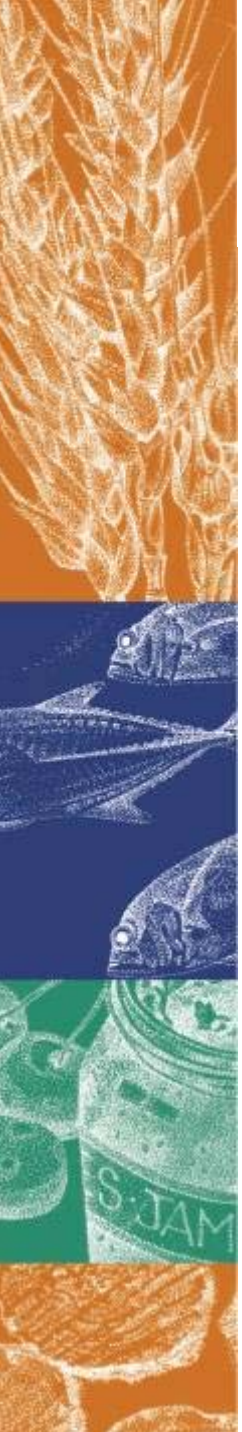

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Social dimensions of NRM

Allan Curtis

and

Trevor Webb

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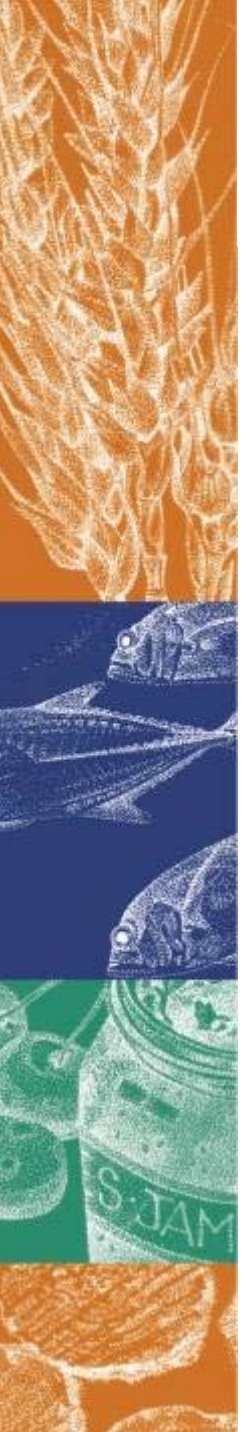
Social dimensions of NRM

Overview

- Introduction to the social dimension
- Social research for catchment management
- Monitoring forest values



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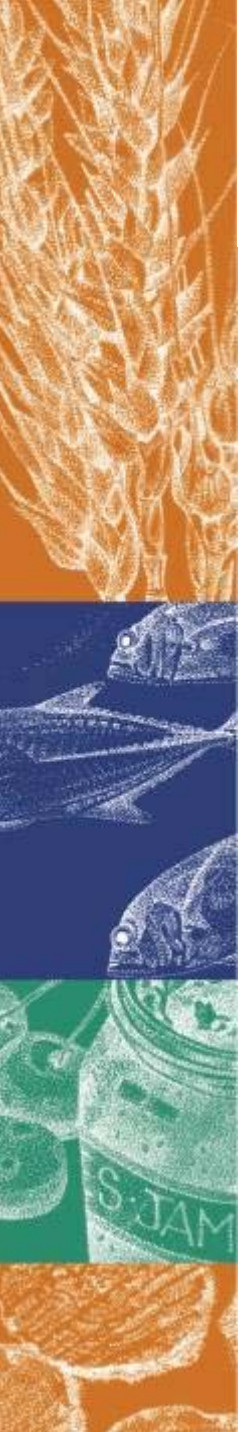
Social dimensions of NRM

- All environments modified by people
- Improvement requires behavioural change
- Technical solutions often socially unacceptable
- Resource degradation has social impacts
- Communities structured by class, gender, age, location
- Social and economic inequalities lead to degradation
- Market failure to capture full range of values



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Social research for catchments

Typical planning cycle

- Articulate the vision
- Describe catchment condition/ identify key challenges
- Identify a way forward
- Develop ways of learning from implementation
- Assess achievements

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Social research for catchments

Potential roles for social research

- Gather stakeholder perspectives of possible futures
- Describe social structure
- Help stakeholders explore trade-offs
- Understand landholder adoption
- Use social impact assessment to respond to changes in landuse and resource access
- Assist groups measure progress

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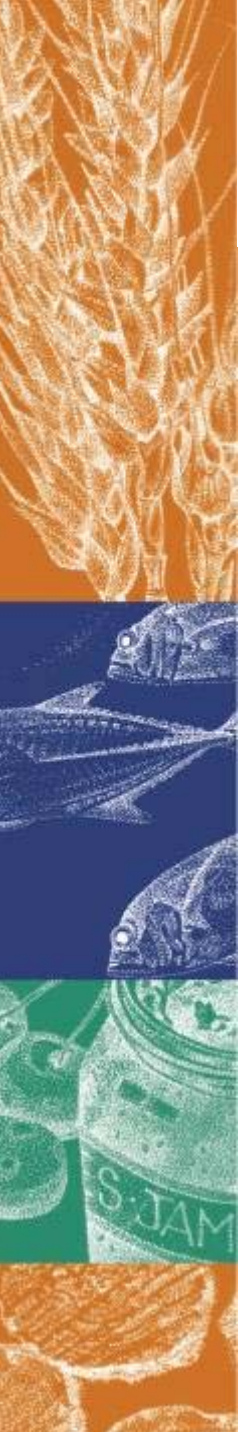
Social data for catchments

Collecting and interpreting baseline data to underpin regional plans

- A mail survey to capture rural landholder information
- Survey data integrated with other spatial layers in GIS
- Collaboration with stakeholders to build capacity

Purpose of data collection

- Identify and refine investment priorities
- Develop and improve communications
- Select policy options to accomplish targets
- Evaluate achievement of objectives



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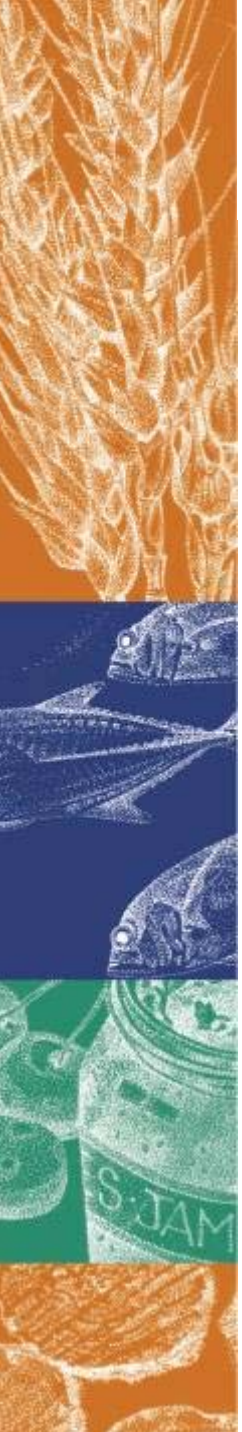
Purpose of data collection

