Brighton & Hove City Council

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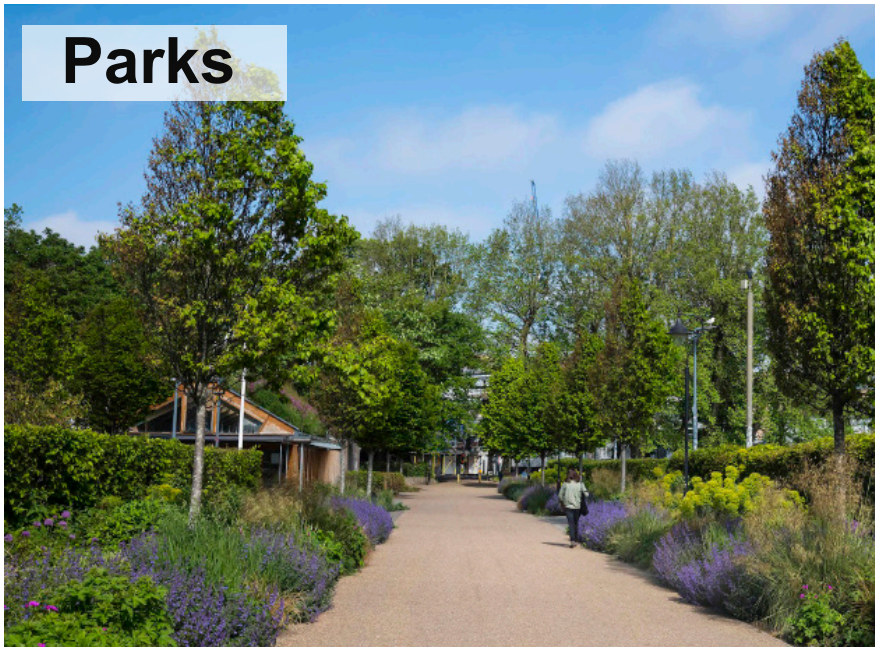
LET'S LEARN ABOUT

GREEN AND BLUE INFRASTRUCTURE

What do we mean?

Green and blue infrastructure is the network of green and blue spaces and other natural features across the city

Examples of green and blue infrastructure



Examples of green and blue infrastructure

as well as footpaths, cycle routes, nature reserves, road verges, street trees and even private gardens!

Green infrastructure is not limited to rural areas and plays an important role in cities such as Brighton and Hove

For example, sustainable drainage systems and rain gardens offer a wide range of benefits within an urban context.

Can you name the key green and blue infrastructure features in the city?

Green and blue infrastructure in your city!

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Above all, green infrastructure is defined by its

multi-functionality

with a single feature often delivering a range of benefits

Let’s take a closer look at some of these benefits.....

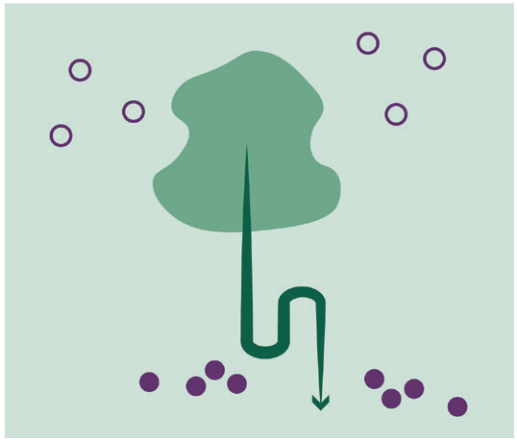
What benefits do trees and woodlands provide?

Key benefits of woodland and street trees.....

