



Natural Resources
and Environment

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RESOURCES

CONSERVATION

LAND MANAGEMENT



SUSTAINABLE LAND & WATER MANAGEMENT

AN AUSTRALIAN APPROACH TO A KEY GLOBAL ISSUE



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INTERNATIONAL CONTEXT

World water industry is rapidly changing:

- Technological change**
- Income distribution and lifestyle**
- Globalisation and corporatisation**
- Natural Resource systems**
- Environment sustainability**
- Social and Political Agenda**



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MURRAY DARLING BASIN COMMISSION NATURAL RESOURCE MANAGEMENT STRATEGY

- 1988 Agreement between three State Governments and Federal Government
- 1.06 million square kilometres
- half of the nations gross agricultural production
- Community participation.



MURRAY DARLING BASIN COMMISSION - NATURAL RESOURCE MANAGEMENT STRATEGY

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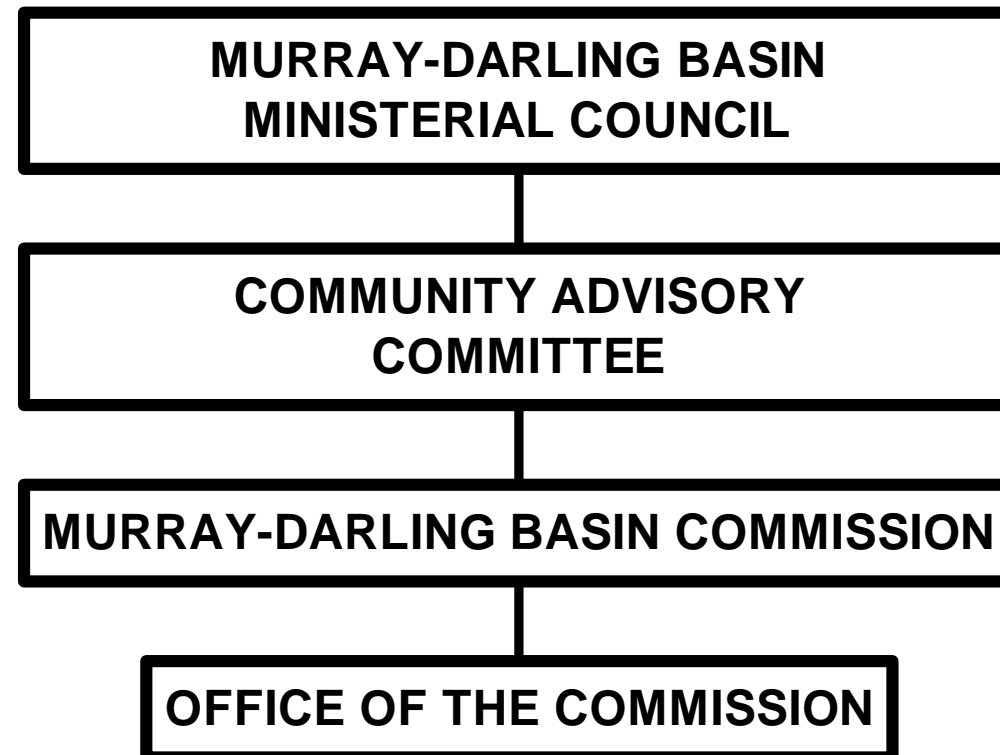
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MANAGEMENT STRUCTURE FOR THE MURRAY DARLING BASIN INITIATIVE





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WATER SHARING

- Interstate disputes prior to Federation 1901
- River Murray Waters Agreement in 1914
- Agreement unchanged until 1980's
- Increased pressure to define property rights
- Water resources fully committed
- Cap on diversions 1997