Studies underway

- Burnett/Mary
- Qld MDB
- Glenelg Hopkins
- Lachlan

Studies completed

- Ovens
- Goulburn Broken
- Wimmera



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Survey topics

- Importance of issues
- Awareness
- Knowledge
- Attitudes
- Values
- Confidence in practices
- Financial capacity (income, debt, property size, enterprise mix)
- Age/stage of life
- Occupation
- Property and business planning
- Long-term plans
- Adoption of practices
- Entry to new enterprises
- Interest in stronger cost sharing

Key findings

NRM issues of secondary importance

- Lack of employment for young
- Government cut backs on employment
- Decline of small villages and towns
- Difficulty accessing health services

Dryland salinity

- Most don't report saline affected areas
- Those that do, report small areas affected
- Landholder identified saline areas match expert maps
- Most not concerned about salinity

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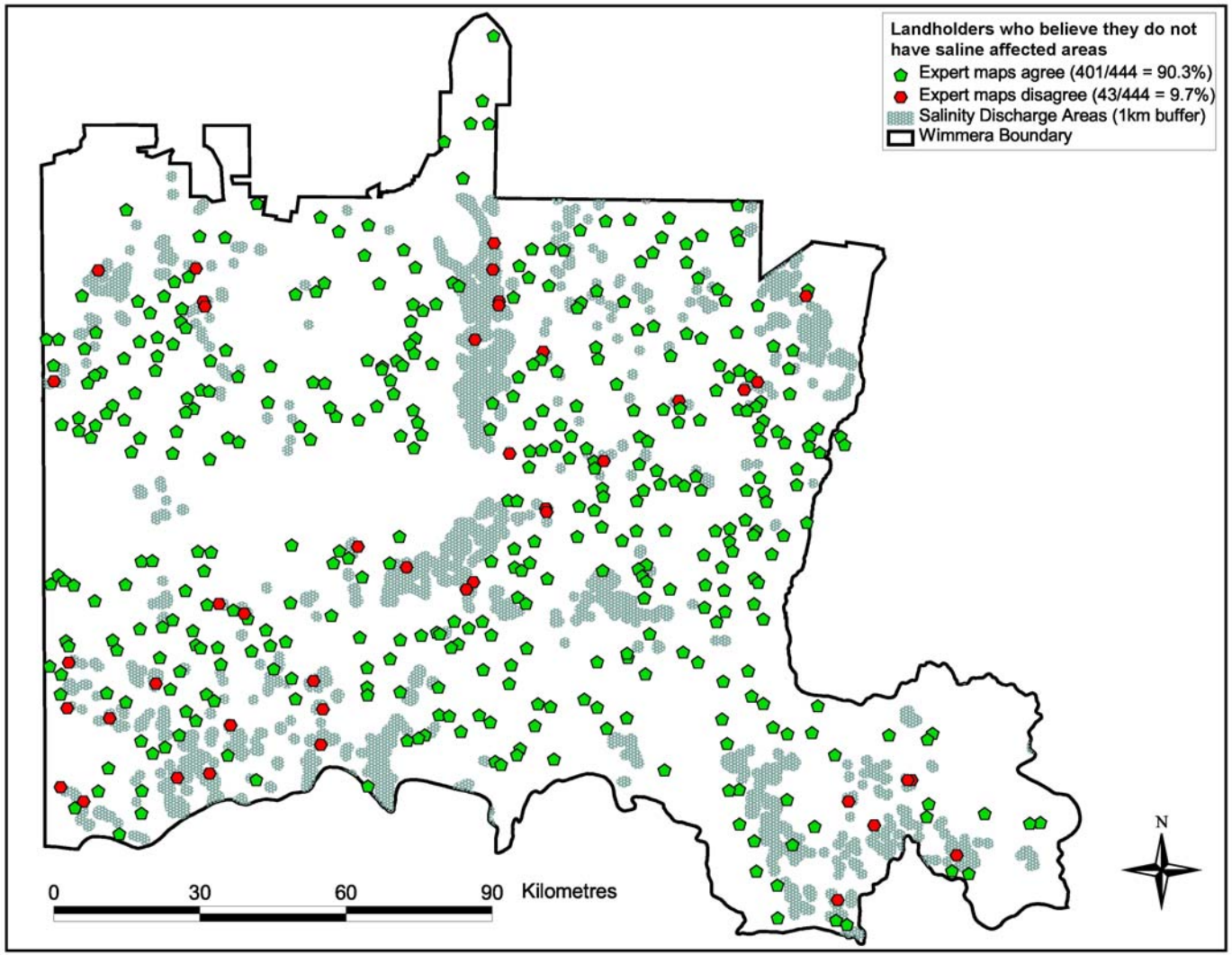
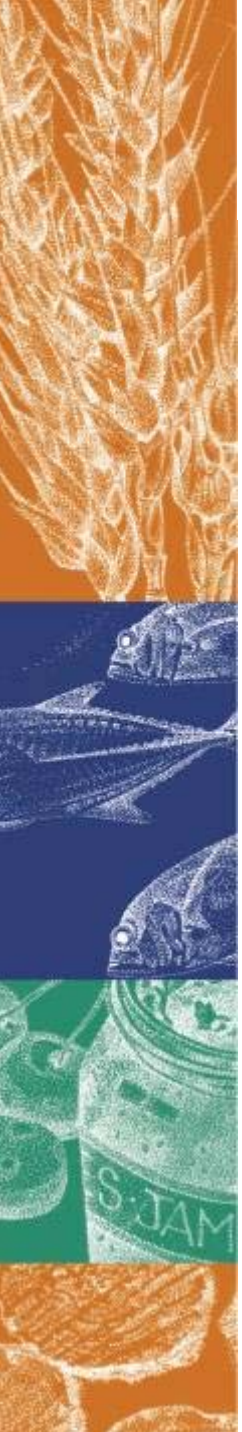
Landholder and expert awareness of salinity





