Murray-Darling Basin – A Living Landscape

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Murray-Darling Basin

15% of Australia

Over 2 million people
Murray-Darling Basin
A Snapshot

› The Basin covers 1 million sq. km (equivalent to the size of South Africa)

› Major river system by world standards
  » River Murray 2530 km
  » River Darling 2740 km
  » Basin produces 40% of total gross value of Australia’s agricultural production – including 70% of irrigation production
Average Annual Rainfall in Murray-Darling Basin
Global water resources

FAO AquaStat Data
Variable flows

Rainfall (mm)

Extreme floods

Extreme drought

Calendar Year
Ratio of maximum annual flow to minimum annual flow for selected rivers

<table>
<thead>
<tr>
<th>COUNTRY</th>
<th>RIVER</th>
<th>RATIO BETWEEN THE MAXIMUM and the MINIMUM ANNUAL FLOWS</th>
</tr>
</thead>
<tbody>
<tr>
<td>BRAZIL</td>
<td>AMAZON</td>
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<tr>
<td>SWITZERLAND</td>
<td>RHINE</td>
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<tr>
<td>CHINA</td>
<td>YANGTZE</td>
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<td>SUDAN</td>
<td>WHITE NILE</td>
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<td>USA</td>
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<tr>
<td>SOUTH AFRICA</td>
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<td>AUSTRALIA</td>
<td>MURRAY</td>
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<td>AUSTRALIA</td>
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<tr>
<td>AUSTRALIA</td>
<td>DARLING</td>
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</table>
Charter

“to promote and coordinate effective planning and management for equitable, efficient and sustainable use of land, water and other environmental resources”
SIX GOVERNMENTS
C’wealth NSW Vic SA Qld ACT

MURRAY-DARLING BASIN MINISTERIAL COUNCIL
Up to 3 Ministers from each Government representing land, water and environment

Community Advisory Committee
21 Regional & special interest representatives

MURRAY-DARLING BASIN COMMISSION
1 Independent President
2 Commissioners from each Government

Commission Office
Technical and administrative secretariat
River Murray System
LAKE MULWALA – Yarrawonga Weir

PHOTO: Michael Bell
DARETON – On the Murray

Photo: Michael Bell
MURRAY MOUTH - Dredge

PHOTO: Michael Bell
Water trading

From this ....           To this ....
Turning water into wealth (by Commodity)

Gross value of irrigated agriculture $7.3 billion per annum

Source: ABS 2000
Murray Mouth Barrages

RIVER MURRAY BARRAGES LOCATION PLAN

LEGEND
CONCRETE STRUCTURES SHOWN THUS
BANKS
MURRAY MOUTH – Goolwa Barrage

PHOTO: Michael Bell
The six ecological assets
Murray Mouth, Coorong and Lower Lakes

Healthier lower lakes and Coorong estuarine environment

› Open Murray mouth
› More frequent estuarine fish spawning
› Enhanced migratory wader bird habitat in the Lower Lakes
River Murray Channel

- Increase the frequency of higher flows in spring that are ecologically significant
- Overcome barriers to migration of native fish species between the sea and Hume Dam
- Maintain current levels of channel stability
The Challenges
Water Flow

Murray mouth - Flowing

Murray mouth - Closed, April 1981

Commissioner, Sir Ronald East straddling the River Murray at Nyah, Victoria during the drought of 1923

Photos: Courtesy SA Govt
Our youth our future..