

# Ecosystem Services and INRM in the Uthukela DM

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- 🌳 Identification of key ES **delivery** areas can drive prioritisation of areas for conservation and restoration
- 🌳 Service delivery is defined as where **supply** meets **demand** (spatially)
- 🌳 We outline a method for **regional** ES mapping for inclusion in the uThukela DM EMF



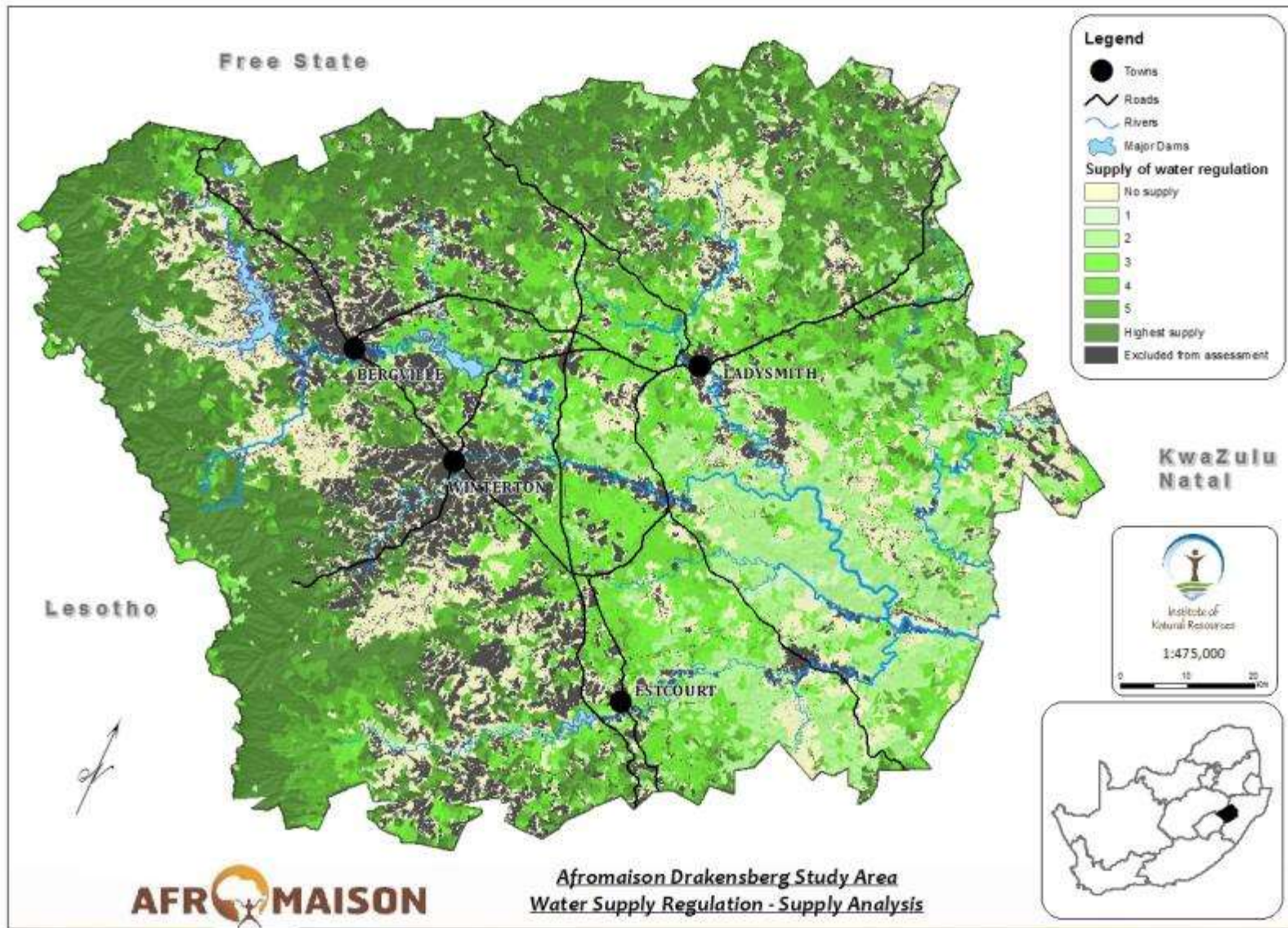


## Supply:

- ❖ This is effectively the mapping of ecological infrastructure
- ❖ The supply is mapped using the best spatial data available:
  - Land cover type
  - Catchment hydrology studies
  - Biodiversity distribution maps
- ❖ Supply is heavily influenced by condition of infrastructure
  - 'Condition' of ecosystem based on vegetation



