

# **The Effect of Forest Thinning Treatments on Perceptions of Recreational Value and Ecological Health**

**Wungong Catchment Research Program**

Dr Jo Ann Beckwith – Beckwith Environmental Planning

Dr Susan Moore – Murdoch University





# Research Literature

- Forest visitors prefer scenery that is undisturbed, contain a variety of natural features, or is associated with natural or beauty descriptions (Herrick & Rudis 1994).
- An individual's perception of scenic beauty and his/her recreational preferences can differ considerably for the same forest landscape (Tahvanainen et al. 2001).
- The prevailing scenic aesthetic can be out of step with an ecosystem-management based approach that promotes human-made activities that emulate natural disturbance (Sheppard 2001).

# Research Question

What are the effects of different forest treatments on perceptions of:

- (a) recreational value
- (b) ecological health

Three populations of interest:

- Natural resource management experts
- Recreational forest users
- People who live in the Wungong area

- The alternatives are the five treatments in the native forest area demonstration plot. This is a high-quality jarrah forest site, dieback-free, and cut-over in the decade 1940-1950.
- For each treatment, visual simulations are prepared reflecting different stages of regrowth over the duration of the treatment.

**Image editing can be used as a planning or research tool to present alternatives and solicit feedback**



- Respondents will view a series of paired photos. For each pair, the respondent will use a preference scale to indicate the level of 'recreational value'.
- The exercise is repeated using a preference scale for 'ecological health'.
- Six focus groups will be conducted with a sub-set of the above respondents.
- These will explore the reasons and concepts that underpin their judgments of the forest treatments.

# The Research Findings Will:

- Assist in selecting forest treatments that strike a good balance between increased runoff and impacts on recreation values.
- Assist in providing advice on how forest management techniques can complement or diminish nature-based recreation values.
- Contribute to a better understanding of the relationship between aesthetic and recreation values and ecological management indicators of sustainability.
- Contribute to development of a theoretical basis for understanding and predicting social responses to forest management systems.