



# Designing Reliable Management Effectiveness Assessments

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*Some background*



# State of the Parks assessments

- Broad scale or system wide management effectiveness assessment tools
- Based on the WCPA framework but adapted for local context
- Data collected from park managers through survey forms



# State of the Parks assessments

- Survey proforma is divided into four parts
- Attribute data
- Context data
- Inputs data
- Management effectiveness data





*My research*

# My research

- How accurate are SoP assessments?
- Where does error in assessments originate?



# My research

- On-ground validation of assessments
- Used monitoring & research data to verify assessments
- Examined sources of error such as:
  - Use of language
  - Lack of specific guidance

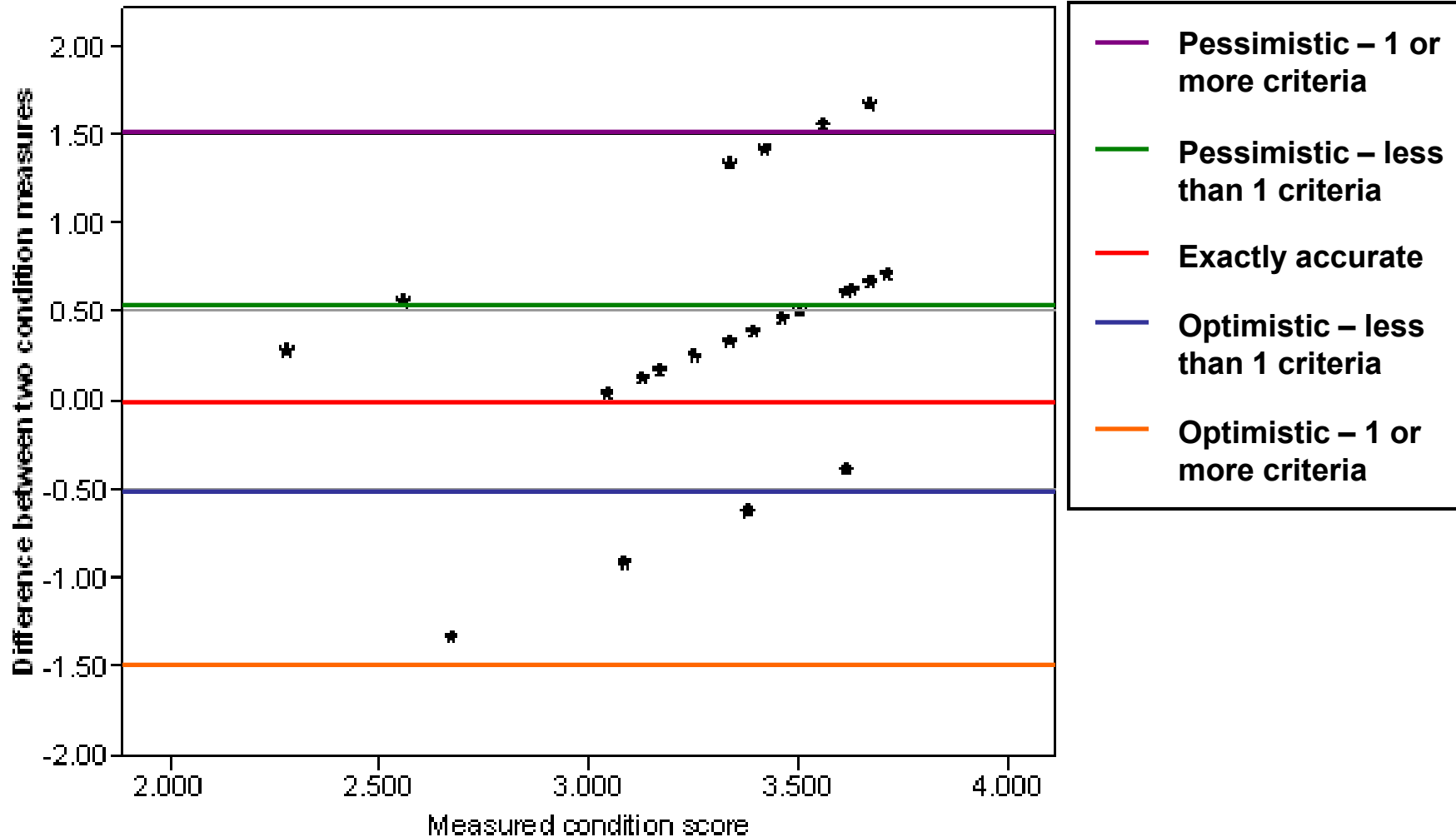


# On-ground validation

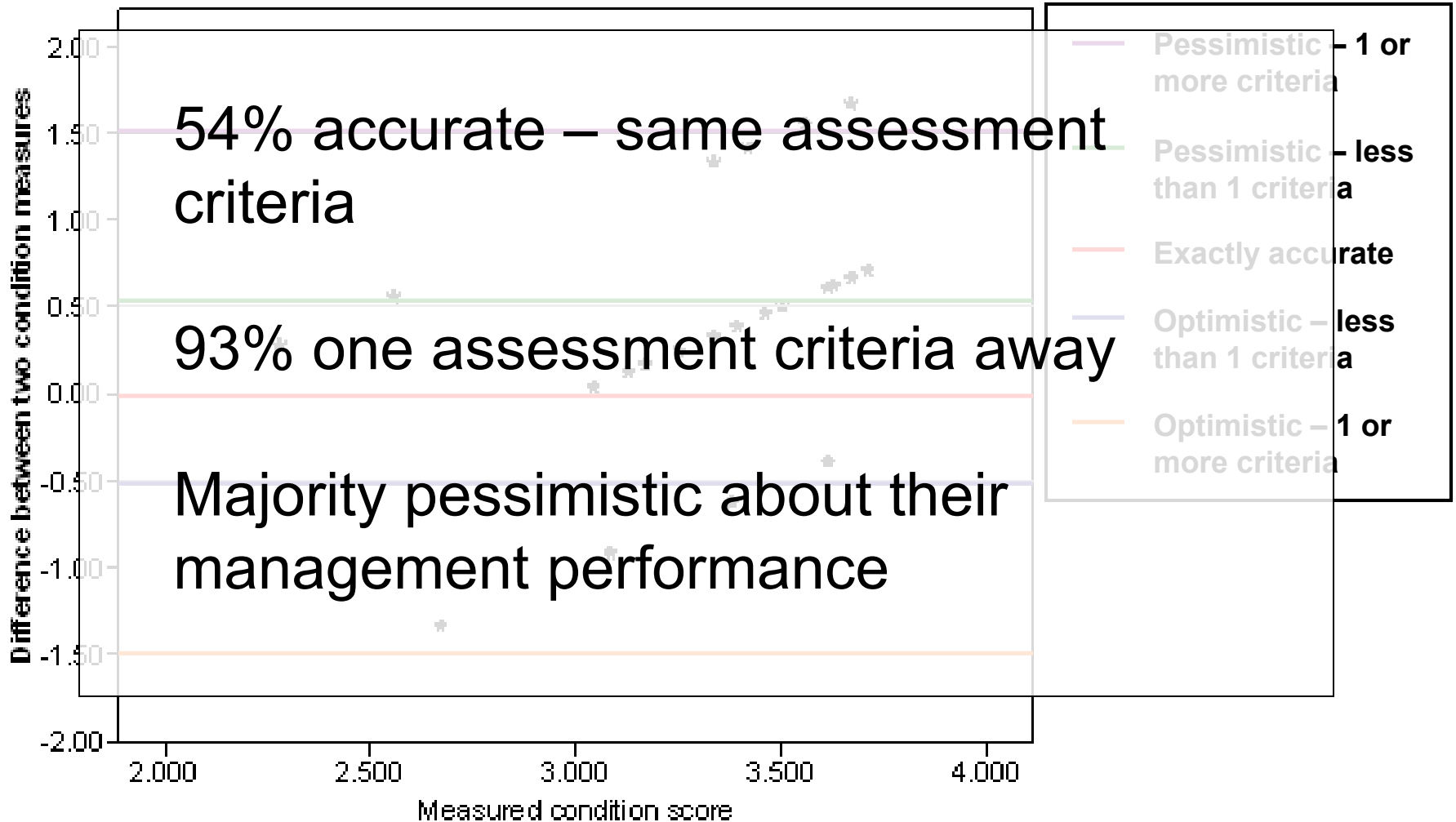
- Condition assessments conducted in 28 parks
- Managers qualitatively assess vegetation condition
- Most had no quantitative data, only experience



