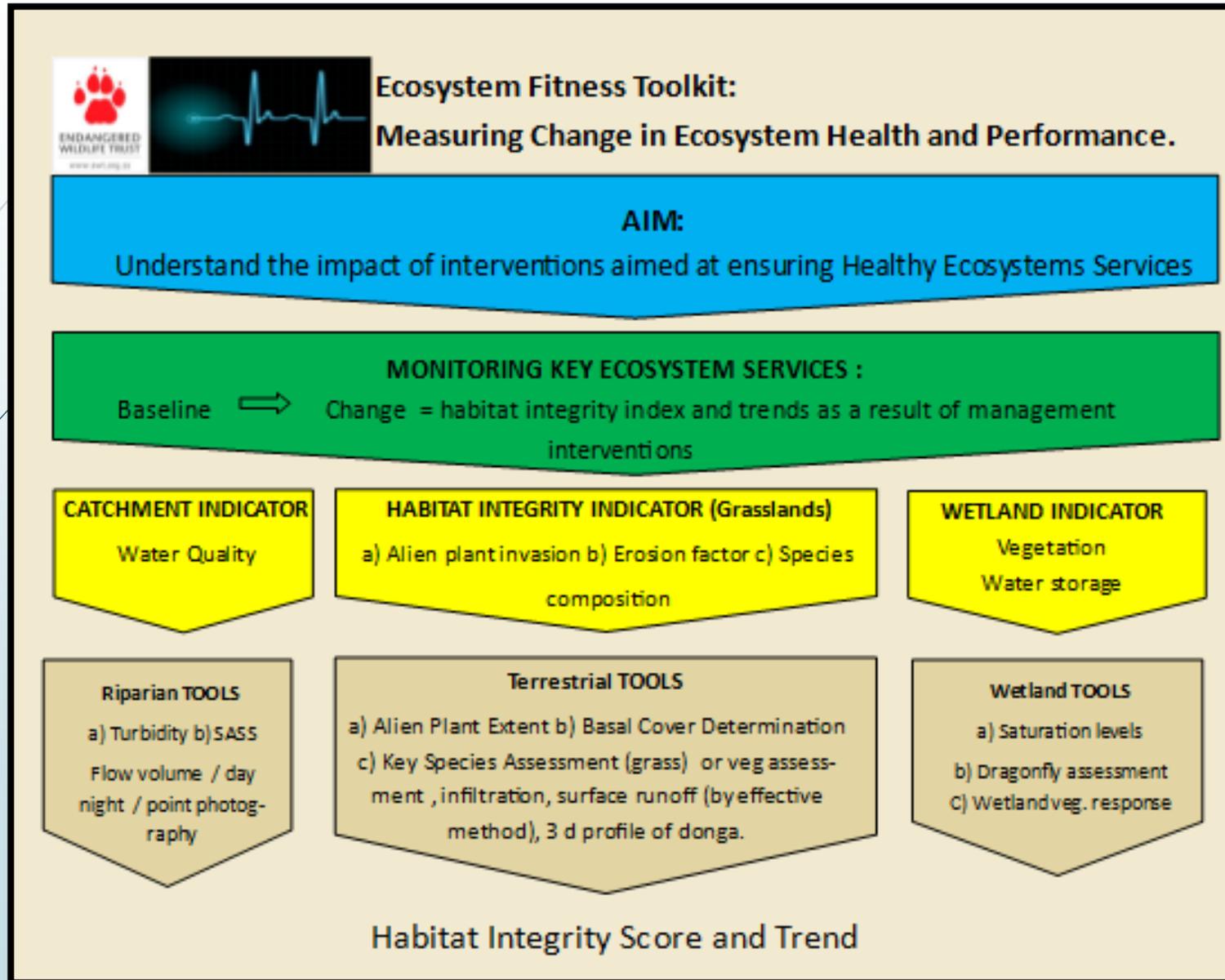




# Development of a Monitoring Tool for Measuring Change in Ecosystems Services - for ongoing monitoring of the impact of management activities or change in baseline.