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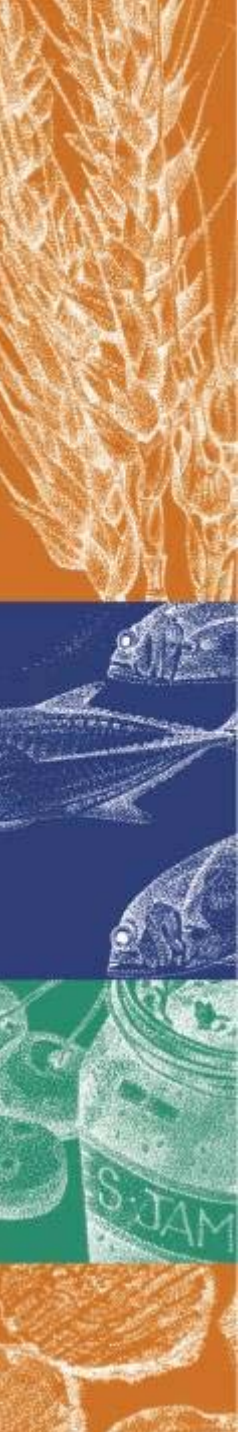
Social structure in Wimmera

- Median age 53 years, residence 46 years
- 80% were farmers
- Median property size 900 ha
- 69% intend to pass property on in family
- 43% purchase, lease or share farm more land
- 18% sell all or a large part of property
- Median year of property transfer 2015



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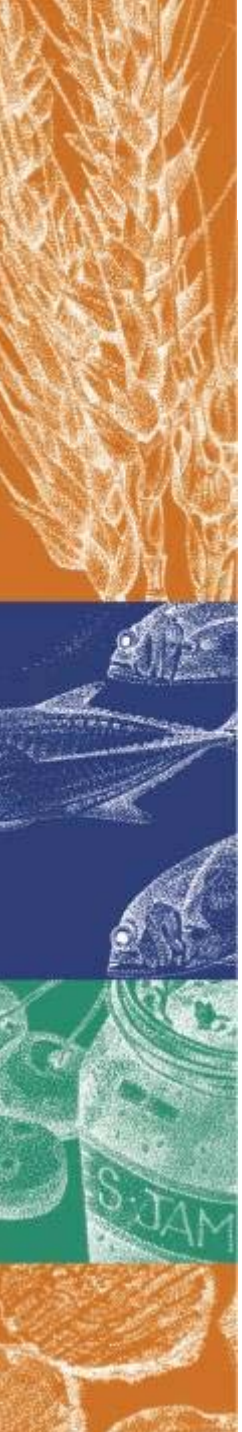
Differences at LMU scale: Goulburn Broken

RMU #1	RMU #7a
658 hectares	21 hectares
40 hours on-property	20 hours on-property
$50K household income	$25K household income
78% farmers	25% farmers
No trades, no retirees	18% trades, 18% retired
100% dryland cropping	No dryland cropping
100% in Landcare	36% in Landcare
56% saline areas	18% saline areas
56% family succession plan	15% family succession plan
44% properties change by 2010	52% properties change by 2010
89% sown perennial pasture	48% sown perennial pasture
11% fenced bush/ water ways	44% fenced bush/ water ways



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Understanding adoption

Stronger links

- Awareness of salinity
- Concern about salinity, vegetation loss
- Values (income)
- Knowledge
- Property planning
- Landcare/ other programs
- Property size/lease land
- Short courses

Some links

- On-property income
- Off-property income

No/few links

- Attitudes
- Age
- Debt levels

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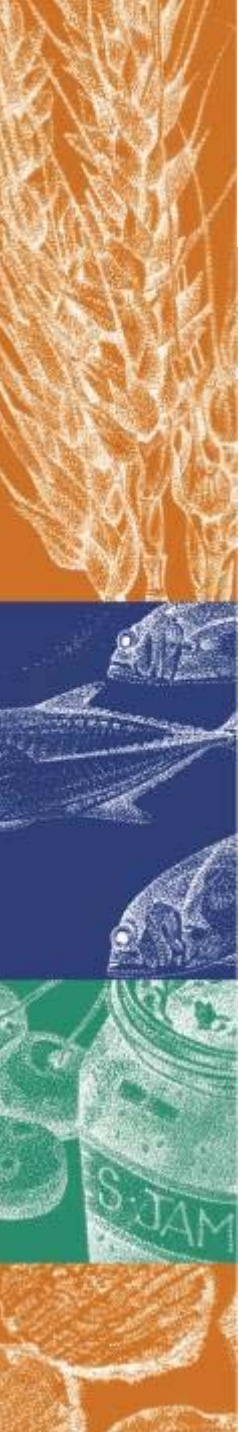
Interest in incentives: Wimmera

Package offered establishment costs, opportunity costs and fee for active management

- 48% said yes or more likely than not
- Almost all said payment would mean more revegetation
- 12 ha median area over next 3 years (1% area surveyed)
- 29% unlikely, 23% said no



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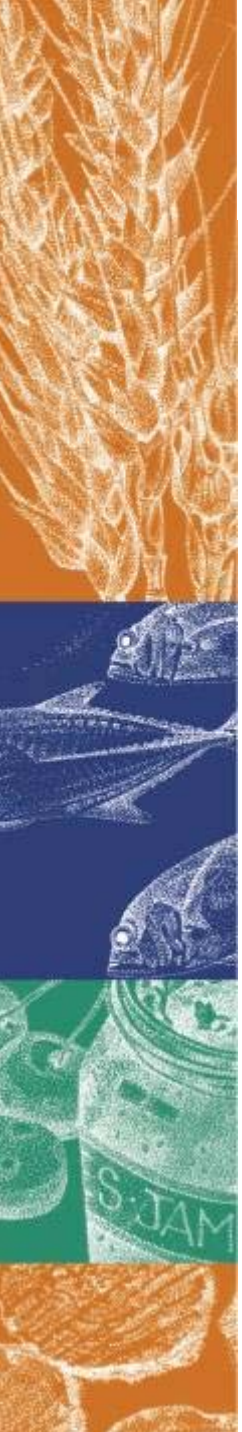
Monitoring forest values with content analysis



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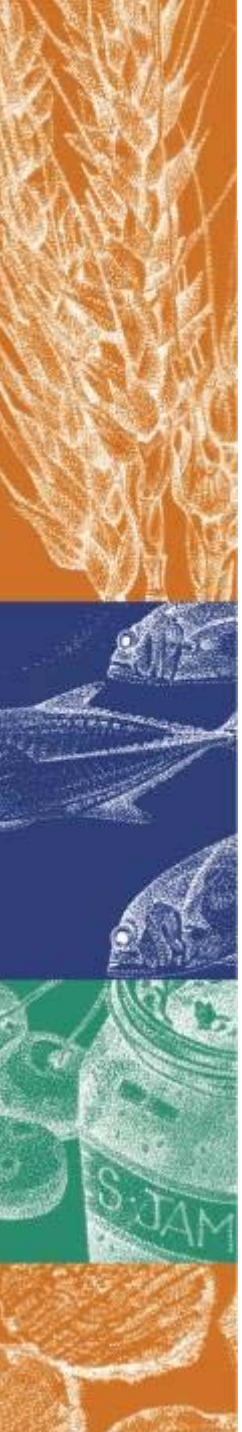
Introduction