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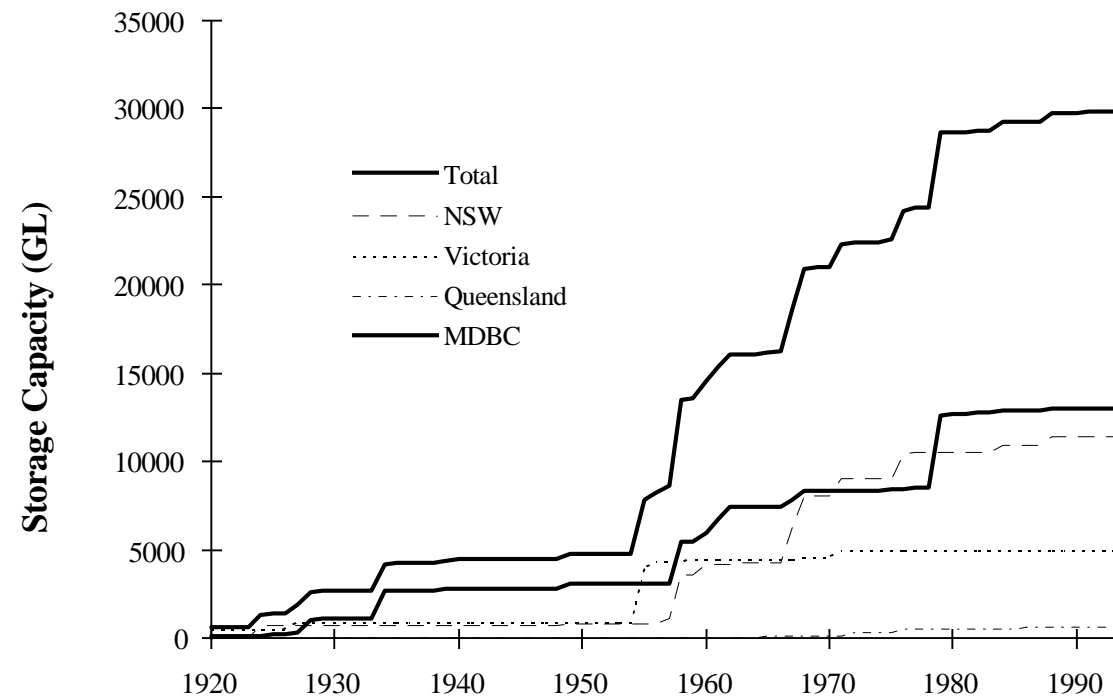
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WATER SHARING

Storage Capacity in Major Dams





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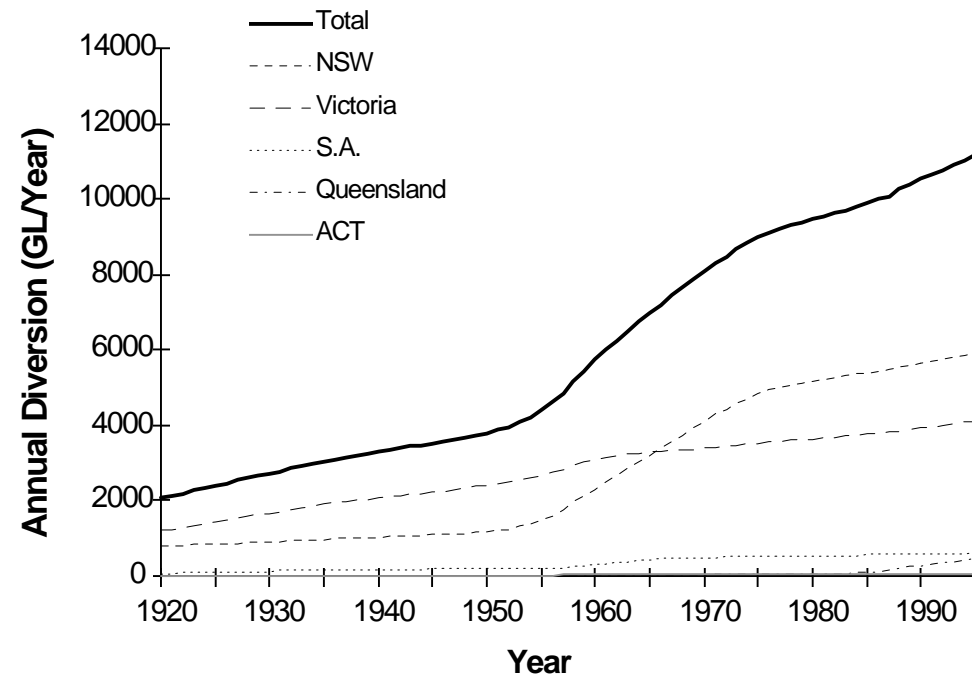
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WATER SHARING

- 1989 continuous water accounting
- 1997 Cap on diversions.





