

# Natural Capital Workshop

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**NCEA Pilot: Neighbourhood  
and Parish Plans**



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# What is natural capital?

Natural Capital is defined as:

*“..elements of nature that directly or indirectly produce value or benefits to people, including ecosystems, species, freshwater, land, minerals, the air and oceans, as well as natural processes and functions”*

UK Natural Capital Committee 2014.



# Ecosystem services and benefits

**Natural Capital** is the stock of natural assets, for example, habitats, soils, water and biodiversity

This natural capital produces a wide range of **ecosystem services** that provide **benefits** to people

## Provisioning

Products obtained from ecosystems  
e.g. food, timber, water



## Regulating

Benefits obtained from environmental processes that regulate the environment  
e.g. air quality, climate regulation, pollination



## Cultural

Non-material benefits people obtain from ecosystems  
e.g. recreation, aesthetic experiences, health and wellbeing



# Greenspaces and place-making

- Quality green spaces deliver a range of benefits that have real value to society, create community well-being, and enhance liveability and sense of place.
- A comprehensive assessment of natural capital and the benefits that it provides (the ecosystem services) enables planners and developers to deliver high quality and sustainable places that are highly valued by society.
- Covid 19 has highlighted the importance of local green spaces that provide multiple benefits.



# Policy alignment

- The Environment Bill
- Biodiversity and environmental net gain
- Local nature recovery networks / strategies
- Agricultural reform and the new Environmental Land Management Scheme (ELMS)



- Quality of place is important for attracting people and businesses to the area
- OxCam Arc
- Links to the climate change policy and aims to go carbon neutral