- Content analysis
- News media as a source of public opinion
- InfoTrend method
- Forest values



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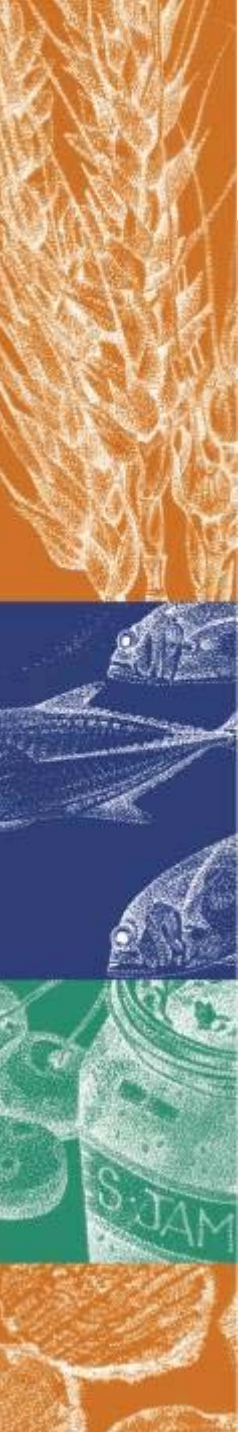
Content analysis

- Widely used technique to make inferences from data
- Qualitative and quantitative
- Examples
  - analysis of WWII propaganda
  - media representations
- Use of computer



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Why use news media?

- Research has repeatedly found strong relationship between media and public opinion
- Media both reflects & informs public opinion
- Cheap, plentiful source of data

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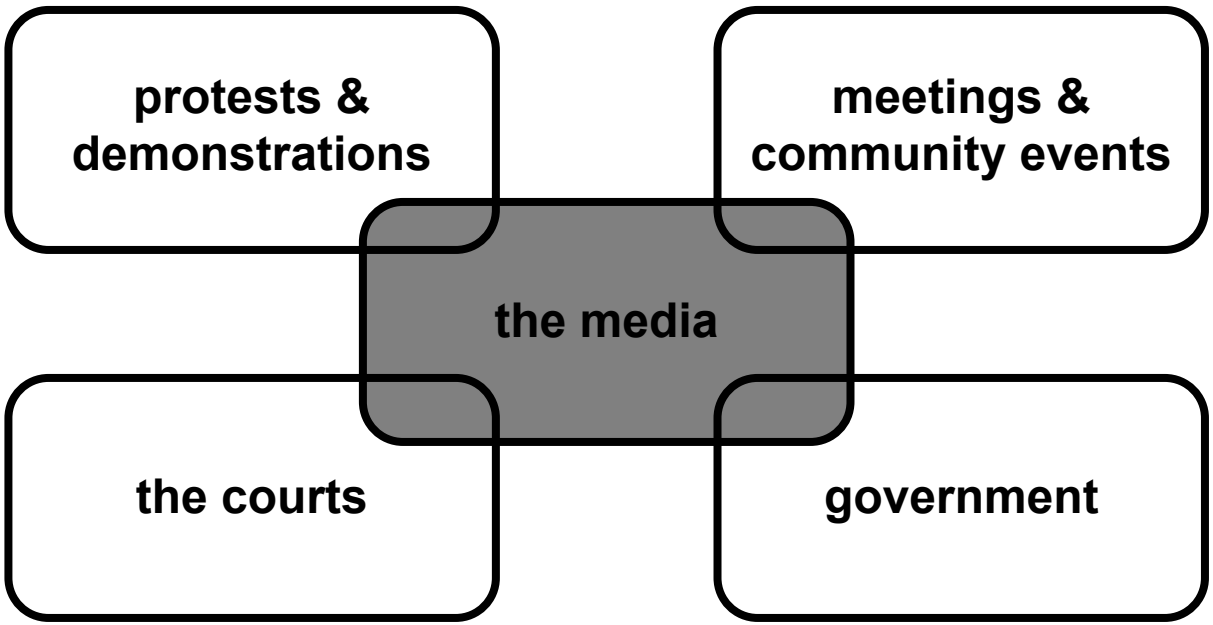
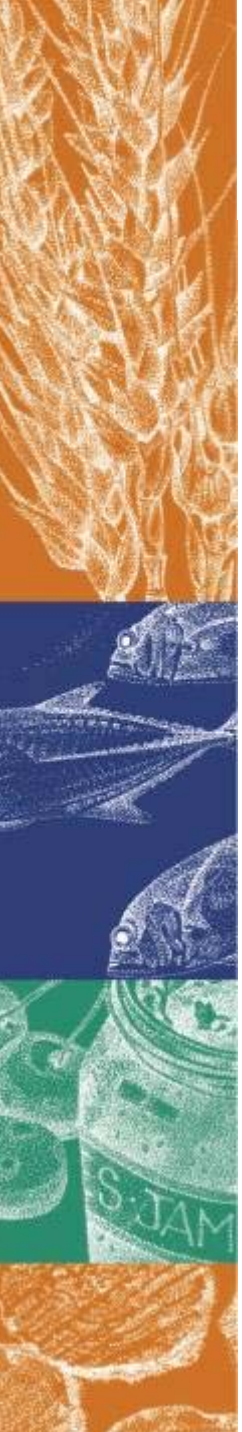
Media as a public forum





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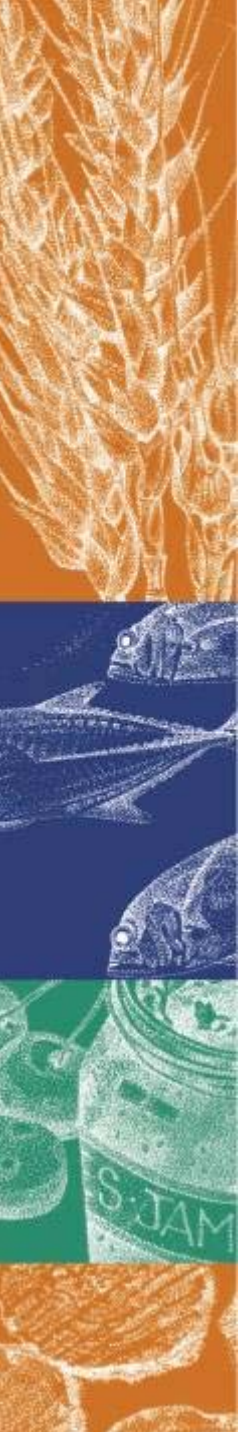
InfoTrend method

