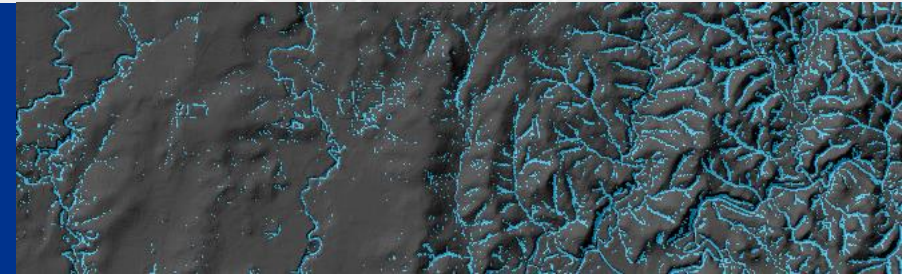# A framework to spatially represent the social values of waterways

Aneeta Nathan – Spatial & Information Services Consultant, Jacobs Group (Australia)
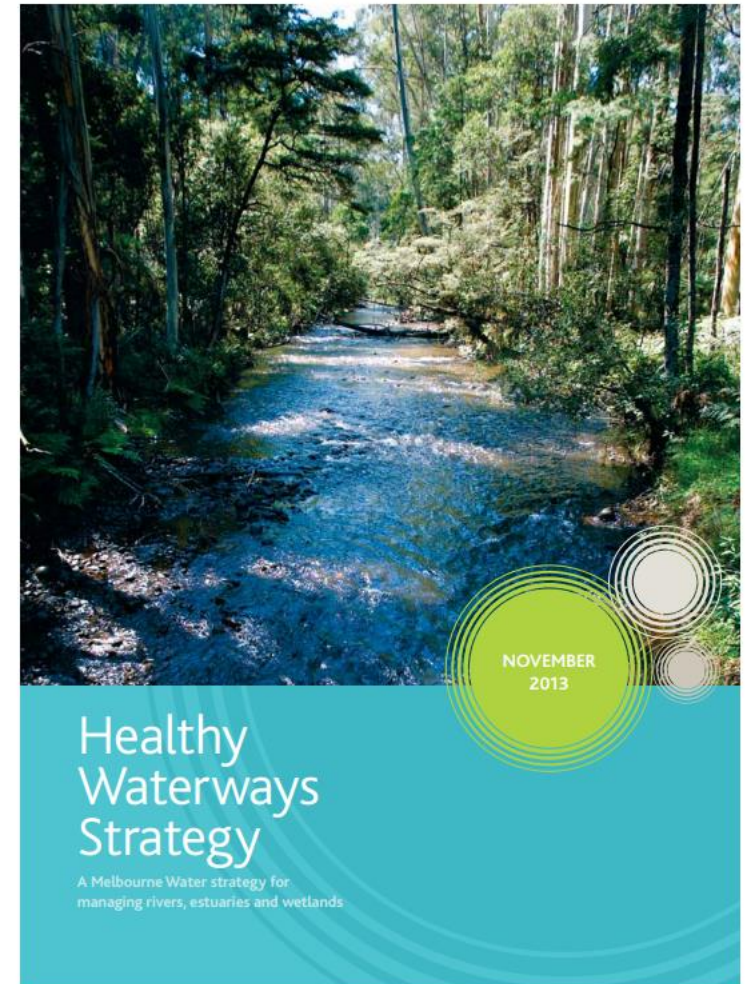
1 November 2018

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Healthy Waterway Strategy

- Strategic direction for waterway management
- Priority targeting

Key challenges

Why a social values focus?

How do we define social values?

How do we represent social values in space?

What questions can we ask?

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Why a social values focus?

Plan early
How can we ensure recognition of social value in planning for waterways?
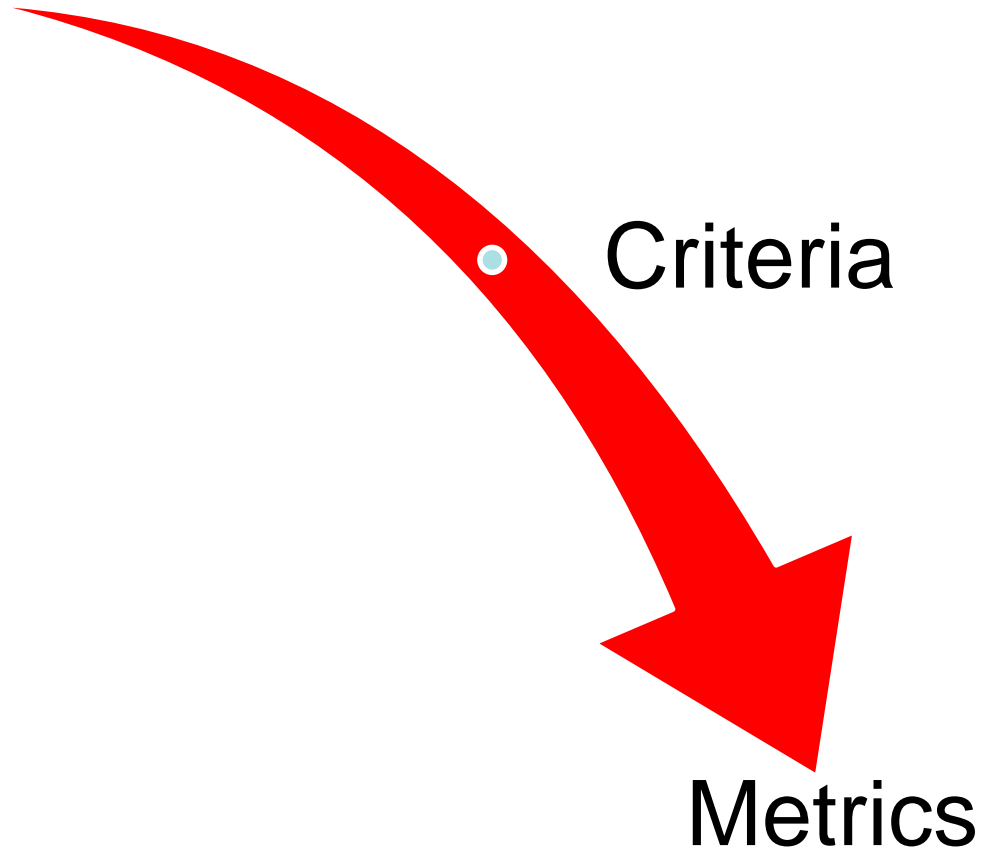
Link to condition
Can we use the waterway condition metrics that under pin social value?

