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National Environmental Science Programme



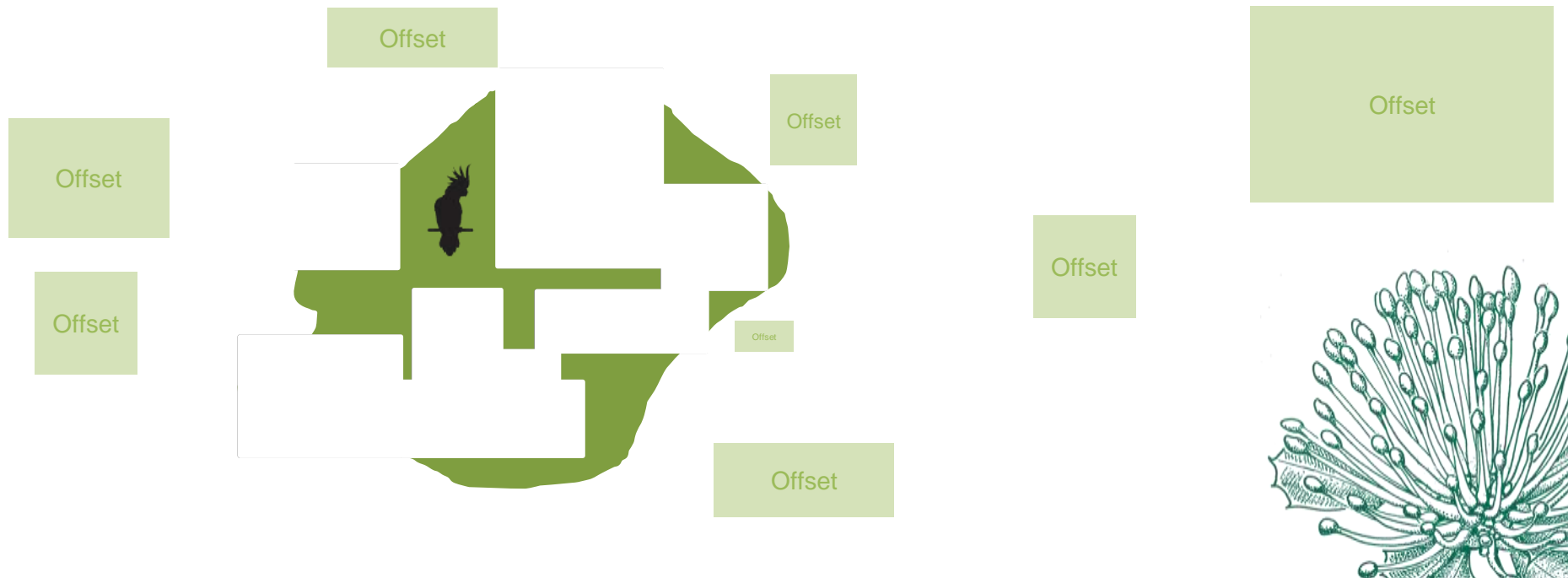
Taking the landscape view: from *ad hoc* to strategic offsets

Heini Kujala | The University of Melbourne



Death by thousand cuts

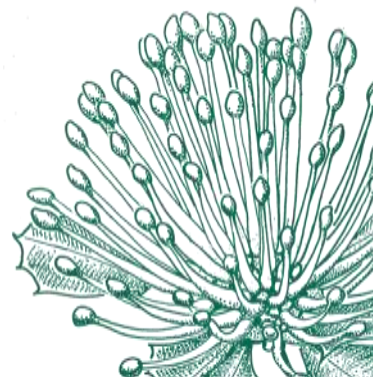
- loss of habitat through the approval of multiple discrete and/or consecutive developments that alone seem insignificant