# Water regulating services: Supply





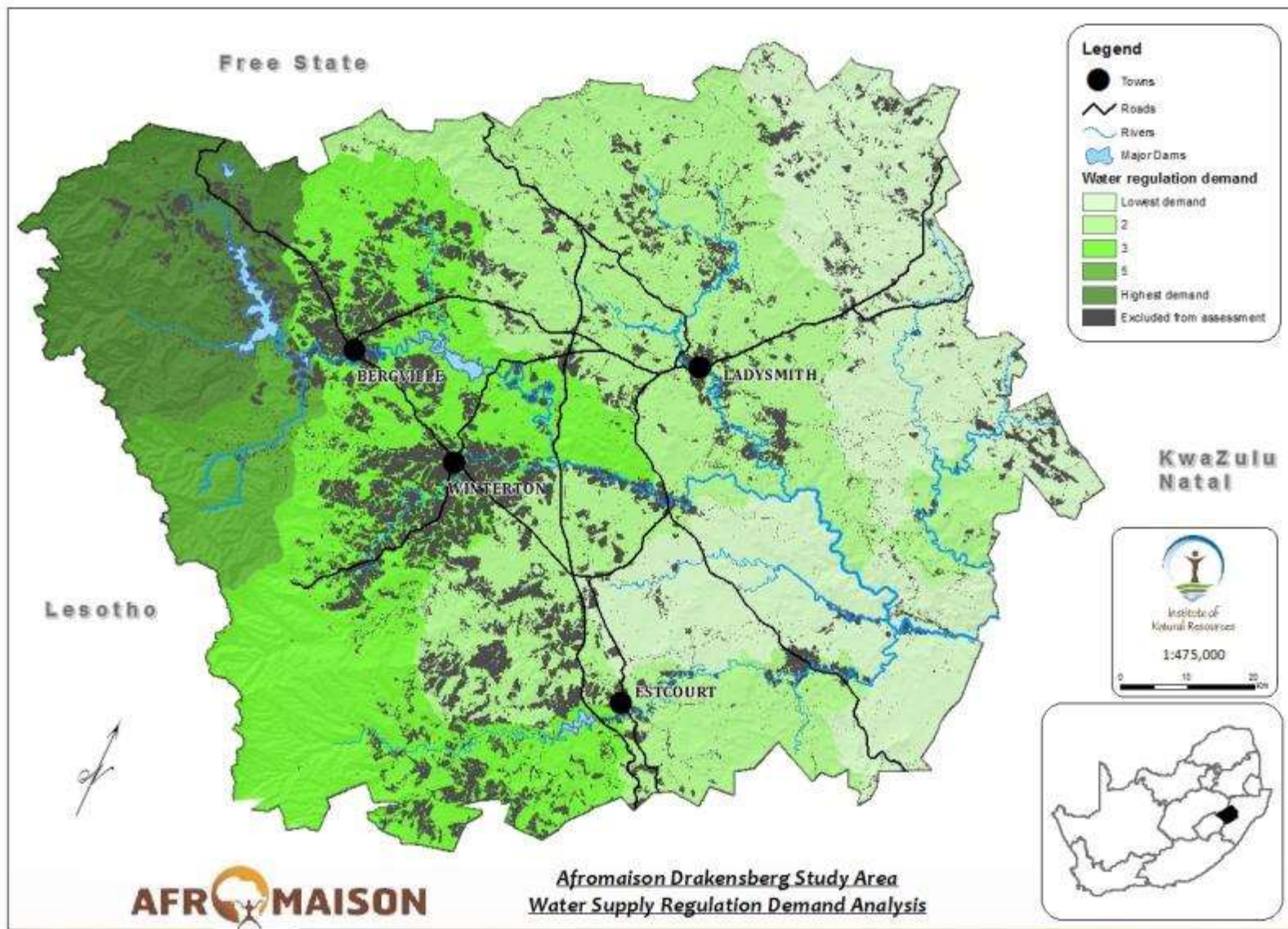
## Demand:

- ❖ Mapping demand requires understanding of
  - **Which factors** exert demand;
  - **where** demand is exerted;
  - **what level** of demand is exerted.
  