Improved air quality

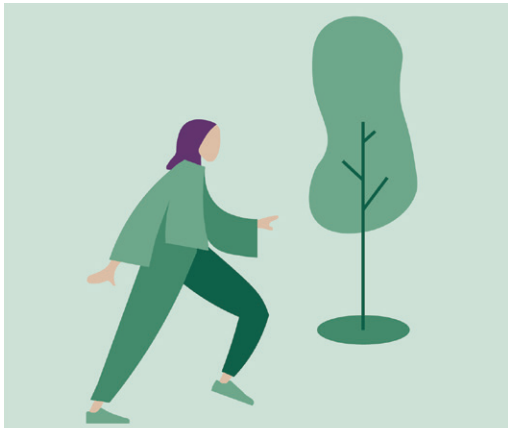
Reduces the risk of flooding

Increased nature and biodiversity



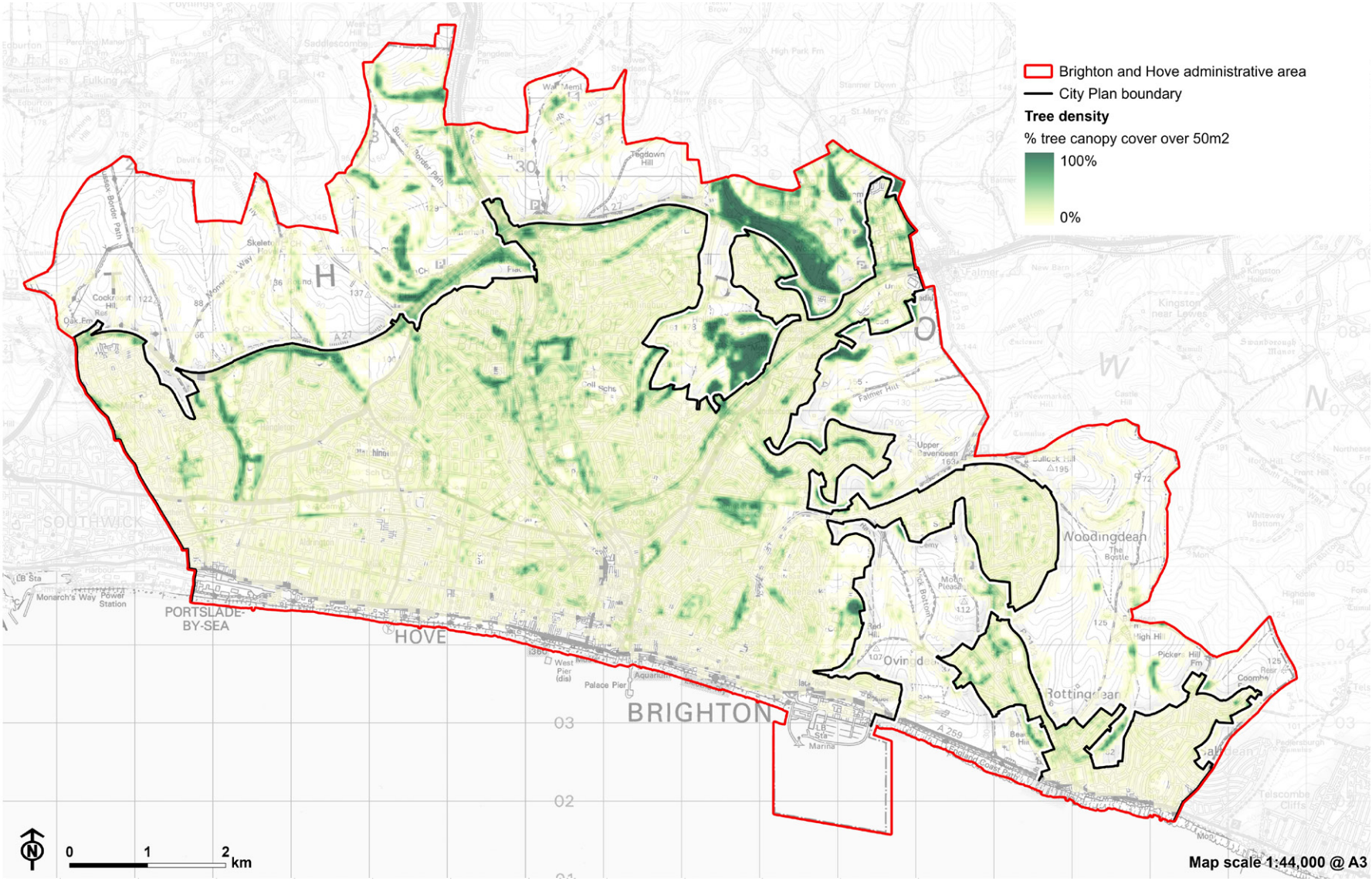
Helps to tackle climate change

Increased cooling and shading



Helps to improve health & wellbeing

Let’s look in detail at tree cover in Brighton & Hove.....