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RIVER MURRAY SALINITY

Salinity increases over the last 30 years from:

- ❑ an increase in water diversion (10 500 000 ML per annum)
- ❑ an increase in drainage flows from irrigation
- ❑ Catchment Clearing increases groundwater in flows

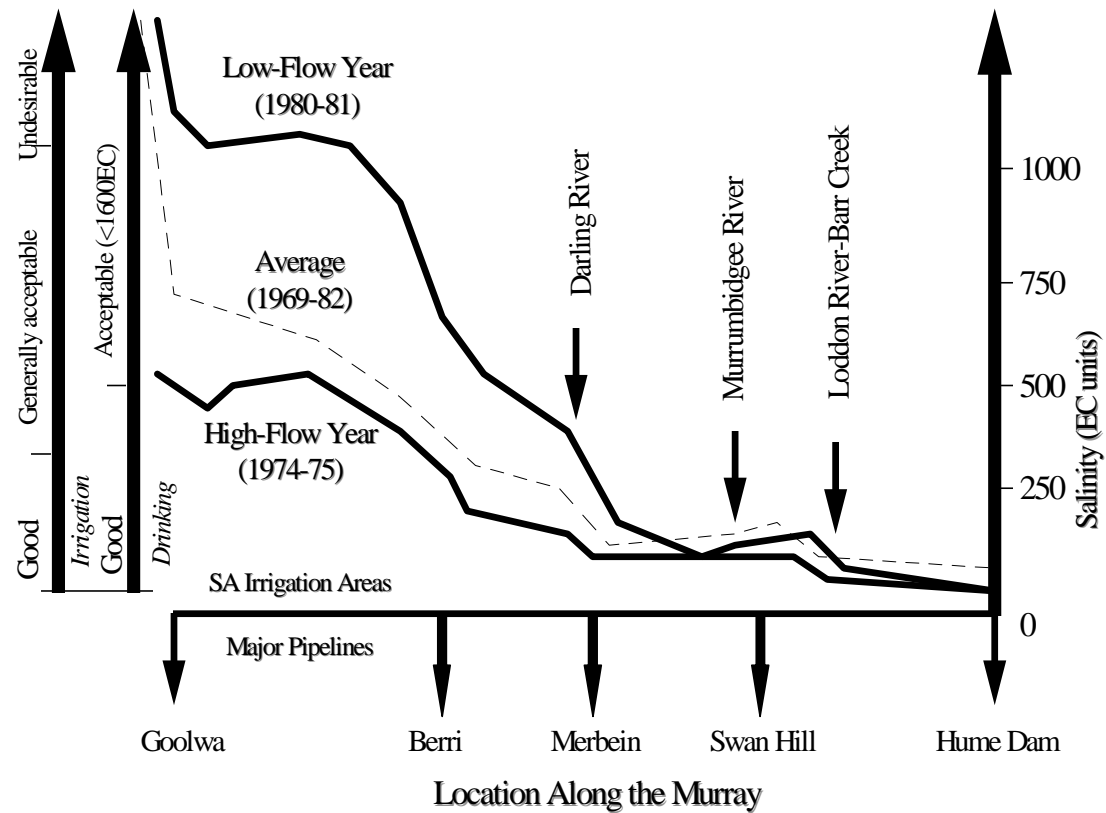
The current cost of salinity is \$40m per annum².