# Natural capital in planning policy

**Assess natural capital baseline**



**Determine flow of benefits and demand**

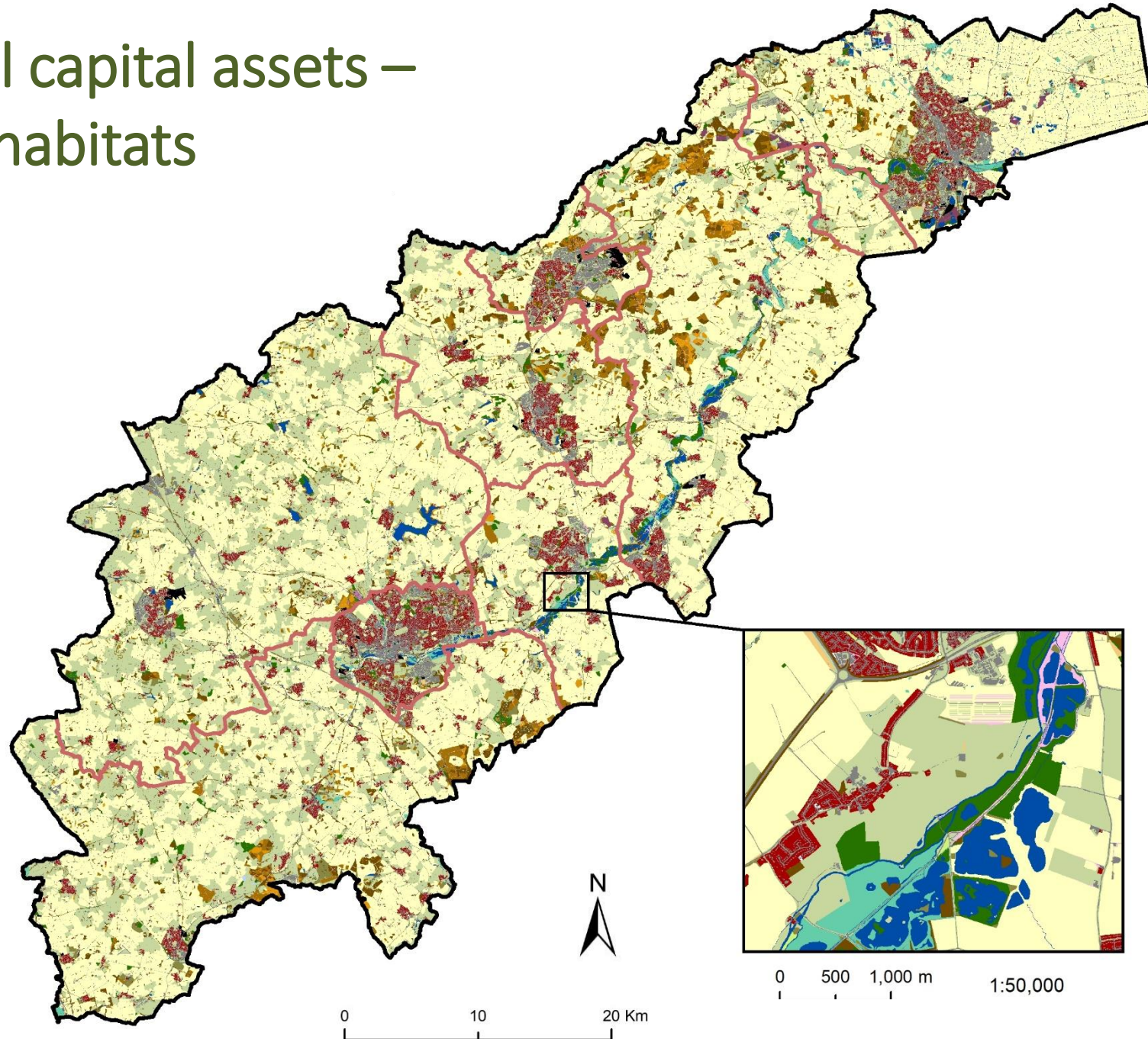


**Objectively identify best opportunities**



**Overlay, check and prioritise**

# Natural capital assets – broad habitats



## Legend

Study area

LA boundaries

## Broad Habitat Category

Cultivated / disturbed land

Uncertain agriculture

Improved grassland

Semi-natural grassland

Marshy grassland