# On-ground validation



# On-ground validation



# Using data to verify assessments

- Examined data for rabbit, fox, weed management & veg condition questions
- 43% of parks listed research/ monitoring for one or more of these
- Data found from twice as many parks



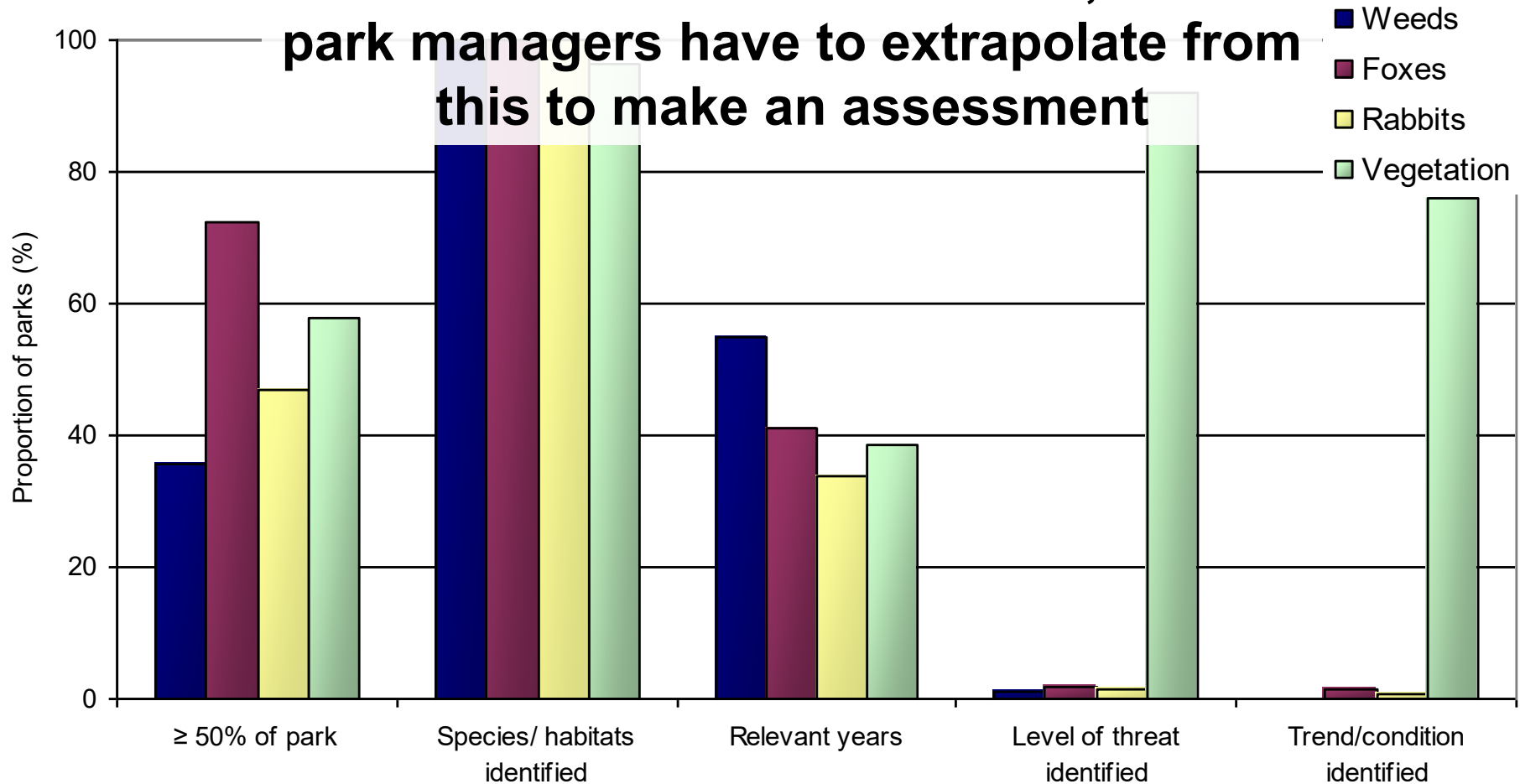
# Using data to verify assessments

- Only 2.5% had enough data to confidently validate the assessment
- None of these assessments were supported by the available data



# Using data to verify assessments

**Even when data are available, most park managers have to extrapolate from this to make an assessment**





# So...

- Most managers can be quite accurate based only on their experience
- Even when data are available, most managers must extrapolate this based on their experience
- Some managers are less accurate – why?