Integrating information
How do we create an environment to represent and query social values?

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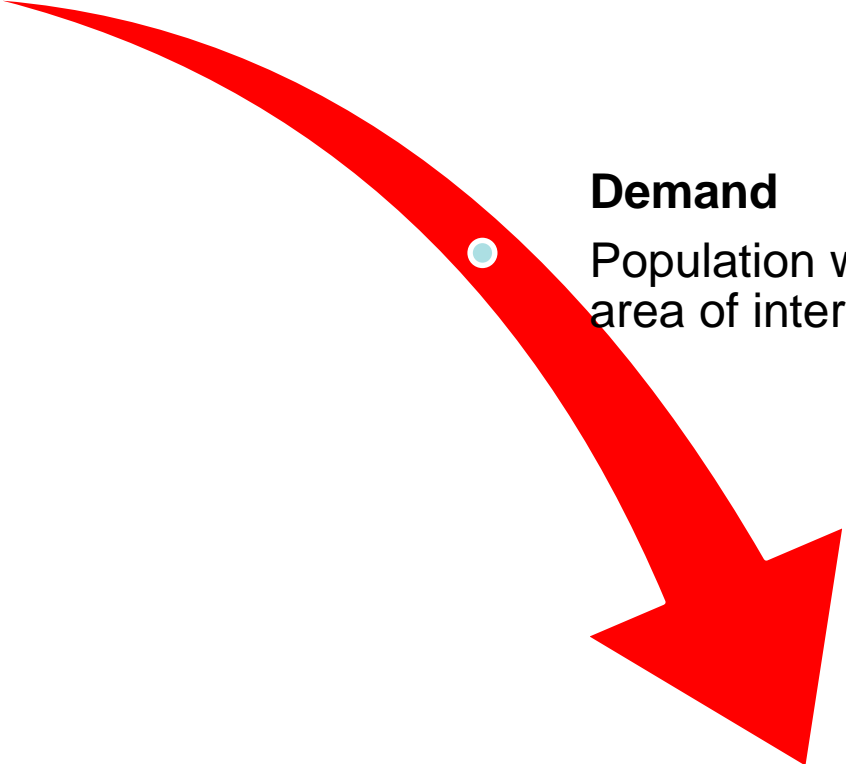# How do we define social values?

Categories

Criteria

Metrics

- **Amenity** – the pleasantness of waterways and their ability to provide a restorative escape

- **Community Connection** – waterways connect the community with nature and with each other

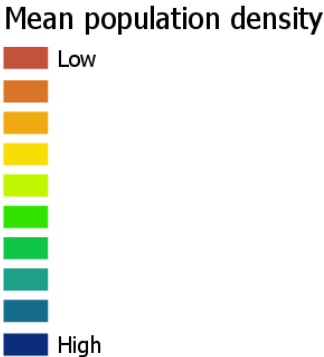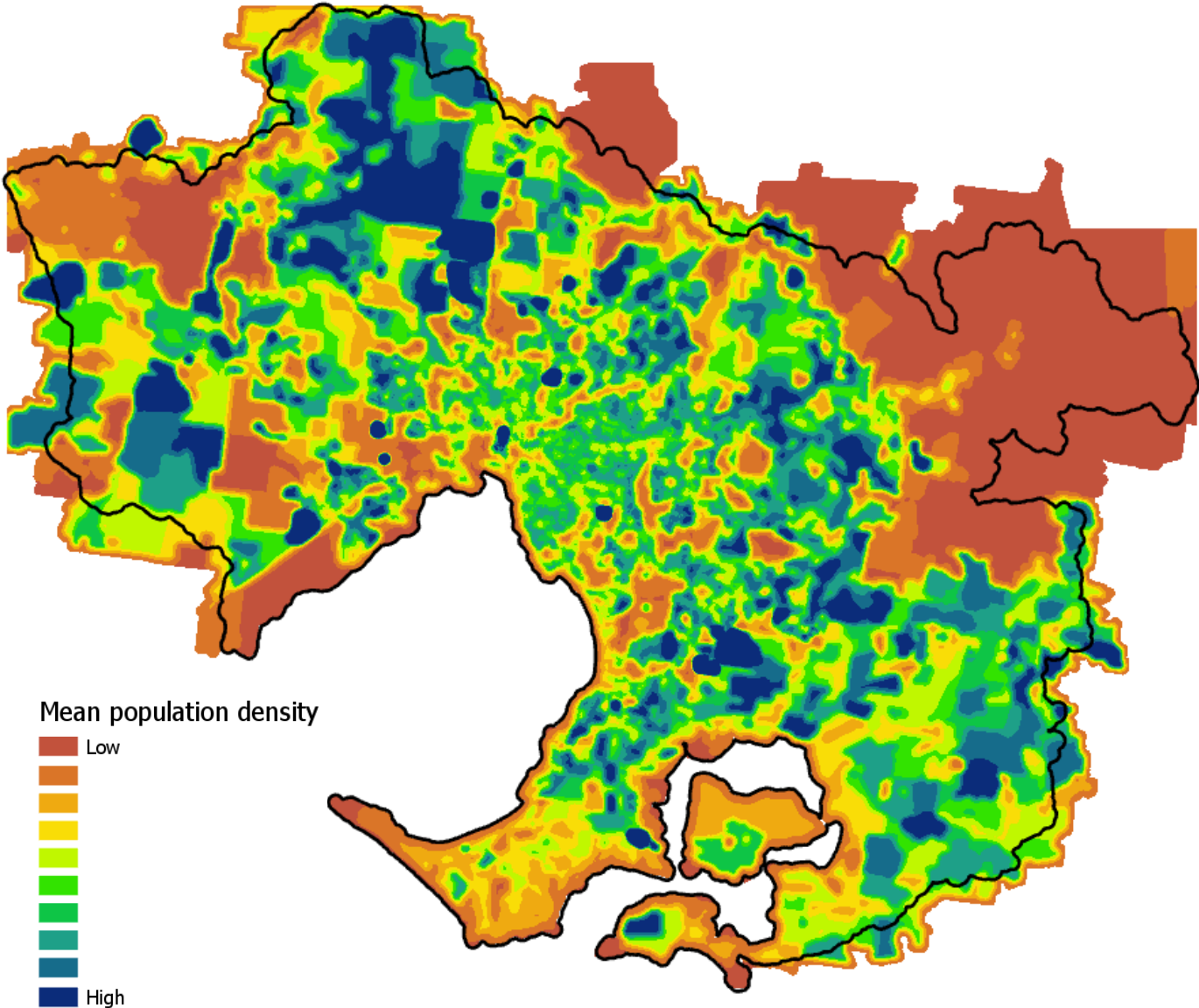- **Recreation** – waterways provide a setting for active and passive recreation