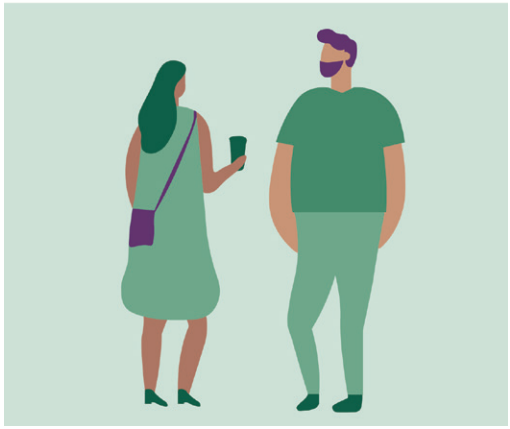


Are there any patterns in tree cover across the city? Where are the gaps?

What benefits do parks and greenspaces provide?

Key benefits of parks and greenspaces.....

Helps to improve health & wellbeing



Recreation and social interactions

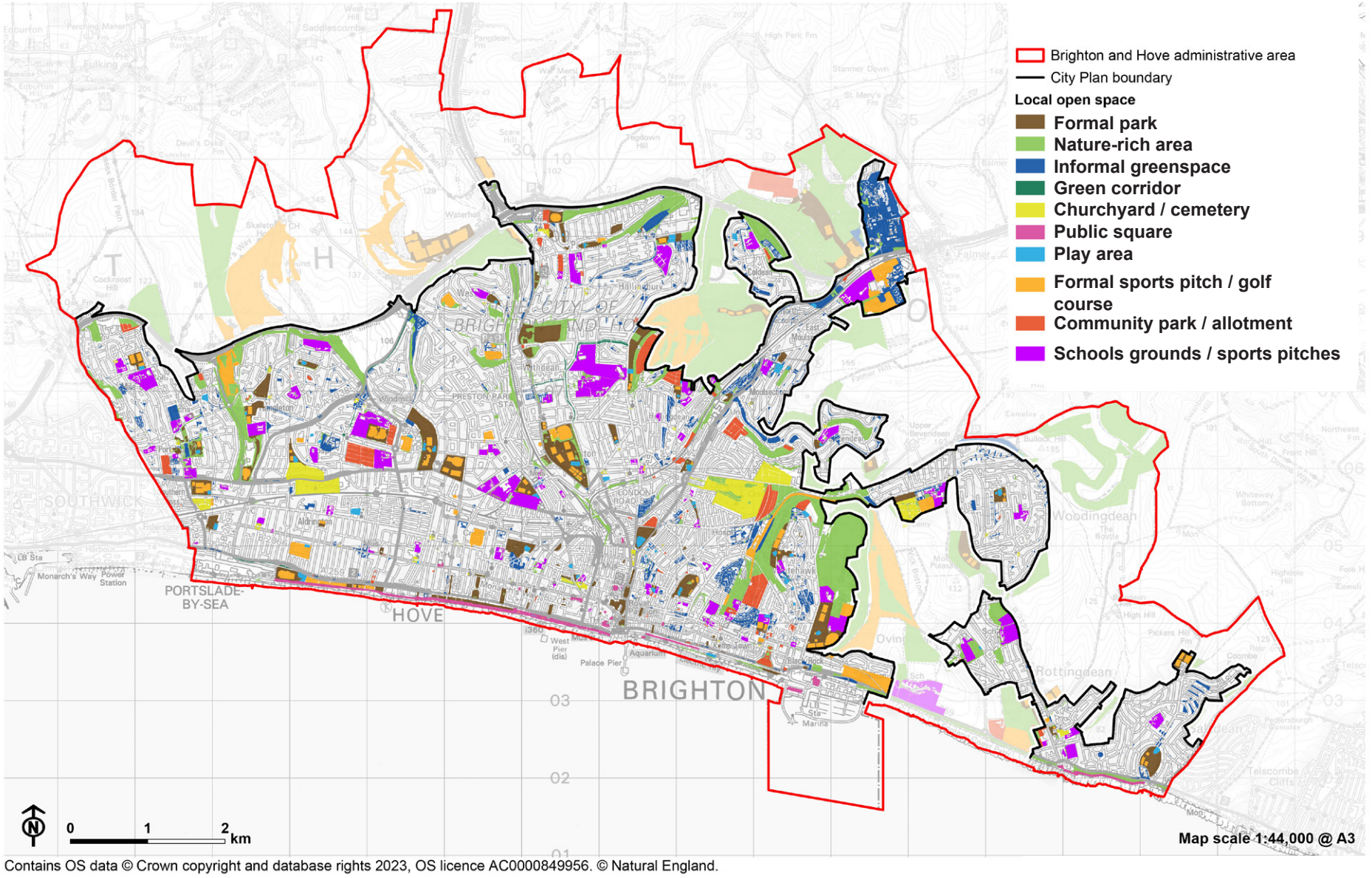
Increased nature and biodiversity

Play and education

Walking and cycling opportunities

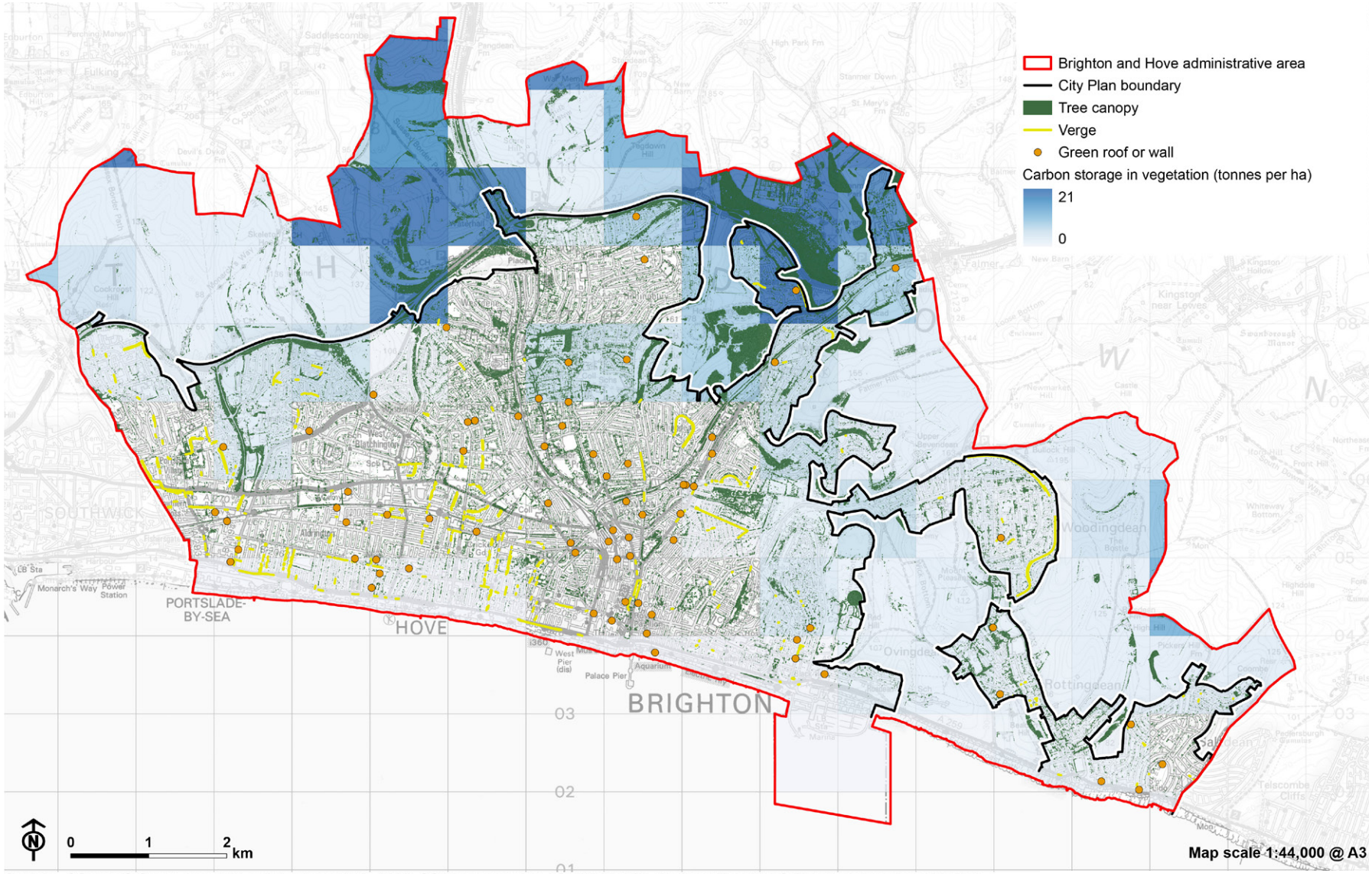
Community food growing

Let’s explore the different types of greenspaces in the city.....



