Australian Government

Murray–Darling Basin Authority

Basin Condition Monitoring Program – engaging community to support Basin health

INBO Basin Summit Session 1 - DATA:
From data to action: modernizing water resources monitoring for resilient basin management

About the Murray–Darling Basin

More than **50** species of native fish.

120 species of native and migratory birds.

16 internationally recognised and protected wetlands.

Covers an area of more than a **million square kilometres.**

Home to **2.4 million** Australians

8,400 irrigated agriculture businesses.

Run the Murray River

Operate locks, dams, weirs on the River Murray on behalf of state governments

Implement water legislation

Including monitoring the impact of water legislation on people, industries and the environment

On-ground sensors are part of our expanded monitoring network

MDBA Conducts Extensive Monitoring

This gives us

- Clear picture of Basin conditions
- Stronger monitoring networks
- Early warning for risks
- Public access to data

Basin Condition Monitoring Program

Cultural

- Pathways to the Basin Plan Review
- Cultural flows
- Outcomes for First Nations peoples

Environmental

- Impacts of water delivery and operations
- eDNA monitoring
- Floodplains and wetland fish
- Satellite vegetation maps

Social

- Basin community values
- Community oral histories
- Communication

Economic

- Economic and social conditions report
- Economic values beyond irrigation
- Changes to employment
- Dynamics of the water market

Hydrology

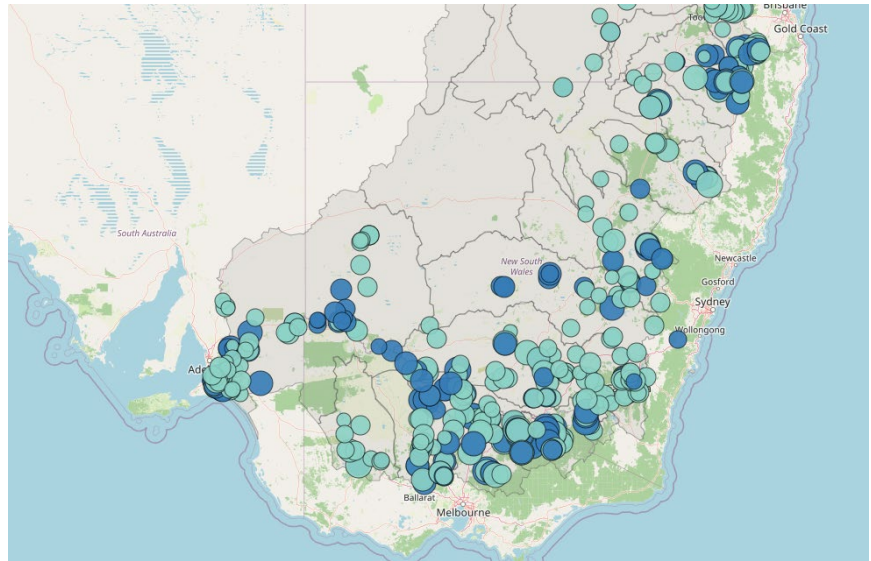
- Community flow measurement

Citizen science eDNA - Environmental

One of the world's largest community eDNA projects

Over **150** volunteers filtered water samples in local waterbodies.

900+ samples analysed for biodiversity information



Outcomes

- Informing native fish biodiversity monitoring
- Lots of community support

EnviroDNA ODONATA

Darling (Baaka) Scrolls - Cultural

Steamboat Scroll identified as community data source – borrowed and digitised

Baaka knowledge of changes to the river & features of important cultural places (fish traps, rock bars)

Working with Barkandji/Ngemba to identify sites of significance

Supported restoring fish passage and water quality; discovered “extinct” snail

How Are Projects Being Used?

Key line of evidence in our 5 yearly evaluation

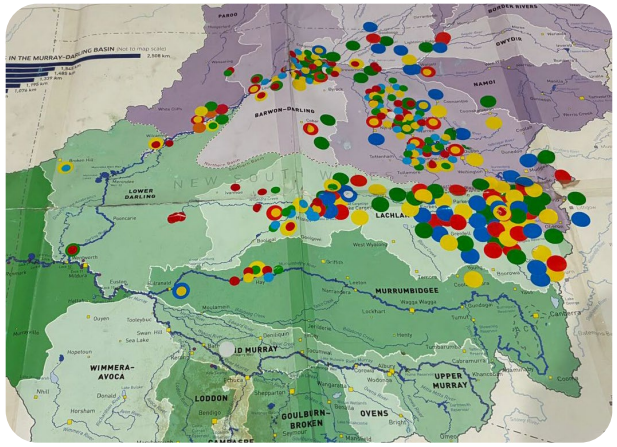
Build relationships (partnerships with university and community), trust, transparency

Feeding into our Basin Plan Review

Informing our approach for the next 10 years of science and knowledge

Shaping The Future Of The Basin

- **2400+** submissions
- Range of perspectives – lived experience
- What We Heard Report – **June 2026**
- Final Report – **December 2026**



Australian Government

Murray–Darling Basin Authority

Thank you.