

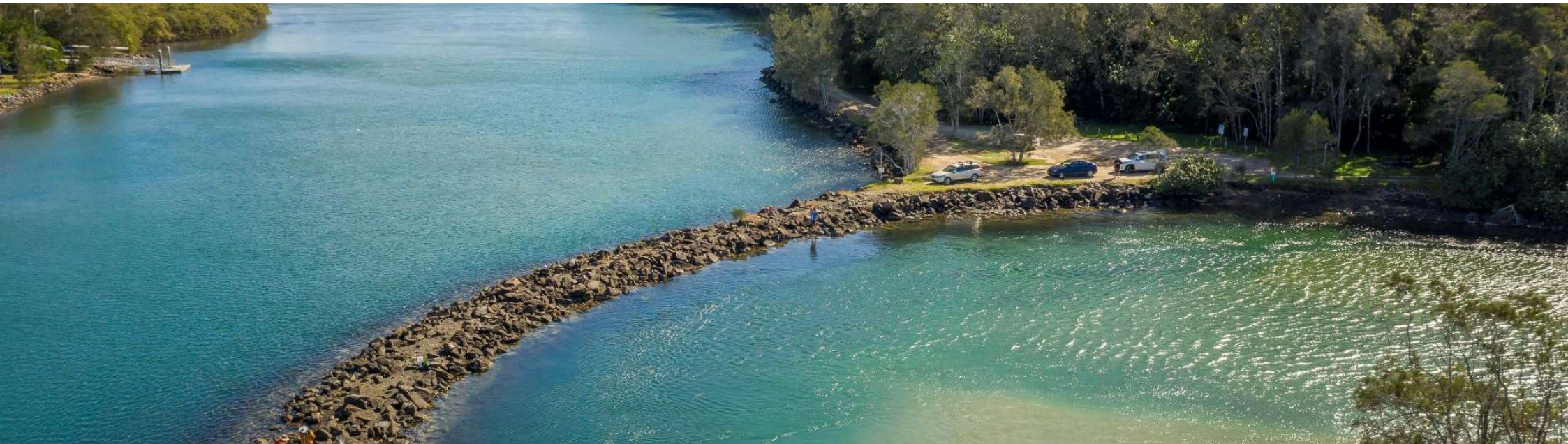
Department of Climate Change, Energy, the Environment and Water



Integrated Catchment Management governance for healthy waterways: the ultimate aspiration for NSW

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Manager Catchment Reform





Acknowledgement of Country



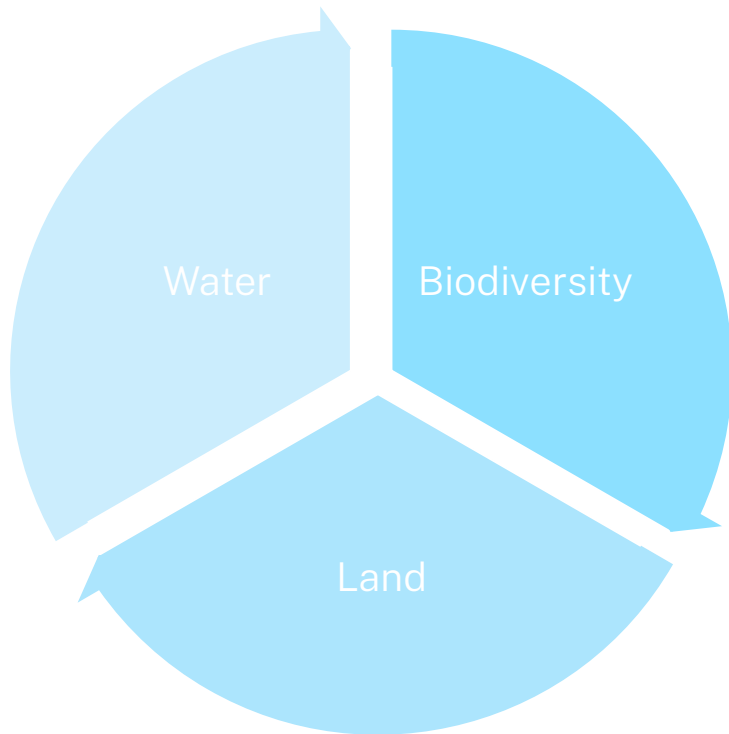
The Department of Climate Change, Energy, the Environment and Water acknowledges that it stands on Aboriginal land.

We acknowledge the Traditional Custodians of the land and water, and we show our respect for Elders past, present and emerging.

