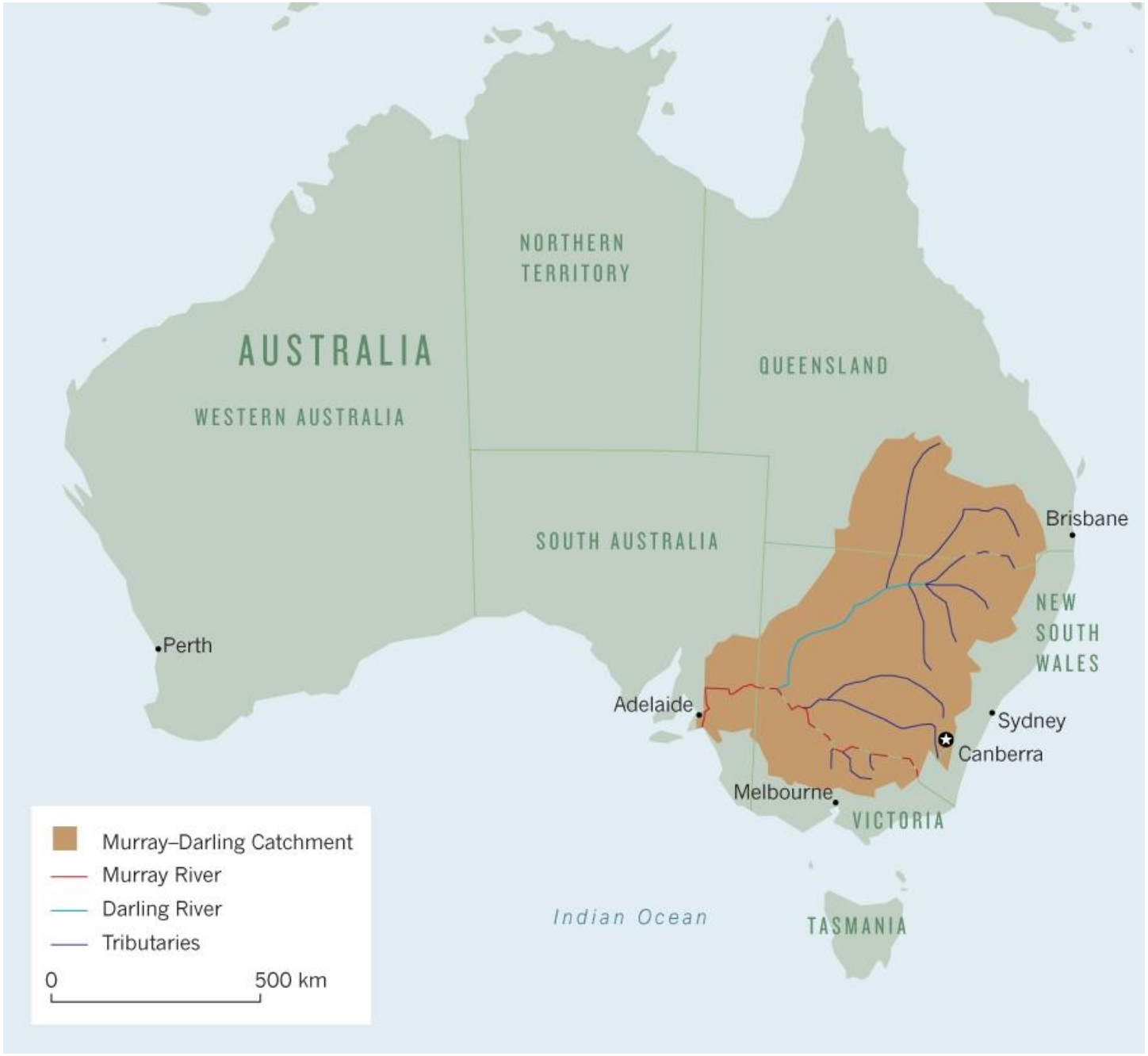
Australian Government

MURRAY–DARLING BASIN AUTHORITY

Groundwater management under the Murray – Darling Basin Plan

Peter Hyde,

Murray-Darling Basin Authority, Canberra, Australia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NEW