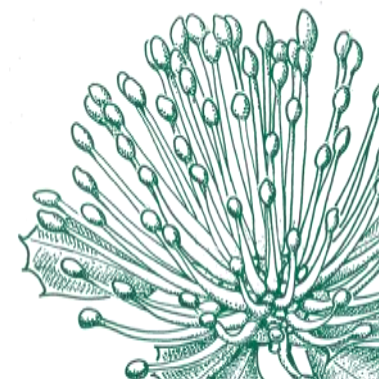
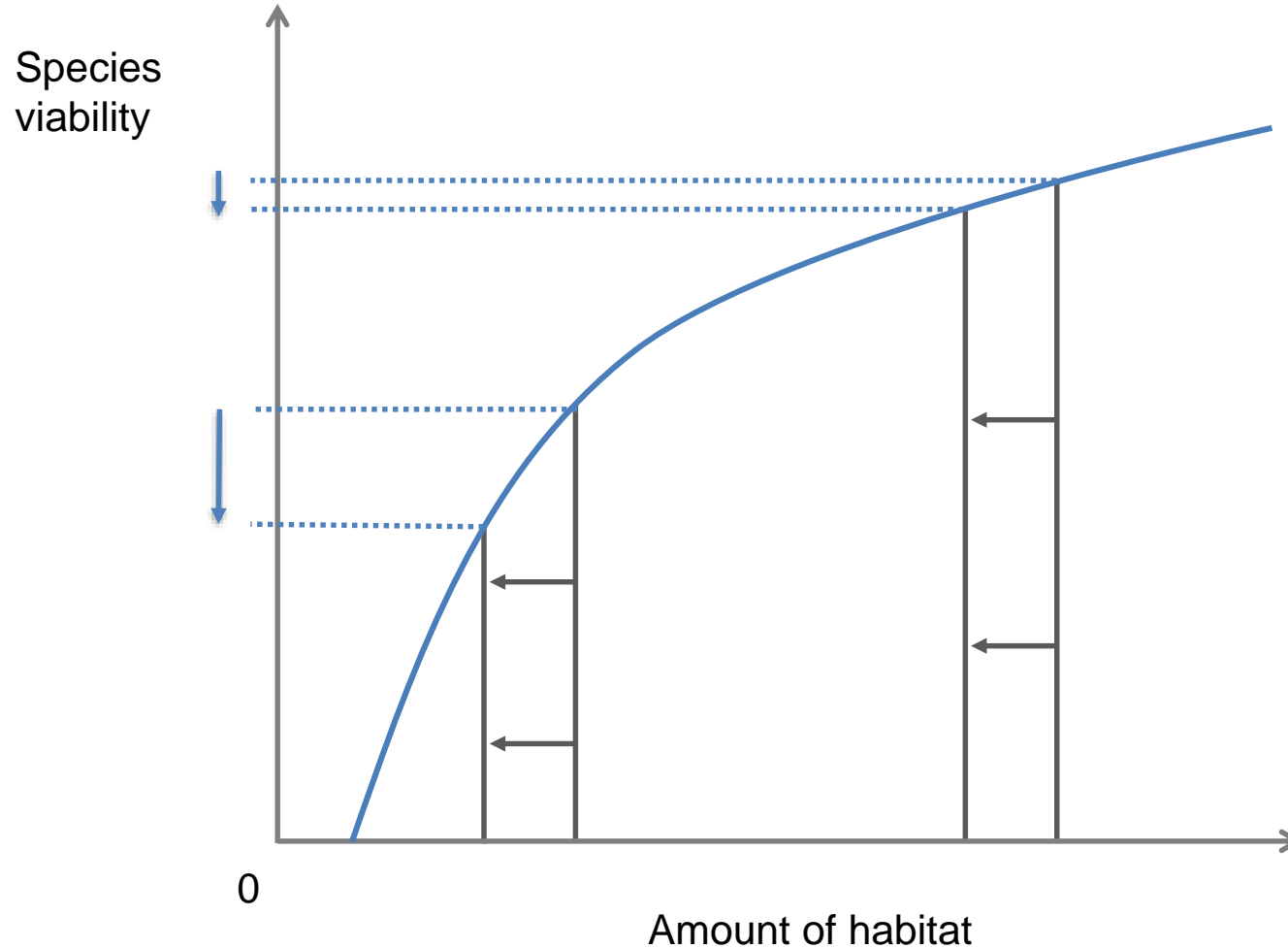
Too narrow focus on single impacts...

Cumulative impacts are not picked up

- Combined habitat loss across multiple development in space and time
- Impacts on configuration – loss of function
- Lack of understanding of the marginal impact of individual development



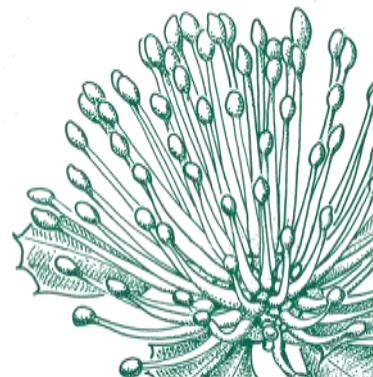
Not all impacts are equal



Too narrow focus on single impacts...

