscapes

Regions: 12

Plan names: *Natural Resource Management Plan or Strategic Plan*

Governance: Not-for-Profit community-based organisations

Board: Community elected

NRM Network:

South Australia

Bodies: Landscape Board

Regions: 9

Plan names: *Regional Landscape Plan*

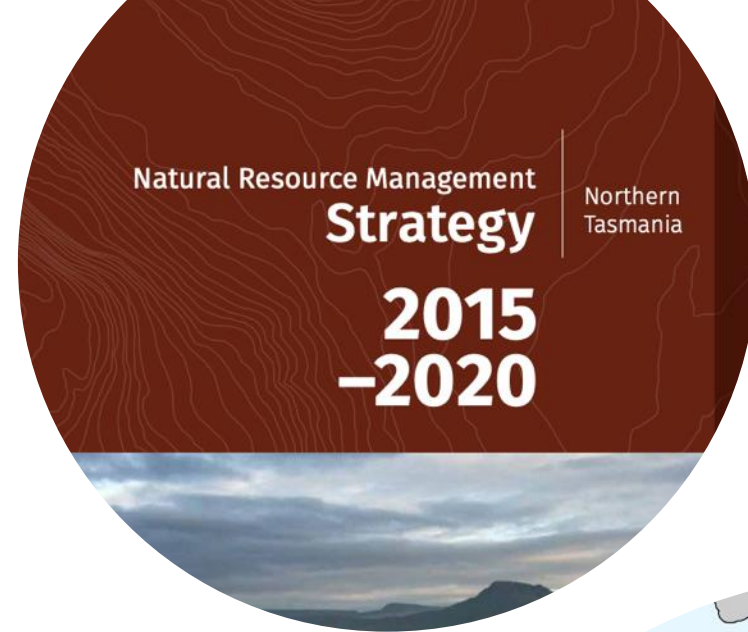
Governance: Defined statutory function

Board: State government appointed (with some members to be elected from November 2022)



NRM Network:

Tasmania



Bodies : Natural Resource Management

Regions: 3

Plan names: *NRM Strategy*

Governance: Non-government organisations

Board: Community elected for North NRM and South NRM. Directors appointed by representatives from participating councils for Cradle Coast NRM



NRM Network:

Victoria

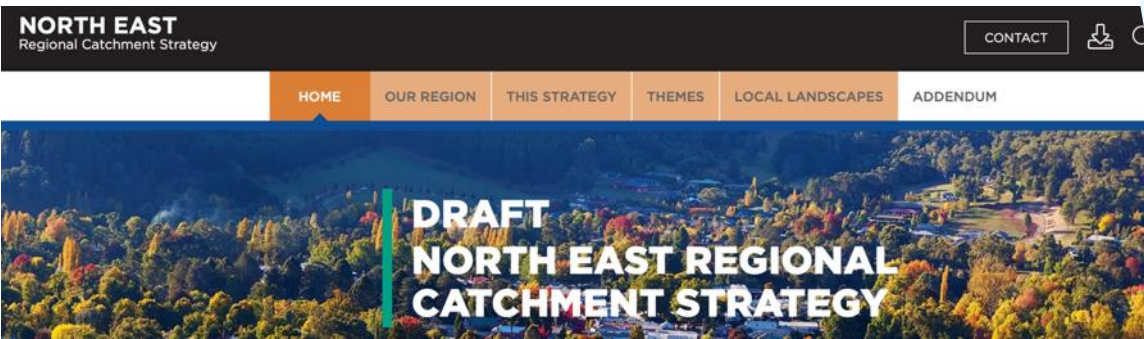
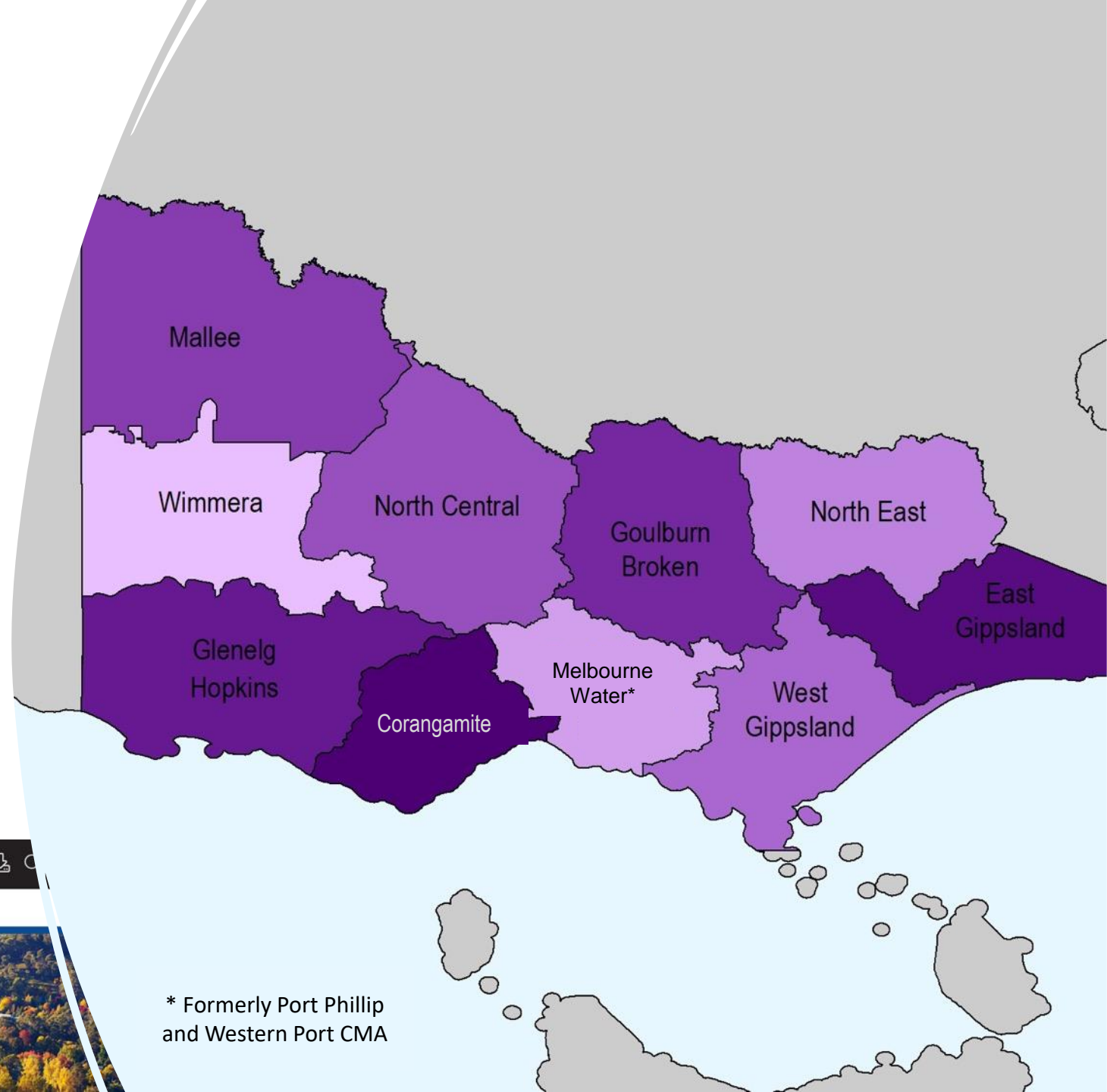
Bodies : Catchment Management Authorities

Regions: 10

Plan names: *Regional Catchment Strategy*

Governance: Defined statutory function

Board: State government appointed



* Formerly Port Phillip and Western Port CMA

NRM Network:

Western Australia

Bodies: Natural Resource Management & Catchment Councils

Regions: 7

Plan names: *Natural Resource Management Plan*

Governance: Not for profit community-based organisations

Board: Community elected

Rangelands NRM Regional Plan

Home

Background to the Plan ▾

Our Region ▾

Sub-Regions ▾

Working with the Plan ▾



NRM Network:

Ocean Watch Australia

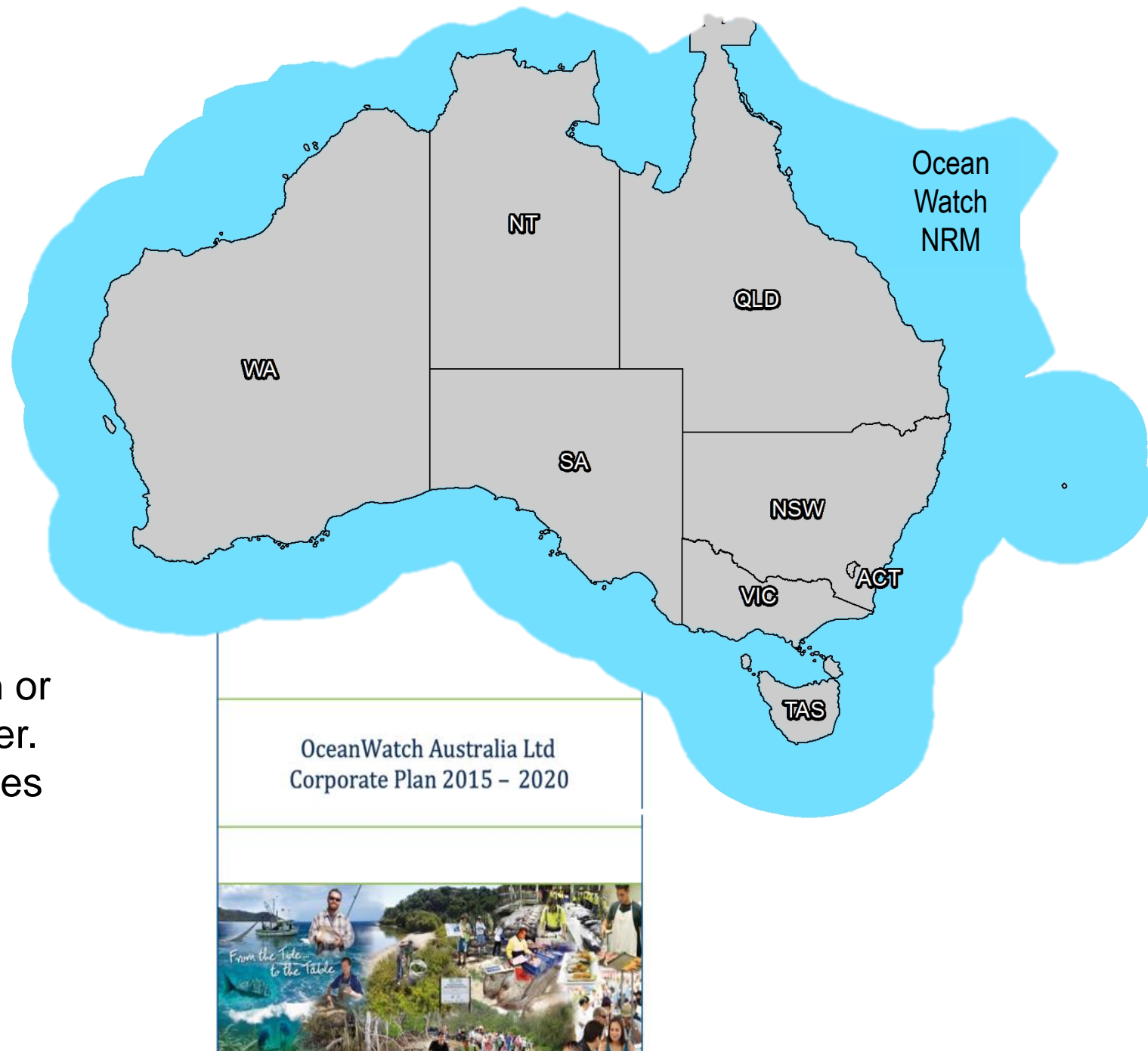
Body: Ocean Watch

Regions: 1

Plan name: There is no regional plan or strategy given the vast area they cover. There is a Corporate Plan which guides their organization's strategic direction

Governance: Non-government organisation

Board: Community elected



8. Where to go for more information



For more information about NRM Planning please visit this website:

<https://nrmregionsaustralia.com.au/>

Alternatively, you can contact the NRM bodies directly via their websites (which can be accessed through the link above)

Additional resources

- Detailed history of NRM planning

1914 River Murray Commission was established as a partnership between the state governments and the Commonwealth Government to share the water resources

Following droughts and soil erosion in the 1920s and 1930s each state developed its own committee in conjunction with CSIRO to assess the problem.

By 1945 all states had a formal structure for addressing soil conservation

River Improvement Trust was established in Victoria and Queensland in 1945 focusing on river function and water quality in response to growing concerns

In 1987 Victoria released its salinity strategy and established local and regional catchment community-based planning committees to guide government investment. It recognised the need for a landscape approach for surface and ground-water management

Salinity continued to be an issue in other states so **Western Australia, New South Wales and South Australia also adopted a coordinated landscape approach in the 1980s**

In the 1980s the local Landcare community group movement began focusing on soil conservation, farm trees and pest plant and animal control and other inter-related land protection projects