Heathland

Fen, marsh and swamp

Broadleaved woodland

Coniferous woodland

Mixed woodland

Scrub

Trees / Parkland

Water

Rock, exposure and waste

Built-up areas and infrastruc

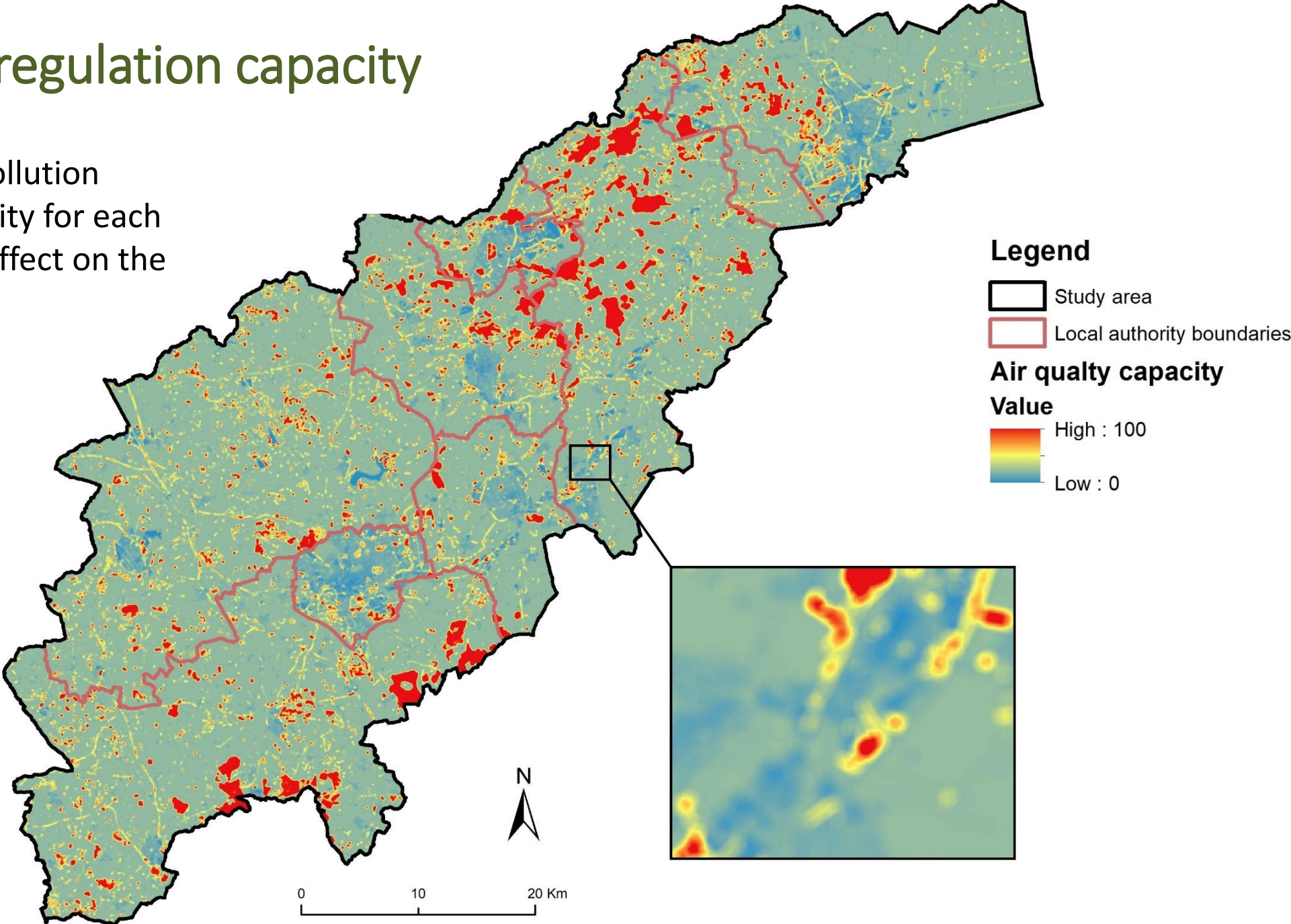
Garden

Mixed / other / uncertain

Unclassified

# Air quality regulation capacity

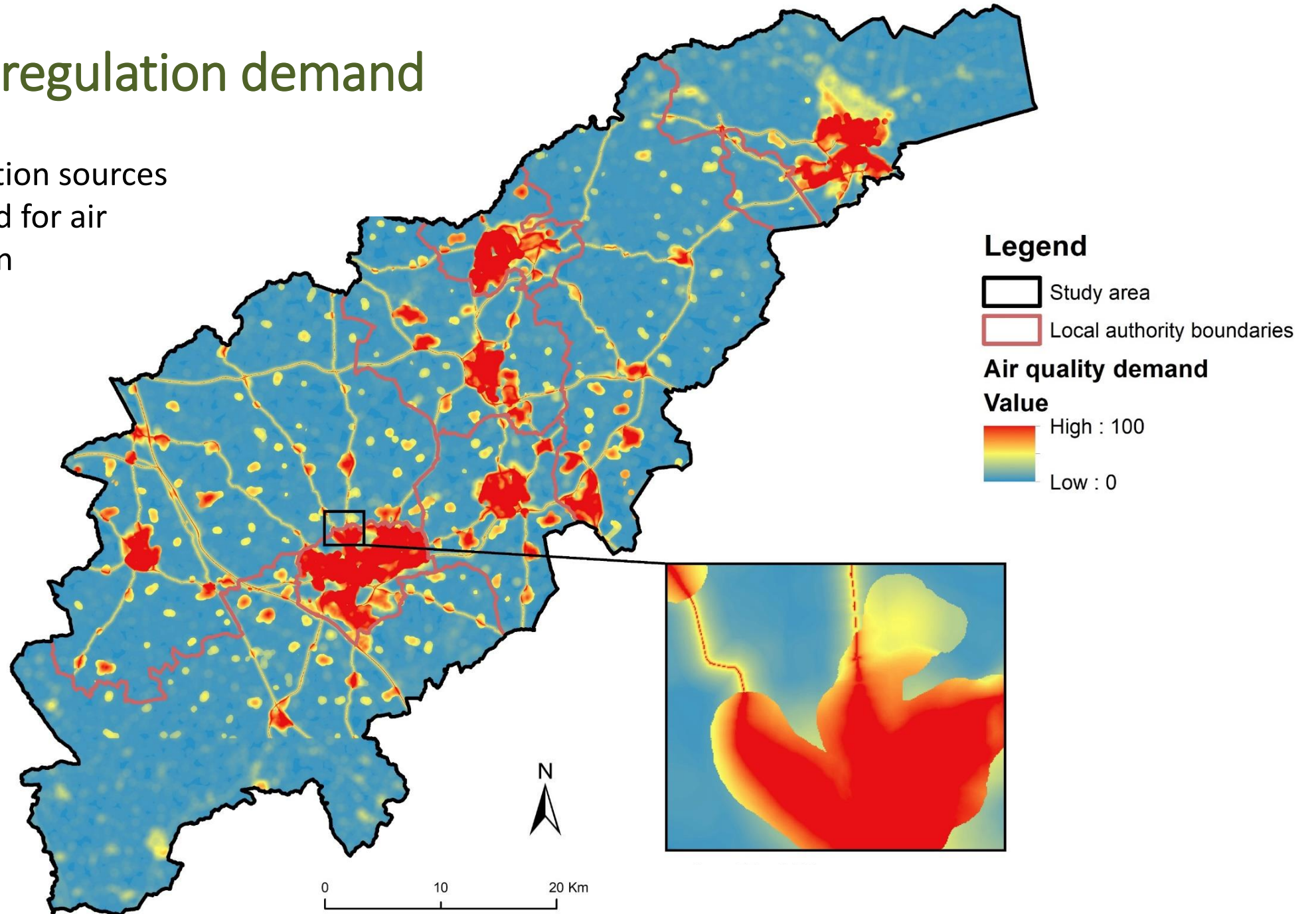
Models the air pollution absorption capacity for each habitat and the effect on the surrounding area