- Download text
- Filter text
- Code text for concepts of interest
- Validate coding



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Data sources

- Major Australian daily newspapers
  - The Age, Canberra Times, Courier Mail, Daily Telegraph, Mercury, Sydney Morning Herald, Australian Associated Press
- August 1997 to April 2002
- 2314 news stories (8982 paragraphs)

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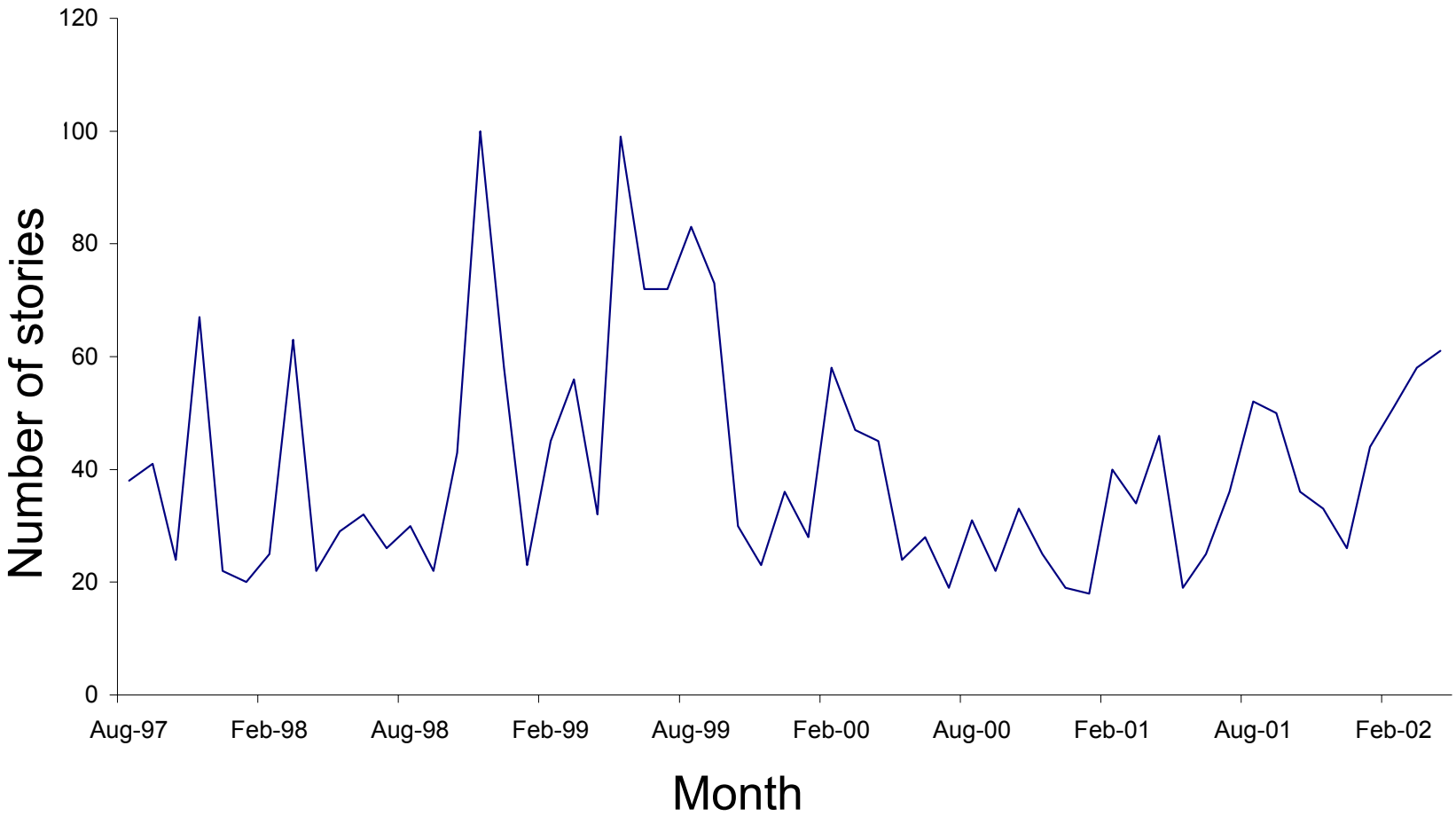

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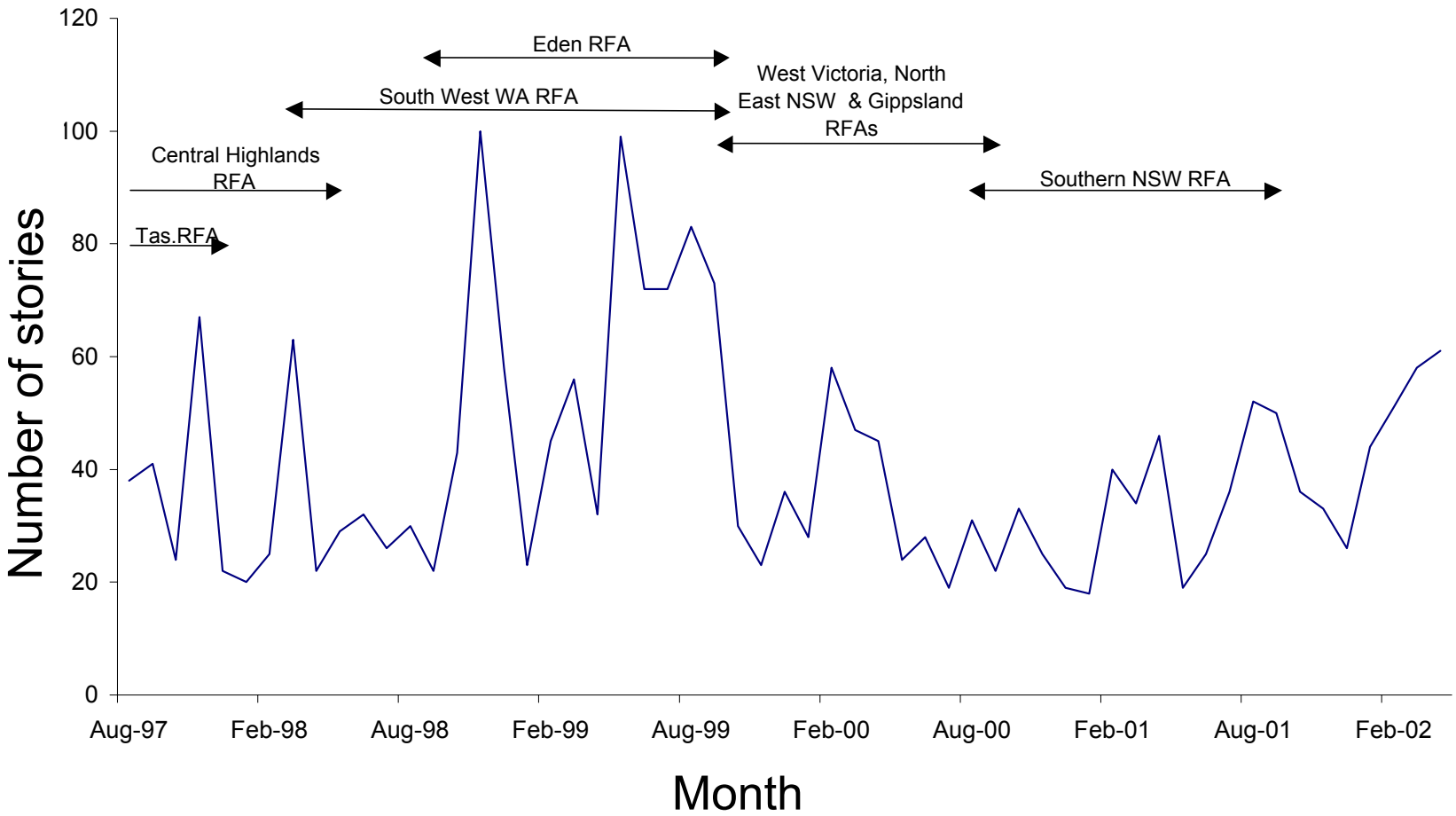

