# The Coorong: science and policies

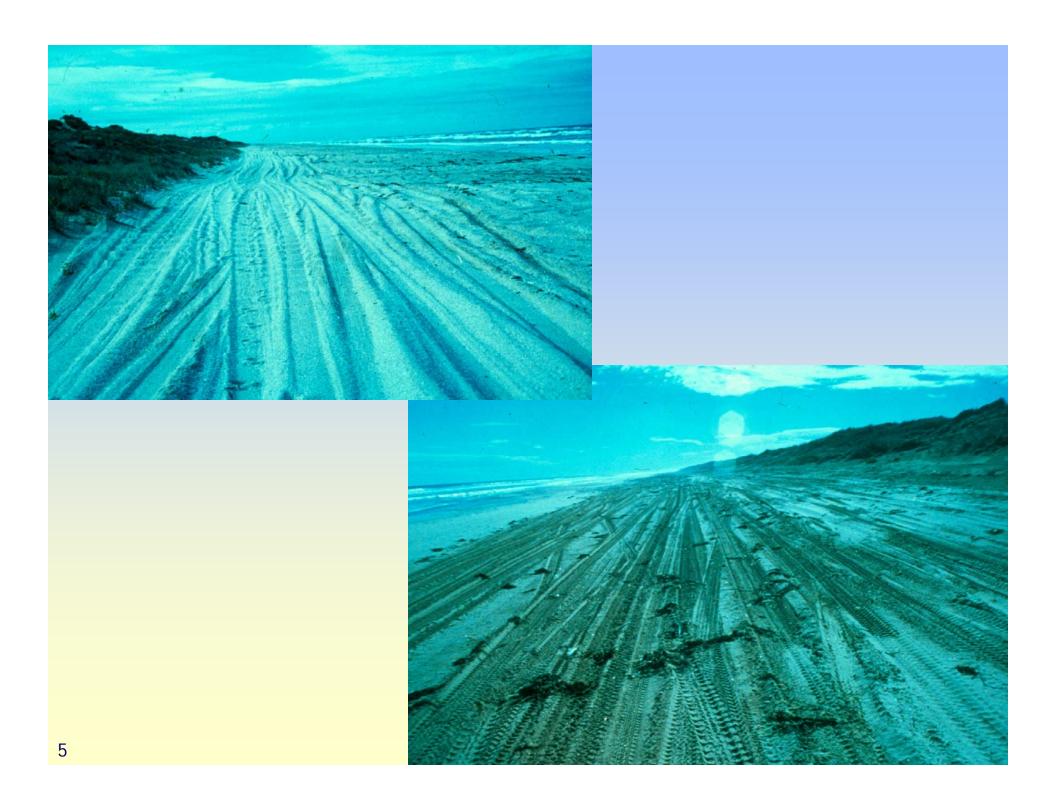
David C. Paton

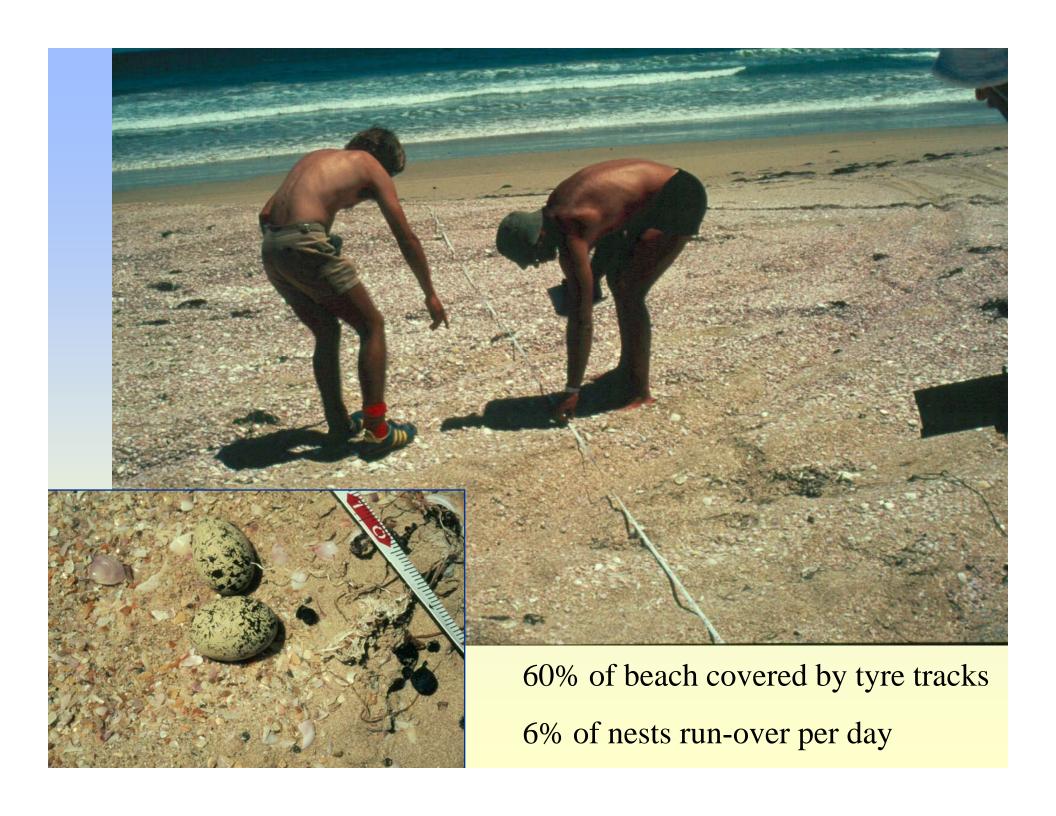




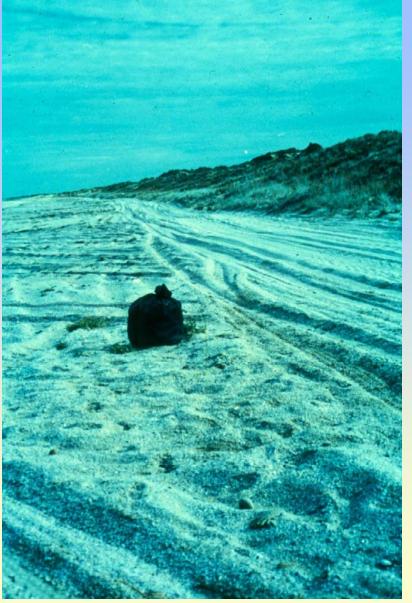












## Process & Outcome

- Conflict between two groups
  - 4WD users and locals
  - Conservation needs
- Community consultation
- Media involvement
- Eventual outcome a compromise
  - Half 90-mile beach closed for 2 months







## **Process and Outcome**

- Despite Ramsar & EPBC listing
  - too costly to dredge the Mouth
  - wait for next flow
- Approaches to government
  - unsuccessful
- Approaches to media
  - successful (Murray Mouth is now dredged)
- Addressing symptom not cause

# **Environmental flows**

How much is needed?

- Series of expert panels (scientists) for each reach along the River
- Used the best available knowledge to model influences of different flow requirements (350, 750 and 1500GL)