# Air quality regulation demand

Models air pollution sources and societal need for air quality regulation

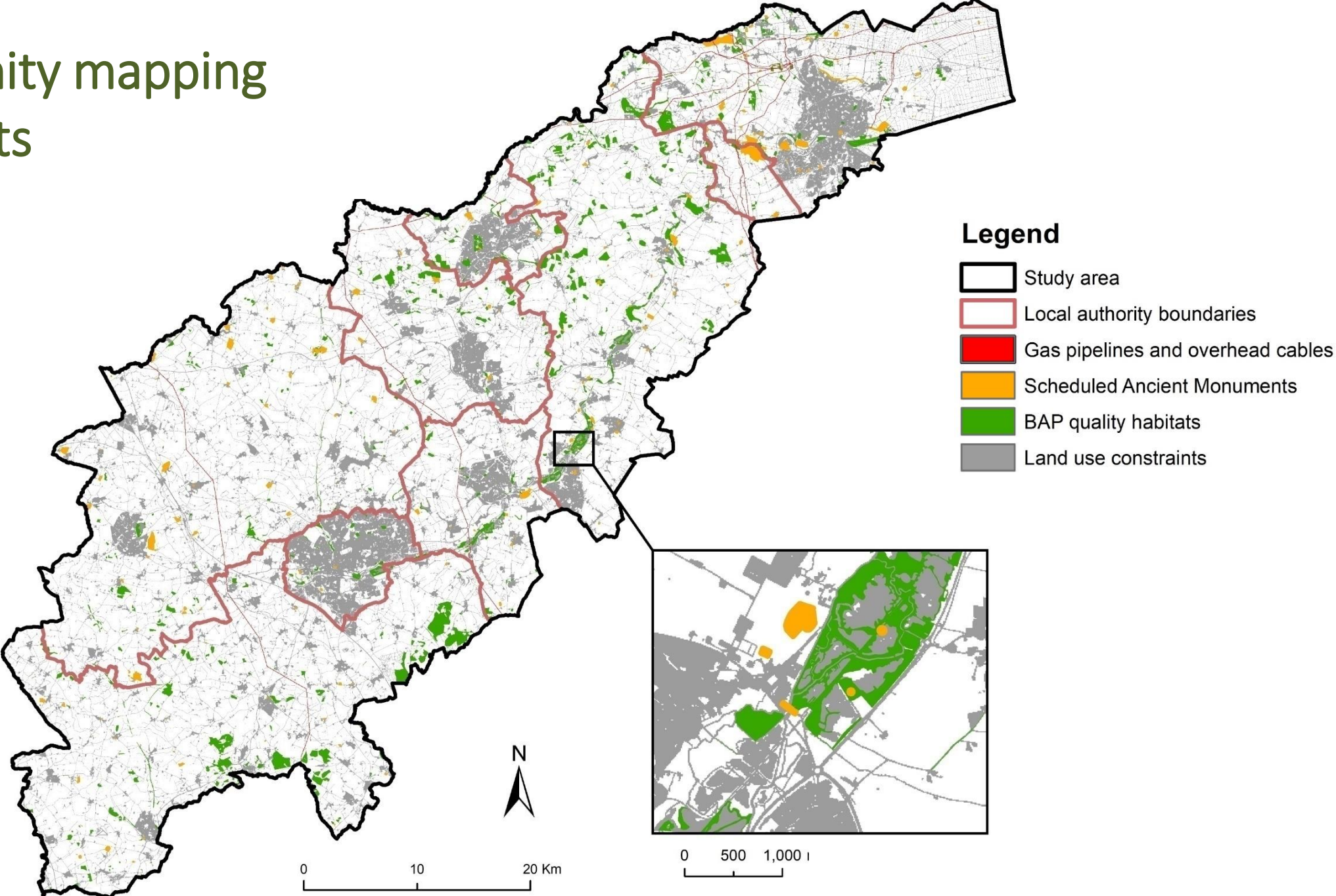


# Habitat opportunity mapping

- A GIS based approach used to identify potential areas for the expansion of key habitats across a landscape.
- Requires a detailed map of natural capital assets (habitat map) and takes constraints into account.
- Mapped opportunities for the following:
  1. To enhance biodiversity
  2. To reduce surface runoff
  3. To reduce soil erosion and improve water quality
  4. To ameliorate air pollution
  5. To increase access to natural greenspace
- Maps combined to highlight opportunities to deliver multiple benefits at the same time.