Which areas have the most number of greenspaces? Where are the gaps?

Soil and vegetation act as carbon stores across the city.....



Can you name some of the key functions of these features which help to create a liveable city?

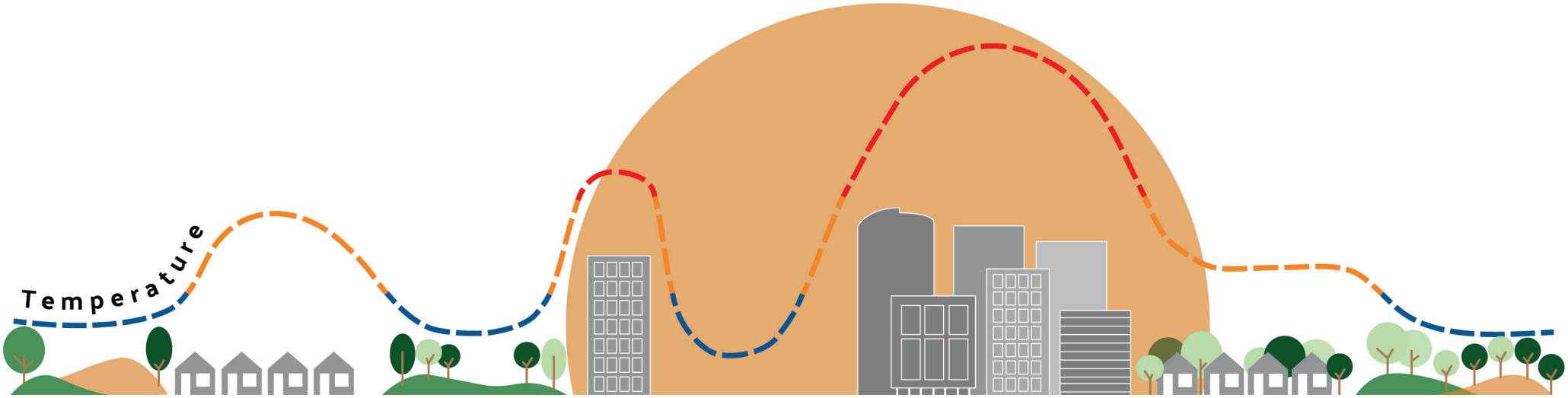
Let’s look in detail at a benefit of green and blue infrastructure which is very important to Brighton & Hove.....

increased cooling and shading

Let’s explain why.....

What is the urban heat island effect?

The urban heat island effect is where built features (pavements, buildings etc.) absorb and retain heat, replacing natural land cover and vegetation.



This results in an increase in surface temperatures in city centres in comparison to rural areas on the outskirts.

Why is the urban heat island effect particularly relevant to Brighton & Hove?

City centre **vs** South Downs National Park

In 2022, surface temperatures across the city centre were on average **8°C higher** compared to the downland areas in the South Downs.