November 2014

# Concept:





# Issues for developing a tool

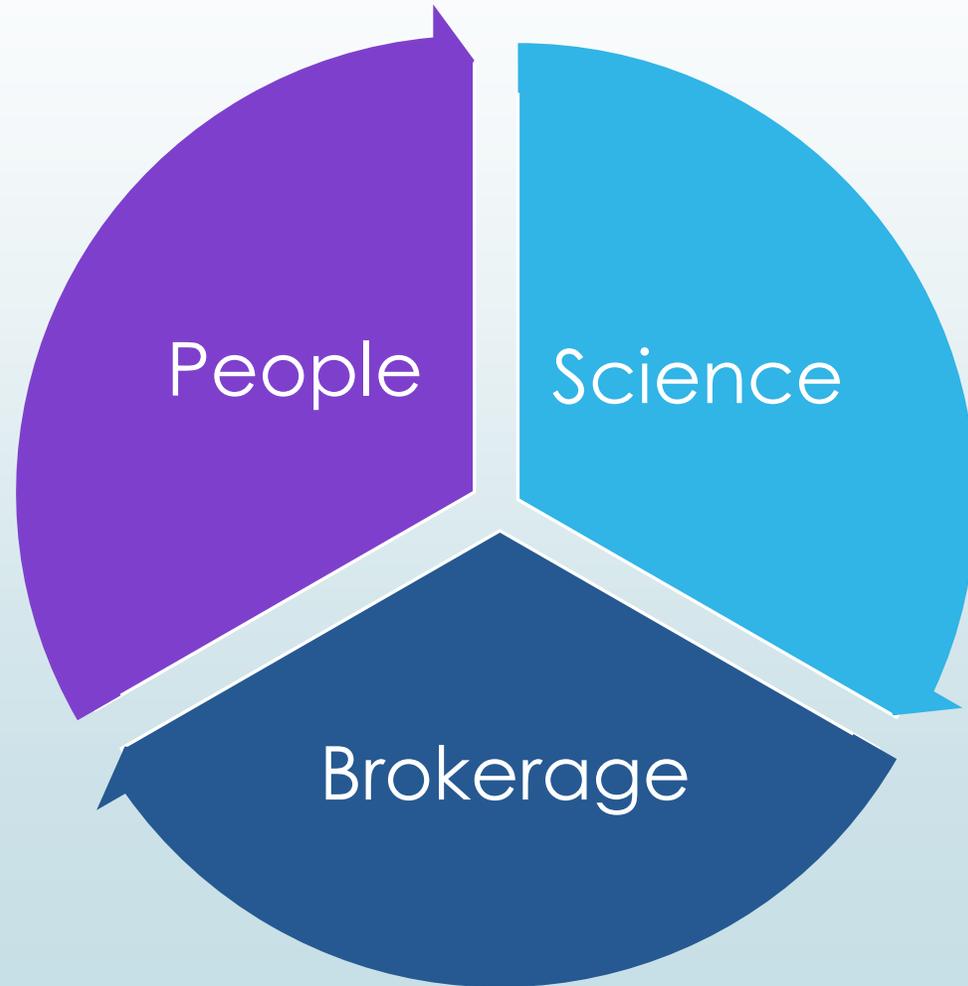
## Primary

- When adopting a holistic view – how do we develop a consistent approach to farms?
- How do we identify the most relevant tools?
- How do we deal with external inputs?
- How do we select the (spatially) correct sampling points?
- How do we bring citizen science into the tool ?