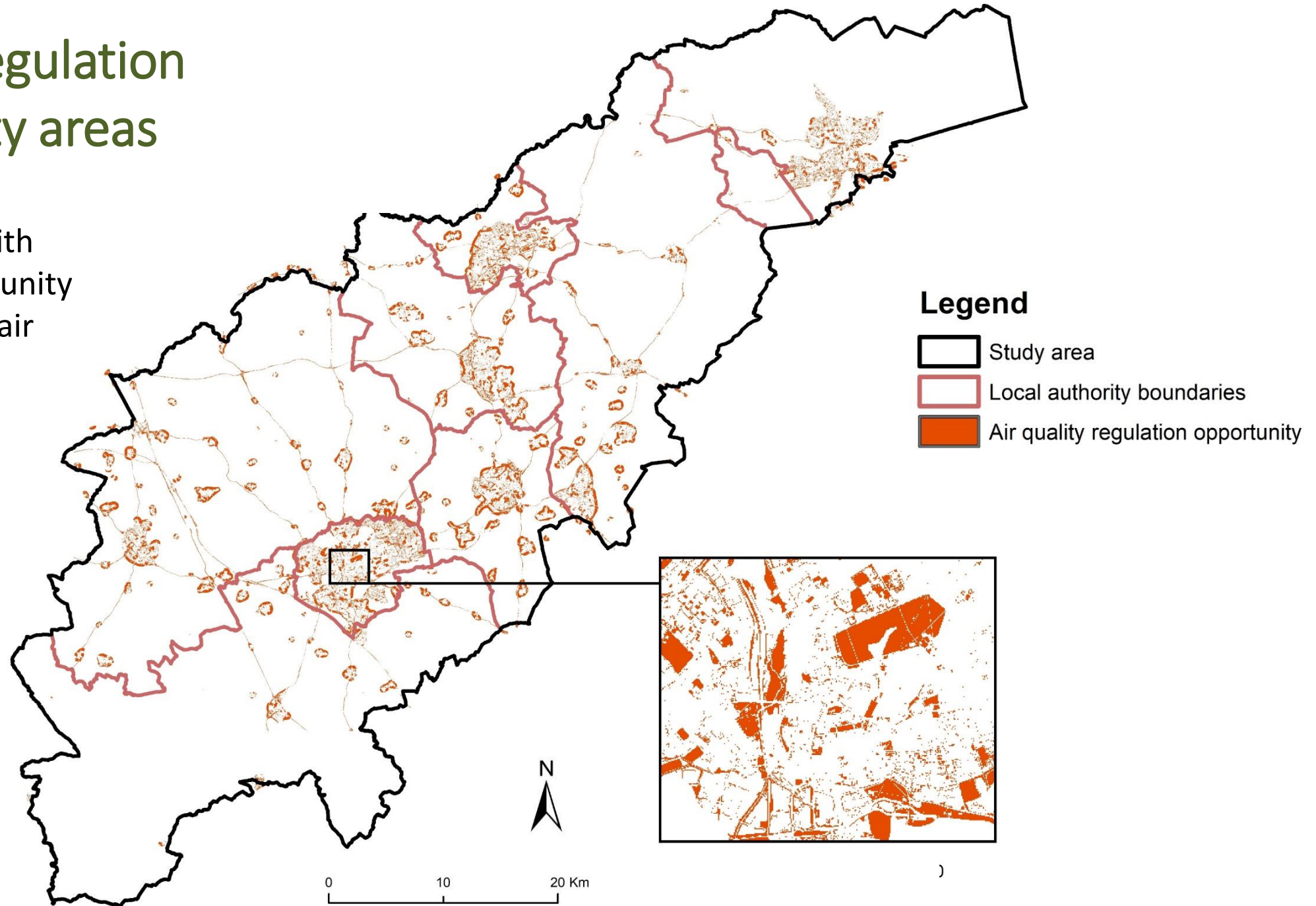


# Opportunity mapping constraints



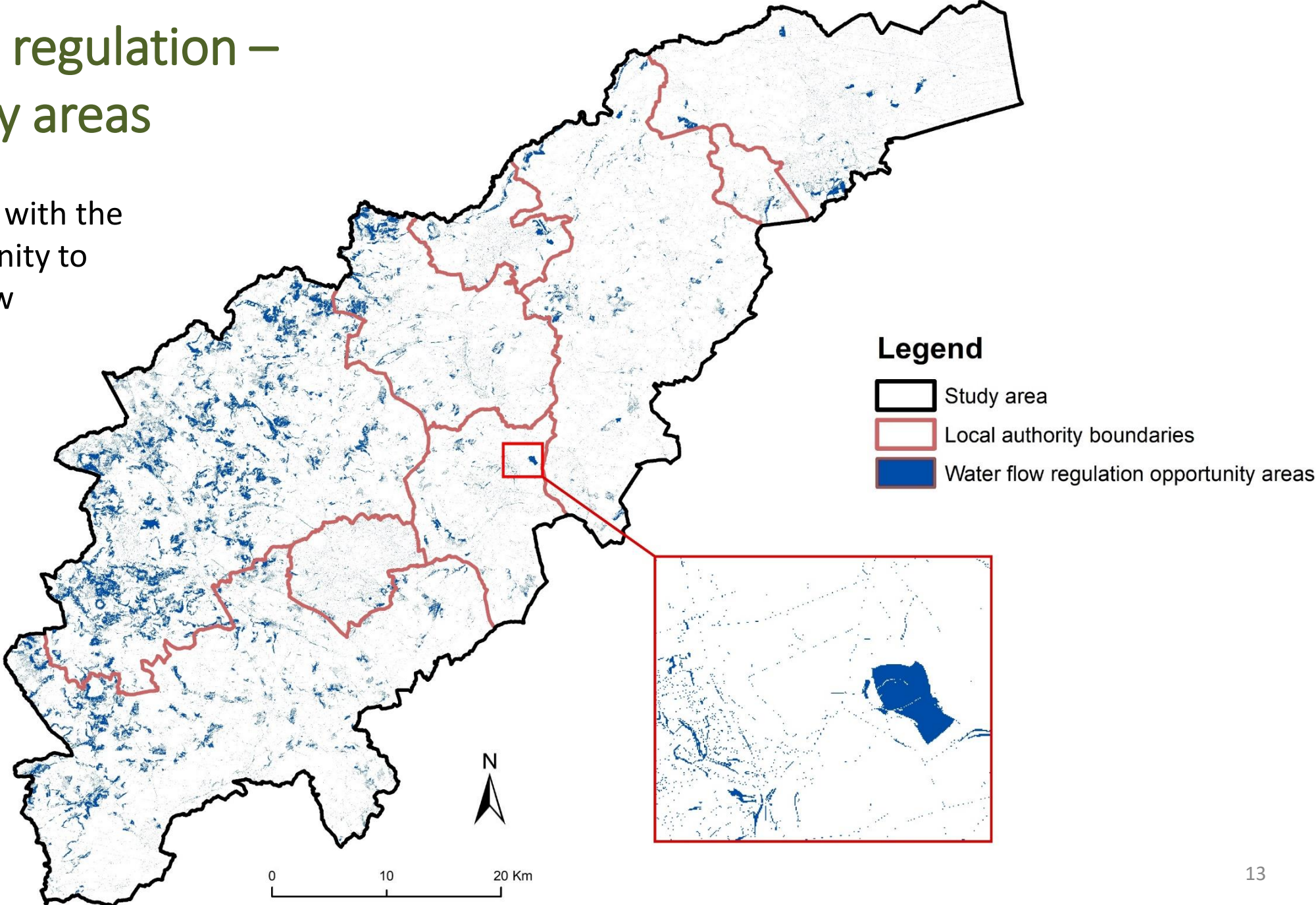
# Air quality regulation – opportunity areas

Top 10% of areas with  
the greatest opportunity  
to ameliorate poor air  
quality



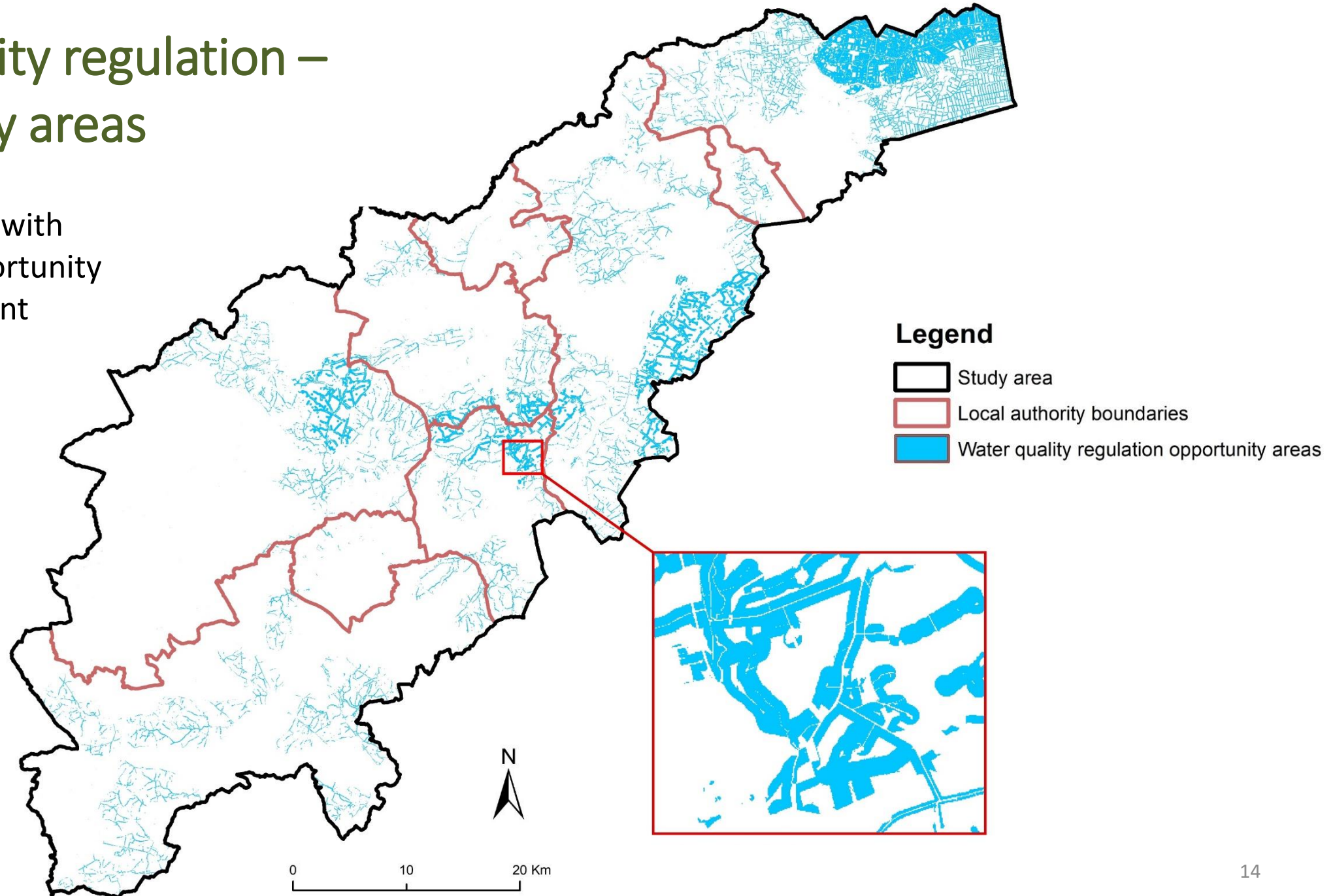
# Water flow regulation – opportunity areas