...but also too narrow focus on single offsets

- Opportunities to coordinate offsetting actions for improved gain missed



What are strategic offsets?

Spatial planning (WHEN)

- Joint offsets
- Systematic planning

Temporal planning (WHERE)

- Advanced offsets
- Complementing temporal offsets

Action planning (WHAT)

- Tailored offset portfolios

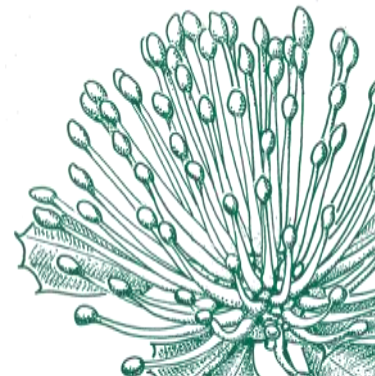
Conservation context (HOW)

- Offsets to support (but not replace) broader conservation goals

Selwood, Kujala et al. In prep.

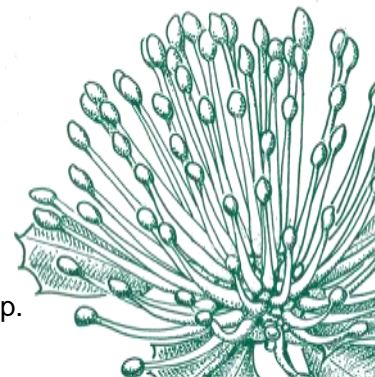
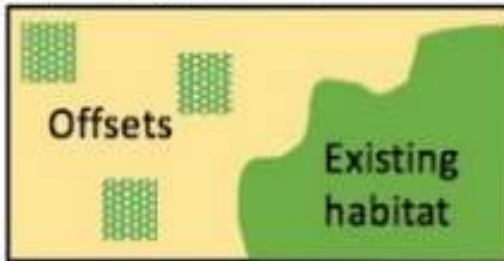