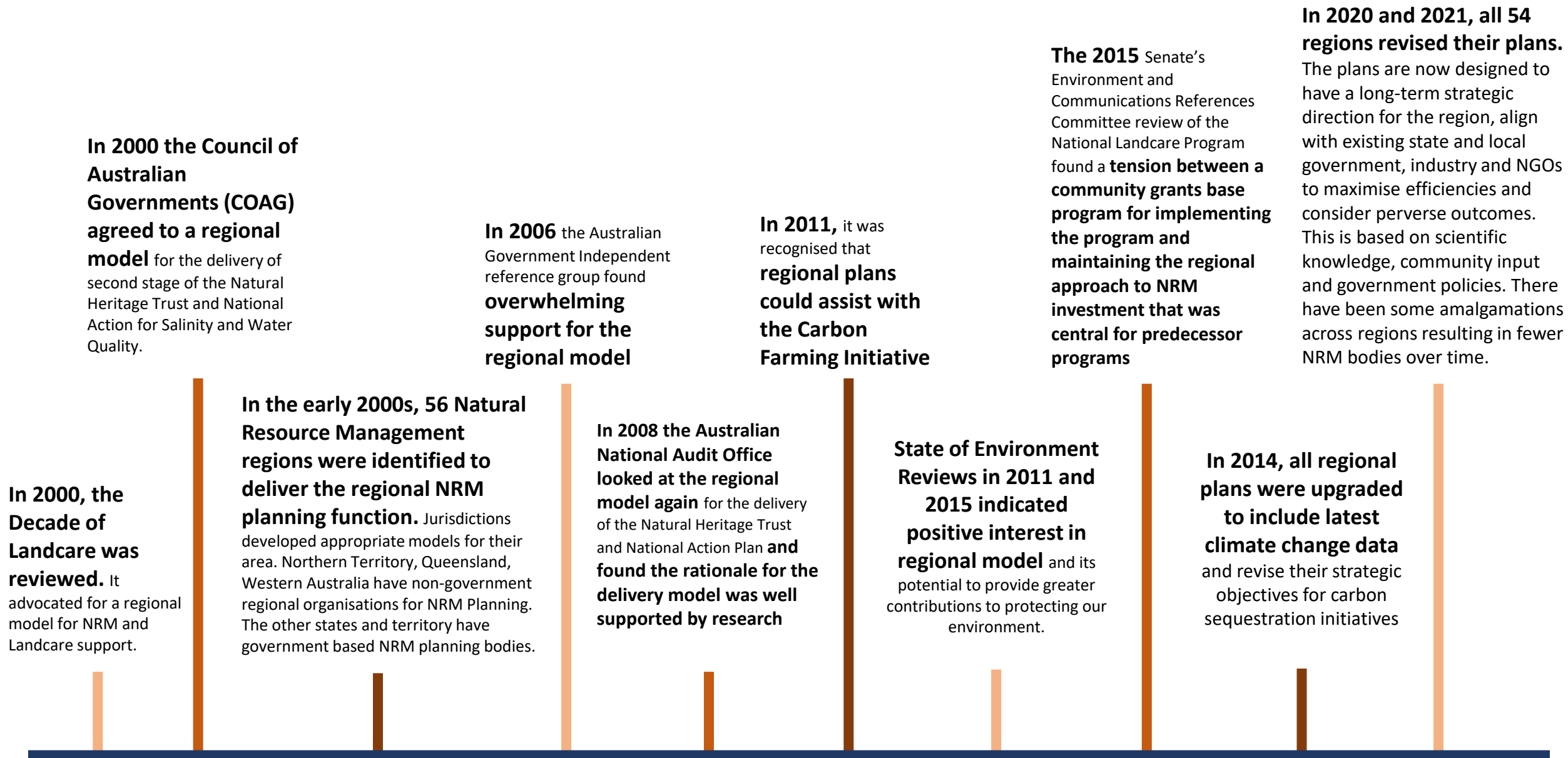
In 1989 the Australian Conservation foundation and the National Farmers Federation jointly encouraged the Decade of Landcare

In 1992 the Murray Darling Basin Agreement established the Murray Darling Basin Commission to replace the River Murray Commission. This new agreement resulted in a whole of catchment approach to managing quantity and quality of the Basin's water resources

In 1990s the Australian Government had fully embraced the Decade of Landcare, so the National Soil Conservation Program and the Federal Water Assistance Program were amalgamated to become the basis of the **National Landcare Program**

Catchment and Land Protect Act 1994 was introduced in Vic to set up a NRM body framework. Other states followed.

Early NRM planning 1914 – 1990s



Early NRM planning 2000 - 2021