Top 10% of areas with the greatest opportunity to reduce water flow



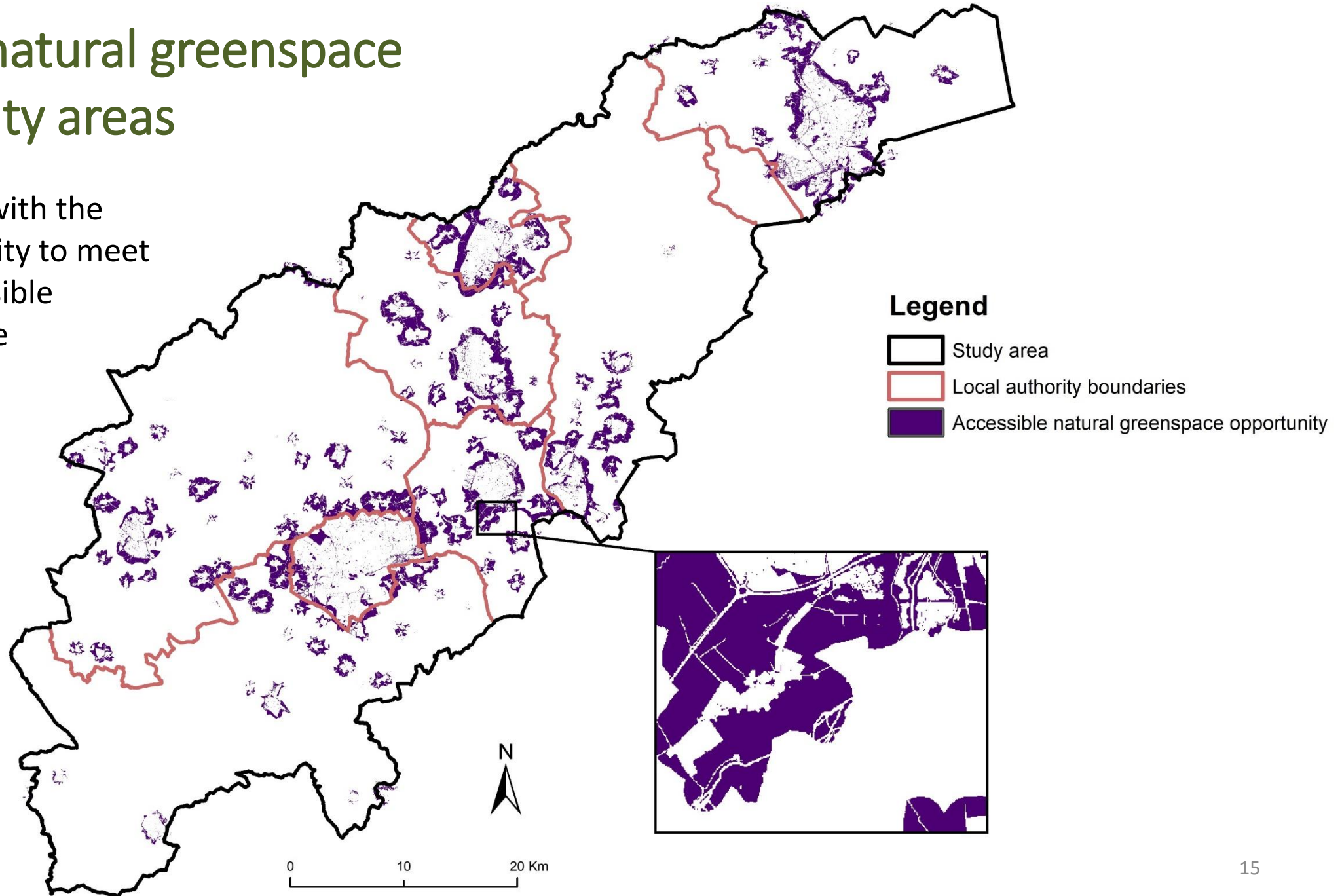
# Water quality regulation – opportunity areas