We do this through thoughtful and collaborative approaches to our work, seeking to demonstrate our ongoing commitment to providing places in which Aboriginal people are included socially, culturally and economically.

Artist and designer Nikita Ridgeway from Aboriginal design agency – Boss Lady Creative Designs, created the People and Community symbol.

What is ICM?



- ICM is the coordinated management of land, water and biodiversity resources based on catchment areas
- involves integrating policy frameworks across land use planning, water planning, biodiversity, and other natural resources, which all influence water quality and water availability in a catchment
- approach does not consider land, water, and biodiversity management as separate activities
- in ICM, catchments are recognised as interdependent systems where waterways are managed as whole entities in their planning and management
- as water is the entity with the most ‘connected’ nature, it should set the boundaries/scale of management for everything else (not land then water/city then water, etc.)

Why is ICM needed?



Image from the NSW Government's official response to the 2023 Menindee fish deaths



The collage consists of four overlapping document covers:

- Top-left:** A document titled "NSW Strategic Plan" from the Department of Climate Change, Energy, the Environment and Water, dated August 2023.
- Middle-left:** An "Independent review Darling-Baaka River" report from the Office of Chief Scientist & Engineer, dated 29 September 2023.
- Middle-right:** A report titled "NSW Water Quality Governance Review" with the subtitle "Pathways to improve water quality across the state", dated June 2024.
- Bottom-right:** The "NSW Government response" to the independent review into the 2023 fish deaths in the Darling-Baaka River at Menindee, dated June 2024, published by the Department of Climate Change, Energy, the Environment and Water.

Catchment management approaches

Outside NSW

- Victoria – Catchment Management Authorities
- Queensland – Natural Resource Management Regions & Reef Sustainability Plan
- Chesapeake Bay Program – Watershed Total Maximum Daily Load Limit

Within NSW

- Total Catchment Management 1989-1913
- Current governance



Guthega Pondage, Snowy Mountains.
Photographer Louise McKenzie

Victoria

- Shared responsibility administered through the *Catchment and Land Protection Act 1994 (Vic)*
- Catchment management authorities – independent statutory bodies
 - catchment managers and waterway managers
 - small, agile organisations
 - community stakeholder engagement
 - set strategic direction and coordinate implementation
 - statutory functions – planning referrals on floodplains
- General environmental duty (GED)
- funding through the environmental contribution.



A map of catchment management boundaries within Victoria

+ Strengths

- clarity of roles and responsibilities
- sustainable funding source
- 20+ years focus on integrated catchment management

- Limitations

- limited influence of catchment strategies in planning processes
- compliance of GED
- further work in integrating Aboriginal values and objectives.

Queensland

- Statewide — no overarching catchment management framework in Queensland
 - NRM regions — non-statutory forums
 - River Improvement Trusts
- however, Reef as a catchment good governance example
- Reef 2050 Sustainability Plan and sub-ordinate 2050 Water Quality improvement plan
- Reef Protection Regulation
- Paddock to Reef Monitoring, modelling and reporting program.



A map of catchment boundary areas within Queensland

+ Strengths

- Reef catchment – overarching strategy that sets objectives and targets
- Reef catchment – regulation of key industries to minimum set practice standards

- Limitations

- Statewide: lack of clear roles and responsibilities
- Statewide: lack of statutory power or influence on land planning decisions

Chesapeake Bay, US

- Program office established through federal EPA under Clean Water Act
- regional partnership across 7 jurisdictions established in 1983 that sets out 10 goals
- each goal has management strategy and work plan, each state develops a watershed implementation plan
- coordination through Chesapeake Bay Agreement has led to a halt of ecosystem and waterway health decline despite population increase and an increase in ecosystem pressures.



A map of Chesapeake Bay's watershed.
Source: www.chesapeakebay.net

+ Strengths

- 40 years of continuous interjurisdictional effort to protect and restore Chesapeake Bay
- governance framework that coordinates well across stakeholders.

- Limitations

- large governance framework and resource intensity of modelling can take away from focus of on-ground action
- despite setting loads, targets have not been reached.

Past catchment management in NSW 1989–2013



Eroded banks downstream of Lake Burrinjuck, Murrumbidgee River

Photographer: Andrew Roberston

Strengths of previous approaches:

- engagement on priorities for their local area is highly valued amongst the community
- tailored local approaches within a consistent legislative framework at state scale are highly valued
- long-term state investment attracts interest in planning for long-term outcomes.