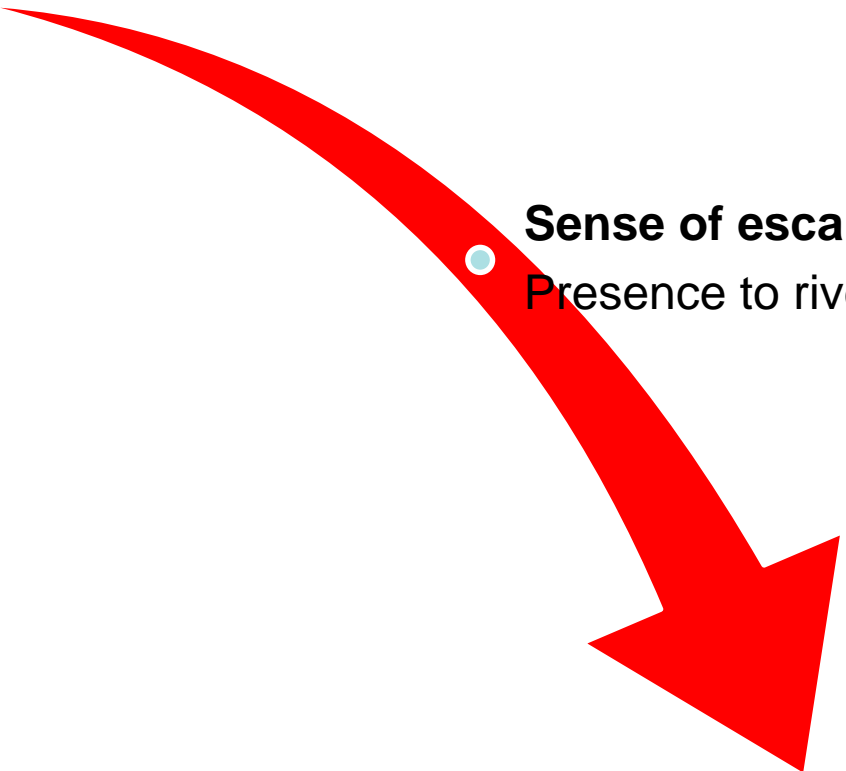**JACOBS**®

How do we define social values?