Top 10% of areas with the greatest opportunity to reduce sediment loadings

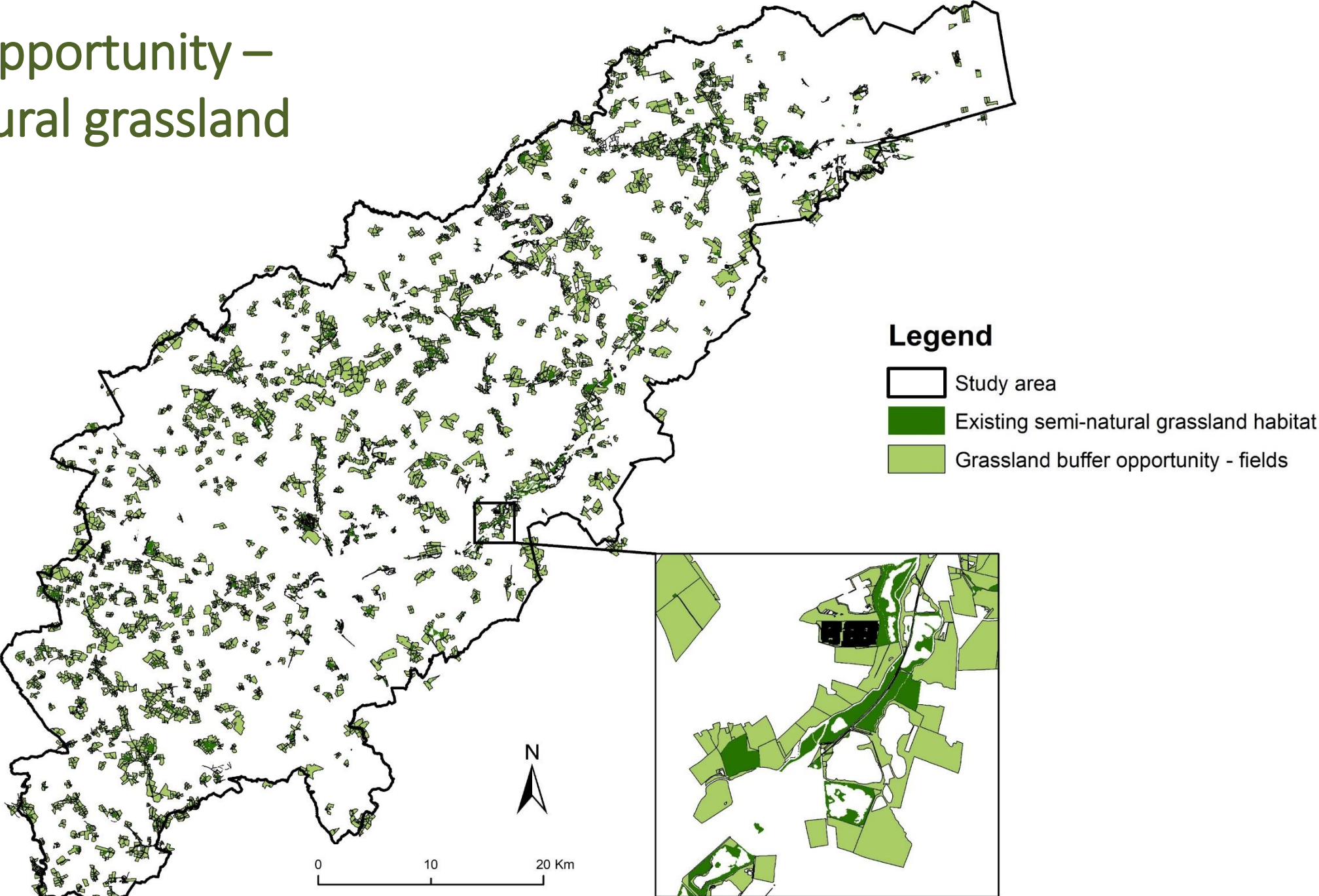


# Accessible natural greenspace – opportunity areas

Top 10% of areas with the  
greatest opportunity to meet  
demand for accessible  
natural greenspace