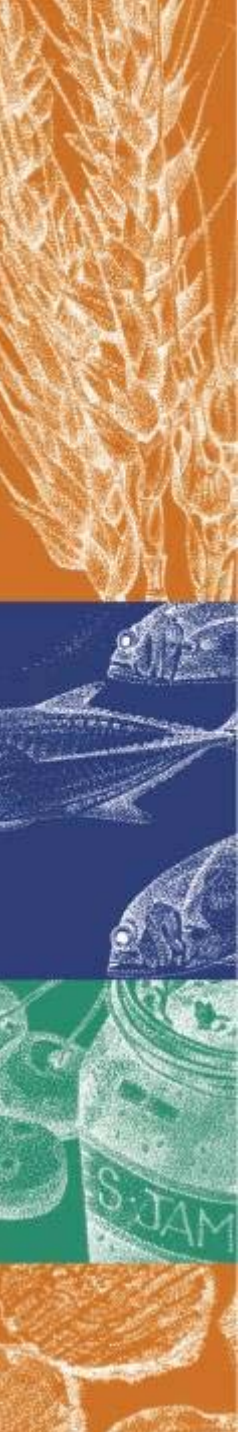

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Coding with InfoTrend

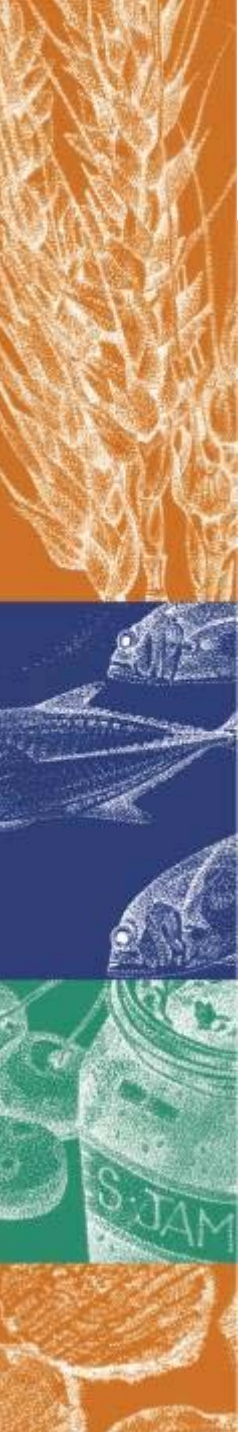
- Dictionaries
  - lists of ideas and associated words & phrases
- Idea transition rules
  - specify how the ideas are combined

Forest values

- Ecological
  - eg protection of endangered species, ecological services
- Commodity
  - eg timber production, woodchip production
- Moral, Spiritual and Aesthetic
  - eg natural beauty, sacred sites

Ecological value

Conservationists said the forest to be protected was less than one-third of the 1.2 million hectares identified by Commonwealth scientific studies as needed to protect forest types and endangered species.



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Ecological value

Conservationists said the **forest** to be **protected** was

Ecol.Obj. *protect*

less than one-third of the 1.2 million hectares identified

by Commonwealth scientific studies as needed to

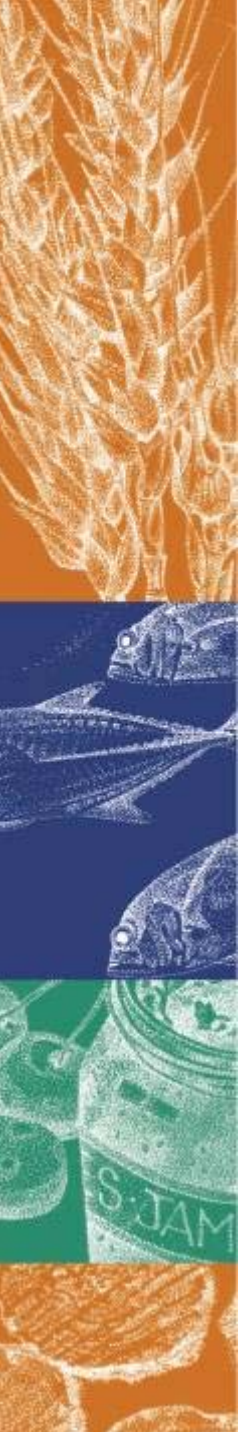
protect **forest** types and **endangered** **species**.

protect *Ecol.Obj.* *damage* *Ecol.Obj.*

Ecol.Obj. + protect = ecological value

Commodity value

The agreement guarantees the timber industry will be assured of a supply of 25,000 cubic metres of sawlogs a year, 23,000 from the Eden management area, for the first five years.