SOUTH WALES
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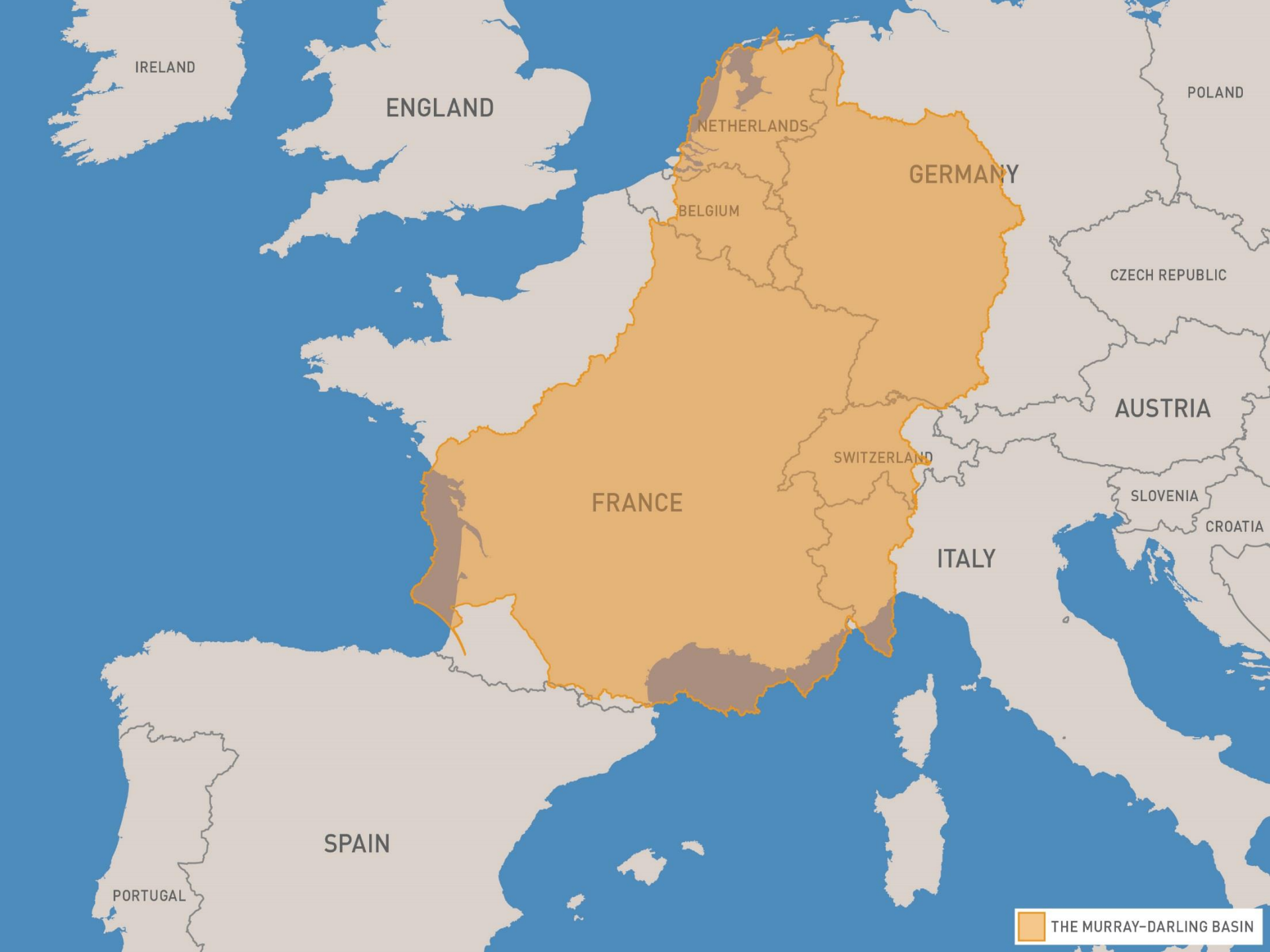
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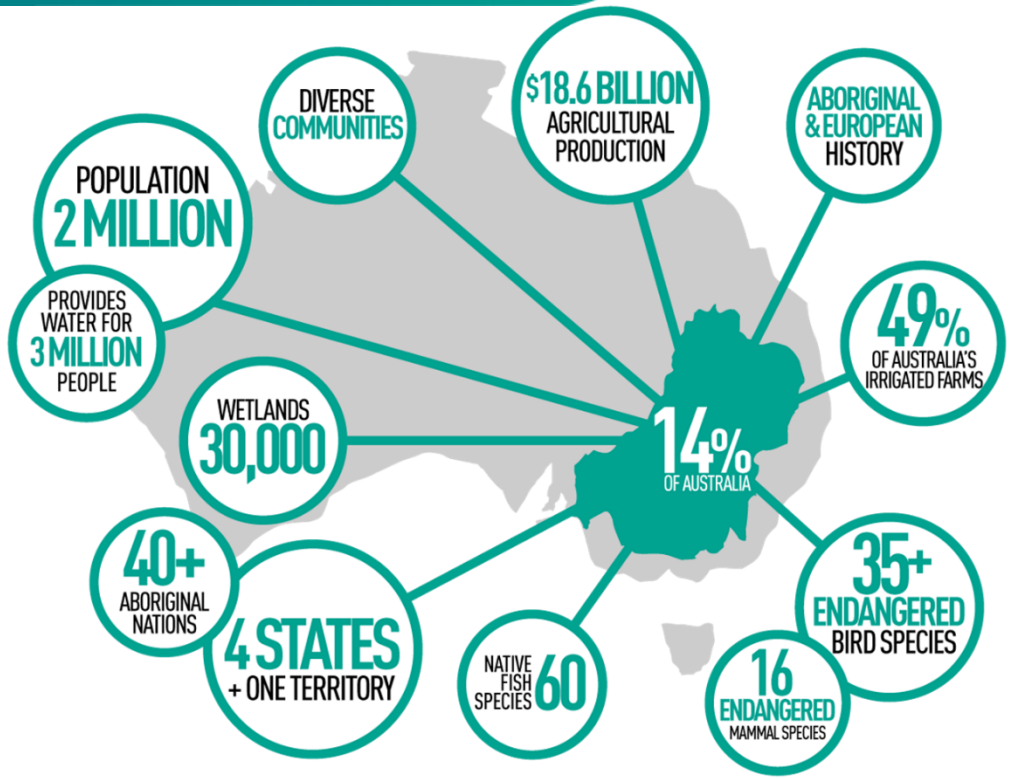
THE MURRAY–DARLING BASIN