Context

Demand

Population within the area of interest

Mean density of population
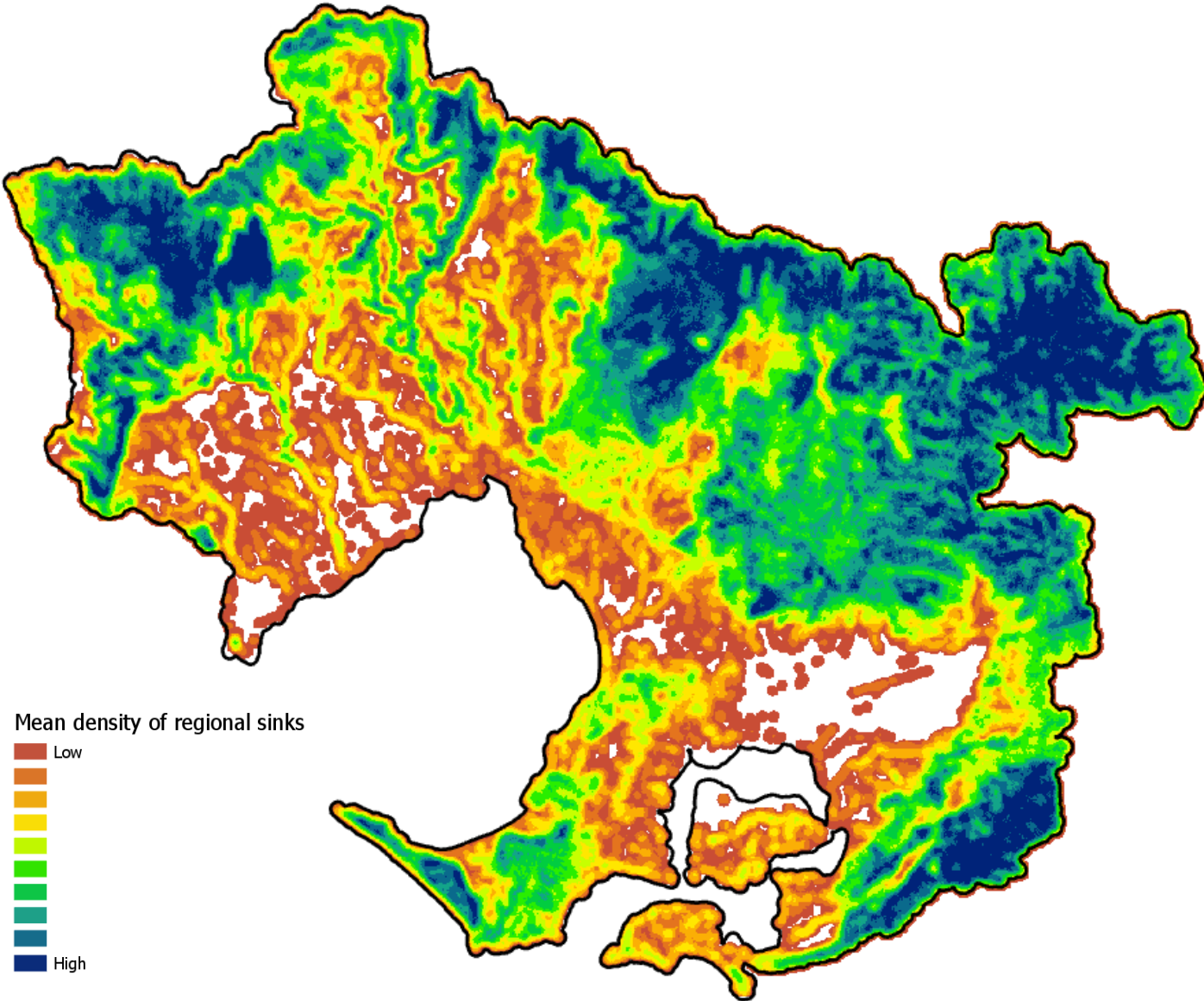

Mean population density

Low

High

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6

How do we define social values?

Amenity

Sense of escape
Presence to river corridors

Mean density of regional sinks

Mean density of regional sinks
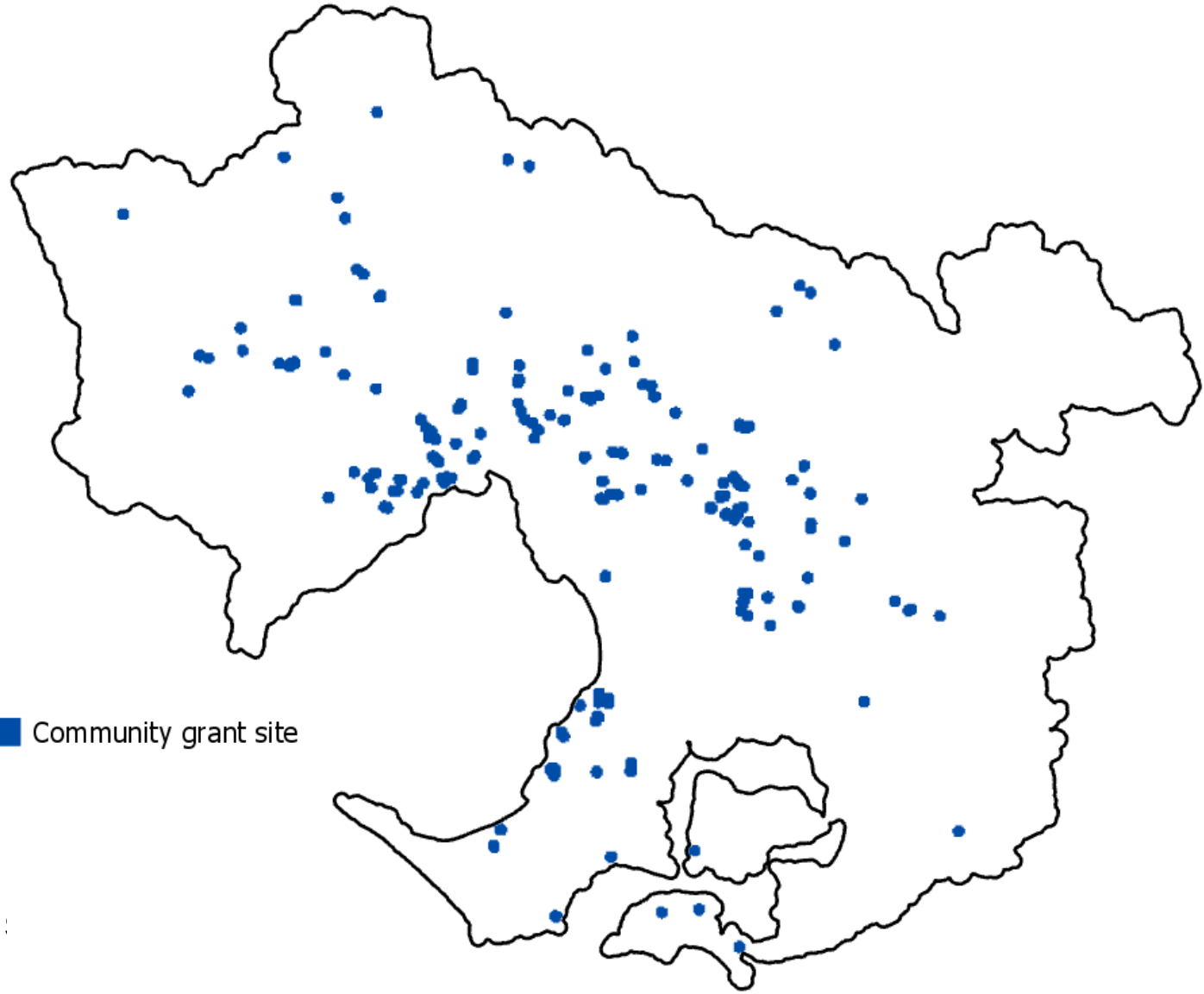
Low

High

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How do we define social values?