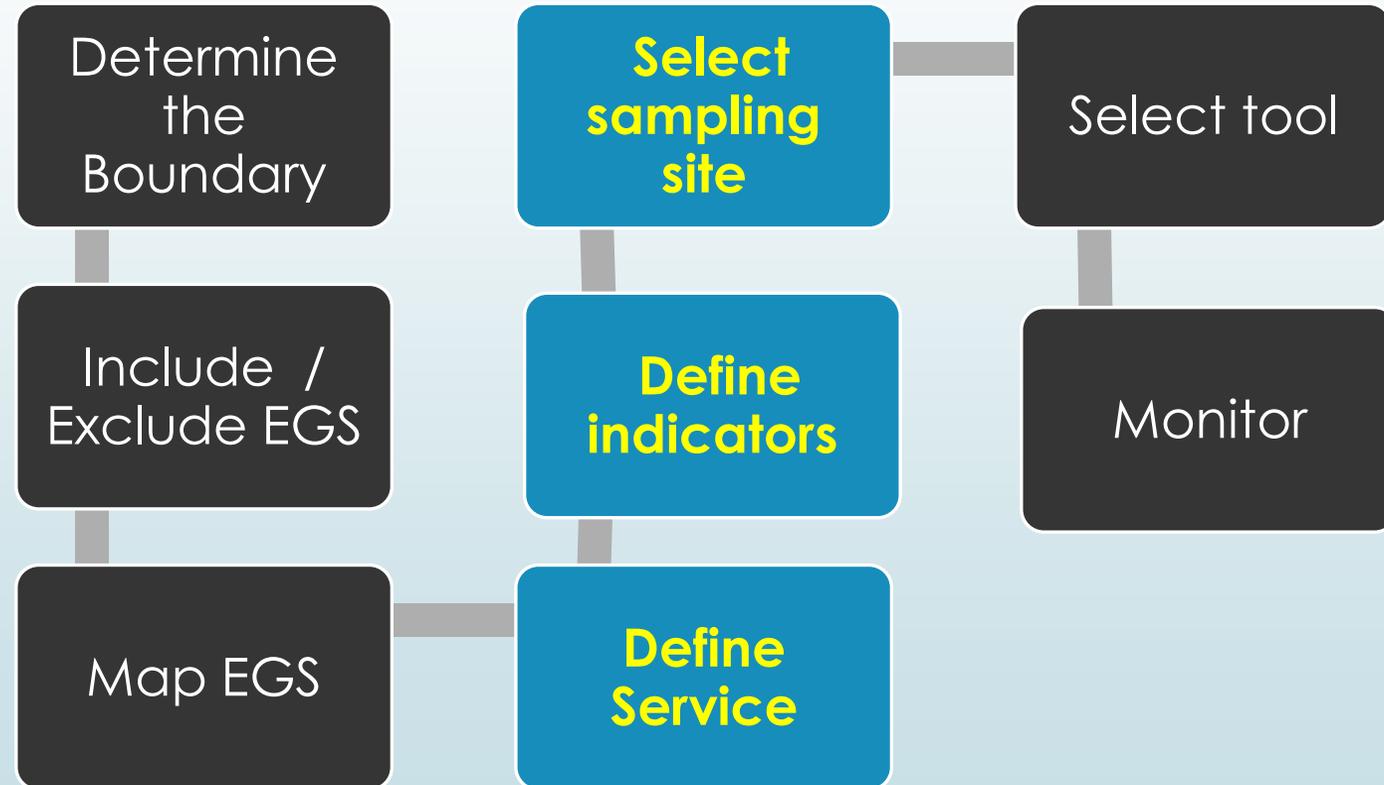
## Secondary

- Do we have to investigate / prove the strength of tools as EGS proxies ? How do we get around this?
- Should we attach weights to the results of different tools.