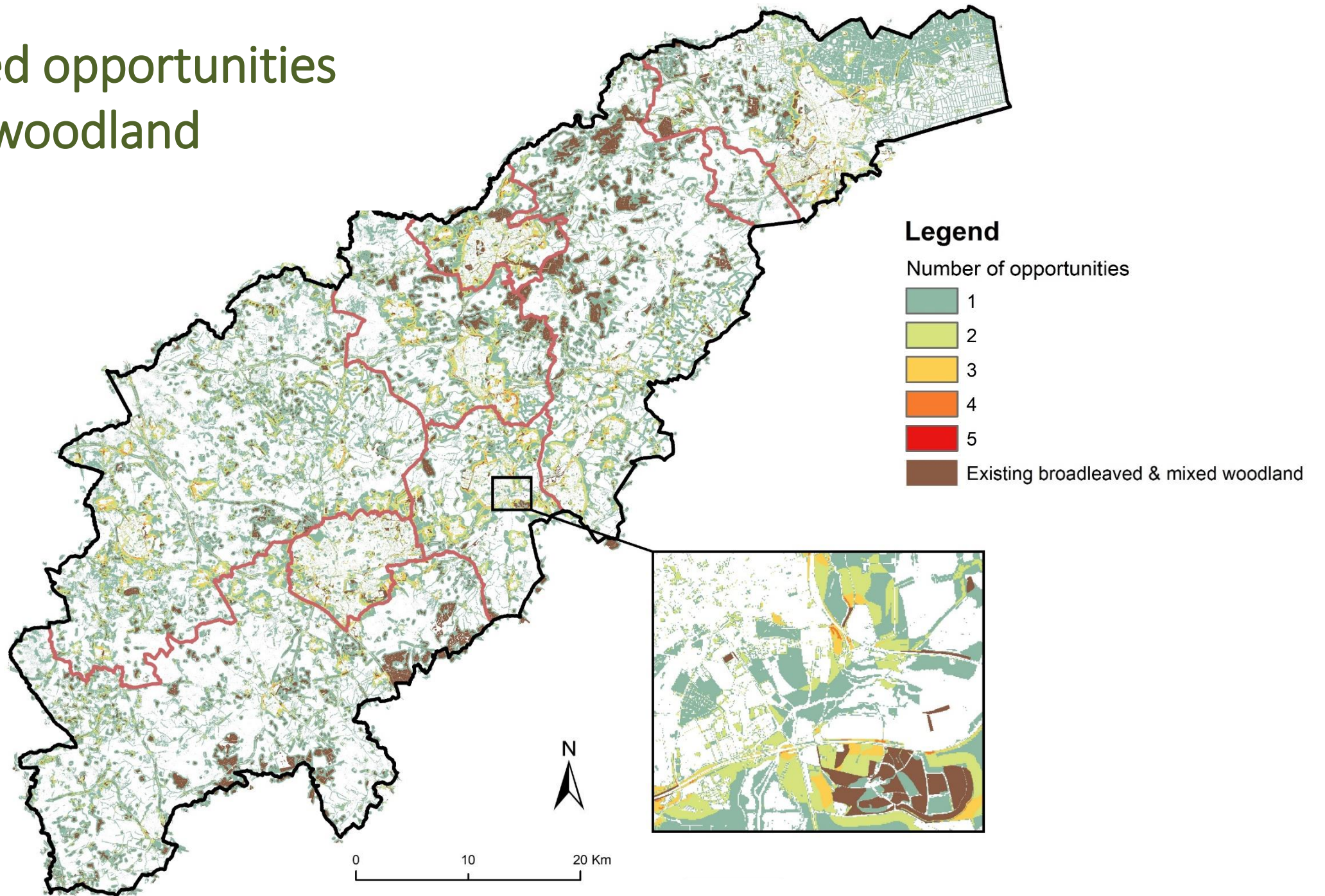


# Habitat opportunity – semi-natural grassland



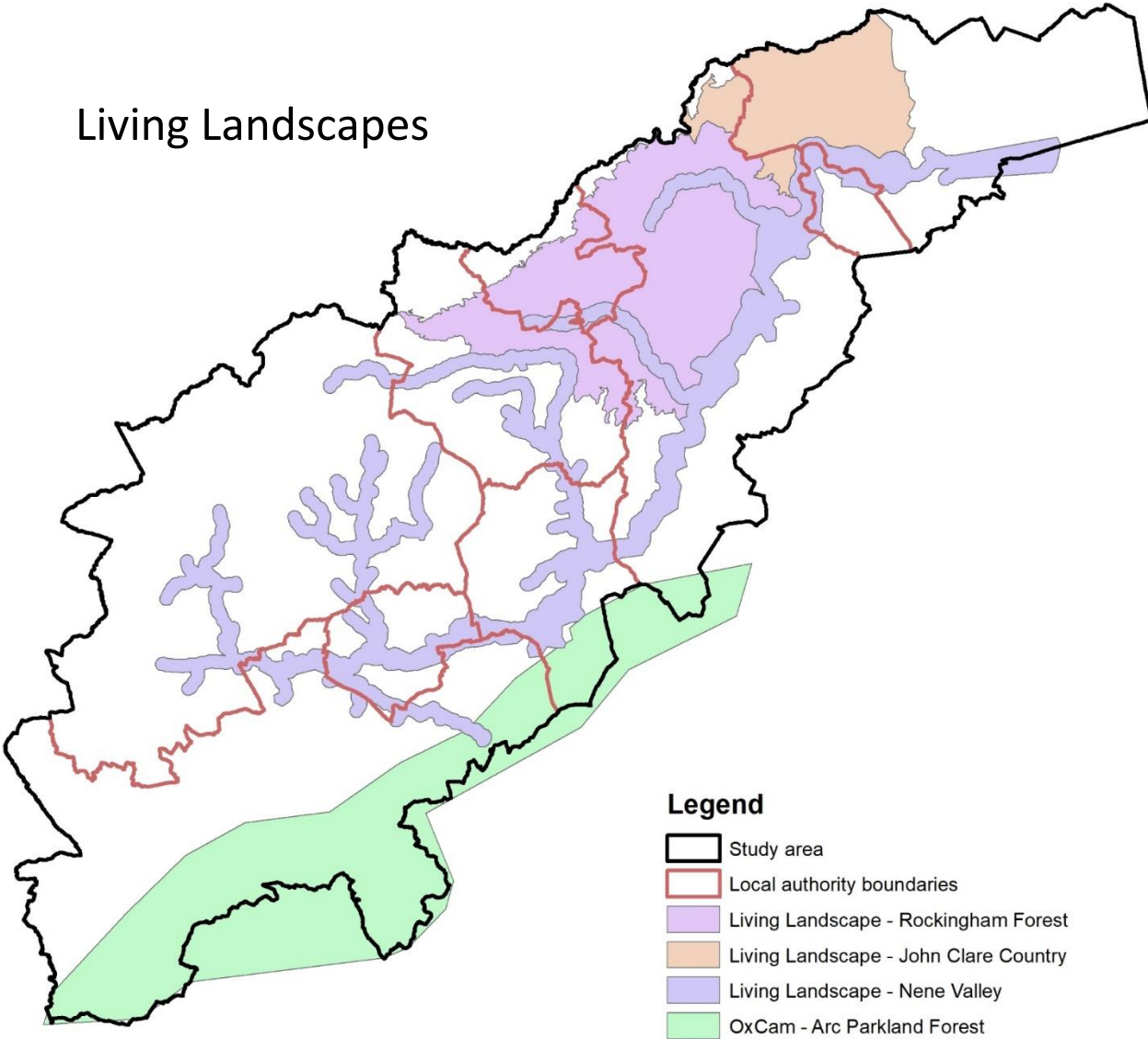


# Combined opportunities for new woodland



# Prioritising locations

## Living Landscapes



## Green Infrastructure Corridors