Community Connection
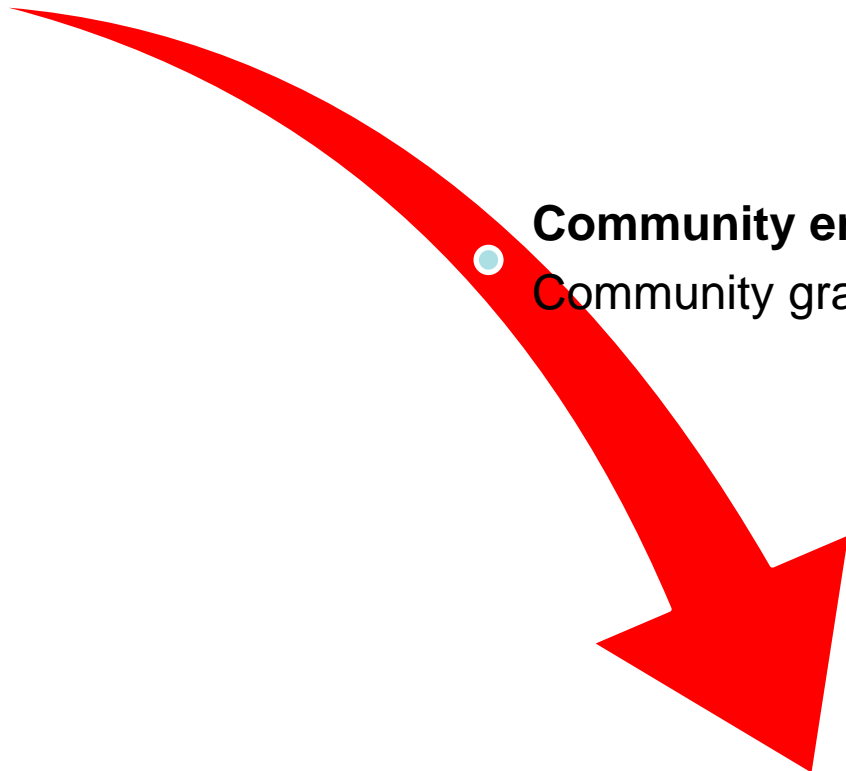
Community engagement
Community grants

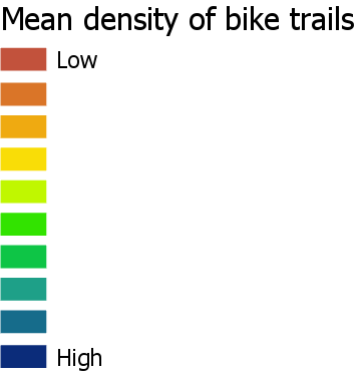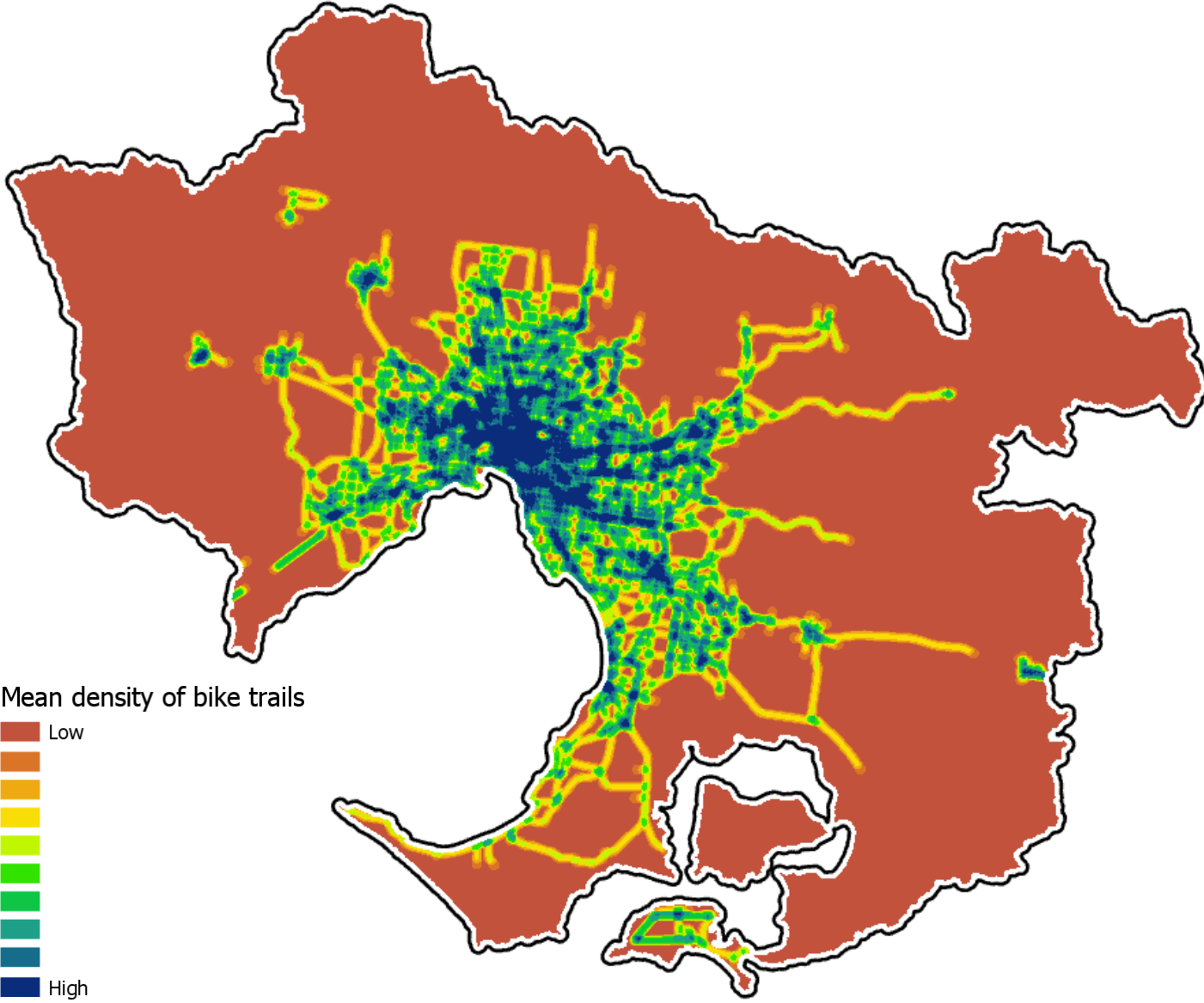**Presence of community grant**