Limitations of previous catchment management in NSW:

- lack of recognition of cultural values, Caring for Country practices and the roles of Aboriginal people in waterway and catchment governance models
- integration of land use planning with natural resource management planning did not occur
- reliance on voluntary arrangements and incentive programs for private landholders can work well but have limitations in practice.

Current NSW catchment management



A map of NSW water strategy regions

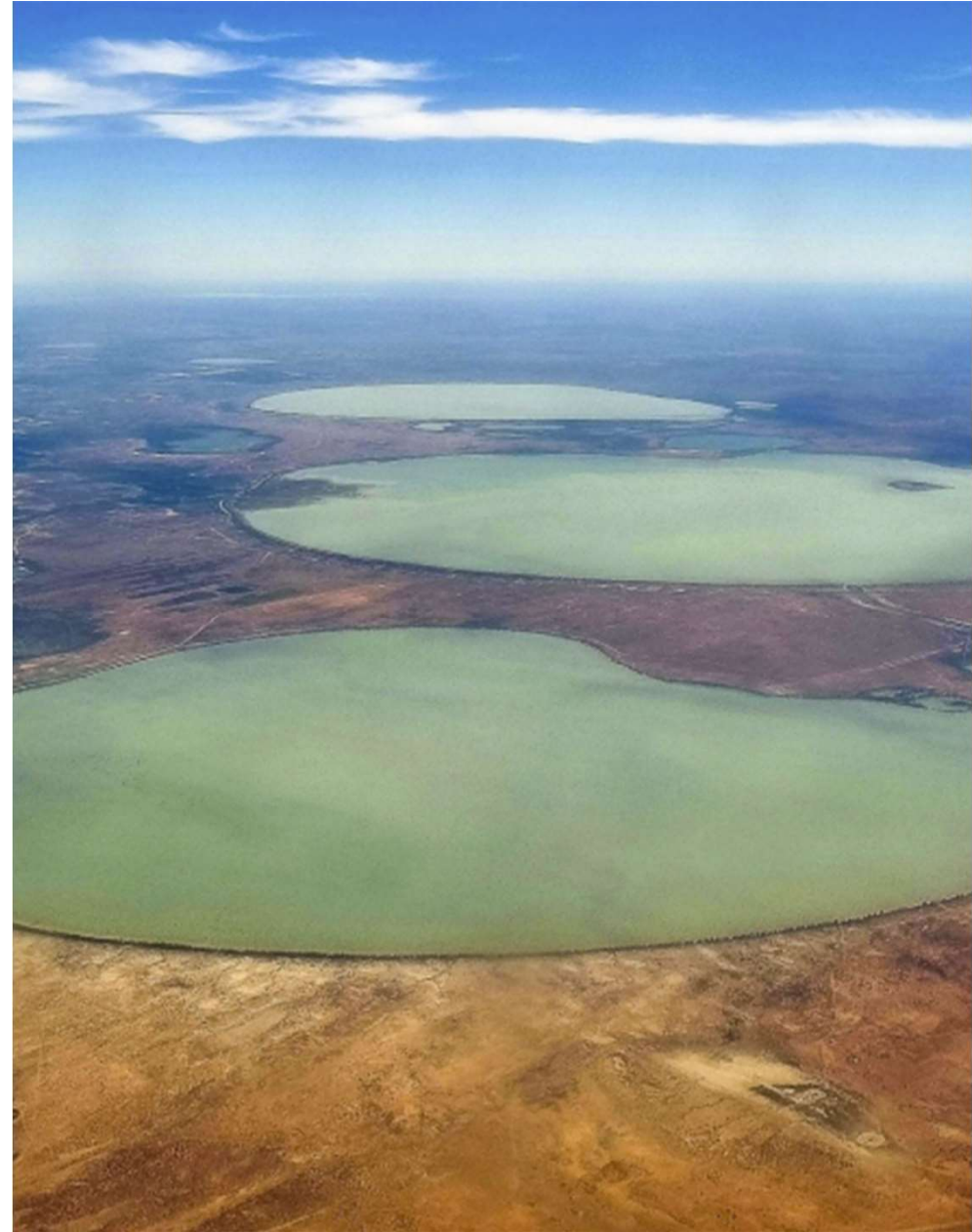
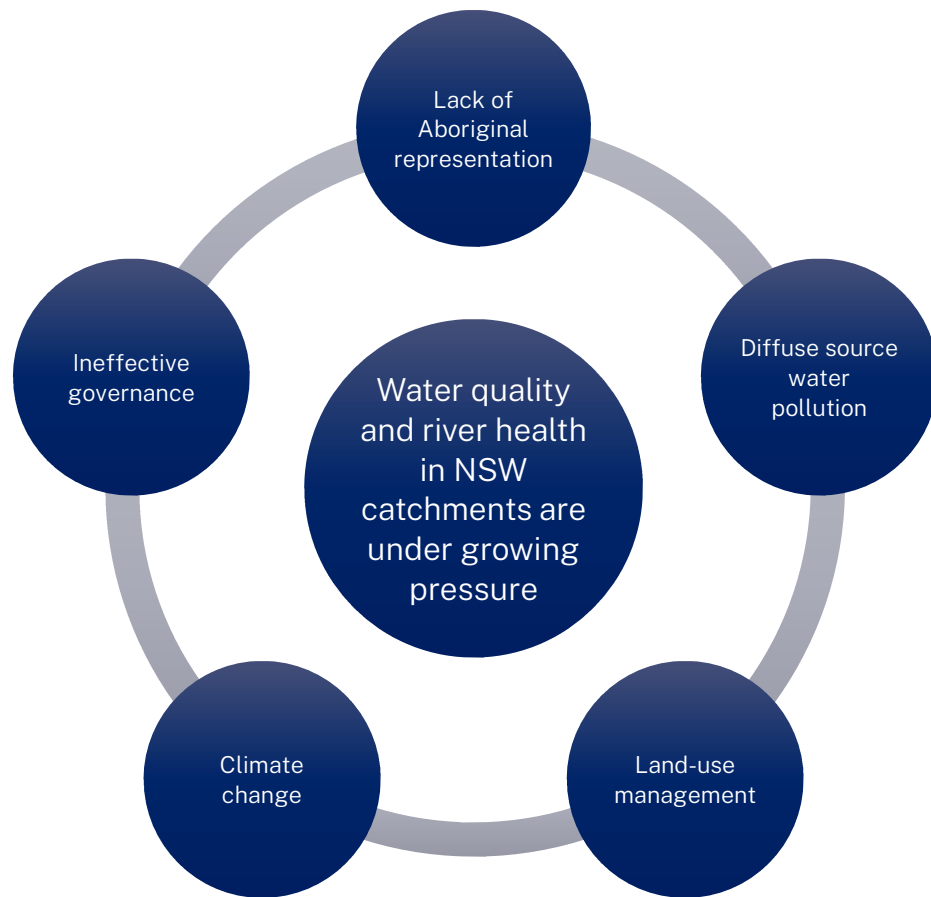
- Fragmented governance with over 50 legislative instruments and 30+ agencies involved with unclear and uncoordinated agency roles and responsibilities
- lack of a state government framework for ICM has led to piecemeal responses outside of an organised government policy framework, which lacks enforceability and resourcing.
- no single agency currently has the authority, capacity, and resources to undertake catchment scale planning, drive coordinated engagement with diverse stakeholders to accurately consider a broad range of community values for water quality, as well as the regulatory powers to mandate and enforce water quality considerations.
- land use planning and water management are poorly integrated; existing management arrangements create a disconnected approach to managing NSWs waterways.

Key legislation & NSW state agencies



Legislation	Responsible Agency	Instrument
Water Management Act	NSW DCCEEW, enforced by NRAR	Water sharing plans, State Water Management Outcomes Plan (last in effect 2002)
Environment Planning and Assessment Act	DPHI	State Environmental Planning Policies, Local Environmental Plans
Protection of the Environment Operations Act	EPA	Protection of the Environment Policies (in development)
Fisheries Management Act	DPIRD	Habitat Protection Plans
Local Land Services Act	LLS	State Strategic Plans, Local Strategic Plans
Crown Land Management Act	Crown Lands	State strategic plan for crown land
Biodiversity and Conservation Act	NSW DCCEEW	Biodiversity Assessment Method, Biodiversity Offset Scheme

Key drivers of water quality issues



Need to integrate Aboriginal knowledge & leadership

- Water is a living entity
- cultural flows and spiritual uses must be central
- the importance of Aboriginal leadership opportunities in governance and decision making
- accountability must be transparent and culturally relevant.



What could reform look like



Evaluating
catchment
scale
governance
models

Tailoring
approaches
to regional
needs

Integrating
land use
planning and
water
management

Aligning
priorities
across
management
frameworks

Embedding
Aboriginal
leadership
into
governance

Thank you