- ❖ Demand can be exerted from anywhere but is always exerted onto an ecosystem / area supplying the service
  - Sometimes all ecosystems supplying the service
  - Sometimes selected ones





# Water regulating services: Demand



# Approach to ES mapping: Prioritisation

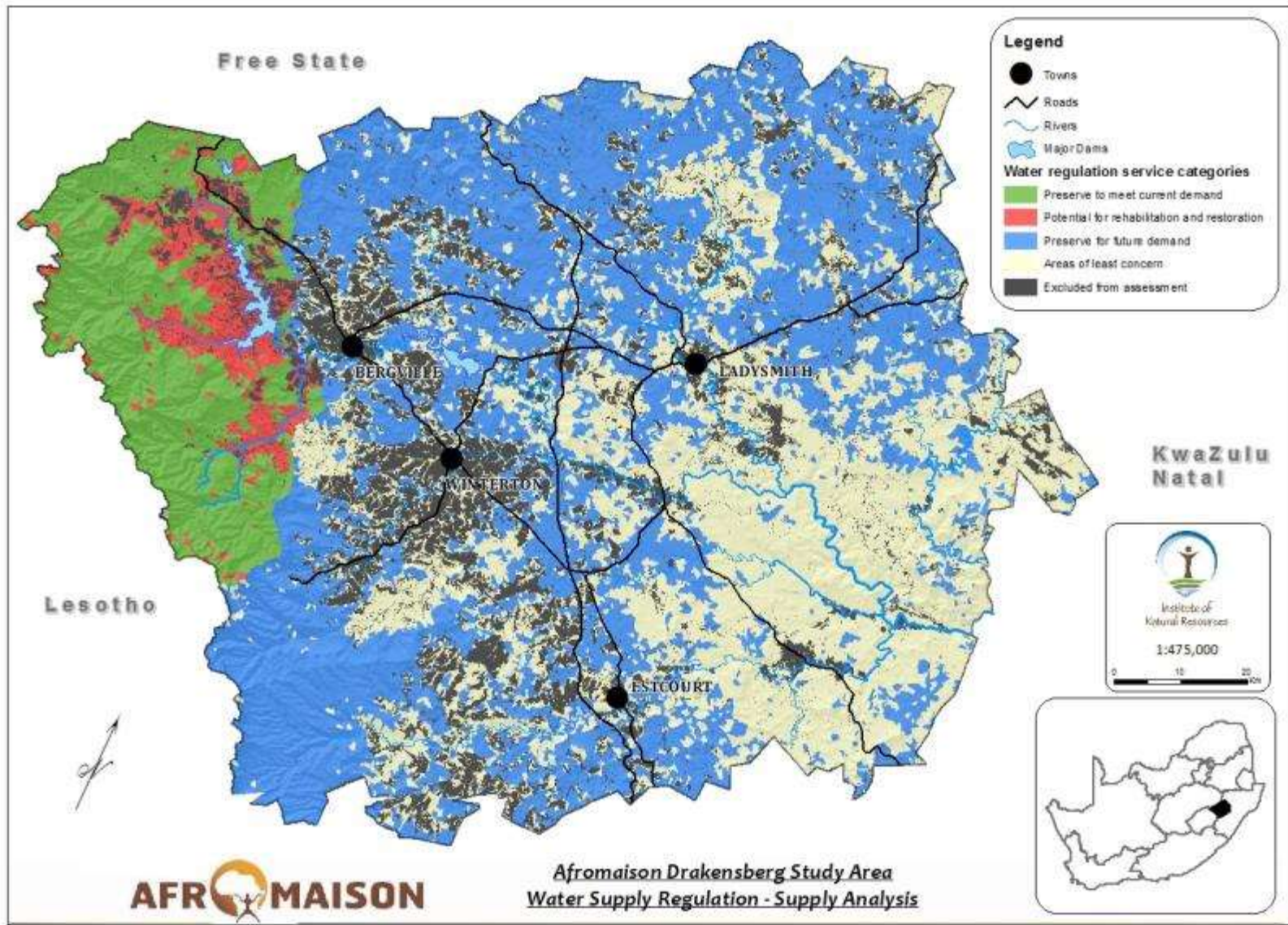


|        |      | Supply   |  |
|--------|------|--|--|
|        |      | High   | Low  |
| Demand | High | Retain to meet current demand. Implement management action to limit impact of heavy demand and ensure continued supply | Implement restoration and rehabilitation to help meet current demand |
|        | Low  | Retain to meet low current and possible higher future demand   | Areas of least concern   |



