

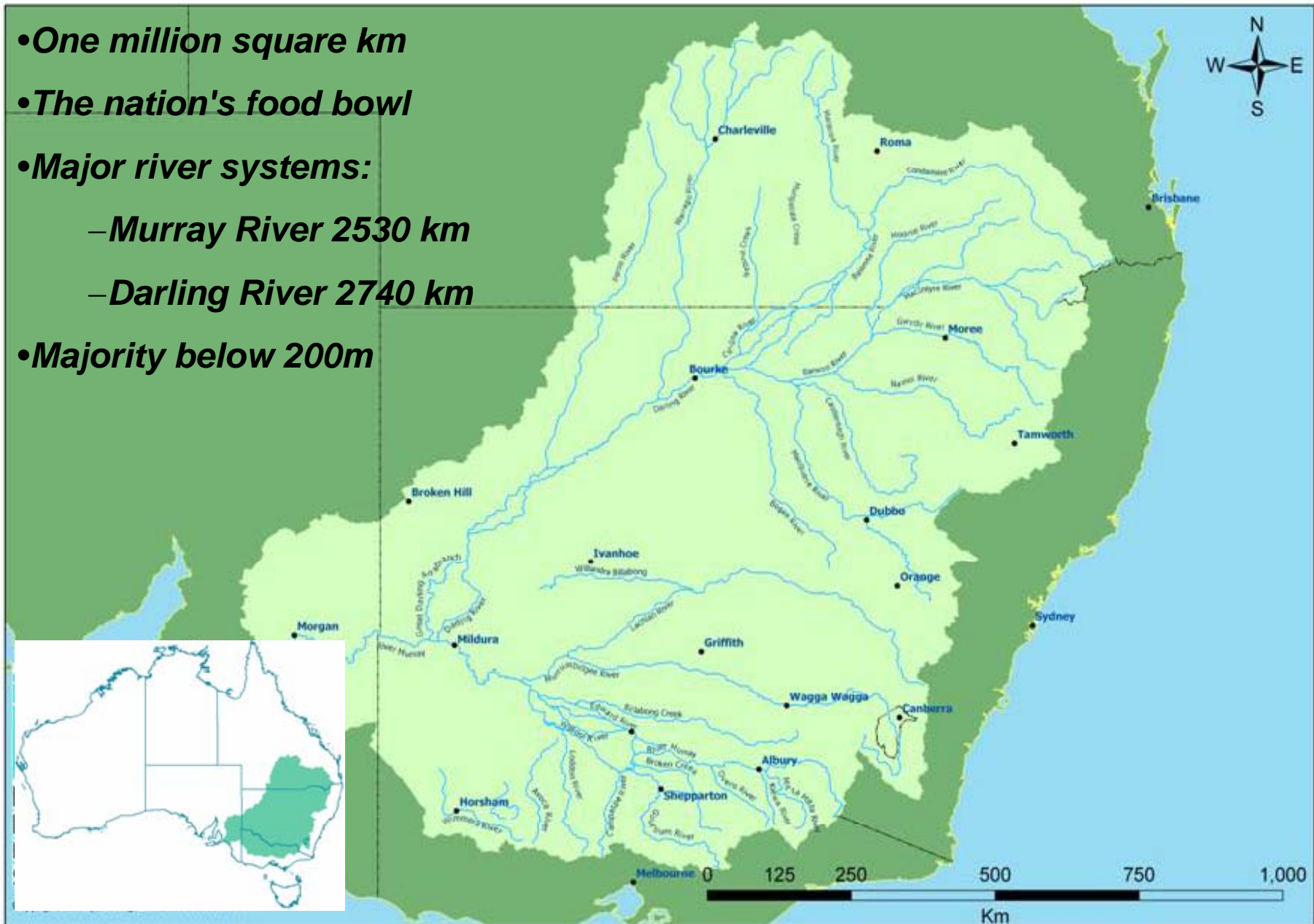


Native Fish Strategy in the Murray – Darling Basin

An Overview Peter Jackson

Murray-Darling Basin

- *One million square km*
- *The nation's food bowl*
- *Major river systems:*
 - *Murray River 2530 km*
 - *Darling River 2740 km*
- *Majority below 200m*





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Fish Fauna

- Forty-five natives
- Twelve alien or translocated.
- Alien fish up to 70% (numbers) and 90% (biomass) in some rivers.
- Carp most abundant and widespread.
- > 50% are Threatened
- 10% pre-European



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Native Fish in the Basin



Murray cod

(*Maccullochella
peelii peelii*)

⑩ Largest
freshwater fish
in Australia

⑩ Localised
depletion.



Australian Government



Native Fish in the Basin



Golden perch

(*Macquaria ambigua*)

⑩ Listed as Vulnerable in NSW under the FM Act 1994



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Native Fish in the Basin



**Freshwater
catfish**
(*Tandanus
tandanus*)

- Widespread in Qld.
- Significant decline elsewhere



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Native Fish in the Basin



Olive perchlet or Glass fish

Abassis agassizii

- Very rare in NSW
- Extinct in SA and Vic.