Dr Katherine Selwood

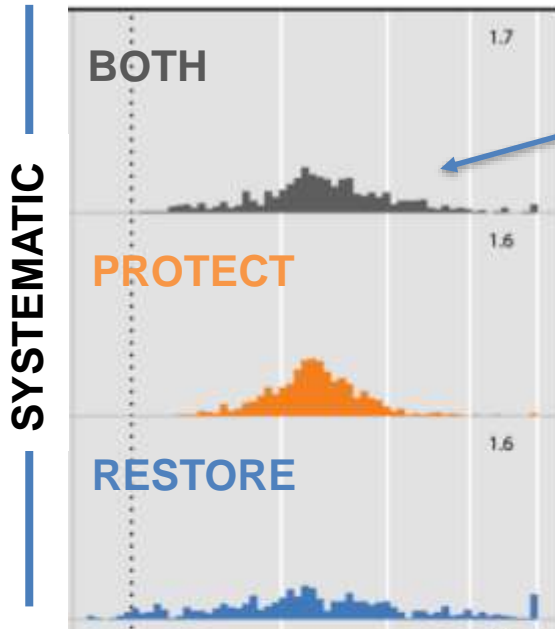


Spatial planning

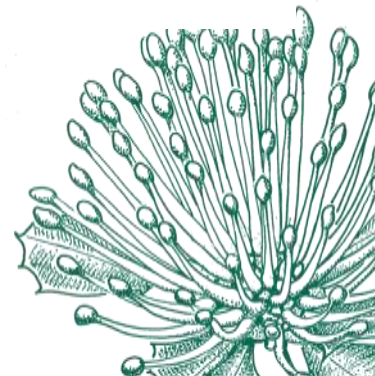
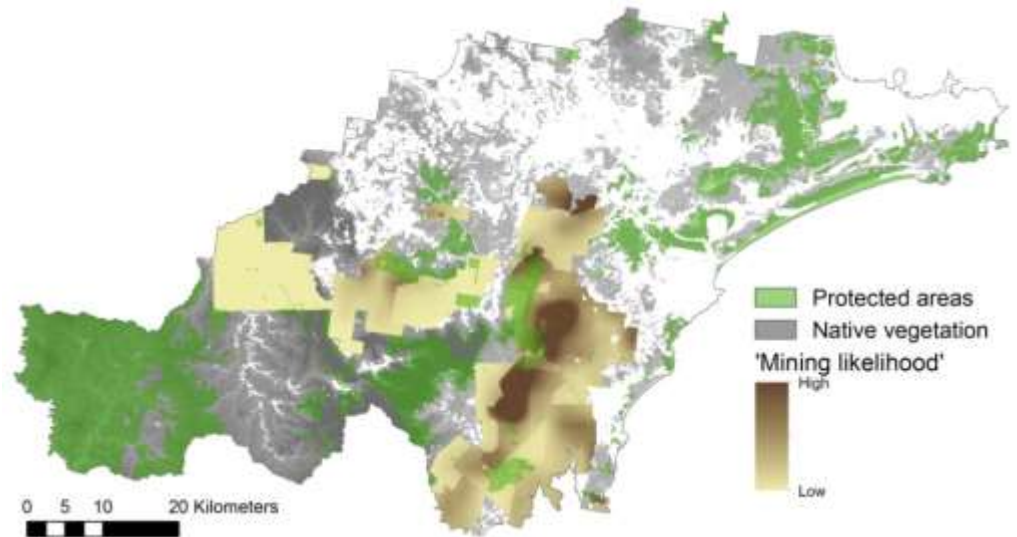
Spatially ad hoc