Community grant site

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How do we define social values?

Recreation
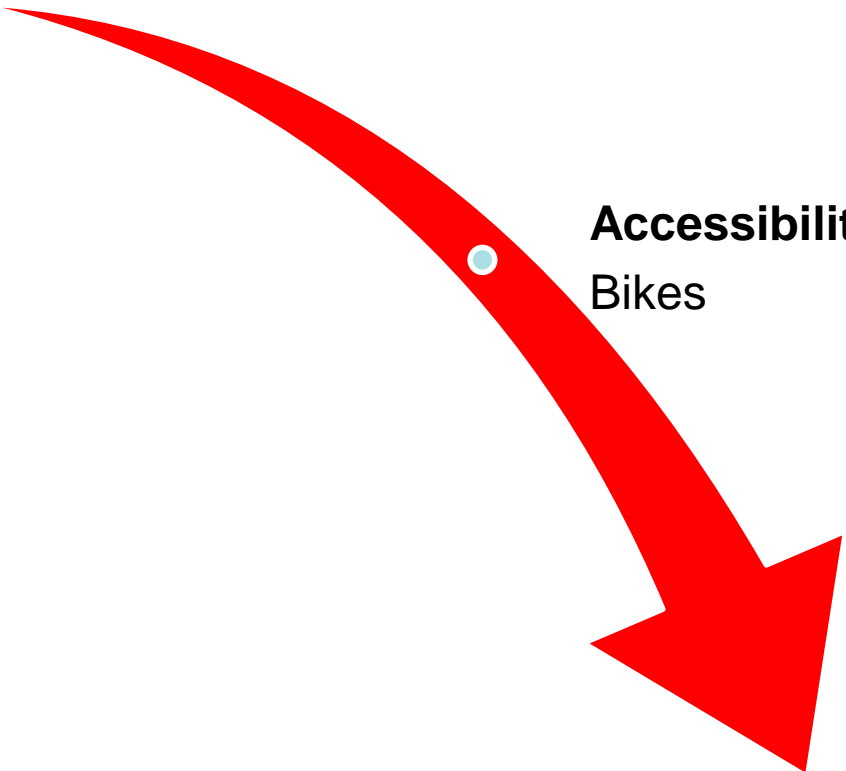
Accessibility
Bikes

Mean density of bike trails

Mean density of bike trails

Low

High

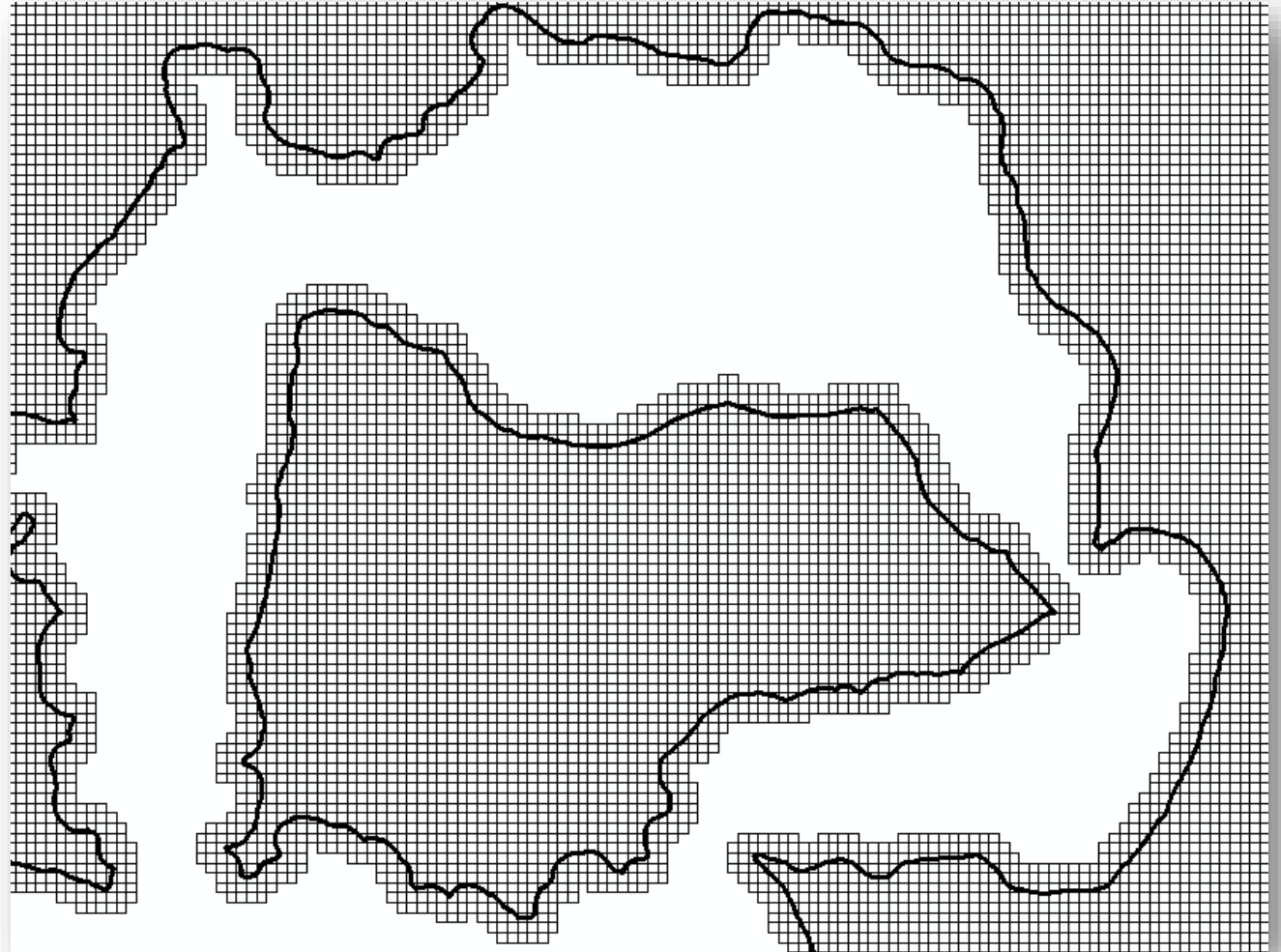**JACOBS**

How do we bring social values together in space?

Considerations:
- Operational use
- Summarising metrics
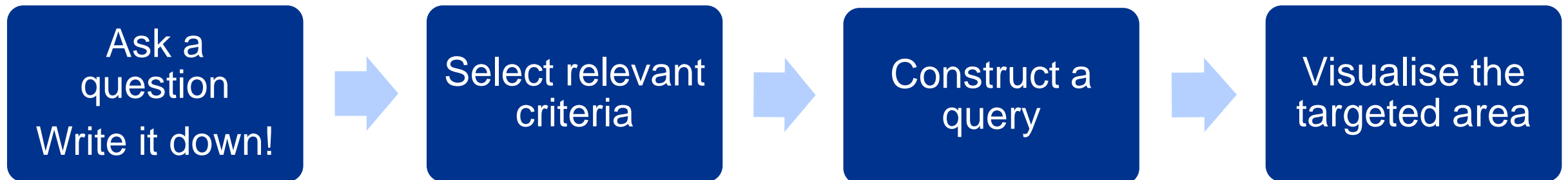- Appropriate scale
- Easy way to ask a question

250m x 250m mesh across French Island