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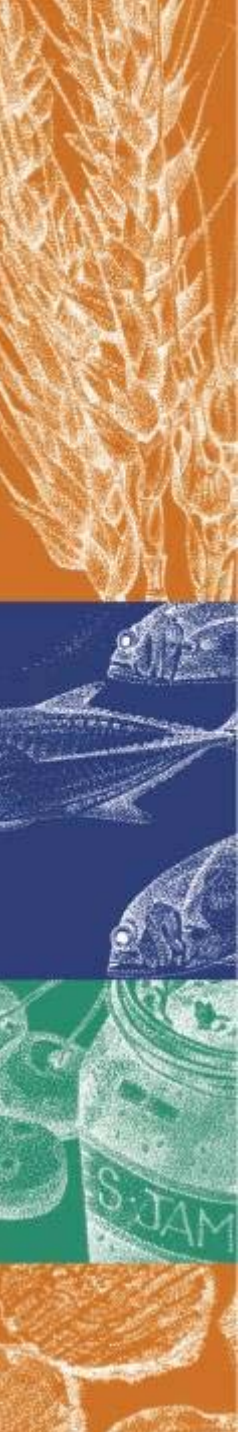
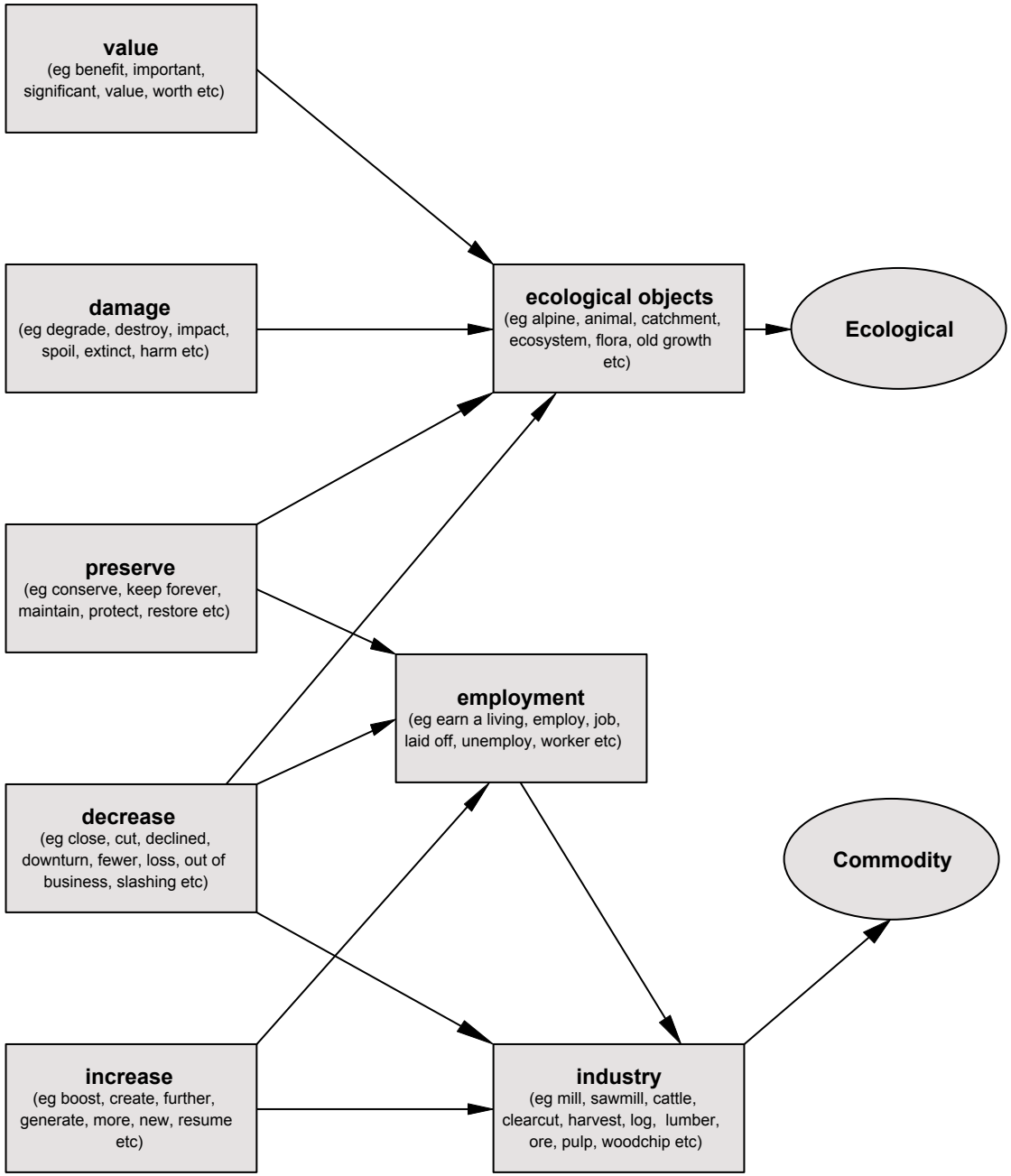
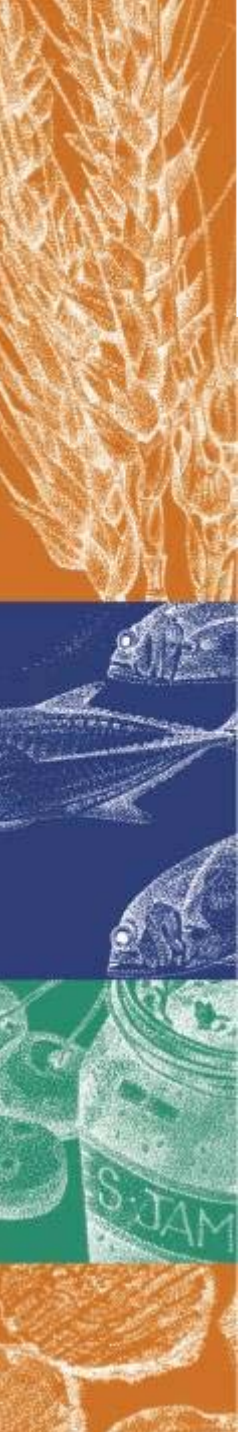
Commodity value

The agreement guarantees the **timber** (*industry*) **industry** (*industry*) will be assured of a **supply** (*economic*) of 25,000 **cubic metres** (*industry*) of **sawlogs** (*industry*) a year, 23,000 from the Eden management area, for the first five years.

industry + economic = commodity value




value
(eg benefit, important, significant, value, worth etc)
damage
(eg degrade, destroy, impact, spoil, extinct, harm etc)
ecological objects
(eg alpine, animal, catchment, ecosystem, flora, old growth etc)
Ecological
preserve
(eg conserve, keep forever, maintain, protect, restore etc)
employment
(eg earn a living, employ, job, laid off, unemploy, worker etc)
decrease
(eg close, cut, declined, downturn, fewer, loss, out of business, slashing etc)
Commodity
increase
(eg boost, create, further, generate, more, new, resume etc)
industry
(eg mill, sawmill, cattle, clearcut, harvest, log, lumber, ore, pulp, woodchip etc)