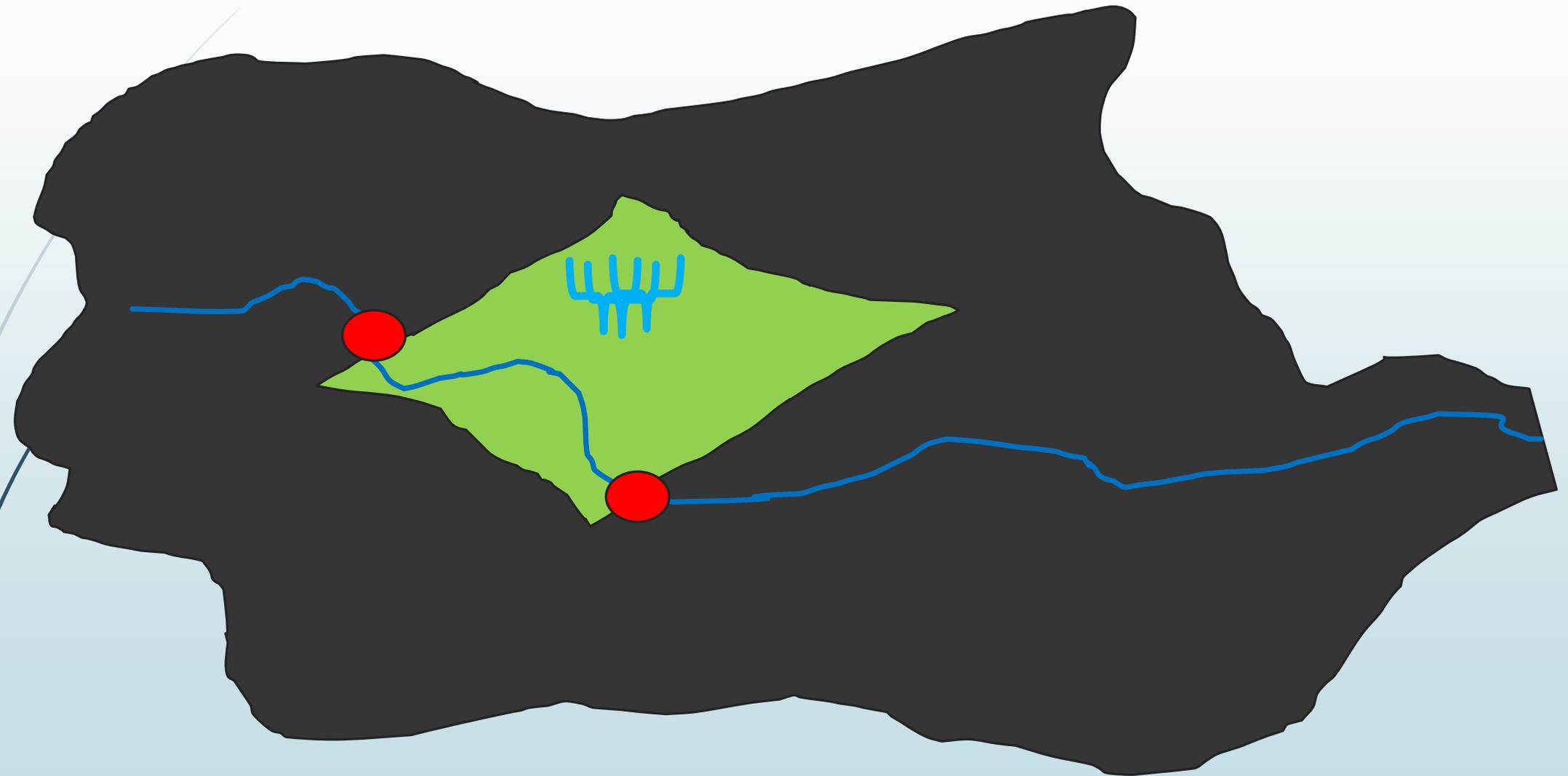
# Audiences



# Proposed Methodology



# Boundaries





## Ecosystem Service +

- Habitat yielding healthy services

## Ecosystem neutral

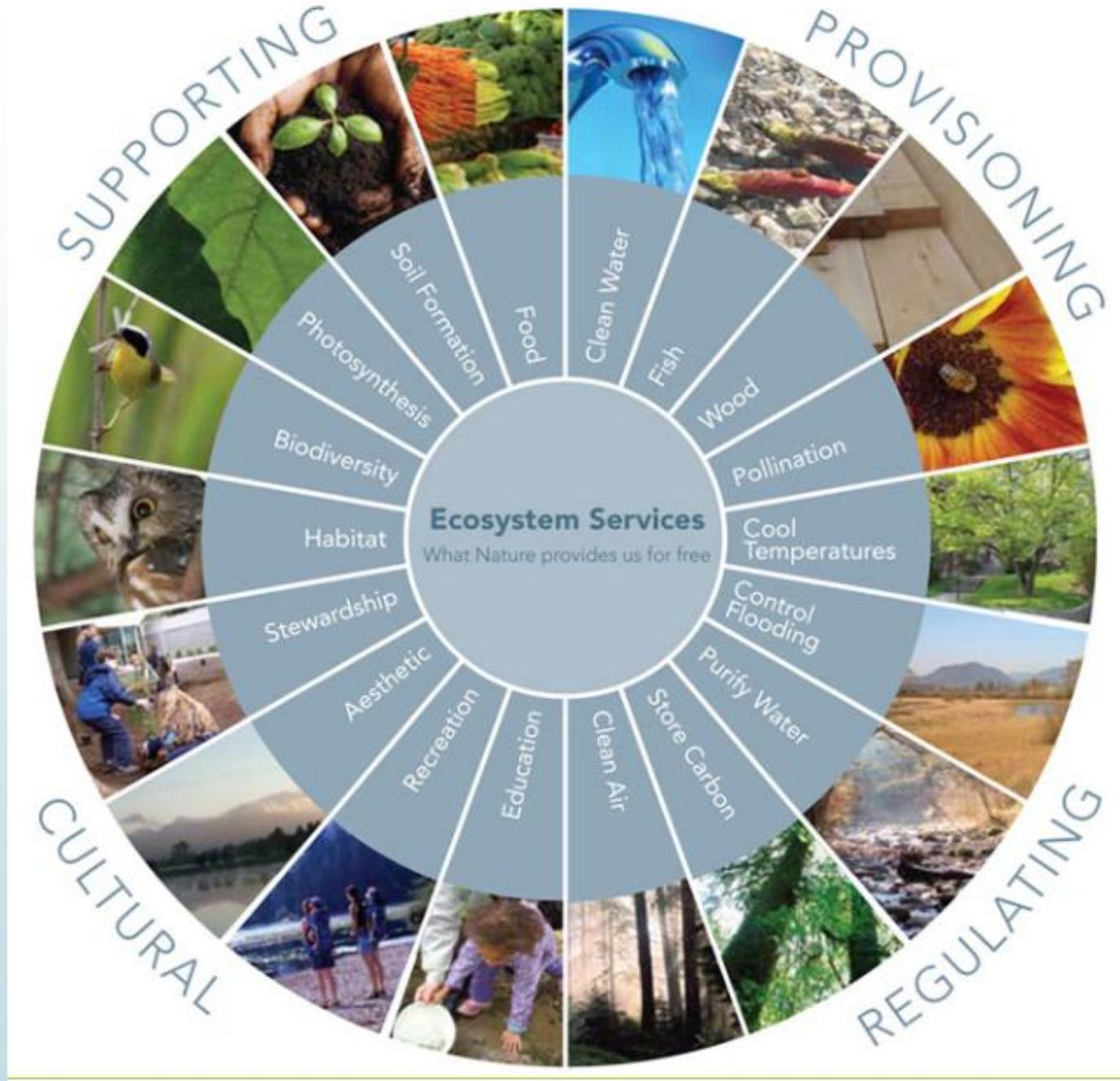


- Transformed / degraded land with minimal impact on EGS

## Ecosystem Disservice -

- Transformed / damaged systems damaging EGS

**Focus on provisioning and regulating services + Biodiversity**



## Aquatic Riparian

- Mini Sass
- Turbidity
- Flow volume
- PH

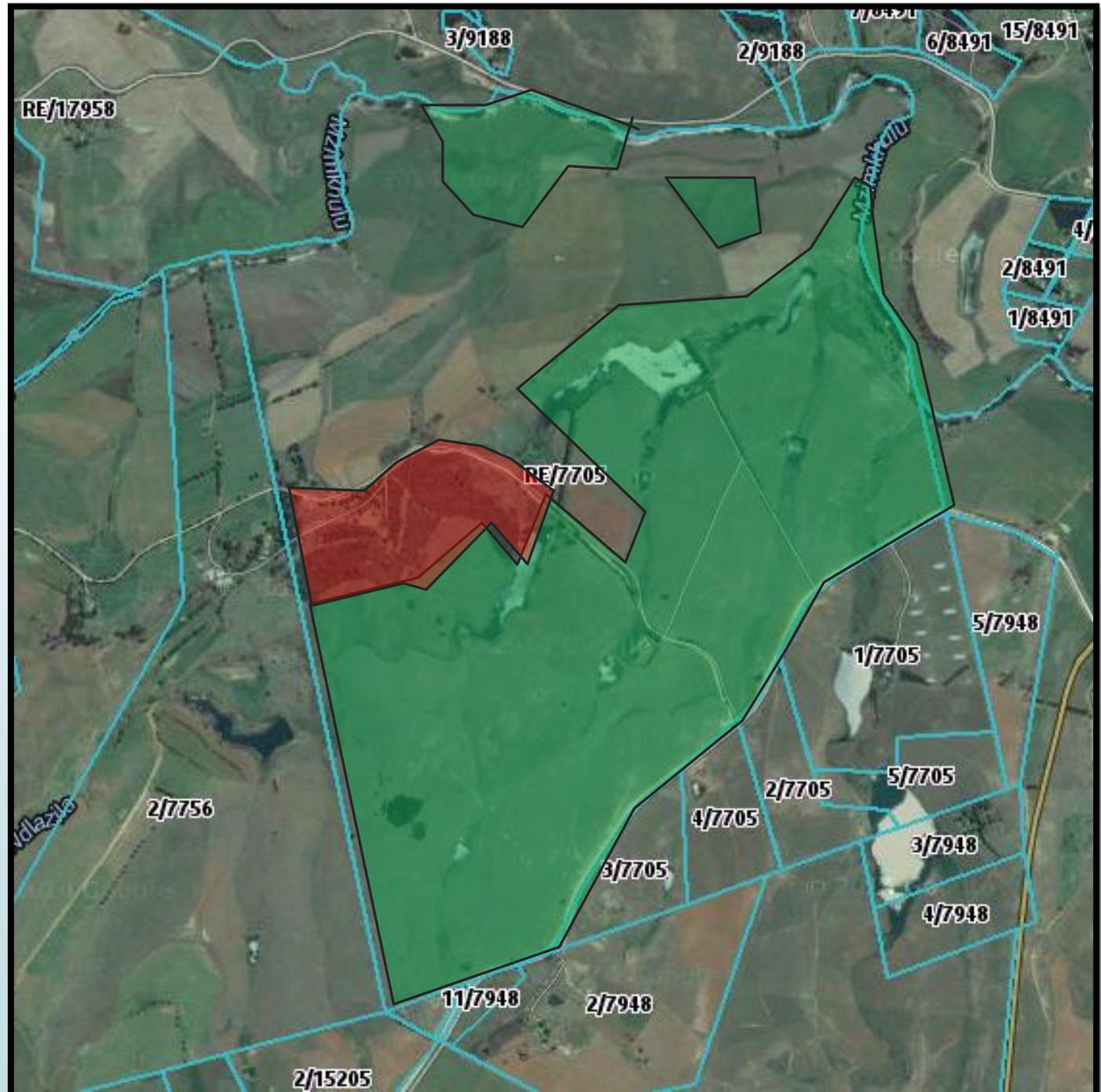
## Aquatic

- Saturation pits