*What influences precision and accuracy of assessments?*



# Use of language in assessments

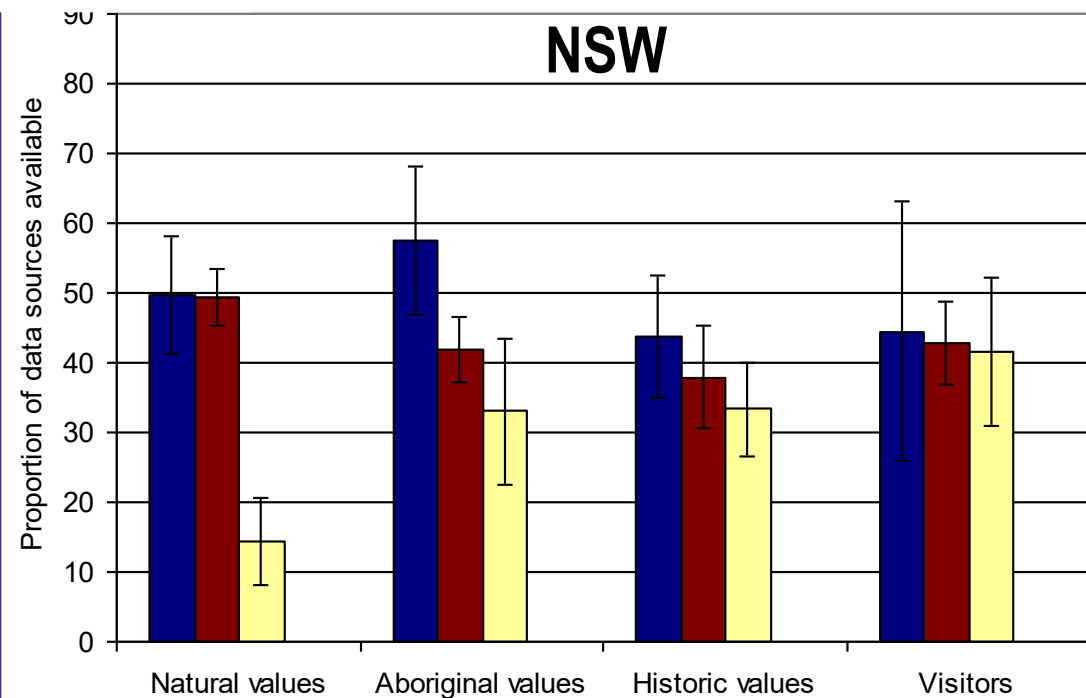
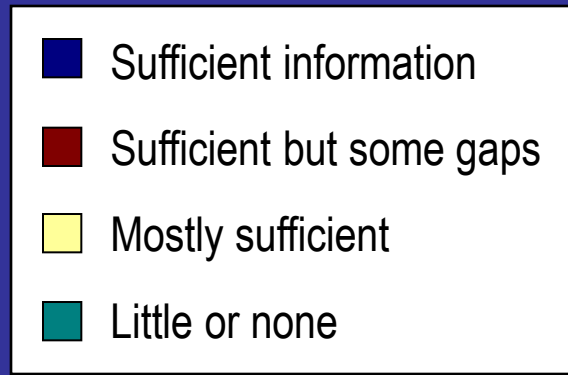
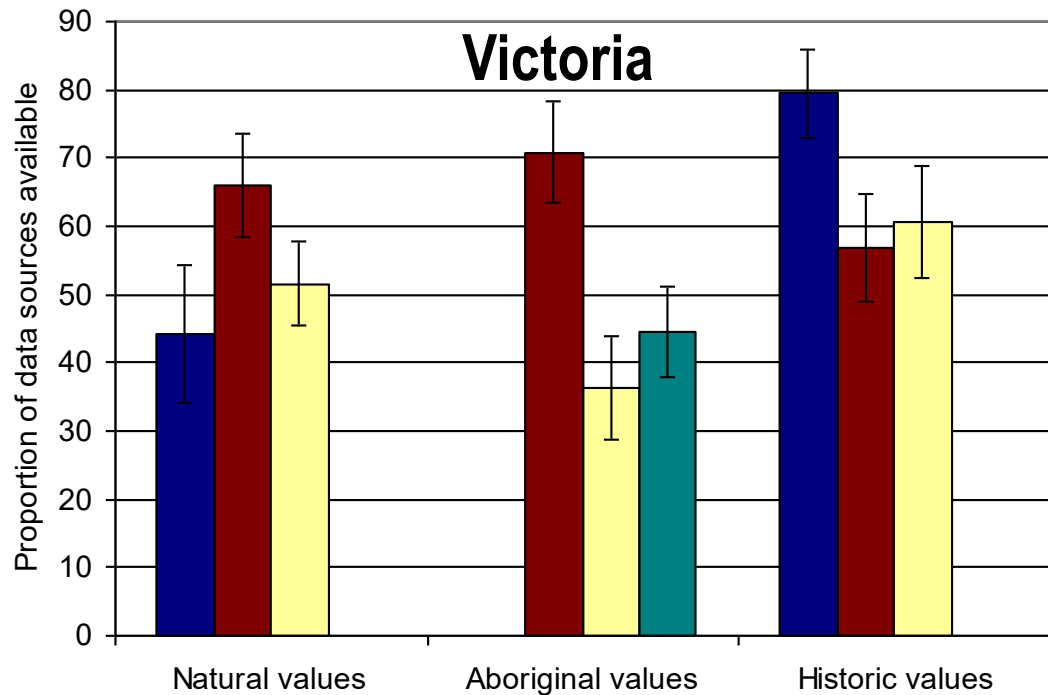
- Error in assessments can come from language (linguistic uncertainty)
- SoP uses terms defined to allow flexibility in assessment criteria
- What impact does this have on reliability?