RIVER MURRAY SALINITY

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SALINITY AND DRAINAGE STRATEGY

The specific objective of the strategy are to:

- improve River Murray quality
- protect irrigation land
- conserve the natural environment



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NATURAL MANAGEMENT STRATEGY

Strategic Aims

- prevent natural resources degradation**
- promote sustainable practices**
- effective resource planning and management**
- long term viable economic future**
- maintain biodiversity**
- preserve cultural heritage**
- conserve recreation values**
- community and government partnership.**



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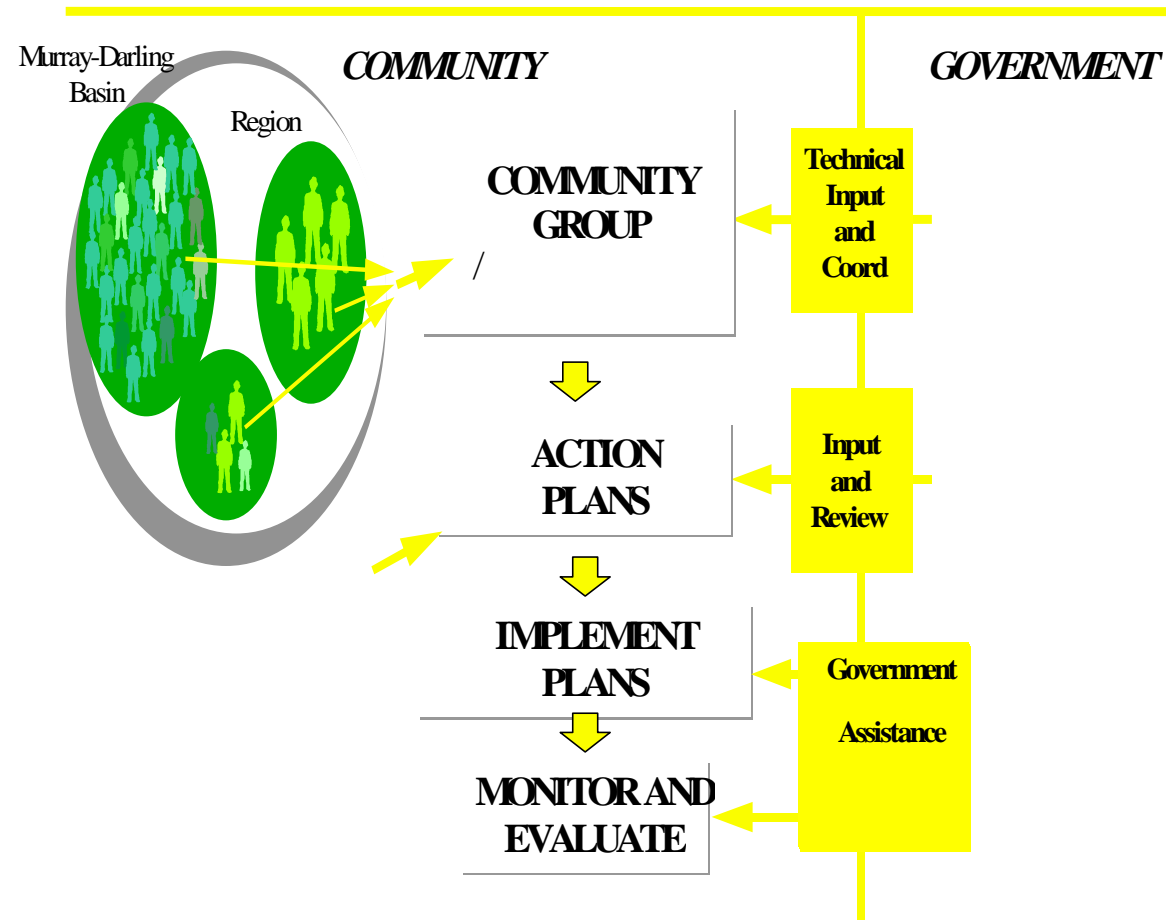
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COMMUNITY ACTION





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THE MOVE TO TRADEABLE WATER ENTITLEMENT

Comprehensive System of Water Entitlements - A Victorian Perspective

- ❑ **Water Act 1989 - water entitlements clearly defined**
- ❑ **Statutory basis for environment allocation**
- ❑ **Water trading introduced**
- ❑ **Groundwater Protection Areas introduced**



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CONCLUSION

Key Success factors are:

- A stable institutional framework**
- A sound knowledge base**
- Integration across:**
 - **natural resource issues**
 - **jurisdictions**
 - **research/policy/implementation**
- Strong community participation**