- Amphibians
- Turbidity
- Fixed point photography

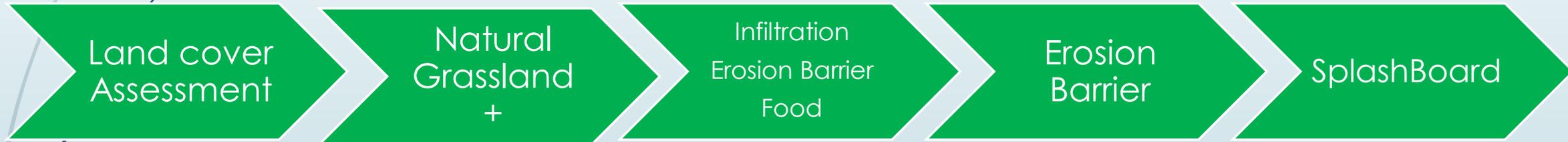
## Terrestrial

- Basal Cover
- Infiltration Rate
- Key species
- Vigour
- Biomass
- Soil carbon
- Extent of infestation

# Riverlea example



# Riverlea Example - Positive EGS Service



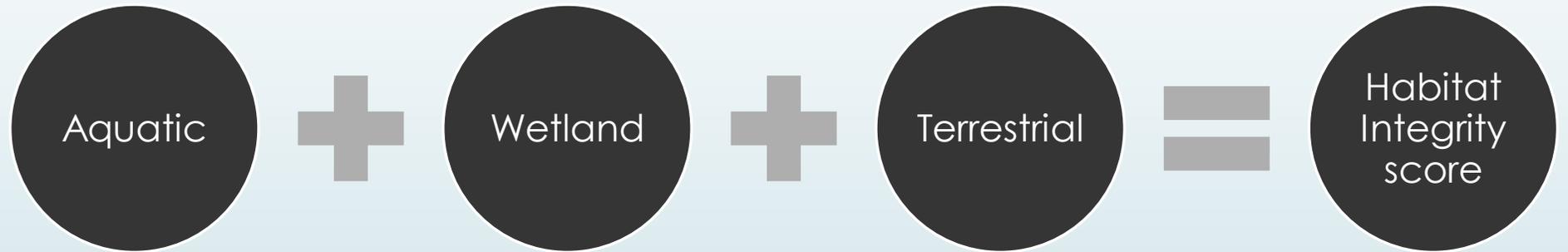
A dark blue vertical bar on the left side of the slide. A black arrow points to the right from the top of this bar. Several thin, curved lines in shades of blue and grey originate from the bottom left and sweep upwards and to the right across the slide.

# External Inputs

Main external influences

- ▶ Temperature
- ▶ Precipitation
- ▶ Evaporation
- ▶ Fire

# Habitat integrity index



How would this look for different audiences ?



# Key Questions



- ▶ How do we deal with boundaries ?
- ▶ Are there other tools we should be looking at ?
- ▶ How do we select the positioning of sensitive sampling points ?
- ▶ How do we deal with external inputs ?
- ▶ How do we satisfy all the user groups ?
- ▶ Is it possible to combine scores to form a habitat index ? Perhaps for a specific audience ?