Threats to native fish in the MDB



Threats – Flow regulation

- 2/3 of flow diverted.
- Median annual flow to sea is now 27% of natural.
- State of drought for > 61 years per 100 years (natural 5 per 100).
- Diversions from Barwon-Darling and tribs. 50,000ML (1960) – 1.4 Mill ML (1990-91)



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Other Threats

- Habitat degradation.
- Lower water quality.
- Barriers.
- Alien Species.
- Disease
- Exploitation.
- Translocation and Stocking.

Management-Jurisdictions

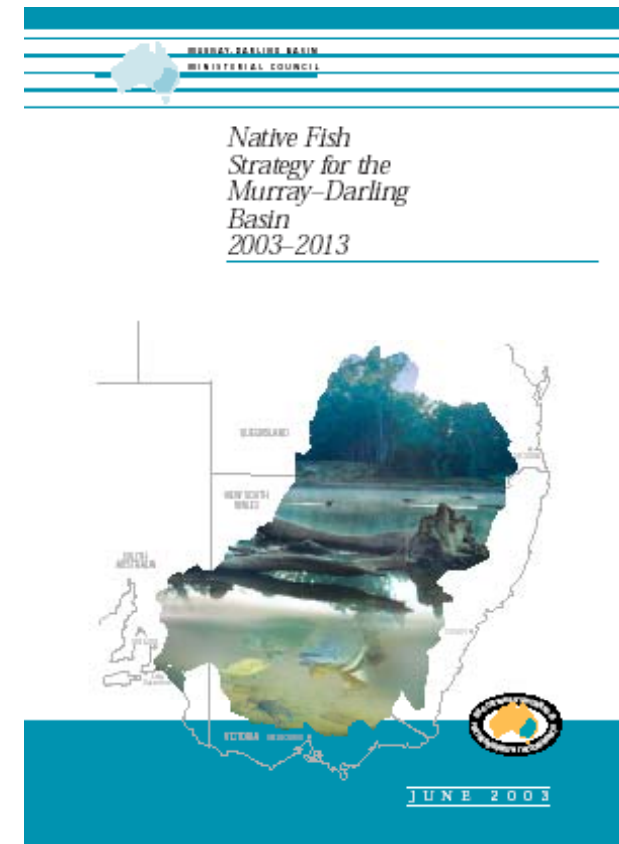
- New South Wales- 56%.
- Queensland- 24%.
- Victoria-12%.
- South Australia-6.5%.
- Australian Capital territory- 0.2%.

Management-Basin Wide

- **1992-** Murray Darling Basin Agreement (MDBMC/ MDBC/ CAC).
- **2003-**Native Fish Strategy
- **2008** – Murray-Darling Basin Authority.
- **2010-** Draft Basin Plan for sustainable water use.

Native Fish Strategy

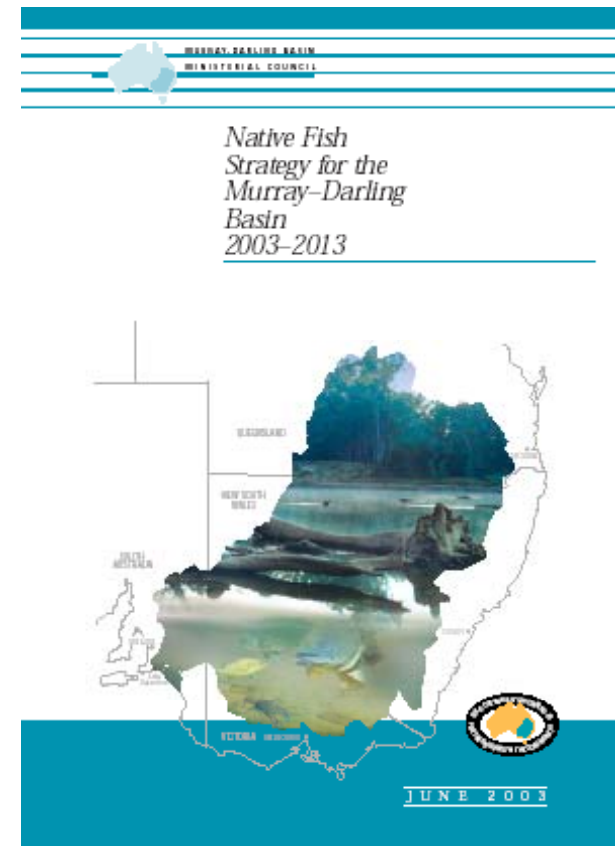
- **Community driven**
- long term – 50 years.
- Rehabilitate native fish communities to 60% in 50 years.
- Healthy fish populations and habitats mean healthy rivers.



Native Fish Strategy

The NFS has 6 Driving actions:

- Rehabilitate fish habitat.
- Protect fish habitat.
- Manage river structures.
- Control alien fish.
- Protect threatened species.
- Manage translocation of species.





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Two Key Principles

- Community and partner ownership and participation are essential.
- Multiple management interventions are more likely to produce a positive and quicker result for native fish communities.