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What questions can we ask?

Find me places that have these characters!

The structure allows us to turn planning questions into database queries

It allows us to target locations

| Ask a question Write it down! | → | Select relevant criteria | → | Construct a query | → | Visualise the targeted area |

The workflow!

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Example – using metrics to define amenity profiles

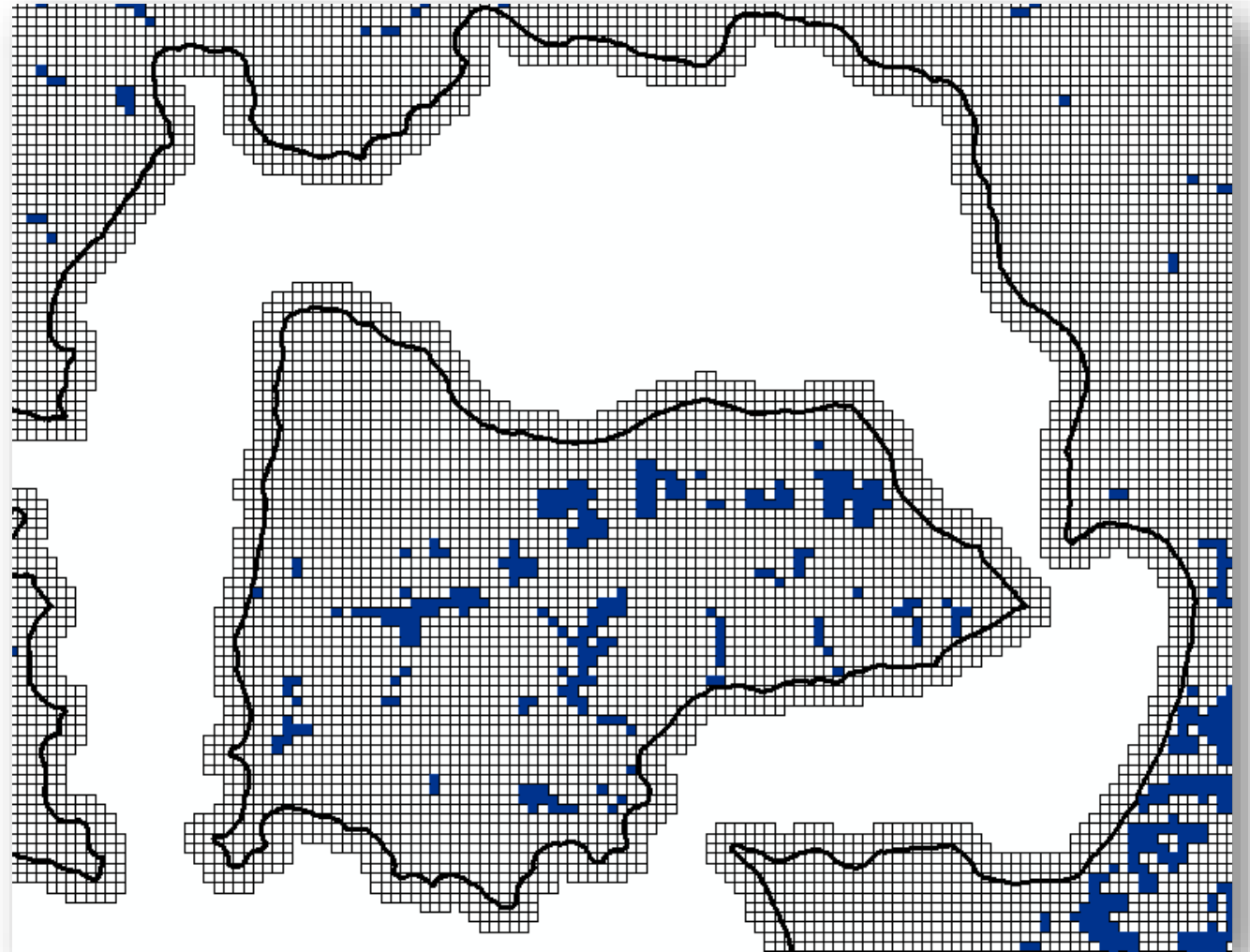Where can I feel a sense of escape from the urban environment?