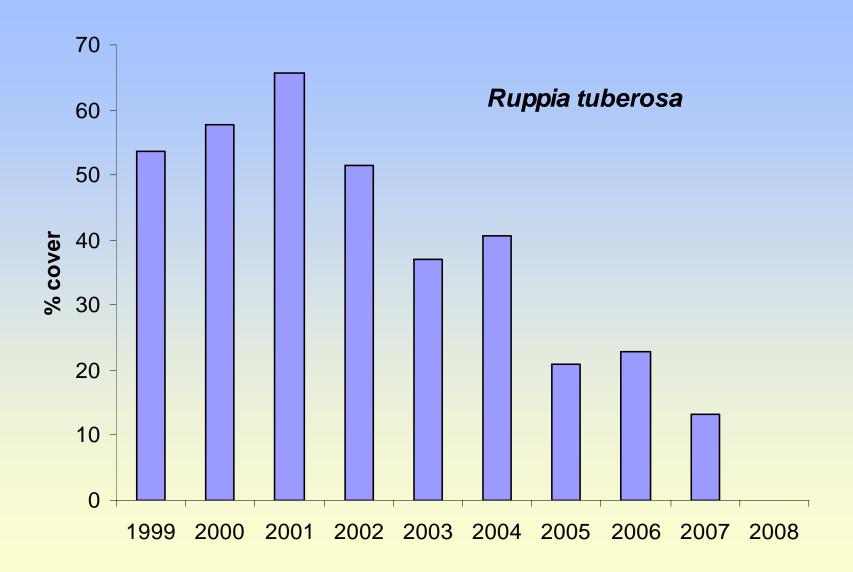
Davo Blair Photography

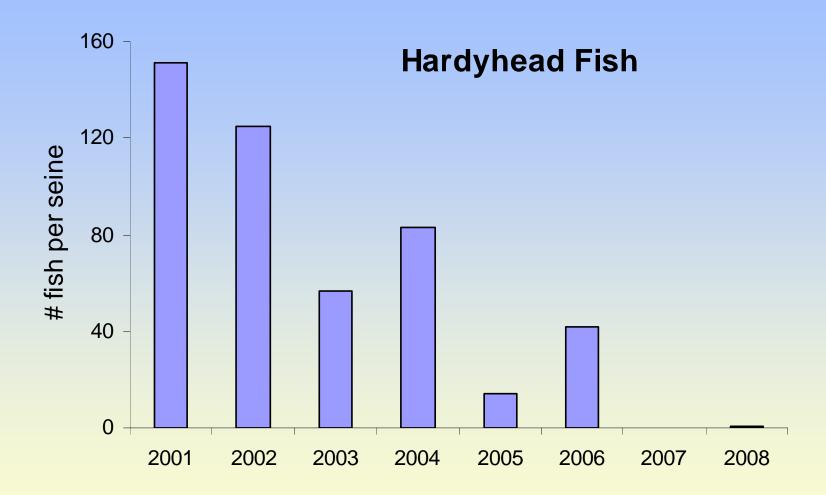
#### Benefits of environmental flows

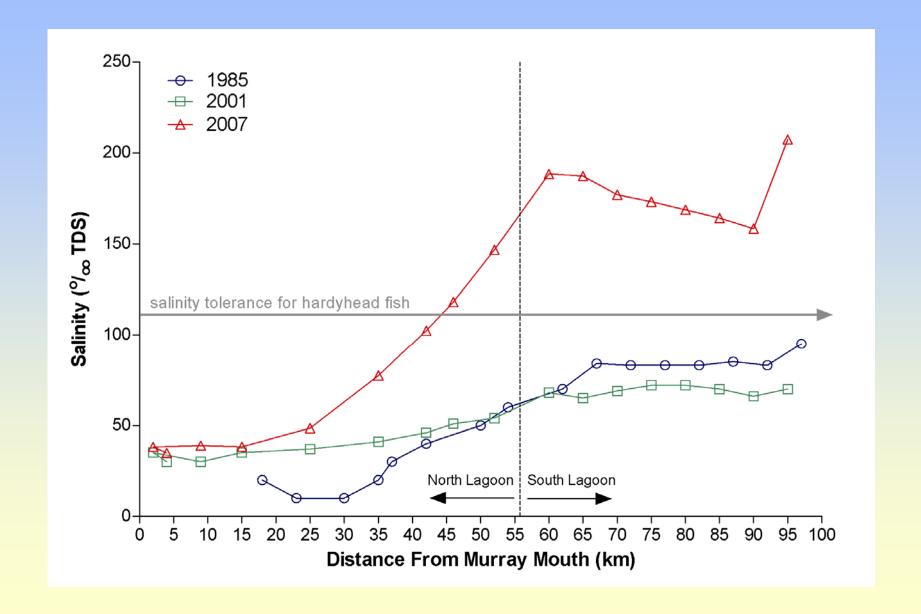
Flow	Ruppia tuberosa		Mouth Open Index
	Relative	% years high	
	performance	stress	% years MOI < 0.05
Year 2000	1.00	17	36
Environmental flows			
350 GL	1.17	8	26
750 GL	1.21	5	22
1500 GL	1.38	<1	8
Natural	1.79	<1	<1

## Outcome

- Major political parties key policy
  - deliver 500GL of environmental flow to the Murray River
  - Prior to 2004 and 2007 federal elections
- Still to meet this obligation
- Should have modelled the "no environmental flow" scenario











Grey	<b>Teal</b>
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**Fairy Tern** 

1980s	59,000	1980s	1350
2000s	10,000	2000s	240
2007	2,500	2007	6





### Migratory sandpipers

1980s	45,000	1980s	2,200
2000s	12,500	2000s	500
2007	9,000	2007	430

## Lessons learnt

- Need science to inform policy
- Need science to manage natural resources
- Scientists need to be strategic
  - Commence by engaging with government
  - Lobby relevant politicians
  - Use the media