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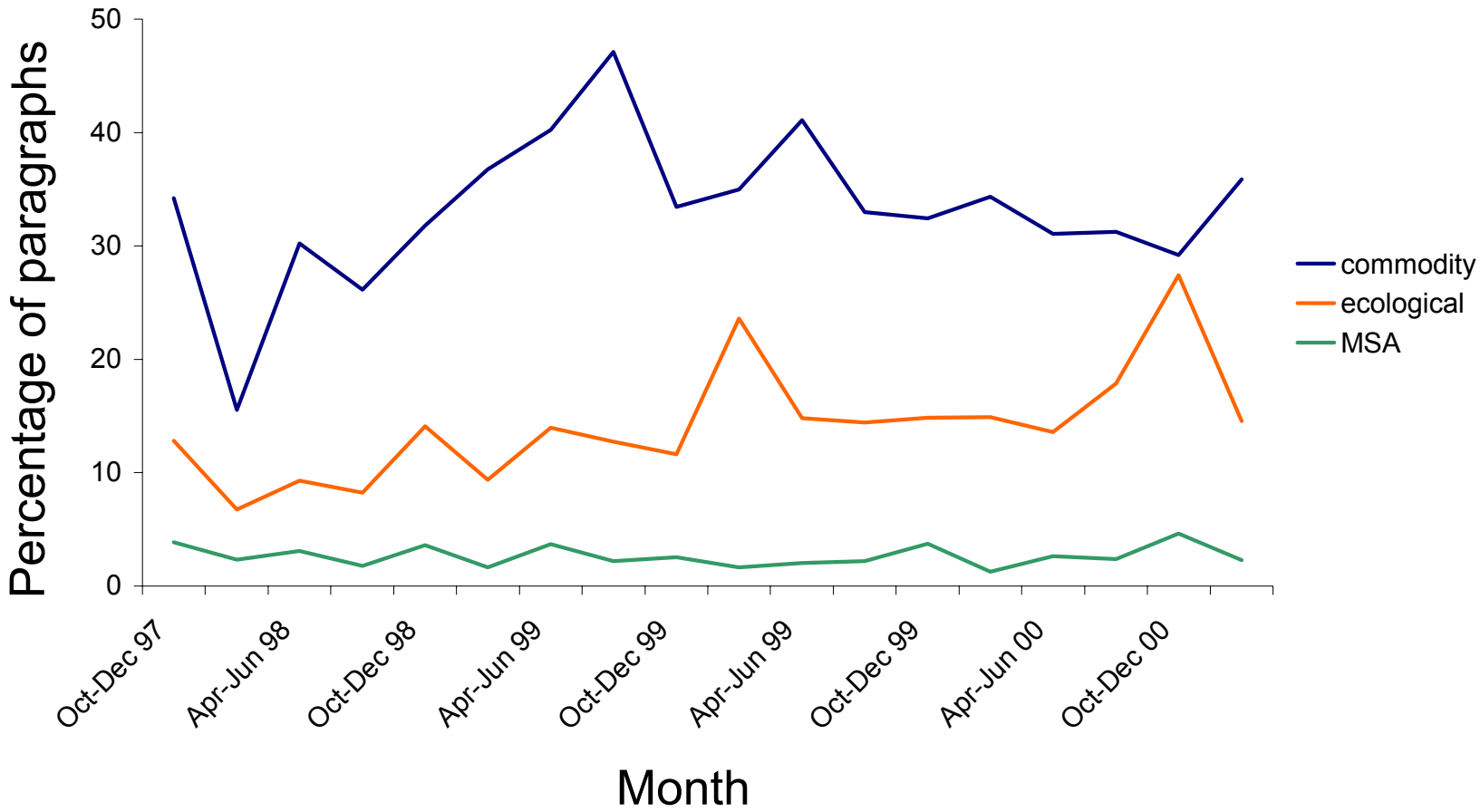

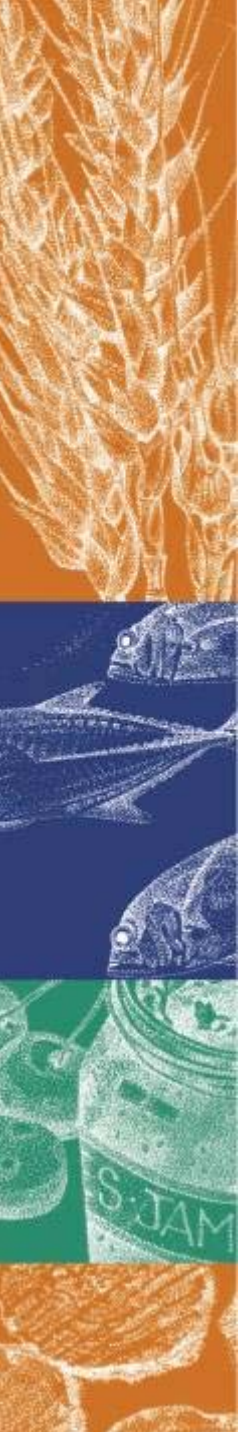

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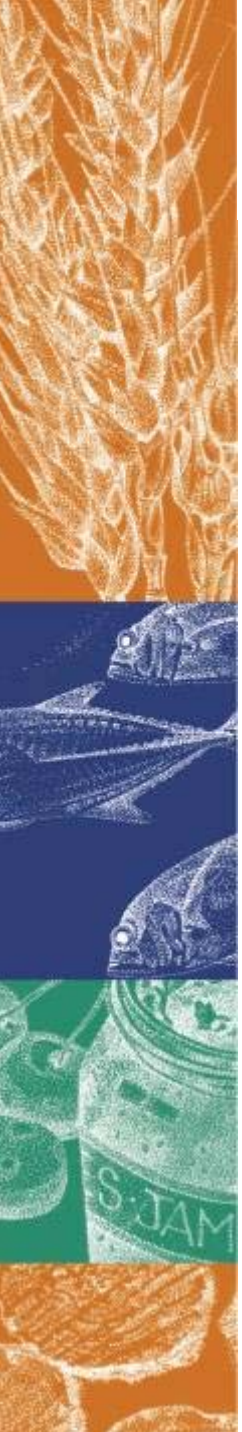
Benefits of approach

- Extends back in time
- Analysis can be easily updated
- Effects of important events can be observed
- Can be expanded to include new issues
- Uses secondary data source



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Disadvantages of approach

- Depth of analysis
- Values measured indirectly

Conclusion

- Understanding social dimensions important to NRM
- Range of approaches to access information
- Choice depends on purpose