Low in the terrain & lots of trees

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Example – using metrics to define amenity profiles

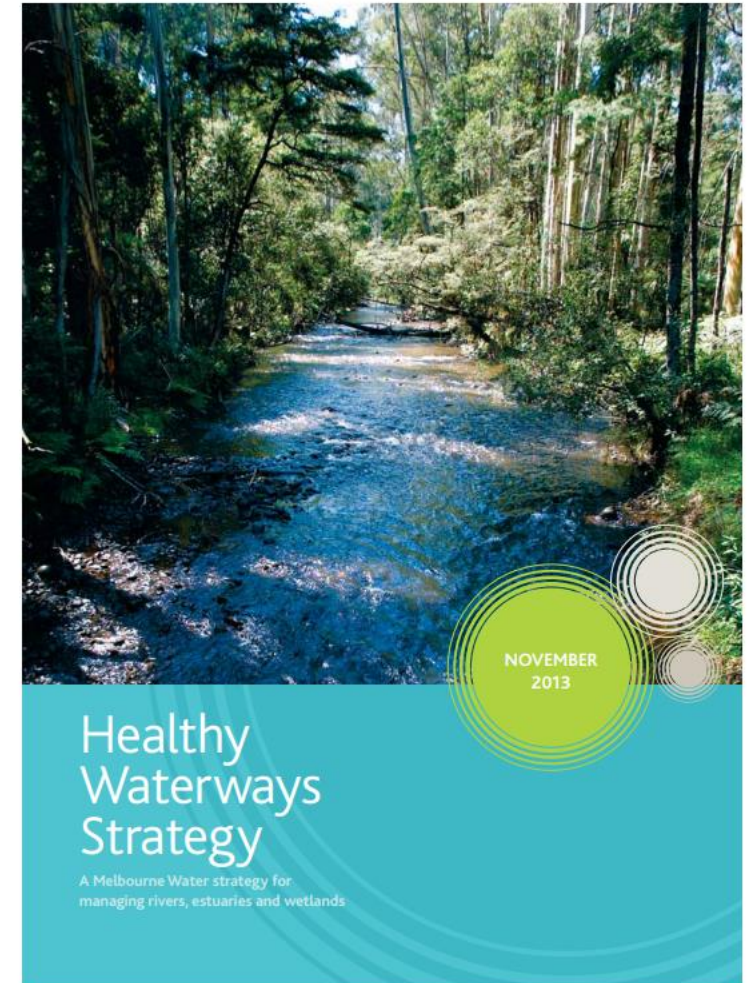Where can feel a sense of escape from the urban environment?

Low in the terrain & lots of trees

Result of query across French Island

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Application to the Healthy Waterway Strategy

- Preliminary target areas
- Delivery included database, raw data, documentation
- In-house training
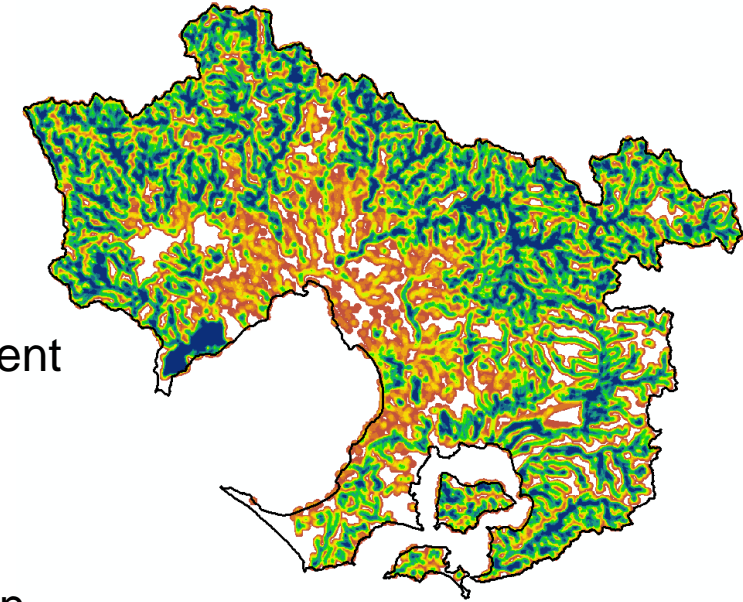
Representing the social values of waterways

- Structured approach to metric development
- Common analysis geography
- Highly accessible resource for decision making

Why a social values focus?

How do we define social values?

How do we represent social values in space?

What questions can we ask?

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Questions?

November 19, 2018

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