# Use of language in assessments

- Asked managers:
  - how they define “sufficient information for planning and decision making”
  - The data they need to have sufficient info
- Compared these answers to equivalent questions in their SoP assessments





# Language in assessments

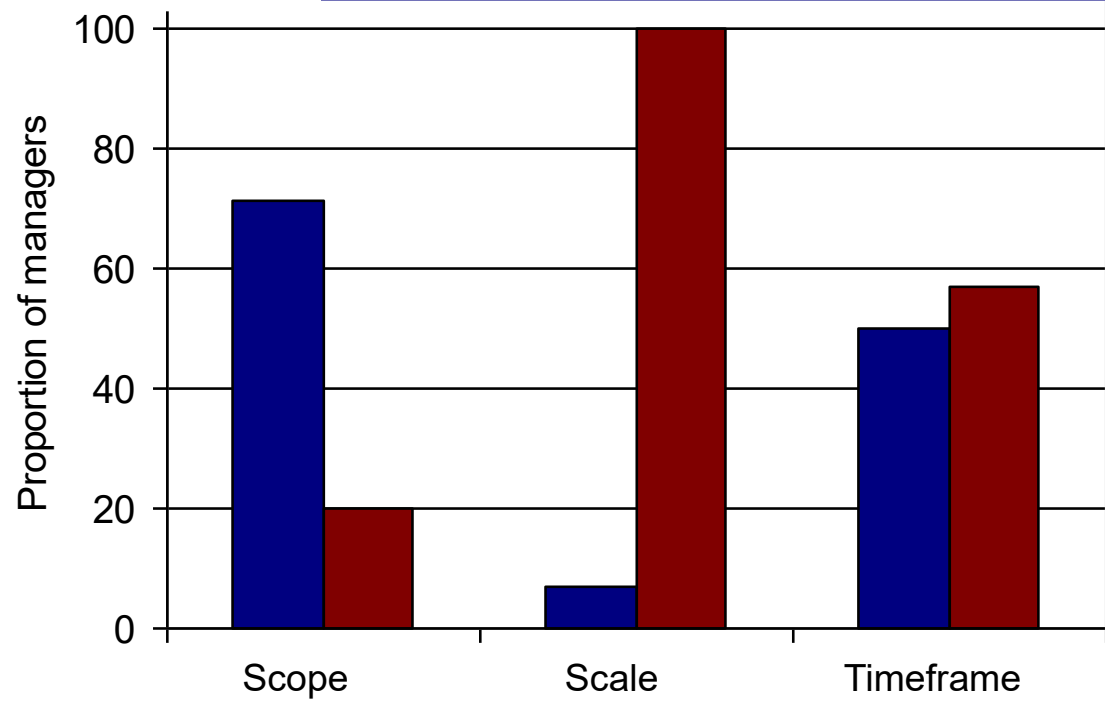
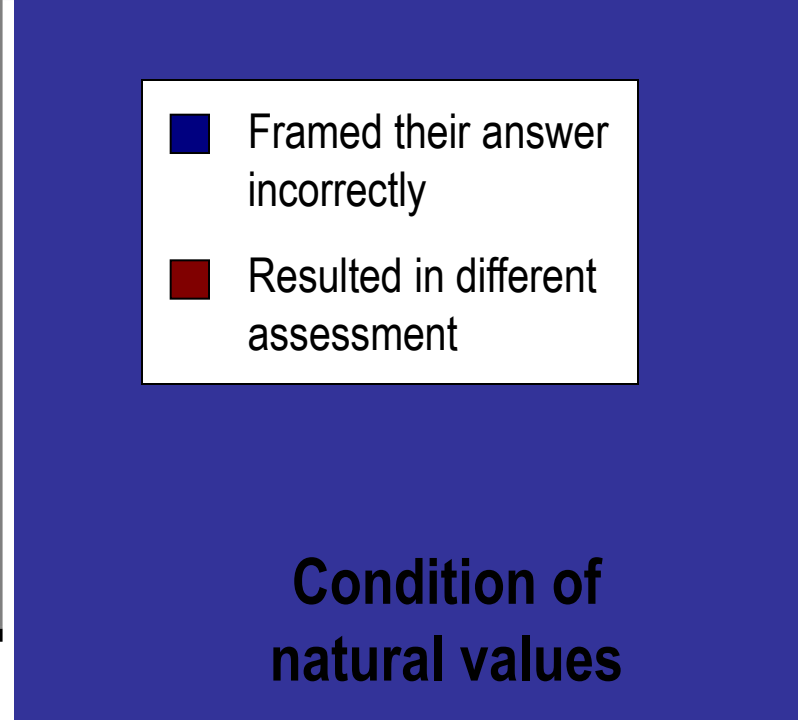
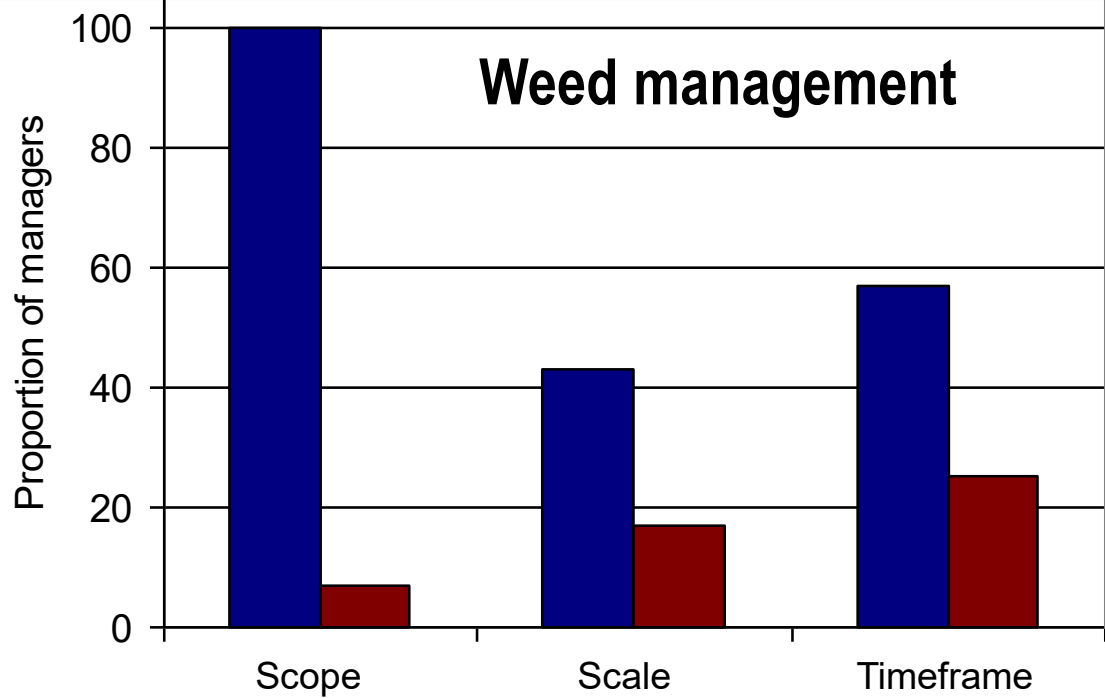
- Poorly defined language can introduce error into the data set
- Agencies need to define terms/concepts
- Provide clear definitions for managers to refer to during the assessment



# Differences between managers

- Error arising from subjective judgement is termed epistemic uncertainty
- Interviewed managers about how they answered SoP questions
- Answers vary in scope, scale and timeframe – 100% got one or more of these wrong





# Differences between managers

- Managers will interpret questions differently when not given clear guidance
- These differences can lead to different assessments
- Addressing these potential differences in written guidelines and training sessions is important



*So what have I learnt...*



# Lessons

- We can rely on the expert knowledge of park managers to assess management effectiveness
- Experience is equivalent to data
- Data are mostly extrapolated to make an assessment



# Lessons

- Need to be cognisant of the language used in assessment and ensure it is clearly defined
- Use written guidelines and training sessions to ensure staff know what you want from them
- Keep staff involved every step of the way!



*Thank you*