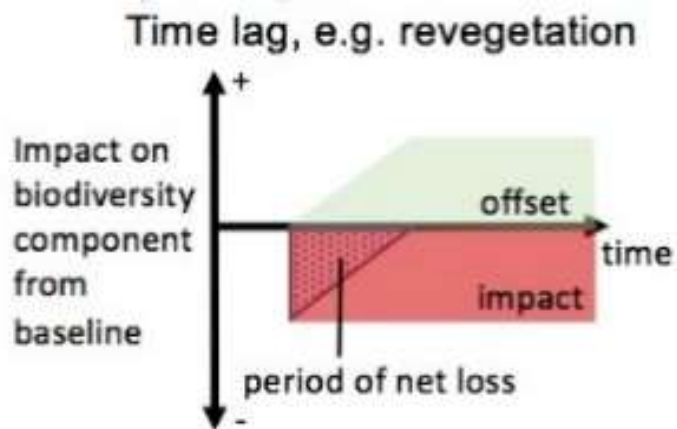
“Systematic” offsetting



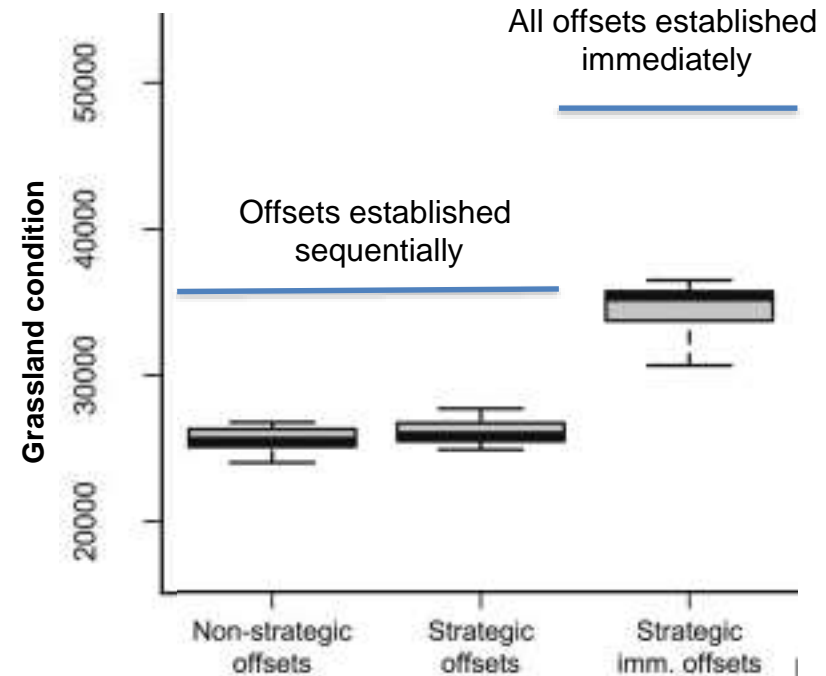
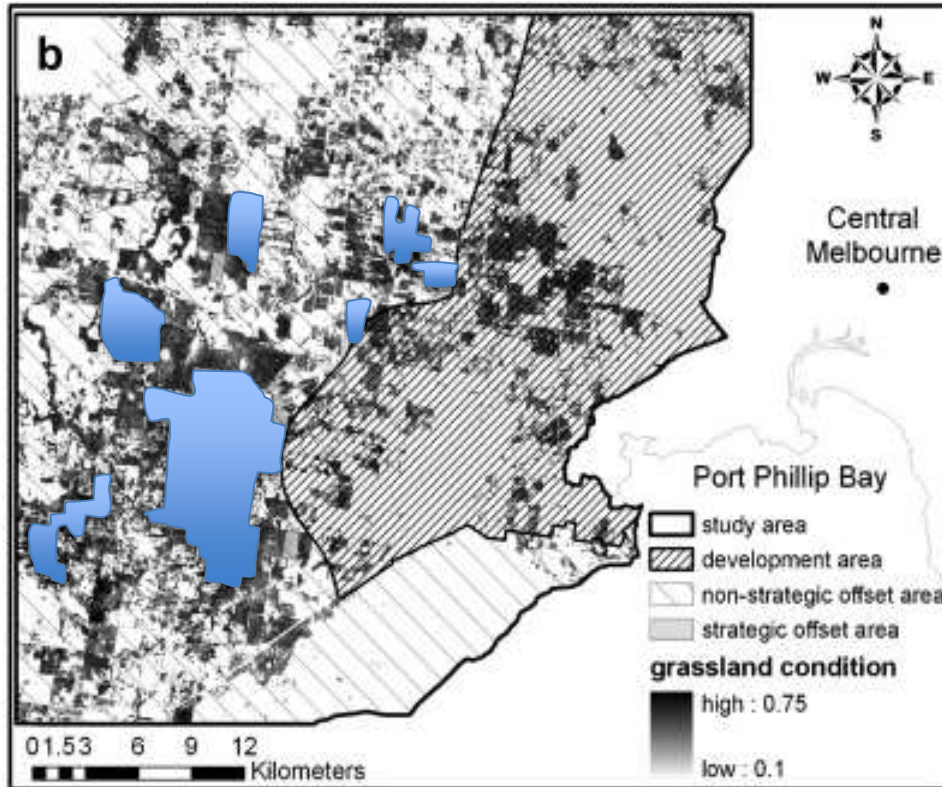
Increase in the habitat protected after development and offsetting across 596 species