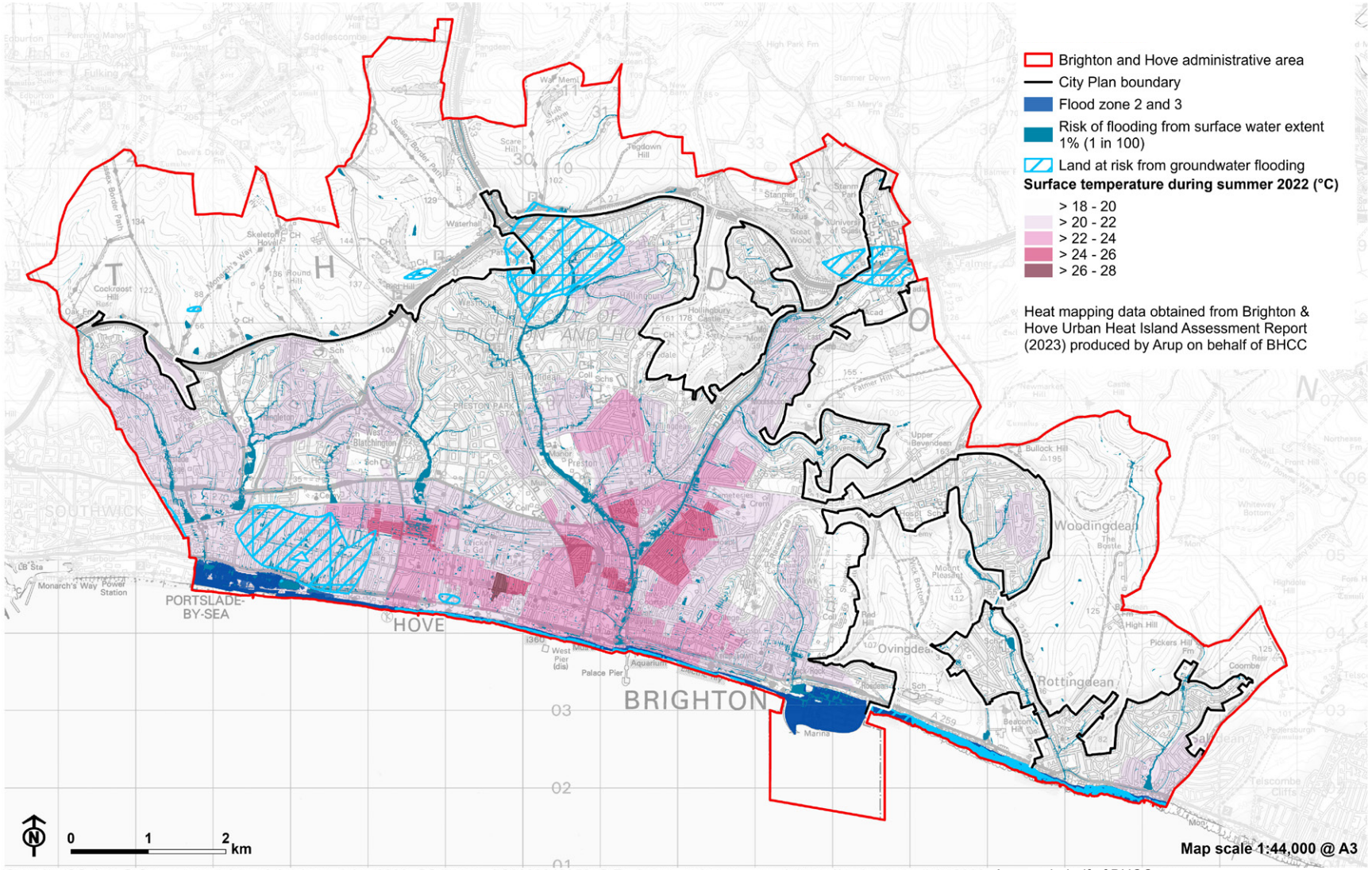
Green infrastructure offers the opportunity to reduce the impacts of the urban heat island within dense areas of the city.

What are the adverse effects of the urban heat island within cities?

- Lower quality of life for residents;
- Health impacts due to heat exposure - high temperatures can cause respiratory problems, sunstroke, dehydration, tiredness and heatstroke;
- Increased air pollution and greenhouse gas emissions (as people attempt to stay cool with fans and air conditioning); and
- Changes in the availability of food and water for wildlife.

The effects of extremely high temperatures disproportionately impact certain groups of people, especially the very young and old (as well as those with pre-existing health conditions).

The urban heat island effect in Brighton & Hove



Where in the city could green and blue infrastructure have the most impact in reducing the urban heat island effect?

Pick a road you are familiar with in the city centre and think about the types of green and blue infrastructure you could fit there.....

Sketch out how the street could look and think about the multi-functional benefits the green and blue infrastructure features would provide.