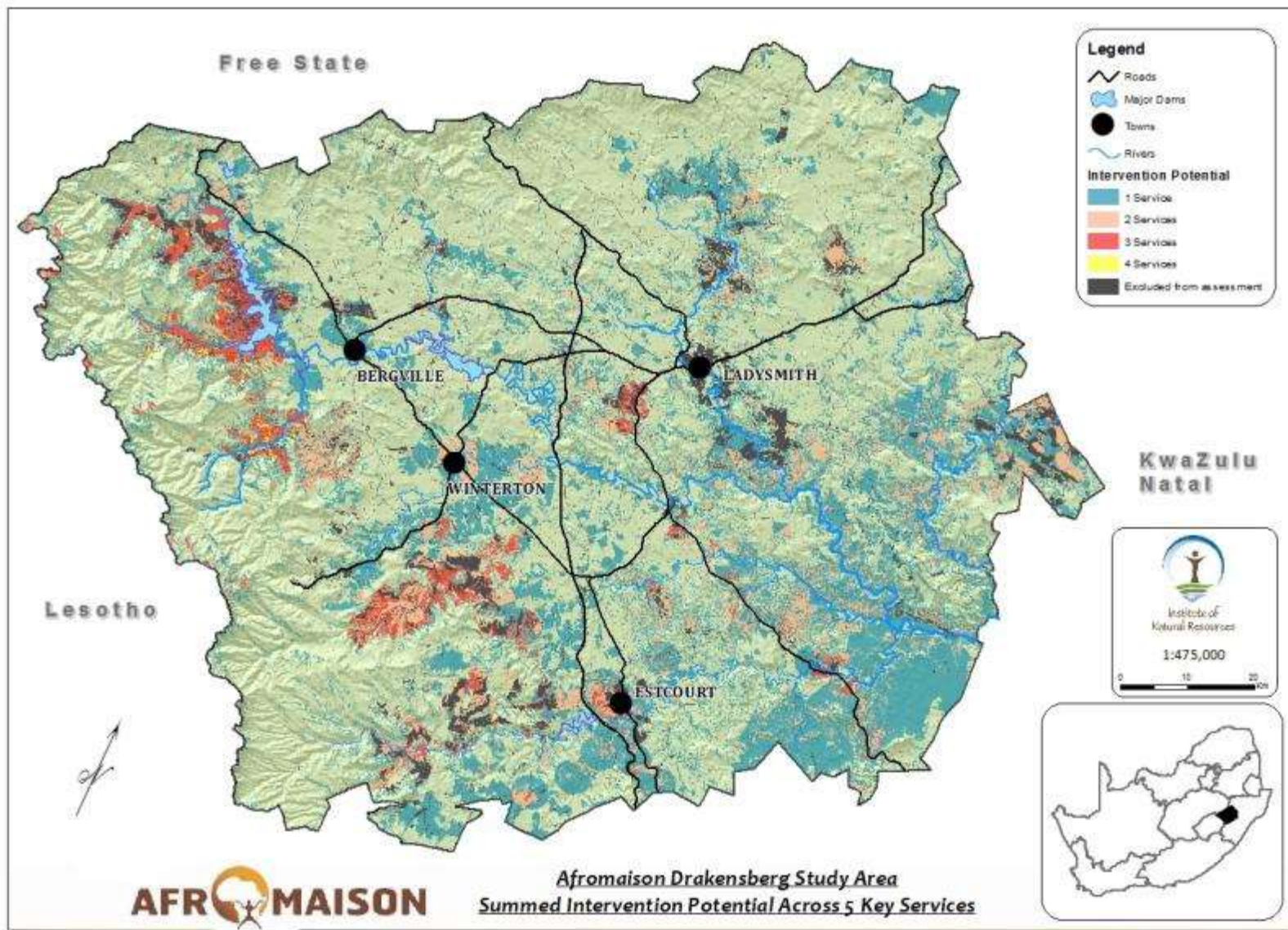


# Water regulating services: Prioritisation





# Optimise resources: Combined services





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**Africa at a meso-scale: adaptive and integrated tools and strategies for natural resource management**

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## Title

**Ecosystem Services in the Uthukela District Municipality**

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# Thank you

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## Discussion point:

- ❖ Is it 'overkill' to utilise fine scale data for regional scale ecosystem services assessment / mapping?