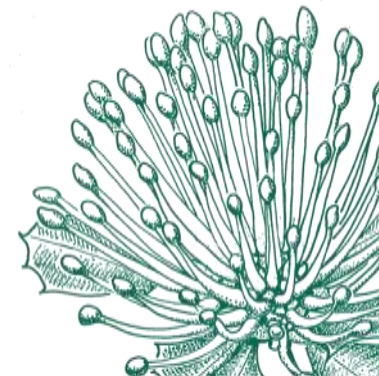
Temporal planning



Timing off offsets

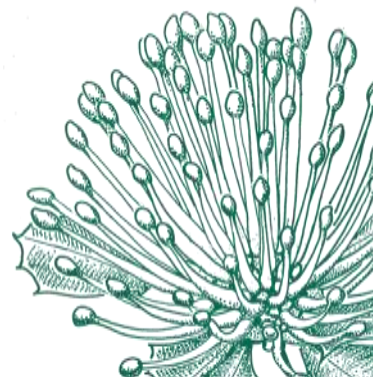


Gordon et al. 2011 Environmental Modelling & Software



Conservation context

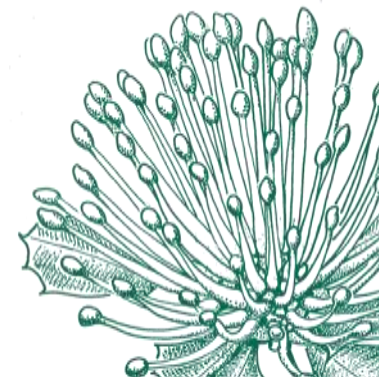
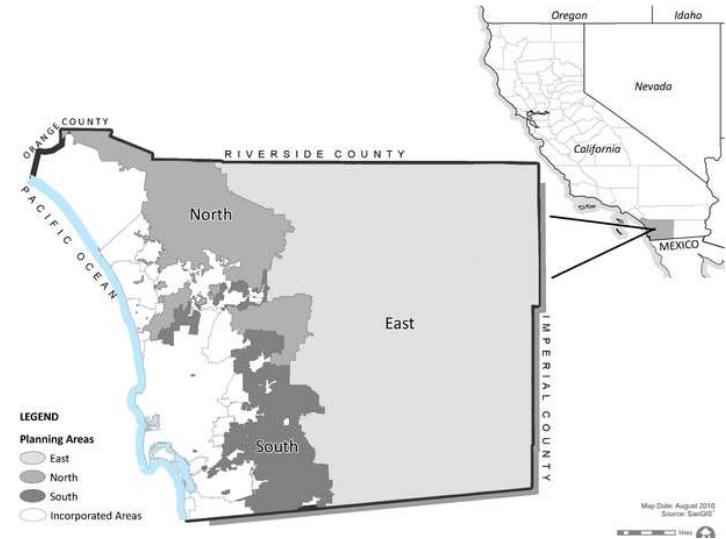
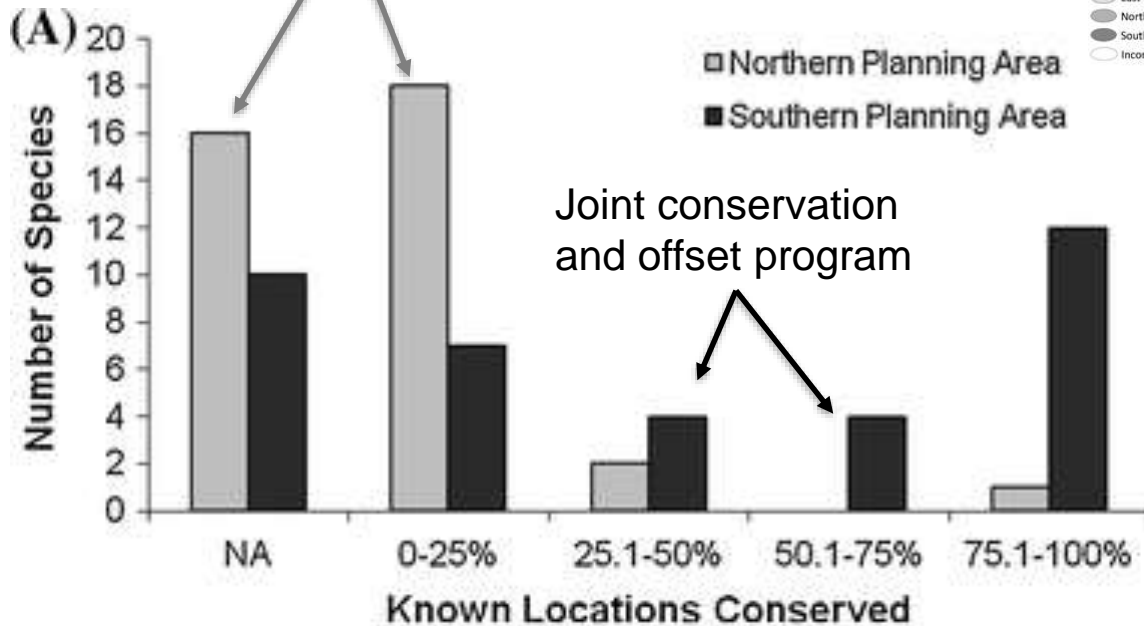
- Offsets to support (but not replace) broader conservation goals
- Synergies across multiple conservation programs and players
 - Complementing actions
 - Effective use of resources
 - Monitoring of additionality



Conservation context

Underwood 2011 Environmental management

Separate conservation and offset programs



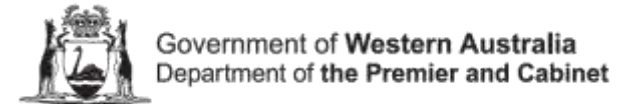
How to be more strategic?

- Re-think the objective
- Spatial information (biodiversity, development, offsets) at ecologically appropriate spatial and temporal scale
- Mechanisms that allow centralised
 - assessment and approval of impacts
 - coordination, monitoring and evaluation of offsets



Thank You

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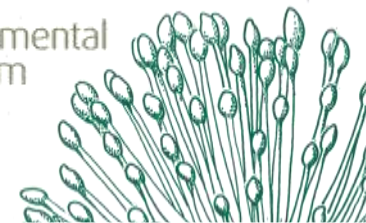
Amy
Whitehead



Brendan
Wintle



Katherine
Selwood



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