The Murray-Darling Basin



What is the Murray – Darling Basin Plan

Coordinated approach to water management across the Murray–Darling Basin

Sustainable limits on surface and groundwater

Water quality targets

Basin wide environmental watering arrangements

Water trading rules

Water Management pre-Basin Plan

- Water is ‘owned’ by the state governments
- Users have a ‘right’ to access
- Water management is constitutionally a state responsibility
- A history of water reform from 1994 onwards:
  - 1994 Intergovernmental Agreement
  - 2004 National Water Initiative

Why the need for a Basin Plan

- Driven by increasing surface water use
- Degrading environmental assets, including the rivers
- Millennium drought was the catalyst
- The first time the Commonwealth Government has managed water

Groundwater in the Basin Plan

- Defines
  - 22 planning areas (Water Resource Plan)
  - 66 individual GW management units
  - 81 separate sustainable diversion limits (SDLs)
- Introduces consistent planning framework across the Basin

Charleville
Roma
BRISBANE
Toowoomba
St George
Goondiwindi
Moree
Narrabri
Tamworth
Bourke
Dubbo
Orange
SYDNEY
Forbes
Griffith
Wagga Wagga
CANBERRA
Deniliquin
Albury
Shepparton
Bendigo
Seymour
Horsham
Mildura
Renmark
ADELAIDE
Murray Bridge
Broken Hill
Ivanhoe
MELBOURNE
Warrego River
Nebine Creek
Maranoa River
Condamine River
Moonie River
Balonne River
Culgoa River
Narran River
Barwon River
Gwydir River
Macintyre River
Paroo River
Darling River
Bogan River
Macquarie River
Willandra Creek
Lachlan River
River Murray
Murrumbidgee River
Edward River
Billabong Creek
Tumut River
Avoca River
Loddon River
Wimmera River
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Basin Plan extraction limit summary

	Recharge GL/y	Baseline Diversion Limit GL/y	Sustainable Diversion Limit GL/y
Groundwater	24,400	2,386	3,334
	Inflows GL/y	**Baseline Diversion Limit GL/y**	**SDL GL/y**
Surface water	32,500	13,600	10,873

Sustainable Diversion Limit determination

- The 11 numerical groundwater models focus on the higher use alluvial groundwater systems in NSW, Victoria and Queensland (13 SDL areas)
- Recharge Risk Assessment Methodology - % of recharge based on risk and uncertainty.

Groundwater reviews

- Three SDLs not agreed
- Reviewed 2013/14
- Outcomes
  - Increase in allowable take
  - Mandatory local management rules
  - Revised groundwater compliance methodology

Basin Plan Implementation

- Implemented by 30 June 2019
- States prepare Water Resource Plans for each area
- MDBA assess for compliance with the Basin Plan
- Minister accredits

Risks

- Timeline to 2019 – only 2 plans have been assessed to date. Do states & MDBA have the resources and time?

- Political support diminished. An outcome of ongoing lobbying against Basin Plan surface water reductions and impacts on communities

What we learnt

- Water management strategies require an evidence base informed by:
  - Science
  - Community
  - Governance

- A management plan is a social construct informed by science

- You **MUST** bring the community on the journey

Questions?

www.mdba.gov.au